مكتبة قطر الوطنية
Qatar National Library

This PDF was generated on 01/09/2023 from online resources of the **Qatar Digital Library**

The online record can be viewed at:
http://www.qdl.qa/en/archive/81055/vdc_100000001491.0x00014a
It contains extra information, high resolution zoomable views and transcriptions.

Copies of Journals Containing Articles on Persia and the Persia Gulf

Holding Institution	British Library: India Office Records and Private Papers
Reference	Mss Eur F111/393
Date(s)	1896-1905 (CE, Gregorian)
Written in	English in Latin
Extent and Format	11 volumes (715 folios)
Copyright for document	Creative Commons Non-Commercial Licence

BRITISH LIBRARY

About this record

This file consists of copies of various journals formerly belonging to George Curzon, which contain articles relating to Persia and the Persian Gulf. The journals are as follows:

- Five issues of *The Geographical Journal* (journal of the Royal Geographical Society): volume VIII, no. 5, November 1896, (ff 2-76); volume X, no. 6, December 1897 (ff 77-167); volume IX, no. 4, April 1897 (ff 168-251); volume XII, no. 2, August 1898 (ff 252-326); volume XVI, no. 6, December 1900 (ff 327-440)

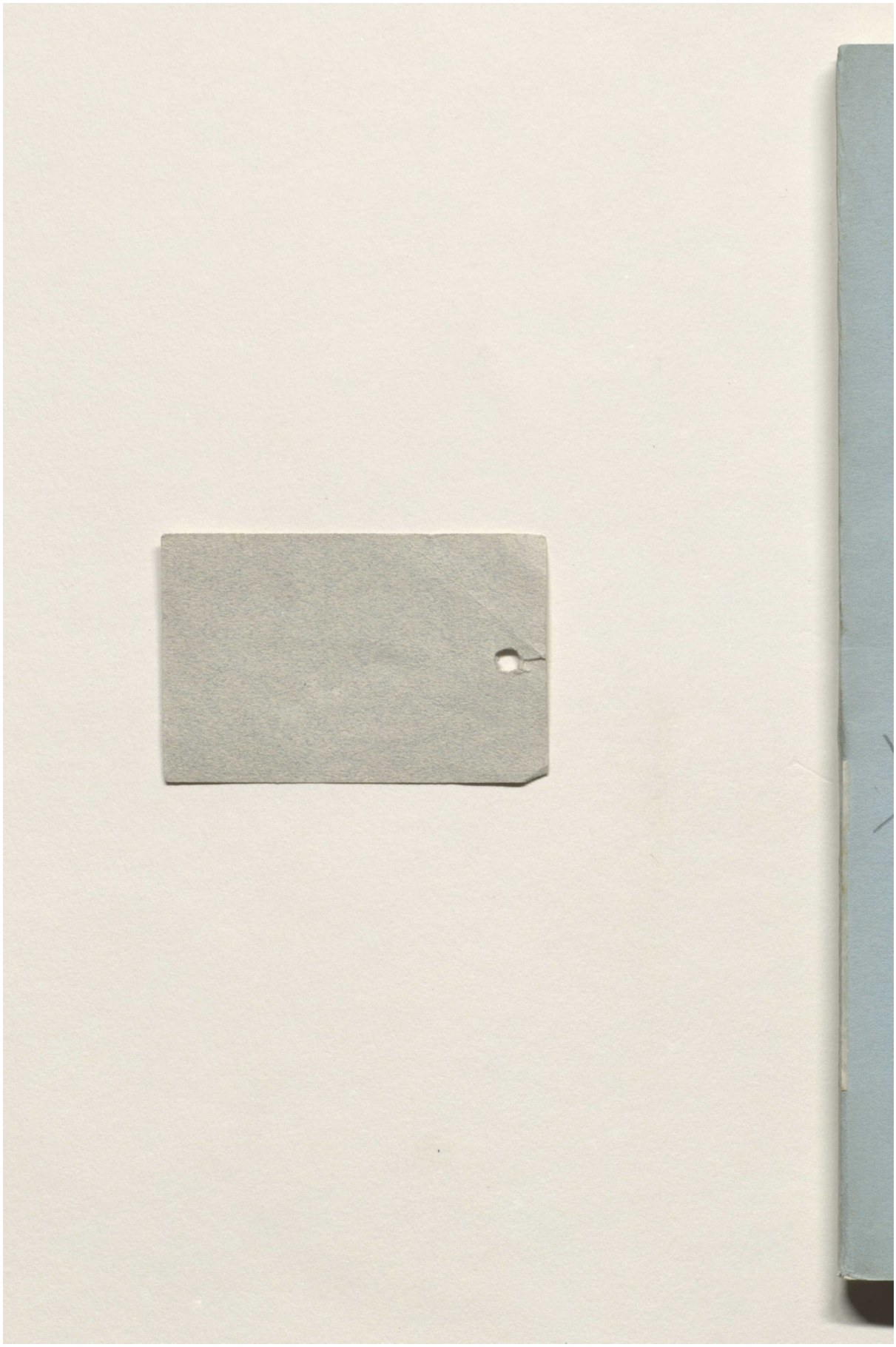
- One issue of the *Asiatic Quarterly Review* (full title: *The Imperial and Asiatic Quarterly Review, and Oriental and Colonial Record*): volume XIII, no. 26, April 1902 (ff 441-557)

- One issue of *The Fortnightly Review* : no. CCCCLXIII, New Series, July 1905 (ff 558-675)

- Three issues of the *Journal of the Society of Arts* : volume XLVIII, no. 2480, 1 June 1900 (ff 676-697); volume XLIX, no. 2527, 26 April 1901 (ff 688-705); volume LI, no. 2623, 27 February 1903 (two copies: ff 706-721 and ff 722-737).



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00003c



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

NOVEMBER, 1896. VOL. VIII. NO. 5.

The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

SUMMARY OF CONTENTS.

(For Details, see over.)

	PAGE
Journey Round Siam. By J. S. BLACK, First Assistant of Her Majesty's Consular Service in Siam	429
A Journey in the Valley of the Upper Euphrates. By VINCENT W. YORKE	453
De Morgan's "Mission Scientifique" to Persia. By Major-Gen. Sir F. GOLDSMID, C.B., K.C.S.I.	474
Some Books on East and South Africa	478
Geography at the British Association, Liverpool, 1896	482
Railways in Africa. By Major L. DARWIN, Sec. R.G.S.	488
From Teheran towards the Caspian. By Lieut.-Colonel HENRY L. WELLS, R.E.	501
The Monthly Record	513
Obituary	522
Correspondence	524
Geographical Literature of the Month	526
New Maps	537
Maps and Illustrations.	

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

LONDON
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.

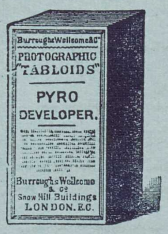
PUBLISHED MONTHLY.] [To Non-Fellows, Price 2s.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005f

مكتبة قطر الوطنية
Qatar National Library

Photographic 'Tabloids' (B. W. & Co.)

TRADE TABLOID MARK



Of all Chemists and Dealers.

PHOTOGRAPHIC 'TABLOIDS' have been used with signal success by travellers and explorers in all parts of the globe. They keep equally well and produce the same excellent results in every climate from that of the Arctic Regions to that of the Tropics. Their compactness has enabled explorers to develop and fix important plates on the spot, so that the risk of keeping undeveloped negatives is avoided. In short, the advantages of Photographic 'Tabloids' are, that they are always ready for instant use, they save trouble and space and prevent disappointment and failure.

List of Photographic 'Tabloids.'

DEVELOPING 'TABLOIDS':—			
Eikonogen	in bottles of	15 & 40	
,, with Quinol	,,	15 & 40	
Paramidophenol ...	,,	12 & 25	
Pyro-Developer ...	,,	20 & 55	
Pure Pyrogallic Acid, 1 gr.	,,	42 & 100	
,, ,, 2 gr.	,,	24 & 55	
,, ,, 4 gr.	,,	15 & 36	
Pyrogallic Acid with Eikonogen ...	,,	15 & 40	
Quinol	in bottles of	20 & 55	
Quinol with Pyro.	,,	18 & 45	
ACCELERATOR 'TABLOIDS'	,,	30 & 100	
RESTRAINER 'TABLOIDS':—			
Potassium Bromide, 1 gr.	,,	30 & 100	
Ammonium Bromide, 1 gr.	,,	30 & 100	
TONING 'TABLOIDS':—			
Toning Gold Compound, in tubes containing 3 'Tabloids.'			



Burroughs, Wellcome & Co., Snow Hill Buildings, LONDON.

NO TRAVELLER SHOULD BE WITHOUT

CALVERT'S CARBOLIC OINTMENT,

A CHEAP AND EFFECTIVE REMEDY FOR

Chafed Skin, Piles, Insect Bites or Stings, Sunburn, Sore Eyes, Chilblains, Chapped Hands, Scalds, Neuralgic and Rheumatic Pains, Ear-ache, Cuts, Throat Colds, and Skin Ailments.

Large Pots, 1s. 1½d. each, at Chemists', &c., or post free in United Kingdom for value.

"We have seen a severe case of Ophthalmia, contracted in Egypt, quite cured by regular use of the Ointment at nights."—F. C. C. & Co.

Report from Ceylon: "I have used your Ointment on my Coolies when troubled with very ugly sores on their legs, and I know it to be a very valuable article."

Private Report from Limassol, Cyprus: "I have never found anything to come up to it for Neuralgic and Rheumatic Pains."

F. C. CALVERT & CO., Manchester. Awarded 72 Gold and Silver Medals and Diplomas.

SPRATT'S PATENT LIMITED

SHIP AND ARMY BISCUITS.

Purveyors to JACKSON-HARMSWORTH ARCTIC EXPEDITION.

SAMPLES ON APPLICATION.

SPRATT'S PATENT LIMITED, BERMONDSEY, LONDON.

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

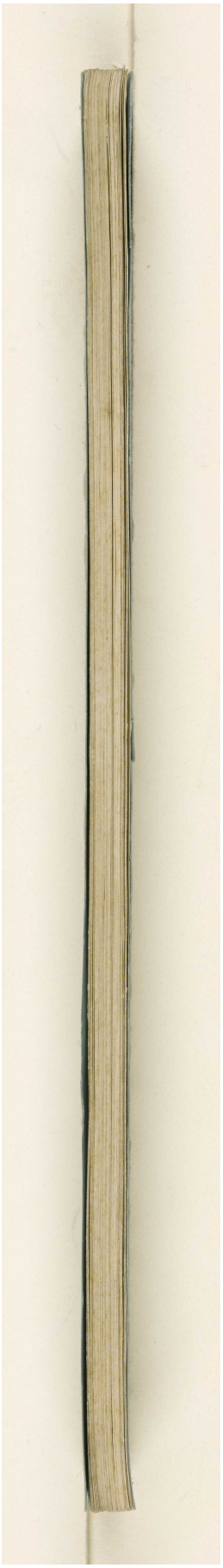
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000044

مكتبة قطر الوطنية
Qatar National Library



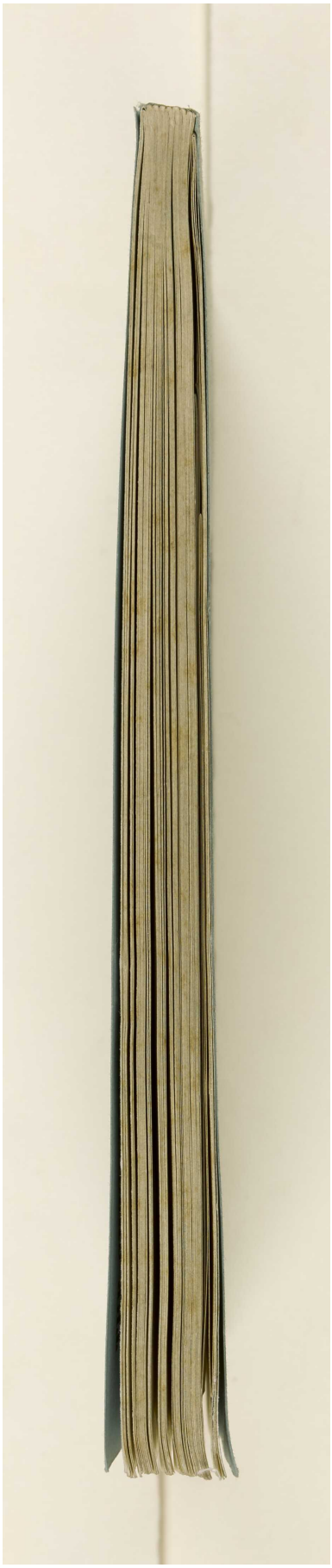
Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000062

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000d



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000027

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Geographical Journal(Journal of the Royal Geographical Society): Volume VIII, No. 5 [tail-a] (6/154)



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

THE GEOGRAPHICAL JOURNAL. To Advertisers.—All communications respecting Advertisements and Bills to be sent to the Advertisement Manager, Mr. Walter Judd, 5, Queen Victoria Street, Mansion House, E.C.

H. SOTHERAN & CO.,
Booksellers, Bookbinders & Publishers.
GENERAL AGENTS FOR PRIVATE BOOKBUYERS & PUBLIC INSTITUTIONS
In India, the Colonies, America, and foreign parts.
A MONTHLY CATALOGUE of SECOND-HAND BOOKS: Specimen No. post free.
LIBRARIES PURCHASED OR VALUED FOR PROBATE.
Telegraphic Address: Bookmen, London. Code in Use: Unicode.
140, STRAND, W.C., & 37, PICCADILLY, W.

SMITH, ELDER & CO.'S NEW BOOKS.

NEW and CHEAPER EDITION of ROBERT BROWNING'S POETICAL WORKS.
In 2 vols. large crown 8vo of about 750 pages each, bound in cloth, gilt top, with a Portrait Frontispiece to each volume, 7s. 6d. per volume.
THE COMPLETE WORKS OF
ROBERT BROWNING.
Edited and Annotated by AUGUSTINE BIRRELL, Q.C., M.P., and FREDERIC G. KENYON.
☞ An Edition has also been printed on India paper. This can be obtained only through Booksellers, who will furnish particulars as to price, etc.

CONAN DOYLE'S REMARKABLE NEW STORY.
On November 13 will be published, with Eight Full-page Illustrations, crown 8vo, 6s.
RODNEY STONE.
By A. CONAN DOYLE, Author of "Micah Clarke," "The White Company," etc.

In November. With Two Portraits, demy 8vo, 16s.
THE LIFE AND LETTERS OF SIR CHARLES HALLÉ.

PREHISTORIC MAN AND BEAST. By the Rev. H. N. Hutchinson, Author of "Extinct Monsters," "Creatures of Other Days," etc. With a Preface by Sir Henry Howorth, M.P., F.R.S., and Ten Full-page Illustrations. Small demy 8vo, 10s. 6d.

London: SMITH, ELDER & CO., 15, Waterloo Place, S.W.

THOMAS MORING,
Engraver, Stationer, Bookbinder, etc.
SPECIAL TERMS FOR STATIONERY OUTFITS.
Book Illustrations Reproduced from Photographs and Drawings by all Engraving and Mechanical Processes.
52, HIGH HOLBORN, LONDON, W.C.
ESTABLISHED 1791.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

For List of Council and Officers, Conditions of Admission to the Fellowship of the Society, and Society Notices, see pages ii. and iv.

The Geographical Journal.

Authors are alone responsible for their respective statements. In MS. communications all new or unfamiliar geographical names should be written in imitation of Roman type.

CONTENTS.—NOVEMBER.

PAGE

Journey round Siam. By J. S. Black, First Assistant of Her Majesty's Consular Service in Siam 429
A Journey in the Valley of the Upper Euphrates. By Vincent W. Yorke 453
De Morgan's "Mission Scientifique" to Persia. By Major-Gen. Sir F. Goldsmid, C.B., K.C.S.I. 474
Some Books on East and South Africa 478
Geography at the British Association, Liverpool, 1896 482
Railways in Africa. By Major L. Darwin, Hon. Sec. R.G.S. 488
From Teheran towards the Caspian. By Lieut.-Colonel Henry L. Wells, R.E. . . 501
The Monthly Record 513

THE SOCIETY
The New Session
Special Medal to Dr. Nansen
EUROPE
Geographical Work in Finland
Ancient Topography of the Étangs de Hourtin and Lacanau
ASIA
Exploration of the Amu-daria
M. Bonin's Journey in South-Eastern Tibet
AFRICA
Captain Bòttego's Expedition
French Expedition across Equa'orial Africa
French Steamer for the Shari
The French in the Niger Basin
AMERICA
Mr. Fitzgerald's Expedition to the Chilian Andes
Project for a Route from the Amazons to Cuzco by way of the Purus
Explorations in the Argentine Republic
POLAR REGIONS
S. A. Andrée's Polar Expedition
MATHEMATICAL AND PHYSICAL GEOGRAPHY
Vertical Distribution of Snow Plants and Habitations
GENERAL
Population Maps
Place-Names
Geological Survey Report
Popular Geography in Manchester

Obituary—Baron Sir Ferdinand von Mueller. Professor Josiah Dwight Whitney. Dr. J. A. Moloney 522
Correspondence—Makran. By General M. R. Haig. The Discovery of the very Important Lundai Sin, or Swat River. By Major H. G. Raverty 524
Geographical Literature of the Month 526
New Maps 537

MAPS AND ILLUSTRATIONS.

Chantabun 431
On the Way to the Great Lake, East Siam 433
A Cambodian Girl weaving Cloth 435
Siamrap during the Dry Season 439
Rapids on the Mekong 443
A Street in Korat 445
The Euphrates above Chermuk (looking South) 455
The Western Euphrates above Aghin (looking North) 457
Gorge of the Western Euphrates below Egin 459
Mosque at Divrik (North Door) 461
Map of Central Siam 540
Map of Africa 540

Sold by

PARIS: Barrère.
VIENNA: Artaria & Co.
HAMBURG: L. Friederichsen & Co.
ST. PETERSBURG: Watkins & Co.
MANCHESTER: John Heywood.
EDINBURGH: Douglas & Foulis.
DUBLIN: Hodges, Foster & Co.
BERLIN: D. Reimer.
LEIPZIG: F. A. Brockhaus.
NEW YORK: International News Co
MELBOURNE: E. A. Petherick & Co.

STREETER & CO., LTD.,
JEWELLERS, PRECIOUS STONE AND GEM MERCHANTS, LAPIDARIES.

GEMS UNSURPASSED. PEARLS PRE-EMINENT.

At the Renowned Store of Streeter & Co. can be seen the Latest Novelties in Jewellery and Perfection in Gems.

STREETER & CO., Ltd., the recognized Authorities on all Precious Stones,
18, NEW BOND STREET, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000063

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., &c., &c.

Honorary-Presidents.

HIS ROYAL HIGHNESS THE DUKE OF SAXE-COBURG-GOTHA, K.G., K.T., G.C.S.I., &c., &c
HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL.

(ELECTED 15TH JUNE, 1896.)

President—Sir CLEMENTS MARKHAM, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Hon. GEORGE C. BRODRICK.
Right Hon. GEORGE N. CURZON, M.P.
Sir GEORGE D. TAUBMAN GOLDIE, K.C.M.G.
Sir RAWSON W. RAWSON, K.C.M.G., C.B.
General R. STRACHEY, R.E., C.S.I., F.R.S.
Rear-Admiral W. J. L. WHARTON, C.B., F.R.S.

Treasurer—EDWARD L. SOMERS COCKS.

Trustees—Right Hon. Sir JOHN LUBBOCK, Bart., F.R.S., M.P.; CUTHBERT E. PEEK, F.R.A.S.

Honorary Secretaries—Major LEONARD DARWIN, R.E.; JAMES F. HUGHES.

Foreign Secretary—Sir JOHN KIRK, K.C.B., G.C.M.G., F.R.S

Members of Council.

W. M. BEAUFORT.
Lord BELHAVEN AND STENTON.
GEORGE CAWSTON.
Colonel J. FARQUHARSON, C.B., R.E.
WILFRED HUDLESTON, F.R.S., F.G.S.
J. K. LAUGHTON
Right Hon. Lord LOCH, G.C.B., G.C.M.G., etc.
GEO. SUTHERLAND MACKENZIE.
Rear-Admiral ALBERT HASTINGS MARKHAM.
ALFRED P. MAUDSLAY.
JOHN MURRAY, LL.D., F.R.S.
General Sir HENRY W. NORMAN, G.C.B., G.C.M.G.
HOWARD SAUNDERS, F.L.S., F.Z.S.
Right Hon. the EARL OF SCARBROUGH
P. L. SCLATER, F.R.S.
Rear-Admiral E. H. SEYMOUR, C.B
Major the Hon. M. G. TALBOT, R.E.
Colonel Sir HENRY R. THUILLIER, R.E., K.C.I.E.
Lieut.-Colonel J. K. TROTTER, R.A.
Admiral the Hon. W. J. WARD.
Lieut.-Colonel C. M. WATSON, R.E., C.M.G.

Secretary and Editor of Publications—J. SCOTT KELTIE.

Librarian—H. R. MILL, D.Sc.

Map Curator.
JOHN COLES, F.R.A.S.

Chief Clerk.
S. J. EVIS.

Bankers—Messrs. COCKS, BIDDULPH, and Co., 43, Charing Cross.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that,

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his admission fee, and "£2 as his first annual subscription, or he may compound, either at his entrance by one payment of "£35, or at any subsequent period on the following basis:—

Fellows of 20 years' standing and over			...	£12 10s.
" 15 " "	and under 20		...	£16
" 10 " "	"	15	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the Society so long as "he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's Periodical Publications.

Copies of the Regulations and Candidates' Certificates may be had on application at the Society's Office, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006e

مكتبة قطر الوطنية
Qatar National Library

GABARDINE COMBINATION SPORTING OUTFITS

OUTSIDE GABARDINE, INSIDE RAIN-PROOFED TWEEDS (Burberry's Patent).

PROOF AGAINST WAIT-A-BIT THORNS AND SPEAR-GRASS, RAIN, SLEET, OR SNOW. HOT AND COLD WINDS. ANTS AND TROPICAL INSECTS.

(The latter points are of special importance for India and Africa.)

Yet perfectly VENTILATING, very DURABLE, and as COMFORTABLE as ordinary Tweed Garments.

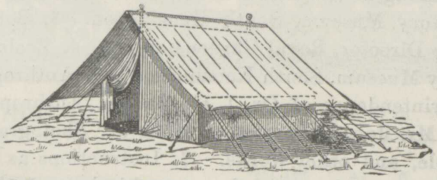
"For lightness combined with strength, nothing has been found to equal the material known as GABARDINE, manufactured by Burberry, of Basingstoke. This substance deserves special recommendation, as one suit will generally outlast three or four made of other and perhaps more expensive cloth."—*The Sportsman in South Africa.*



Write to **T. BURBERRY & SONS,** 30, Haymarket, LONDON, and BASINGSTOKE,

Stating climate required for, and Estimates, Information, and suitable Patterns will be sent free.

THE BEST TENT FOR AFRICA IS BENJAMIN EDGINGTON'S DOUBLE-ROOF RIDGE TENT,



MADE FROM GREEN ROT-PROOF CANVAS,

As Supplied to

MR. H. M. STANLEY.
MR. H. H. JOHNSTON.
SIR F. DE WINTON.
CAPT. STAIRS, R.E.
LIEUT. WISSMANN.
BISHOP HANNINGTON.
REV. MR. ASHE.
REV. MR. COMBER.
THE CONGO STATE GOVERNMENT.
THE IMPERIAL BRITISH EAST AFRICA COMPANY, &c.

PRICE LISTS ON APPLICATION.

STRONG CAMP BEDSTEADS, CHAIRS, AND CAMP FURNITURE OF ALL KINDS.

The above Tent can be seen erected at

BENJAMIN EDGINGTON, Limited,
2, DUKE STREET, LONDON BRIDGE, LONDON, S.E.
(Opposite the Railway Station).

THE No. 4 YŌST TYPEWRITER

Is the Latest and Most Marvellous Writing Machine Extant.

To the African Explorer or the Arctic Navigator a Yōst Typewriter would prove AN ADMIRABLE PRESENT.

The No. 4 Yōst is built entirely of best metals, and it is thoroughly suitable for *all climates.* SEND FOR PARTICULARS.
The Yōst is used and recommended by Missionaries, Travellers, and Explorers in all parts of the World.



THE YŌST TYPEWRITER CO., LTD.,
50, HOLBORN VIADUCT, LONDON, E.C.
West End Depôt: 21, HIGH STREET, KENSINGTON.

MANCHESTER: 3, Deansgate.
LIVERPOOL: 22A, North John St.
BELFAST: 9, Rosemary St.
CARDIFF: 77, St. Mary St.
BIRMINGHAM: 73, Temple Row.
LEEDS: 21, New Station St.
GLASGOW: 112, St. Vincent St.
NEWCASTLE-ON-TYNE: 50, Dean St.
PARIS: 36, Boulevard des Italiens.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000029

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ROYAL GEOGRAPHICAL SOCIETY.

NOTICES.

Hints to Travellers.—The Seventh, revised, Edition, edited, under a Committee of the Council, by Capt. W. J. L. WHARTON, R.N., F.R.S. (Hydrographer to the Admiralty), and Mr. DOUGLAS W. FRESHFIELD, Sec. R.G.S.

Price Eight Shillings; to Fellows at the Office of the Society, Five Shillings.

Instructions for Intending Travellers, under the authority of the Council of the Royal Geographical Society.—Arrangements have been made for the instruction of intending Travellers in the following subjects:—

1. Surveying and Mapping, including the fixing of positions by Astronomical Observations. By Mr. John Coles, Map Curator of the Society. 2. Geology, including practical training in the field. Under the superintendence of Dr. J. W. Gregory, Natural History Museum, South Kensington. 3. Botany. Under the superintendence of the Director, Royal Gardens, Kew. 4. Zoology. Dr. Bowdler Sharpe, Natural History Museum, South Kensington. 5. Anthropological Measurements. Under the superintendence of Dr. J. G. Garson, Anthropological Institute. 6. Photography. By Mr. John Thomson, Author of 'Photographic Illustrations of China and its People,' and other works. 7. Instructions as to What and How to Observe in the Field, from the general geographical standpoint. By Dr. H. R. Mill, Librarian to the Society.

The Lessons are given on days and at hours arranged between the Instructor and the pupil.

Tickets for the lessons must be previously procured at the Offices of the Society, where information as to fees, etc., may be obtained.

Evening Meetings.—Papers to be read at the Evening Meetings in November:—**Tuesday, November 10.** Address by the President. The Jackson-Harmsworth Arctic Expedition, and the Story of the Last Year's Work. By Arthur Montefiore Brice. **Monday, November 23.** Two Years in Uganda, Unyoro and the Upper Nile Regions. By Seymour Vandeleur, Lieut. Scots Guards.

Educational Lectures.—Under the joint auspices of the Society and the London University Extension, Mr. H. J. Mackinder, M.A., is giving a course of twenty-five lectures on the Geography of Europe, Asia, and Northern Africa, in illustration of the Methods and Principles of Modern Geography, at Gresham College, Basinghall Street, E.C., on successive Mondays at 6 p.m. The first lecture was given on October 5. There will be two series of ten lectures each and one of five. To these lectures Fellows are admitted free on showing their tickets.

Any Fellow resident in this country, desiring to have notice of the subjects of papers to be read at the Society's Meetings forwarded to him, can receive such notices by post on payment in advance to the Chief Clerk, at 1, Savile Row, of 2s. per session.

The Society's House will remain open for the Convenience of Fellows on the evenings of the Society's ordinary meetings till 8.15.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000048

مكتبة قطر الوطنية
Qatar National Library

MIDLAND GRAND HOTEL,
St. Pancras Station,
London, N.W.
Telegraphic Address to each Hotel: "MIDOTEL."



MIDLAND RAILWAY HOTELS

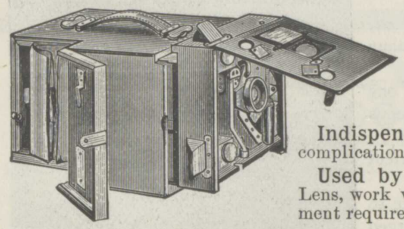
LONDON: MIDLAND GRAND,
ST. PANCRAS STATION, N.W.
Shilling Cab Fare to nearly all Theatres and West End. Close to King's Cross Metropolitan Station. Bedrooms, including Electric Light & Attendance, from 4/-.

LIVERPOOL: ADELPHI, *The Hotel de Luxe of the North.*
Entirely remodelled and refurnished. Telephones in every room.
Every Luxury and Requirement.
Very comfortable and convenient for Transatlantic passengers staying in Liverpool either before or after the sea voyage.

Bradford: MIDLAND. | Leeds: QUEENS.
Derby: MIDLAND. | Morecambe: MIDLAND.
TARIFFS ON APPLICATION.
W. TOWLE, Hotels, &c., Manager.
Chief Office: MIDLAND GRAND HOTEL, N.W.

THE "N. & G." CAMERAS
FOR HAND & TRIPOD.

SEVEN DISTINCT PATTERNS—For Pictures 4¼ × 3¼ in., 9 × 12 centimetres, 5 × 4, 6½ × 4¼, 6½ × 4¾ in., and Stereoscopic, on any Plates or Films.



THE "N. & G." CAMERAS
stand years of constant work in the most trying climate, and never need repairs.
Hundreds in use throughout the World.

Indispensable to Beginners, because free from mechanical complications and extremely simple to work.

Used by the Leading Experts, because they take any Lens, work with any Plates or Films, and provide every adjustment required in Photography.

COMPLETE CATALOGUE, 1s. 3d. Post-free.
Abridged Catalogue, free on application.

NEWMAN & GUARDIA, LTD.,
92, SHAFTESBURY AVENUE, LONDON, W.

(THE ORIGINAL FIRM ESTABLISHED 1810.)

MAPPIN BROTHERS.

Only London Showrooms: 220, REGENT STREET, W. / 66, CHEAPSIDE, E.C. (Next Sir John Bennett's.)
Manufactory: THE "QUEEN'S" WORKS, SHEFFIELD.
Manufacturers of "QUEEN'S" PLATE AND CUTLERY, SOLID SILVER PLATE, DRESSING BAGS, ETC.
ILLUSTRATED CATALOGUE POST-FREE TO ANY PART OF THE WORLD.
Goods forwarded to the country on approval.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

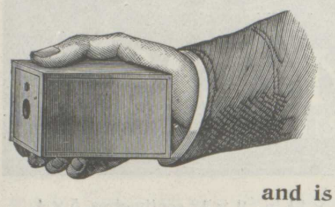
NOTICE.

PHOTOGRAPHS.

ROYAL GEOGRAPHICAL SOCIETY.

It would greatly add to the value of the Collection of Photographs which has been established in the Map Room of the Royal Geographical Society, if all the Fellows who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they would be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

As a rule, Cameras have either to be slung over the shoulder, or carried in the hand.



THE
POCKET KODAK

Slips into the Pocket,

and is hardly felt, as it weighs only 5½ ounces.

The POCKET KODAK holds 12 exposures of Film at one time, and is unloaded and reloaded in daylight.

It has a large finder, and a red window at the back, which shows just how far to turn the key, and how many exposures have been made.

It contains the simplest shutter ever constructed, one button sets and releases it, and makes either instantaneous or time exposures.

It is covered with either red or black leather. Perfect in workmanship. Rich and dainty in finish.

Pictures made with the POCKET KODAK are so sharp and distinct that they are capable of being enlarged up to 8½ × 6½ inches, and sometimes larger.



PRICE, loaded with Film for 12 exposures, £1 1s.

EASTMAN Photographic Materials Co., Ltd.,
115-117, Oxford St., London, W.
PARIS: 4, Place Vendôme.

S. DAVIES,
Merchant Tailor and Colonial Outfitter.

Head Establishment: 142, CHEAPSIDE, LONDON, E.C.

Branches { 328, CENTRAL MARKETS, WEST SMITHFIELD, E.C.
259, SEVEN SISTERS ROAD, N.

A Large Assortment of the Newest Materials always kept in Stock.

GENTLEMEN WAITED ON AT THEIR OWN RESIDENCES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

The Sportsman's and Explorer's Camera

IS THE

Stereoscopic Company's BINOCULAR,

Because when ready to take 30 Pictures it weighs 19 Ounces only.

It is used like a Field Glass. Takes instantaneous and time exposures. Gives Pictures 7 in. by 5 in. when used with the simple printing and enlarging apparatus. Price **£5 5s.** only. Complete with enlarging apparatus, **£10 10s.**

FREE Lessons to Purchasers.



THE LONDON
STEREOSCOPIC Co.,
106 & 108, Regent St., W.;
and 54, CHEAPSIDE, E.C.

S. W. SILVER & CO.,

SUN COURT, 67, CORNHILL, LONDON, E.C.

ROT-PROOF CANVAS TENTS.



EXPLORING EXPEDITIONS

Completely Equipped by

S. W. SILVER & CO.,

INCLUDING THOSE OF

LORD RANDOLPH CHURCHILL,
LORD DELAMERE, SIR H. H. JOHNSTON,
MR. JOSEPH THOMSON, etc., etc.

PORTABLE CAMP FURNITURE.
Skinning and Bowie Knives.
AIR-TIGHT CASES.

"Most of my things were ruined, except those that were packed in the air-tight tin boxes supplied by your firm."—Lady Brassey, *Sunbeam*, R.Y.S.

S. W. SILVER & CO.'S NEW PATENT "EXPLORER'S" FILTER.

"The ebonite Pocket Filter with which you supplied me was of great value to me in South Africa."—Henry Knollys, Lieut.-Col. Commanding Royal Artillery in South Africa.

PATENTEES AND MANUFACTURERS OF

"ANTI-RECOIL HEEL PLATES," "SILVER SAFETY BOLTS," RIFLES FOR LARGE GAME, TRUNKS, BAGS, "EXPERT EJECTOR REVOLVER," "TRANSVAAL RIFLE GUN," etc.

Every Weapon requisite for Hunters and Explorers. Convenient Range for Testing Arms.

PORTMANTEAUX OF EVERY DESCRIPTION.

List of Necessaries for the Voyage to and Residence in every Part of the World on Application to

S. W. SILVER & CO.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004a

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

The "PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY," new series, consists of 14 volumes, extending from 1879 to 1892.

Each volume covers on an average 840 pages, the selling price being 18s. per volume.

These volumes not only contain full reports of the papers read at the Royal Geographical Society, by all the great travellers and geographers of the period, but constitute a record of exploration and geographical work in all parts of the world.

Each volume contains numerous maps, all of them original, embodying the results of exploration, and executed in the best style. In the 14 volumes there are some 350 maps, besides numerous illustrations of characteristic scenery in the least-known parts of the world.

It is believed that a complete set of the *Proceedings* would be a valuable addition to public libraries and other institutions, while many private individuals might wish to have the volumes. As it is desired to reduce the stock in hand, the series is now offered, bound in cloth, at £6 per set. Application to be made to the Chief Clerk, Royal Geographical Society, 1, Savile Row, London, W.

In addition to the *Proceedings*, the Society has issued four volumes of "Supplementary Papers," containing a large number of Memoirs and Narratives of considerable length, besides several valuable Bibliographies. These will be sold for half price, £2 for the four volumes. These contain over 30 Maps and numerous Illustrations.

THE MANUFACTURING

GOLDSMITHS' & SILVERSMITHS' COMPANY,

Show Rooms: 112, REGENT STREET, LONDON, W.

INVITE INSPECTION OF THEIR LARGE AND CHOICE STOCK OF

Diamond Ornaments, High-Class Jewellery and Presentation Plate.

ILLUSTRATED CATALOGUE POST FREE. GOODS FORWARDED ON APPROVAL.

The Goldsmiths' Alliance, Ld. (A. S. Savory & Sons), late of Cornhill, E.C., is transferred to this Company.

SQUATTER'S TENT. Walls 3′ 0″ Poles 7′ 0″ high, and Valise. WITH LONG FLY.



SLY, DIBBLE, & CO., 213, Cable St., London, E.

MAKERS and SHIPPERS of the following:—

TARPAULINS AND WATERPROOFED SHEETS, To suit all Climates.

Hammocks, Kit-Bags, Haversacks, Water-coolers, etc. Flags and Bunting. Ropes, Lines, and Twines. Canvas and Ducks.

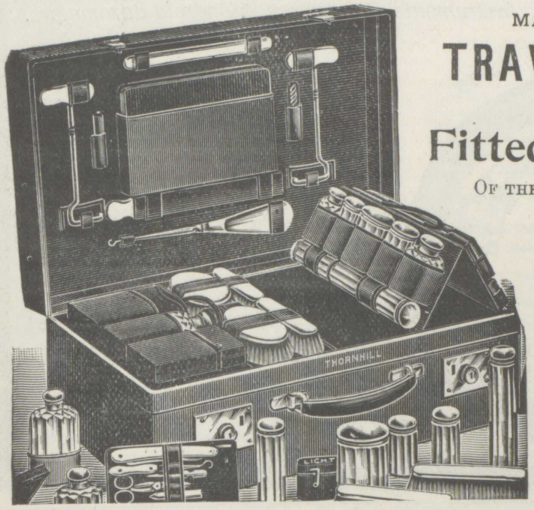
Marquees and Tents lent on hire. Large stock of Second-hand Tents for Sale.

Cheques to be crossed Smith, Payne & Smiths. *ILLUSTRATED PRICE LIST, post free.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003f

مكتبة قطر الوطنية
Qatar National Library

THORNHILL & CO., Ltd.



MANUFACTURERS OF

TRAVELLING BAGS

AND

Fitted SUIT CASES

OF THE FINEST QUALITY AND NEWEST DESIGNS.

Best London Workmanship Throughout.

TRAVELLING REQUISITES

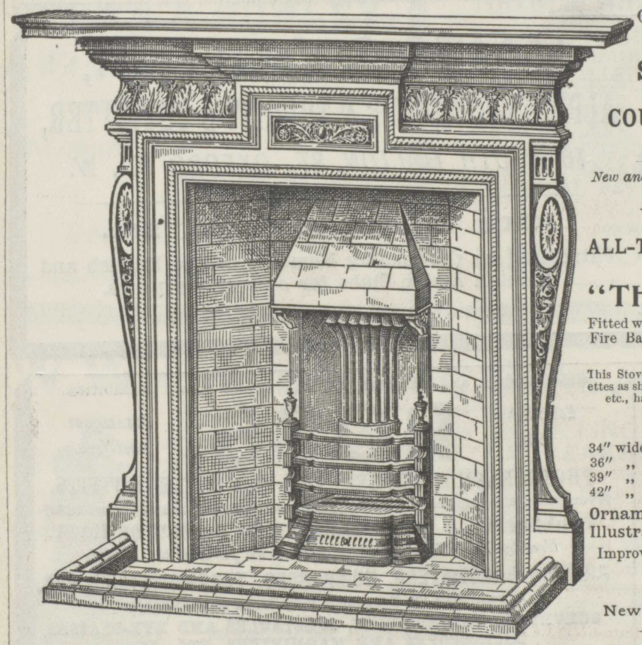
OF EVERY DESCRIPTION.

A Large Stock for Immediate Delivery.

ILLUSTRATED CATALOGUES POST FREE to any part of the World.

144, NEW BOND ST., LONDON.

Barnard, Bishop & Barnards, Limited.



Original Manufacturers of

THE CELEBRATED

Slow Combustion,

OR,

COUNTRY PARSON'S STOVES.

New and Original Designs always being produced.

LATEST NOVELTY—

ALL-TILED CANOPY STOVE,

As Illustrated, No. 667,

"THE IDEAL." *Design Registered.*

Fitted with our well-known Patent Norfolk Fire Basket, Brass Vases to Bar Frame, Ventilating Ash Pan, etc.

This Stove, when made up in 6 in. × 2 in. brickettes as shown, in whole colour, as Teapot Brown, etc., has an exceedingly quaint and attractive appearance.

PRICES:

34″ wide × 36″ high, 13″ fire	..	£4	12 6
36″ ,, × 36″ ,, 15″ ,,	..	4	15 0
39″ ,, × 36″ ,, 18″ ,,	..	4	17 6
42″ ,, × 36″ ,, 21″ ,,	..	5	0 0

Ornamental Cast Iron Mantel, as Illustrated, to suit, 48/6, Primed.

Improved Tile Curb, made in one piece, 35/-. Hearth Tiles extra.

Carriage Paid.

New Catalogue on Application.

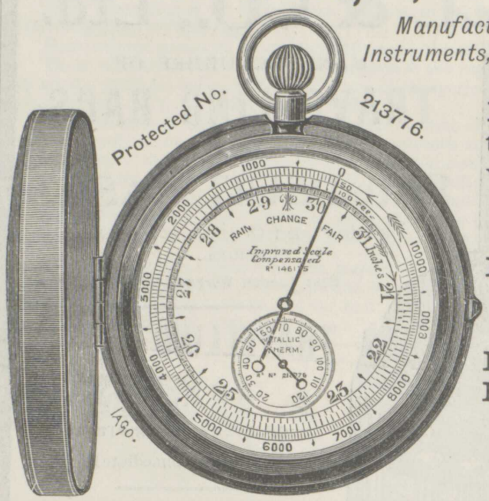
91-93, Queen Victoria St., LONDON, E.C., & Norfolk Ironworks, NORWICH.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000069

مكتبة قطر الوطنية
Qatar National Library

F. BARKER & SON, 12, Clerkenwell Road, LONDON,

Manufacturers of High Class Surveying Instruments, Compasses, & Aneroid Barometers.



Barker's Improved Registered Scale Aneroid, combined with Patent Metallic Thermometer.

Barker's Improved Luminous Compass, for use at night.

Barker's Transparent Pocket Bar Needle Pebble Compass and Dipping Needle.

ORDER THROUGH THE PRINCIPAL OPTICIANS.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.

THE IMPERIAL INSURANCE COMPANY, LIMITED, FIRE.

1, OLD BROAD STREET, and 22, PALL MALL, LONDON.

ESTABLISHED 1803.

Subscribed Capital, £1,200,000. Paid-up, £300,000. Total Invested Funds, £1,500,000.

THE DISTINGUISHING CHARACTERISTICS OF THIS COMPANY ARE:—

Moderate Rates; Undoubted Security; Prompt and Liberal Settlement of Claims.

Every Information and Forms of Proposal can be obtained from the Offices of the Company, or at any of its Agencies at home or abroad.

E. COZENS-SMITH, GENERAL MANAGER.



JAMES S. CARTER,

ALPINE BOOTMAKER & TOURIST'S OUTFITTER,

16, SOUTH MOLTON ST., OXFORD ST., W.

RÜCKSACS. SLEEPING BAGS.
HAVERSACKS. SLEEPING CAPS.
TENTS. GLOVES. SOCKS.

THE ALPINE BOOT, 26s.

Patronised by the leading Members of the English and Foreign Alpine Clubs for over thirty years.

PRICE LIST ON APPLICATION.



Gold Medals and Highest Awards at all Great Exhibitions.

Established 1830.

ROSS.

Catalogues post-free.

PHOTOGRAPHIC LENSES AND COMPLETE OUTFITS.

Every requisite supplied. Developing and Printing executed promptly.

TELESCOPES & FIELD GLASSES OF FINEST QUALITY.

Used by Travellers and Sportsmen in all parts of the World.

ANEROID BAROMETERS, COMPASSES, THERMOMETERS, ETC.

Special Sets for Travellers, very Light and Portable.

SURVEYING INSTRUMENTS, SPECTACLES AND EYE-GLASSES, MICROSCOPES AND MAGNIFIERS, ETC., ETC.

ROSS & CO., 111, New Bond Street, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000037

مكتبة قطر الوطنية
Qatar National Library

S. SMITH & SON'S Non-Magnetisable Watches.



THE TESTING OF OUR WATCHES BY THE
ADMIRALTY.

Hydrographic Department, Admiralty,
London, S.W., 19th May, 1894.

Sir,—I have much pleasure in returning you the two Non-Magnetisable Watches which you were good enough to send for my inspection. They have successfully passed through a severe test in close proximity to a powerful dynamo, and I believe the Astronomer Royal is in correspondence with you on the subject.

I am, Sir, your obedient Servant,
W. H. WHARTON, Hydrographer.

Messrs. S. Smith & Son, 9, Strand, W.C.

Prize Medal, Electrical Exhibition, 1892, for Non-Magnetisable Chronographs.

Certificate and Warranty with every Watch. Postage Free at our own risk. Old Watches and Jewellery taken in exchange. Send for our Treatise on Watches, Just Issued, 141 pp., 320 Illustrations. Finest Work yet Published.

West Strand Observatory,
9, STRAND, W.C.
MAKERS TO THE ADMIRALTY & KEW OBSERVATORY.

We hold the premier position on the Kew Observatory list of 1895, with a Split Seconds Chronograph, with 82·2 marks out of a possible 100.

CATALOGUE OF SECONDHAND BOOKS

On Africa, India, Military, Sport, Travel, &c.

(No. 112) AT GREATLY REDUCED PRICES, POST-FREE.

WILLIAM POTTER, 30, EXCHANGE STREET EAST, LIVERPOOL.

BROWN & ROWLEY,

WATLING STREET, CITY,

Printers,
Account Book
Manufacturers,
AND
General Stationers.

Contractors to the Royal Geographical Society.

Natura Milk and Cream.

NATURAL FLUID MILK AND CREAM IN TINS (Sterilized, not Condensed). UNEQUALLED FOR USE IN HOT CLIMATES, FOR STEAMSHIP COMPANIES, YACHT OWNERS, TRAVELLERS, EXPLORERS, AND SCIENTIFIC EXPEDITIONS. INDISPENSABLE IN CASES OF TROPICAL FEVER, MALARIA, Etc.

LONDON AGENTS:
JAMES PORTER & CO.,
13, Fenchurch Avenue, E.C.

W. W. GREENER'S GUNS AND RIFLES.



THE NEW SPORTING RIFLE
WITH PATENT UNBREAKABLE STOCK.

Double Barrel, 303 Bore, High Velocity, Flat Trajectory, Great Accuracy, and Penetrative Force.

Double Express Rifles from 25 guineas. Large Bore Rifles, and Long Range Single Rifles.

Greener's "Choke Bore Rifle," a perfect Rifle & Shot Gun in one.

GREENER'S SHOT GUNS.

Hammer, from 9 guineas. Hammerless, from 13 guineas. Ejectors, from 30 guineas.

Extract from *The Field*, December 30, 1893.

Mr. Greener made the Batteries for my friend and myself, and a more accurate, perfectly finished, and absolutely reliable set of rifles it would, I am convinced, be impossible to get.
W. GADUMIKA.

W. W. GREENER, 68, HAYMARKET, LONDON, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000070

مكتبة قطر الوطنية
Qatar National Library

SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE.

READY ON DECEMBER 1st.

THE STRUGGLE OF THE NATIONS.

(EGYPT, SYRIA, AND ASSYRIA.)

By PROFESSOR MASPERO.

Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With General and Special Maps, three Coloured Plates, and over 400 Illustrations. Demy 4to (approximately), cloth boards, 25*s.*

This is a companion volume to "The Dawn of Civilization," and carries the history of the ancient peoples of the East from the twenty-fourth to the ninth century before our era. It embraces in its scope the period of the sojourn of the Children of Israel in Egypt, and the historic connexion between Egypt and Syria during the centuries immediately following the Exodus. As its title, "The Struggle of the Nations," implies, the period covered was one in which the Great Empires of the East were in perpetual conflict—each striving for supremacy. Syria, owing to its position on the highway of the nations, became their principal battle-field. The recent discovery of a Stele of Minephtah, in which the Israelites are mentioned for the first time on any Egyptian monument, has infused a new interest into the Bible account of the Exodus. Prof. Maspero has brought to bear upon this question his unrivalled learning. It is clear that the part played by Semitic peoples in Egypt was much more important than was previously suspected, and that from the time of the Hyksos onwards, Asiatics exercised a considerable influence on the Nile.

THE DAWN OF CIVILIZATION (EGYPT AND CHALDÆA). New and Revised Edition. By Professor MASPERO. Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With Map and over 470 Illustrations, including three Coloured Plates. Demy 4to (approximately), cloth, bevelled boards, 24*s.*

Professor Maspero, by using the results of the most recent researches in Egypt and Mesopotamia, has brought this new Edition up to the latest date.

LONDON: NORTHUMBERLAND AVENUE, W.C.; 43, QUEEN VICTORIA STREET, E.C.
BRIGHTON: 129, NORTH STREET.

GEORGE PHILIP & SON'S LIST.

JUST PUBLISHED.

THE BOUNDARY QUESTION BETWEEN BRITISH GUYANA AND VENEZUELA. Consisting of Diagrams and Maps from the Capuchian Archives in Rome, with a brief summary of the question. By the Rev. JOSEPH STRICKLAND, S.J., Litt. Doc., Phil. Doc. Imperial 8vo, cloth, 10*s.* 6*d.*

FOUR NEW LIBRARY MAPS.

LONDON AND ENVIRONS. Philips' Library Map of London and its Environs. Founded upon the Ordnance Survey Plans, and corrected to date from private information, etc.

Scale—3 inches to 1 mile. Mounted on cloth in case, 21*s.*
Size—64 by 52 inches. Mounted on roller and varnished, 21*s.*
4 sheets, coloured, 16*s.* Mounted on patent spring roller, 63*s.*

The *Morning Post*:—"Philips' New Library Map of London is one of the most complete works of its kind. The engraving has been executed with care and delicacy."

ARGENTINE REPUBLIC. Topographical Map of the Argentine Republic. By H. D. HOSKOLD, C.E. This is an entirely new large-scale Map of the Argentine Republic, based on the most recent information, coloured to show the political divisions, with hills printed in brown, and insets showing tables of distance, heights, and sections of the principal mountain regions, etc., and plan of the Town of Buenos Aires. The original, from which this map has been prepared, was drawn by Señor H. D. HOSKOLD, C.E., of Buenos Aires.

Scale—31½ miles to 1 inch. Mounted to fold in leather case, 63*s.*
Size complete—54 by 86 inches. Mounted on roller and varnished, 63*s.*
10 sheets, coloured, 50*s.* Mounted on best spring roller, 126*s.*

WESTERN AUSTRALIA. Philips' Large Map of Western Australia. The topographical information has been reduced from larger Government Survey Maps, special surveys and plans, and other material supplied by the Agent-General. The coast line from Admiralty Charts.

Scale—24 miles to 1 inch. Mounted to fold in case, 30*s.*
Size—52 by 74 inches. Mounted on roller and varnished, 31*s.* 6*d.*
4 sheets, coloured, 21*s.* Mounted on patent spring roller, 73*s.* 6*d.*
Mounted on best spring roller, 105*s.*

WESTERN AUSTRALIA—GOLD FIELDS. Philips' New Map of the Western Australian Gold Fields. (Central Coolgardie Gold Fields, *now ready.*)
Compiled from official Maps of the Department of Mines, W.A., and other information supplied by the Agent-General of Western Australia. This map, when completed, will be the most accurate and reliable published.

Scale—1 inch to 1 mile. Mounted to fold in case, 63*s.*
Size of 4 sheets—60 by 80 inches. Mounted on roller and varnished, 70*s.*
4 sheets, coloured, 42*s.* Mounted on self-acting spring roller, 74*s.* 6*d.*

DETAILED PROSPECTUS POST FREE.

LONDON: GEORGE PHILIP & SON, 32, FLEET STREET, E.C.
ENGLISH AND FOREIGN MAP DEPÔT.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003c

مكتبة قطر الوطنية
Qatar National Library

MR. W. B. HARRIS'S NEW BOOK.

NOW READY.

Dedicated to H.R.H. the Prince of Wales.

FROM BATUM TO BAGHDAD,

VIÂ TIFLIS, TABRIZ, AND PERSIAN KURDISTAN.

By WALTER B. HARRIS, F.R.G.S.,

Author of "Tafilet;" "A Journey through the Yemen;" "Danovitch, and other Stories;" etc.

With numerous Illustrations and Two Maps. Demy 8vo, 12s.

WILLIAM BLACKWOOD & SONS, EDINBURGH AND LONDON.

Dedicated by special permission to Her Majesty.

1896 Edition ready.

Size of Maps, 20 by 25 inches. Half-bound Royal Folio (20 by 13 inches), in Russia or Morocco, with gilt titles and edges, price £6 6s.

THE ROYAL ATLAS OF MODERN GEOGRAPHY.

An entirely New Edition, thoroughly Revised to the present time, the Maps giving the very latest information.

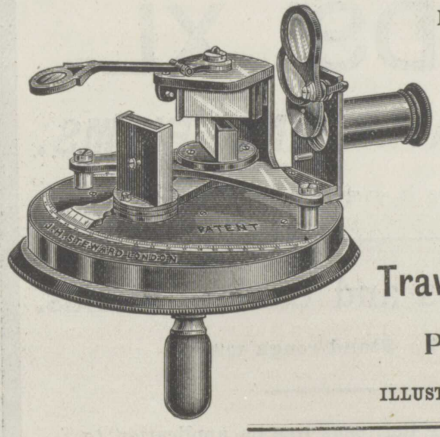
Complete Catalogue of Atlases, Maps, etc., Post Free.

W. & A. K. JOHNSTON,

EDINA WORKS, EASTER ROAD, EDINBURGH; AND 5, WHITE HART STREET, WARWICK LANE, LONDON, E.C.

The BLAKESLEY'S DOUBLE SEXTANT

(STEWARD AND BLAKESLEY'S PATENT).



Invaluable for laying out curves, and for Coast and River Surveys.

Takes angles up to 180° without parallactic error.

Price £10 10s. 0d.,

COMPLETE IN SLING CASE.

Travellers' Scientific Outfits.

PHOTOGRAPHIC KITS.

ILLUSTRATED CATALOGUES GRATIS, POST FREE.

J. H. STEWARD,

Optician to the Government and the National Rifle Association,

406, Strand; 457, West Strand; 7, Gracechurch St., S.E., LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000029

مكتبة قطر الوطنية
Qatar National Library

CLOTHED WITH AIR

CELLULAR UNDERWEAR AND SHIRTS.

THE HEALTHIEST AND MOST ECONOMICAL FOR TRAVELLERS.

Extract from C.T.C. HANDBOOK AND GUIDE, 1896–97, p. 52.

"From the peculiar manner in which CELLULAR CLOTH is woven (forming a network of minute air-cells next the skin), it allows, even more fully than wool, the free evaporation of perspiration on the side next the skin. . . . It is less bulky, and is lighter to carry; it dries much more quickly; it is more easily washed, and its prime cost is much smaller. Last, but not least, it is quite free from that bane of all woollen goods, the liability to shrinkage."

BEST FOR ALL SEASONS AND CLIMATES.
ESTIMATES FOR OUTFITS SUPPLIED ON APPLICATION.

To be obtained in all the principal cities and towns in the United Kingdom, the Colonies, and India.

Illustrated Price List of full range of Cellular goods for Men, Women, and Children, sent Post Free on application.

Full assortment of goods at the following retail houses:—

ROBERT SCOTT, Ltd., 14 and 15, Poultry, London, E.C.
OLIVER BROS., Ltd., 417, Oxford Street, London, W.

WHOLESALE ONLY—

THE CELLULAR CLOTHING CO., LD.,
72 & 73, FORE STREET, E.C.

NEVER TRAVEL WITHOUT!

EDWARDS' XL

Isochromatic and Ordinary PLATES AND FILMS.

Used in all Climates by Travellers in every part of the World.

The Edwards' Dark Slides and Camera Stands.

Light, Strong, and Compact. Stand rough usage.

Before starting for a tour consult our list, sent free on application to

B. J. EDWARDS & CO., The Grove, Hackney,
LONDON, E.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

INDEX TO ADVERTISEMENTS.

Where no folio is given, Advertisement does not appear this month.

Admiralty Charts. PAGE
Potter, J. D. 22

Booksellers.
Potter, William 11
Sotheran & Co. ..... *Cover* 2

Cabinet Makers.
Crockett, J. T., & Son 26

Camp Beds.
Chorlton, I., & Co. 21

China & Glass.
Pearce, A. B. 26

Contractors' Tools, etc.
Hardy Patent Pick Co., Ltd. *Cover* 3

Cutlery.
Hill & Son 26

Cycle Accessaries.
Simpson Lever Chain 22

Decorative Iron Work.
Hart, Son, Peard, & Co. .....

Disintegrating Machinery.
Hardy Patent Pick Co., Ltd. *Cover* 3

Field Glasses.
Brown, James 19
Steward, J. H. 13

Foods for Travellers.
Armour & Co. 17
Halford & Co. .....
Maconochie Bros. 19
Porter, J., & Co. 11
Spratt's Ship Biscuits ..... *Cover* 4

Galvanized Wire Netting.
Barnard, Bishop, & Barnards, Ltd. 9

Guns & Rifles.
Greener, W. W. 11

Hat Manufacturers.
Lincoln, Bennett & Co. 19

Hotels & Restaurants.
Hôtel Cecil 24
Hôtel Métropole 25
Midland Grand Hotel 5

Instruments for Travellers. PAGE
Barker, F., & Son 10
Cary's 21
Casella, L. 22

Insurance.
Imperial Insurance Co., Ltd. ... 10
London, Edinburgh, & Glasgow Assurance Co., Ltd. 25

Jewellers.
Smith, S., & Sons 11
Goldsmiths' & Silversmiths' Co. 8
Mappin Bros. 5
Streeter & Co., Ltd. 1

Lanterns & Slides.
Wood's 26

Medicines & Medicine Cases.
Browne, Dr. Collis .....
Burroughs, Wellcome & Co. *Cover* 4
Calvert & Co. ..... *Cover* 4
Keating 26

Miscellaneous.
Larkin 19

Outfitters.
Carter, J. S. 10
Cellular Clothing Co., Ltd. 14
Davies, S. 6
Jaeger's Woollen Co. 18
Pope & Plante 26
Silver & Co. 7
Thresher & Glenny .....

Photographic Outfits.
Dollond & Co. 17
Eastman Photographic Co. 6
Edwards & Co. 14
London Stereoscopic Co. 7
Newman & Guardia 5
Platinotype Co. 17
Ross & Co. 10

Postage Stamp Dealers.
Lincoln, W. S. 17

Printers & Account Book Manufacturers.
Brown & Rowley 11
Darling & Son, Ltd. 25

Publishers. PAGE
Blackwood, W., & Sons 13
Johnston, W., & A. K. 13
Philip, G., & Son 12
Smith, Elder & Co. ..... *Cover* 2
Society for Promoting Christian Knowledge 12

Ship Owners.
British India Steam Navigation Co. 23
Huddart, James 23
North German Lloyd Co. 23

Sporting Outfits.
Burberry & Sons 3
Witton & Co. 17

Stationers, etc.
Brown & Rowley 11
Moring, T. ..... *Cover* 2

Stores for Expeditions, &c.
Military Equipment ..... *Cover* 3

Tea Importers.
Higgs, W. A., & Co. 15

Tents.
Edgington, B., Ltd. 3
Piggott Bros. & Co. 18
Sly, Dibble, & Co. 8
Unite, I. 26
Willesden Paper & Canvas Works 16

Tobacco Manufacturers.
Richmond Cavendish Co., Ltd. 20
Wood & Son 20

Tours.
Co-operative Travel 16

Travelling Bags.
Hosking, N. 21
Thornhill & Co. 9

Typewriters & Typewriting.
Yost Typewriter Co. 3

Watch & Clock Makers.
Smith, S., & Sons 11
Blockley, H. 21

Waterproof Roofing.
Willesden Paper & Canvas Works 20

OOPONG

(REGISTERED).

A Blend of Choicest India and Ceylon Teas,

PER 2/- LB.

The best value in Tea ever offered to the Public. Six Pounds and upwards forwarded the same day as ordered, carriage paid, to any part of the United Kingdom.

This Tea is supplied in hermetically sealed air-tight cases to Travellers, Yachtsmen, and Expeditions.

W. A. HIGGS & CO., TEA IMPORTERS,

39, HIGH STREET, ISLINGTON, LONDON, N.

AND BRANCHES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000049

مكتبة قطر الوطنية
Qatar National Library

MR. PEROWNE'S
CO-OPERATIVE CRUISES AND EDUCATIONAL TOURS.

1. **TEN GUINEA SWISS SKATING TOURS.** Davos Platz or Grindelwald.
2. **THIRTEEN GUINEA ROME TOURS** (Spring and Autumn).
3. **TWENTY GUINEA CRUISE TO THE NORTHERN CAPITALS** (May and September). St. Petersburg, Copenhagen, Christiania, and Stockholm. 26 days.
4. **EIGHTEEN GUINEA MEDITERRANEAN CRUISE** (September—May). Lisbon, Tangier, Malaga (for Granada), Algiers, Tunis, Sicily, Corsica, and the Riviera. 23 days.
5. **TWENTY-ONE GUINEA PALESTINE CRUISE** (November and January). Palestine, Egypt, Sicily, and Malta.
6. **ICELANDIC AND NORWEGIAN CRUISES** (Summer).

The Baltic and Mediterranean Cruises are on the magnificent S.S. "Midnight Sun," 3188 tons register, 3500 horse-power.

Plans of steamers, and full details, from

THE SECRETARY,
5, ENDSLEIGH GARDENS, LONDON, N.W.

ESTABLISHED 1870.

WILLESDEN CANVAS, WILLESDEN PAPER,

As used by Her Majesty's and Foreign Governments, India Office, H.M. Colonies, Railway Co.'s, etc.

FOR ALL CLIMATES.

WILLESDEN CANVAS.

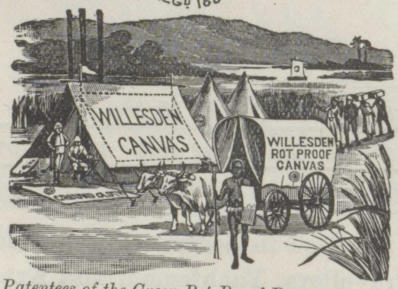
TENTS, AWNINGS, COVERS, BLINDS.

SHADING GLASS.

Rot-Proof, Insect-Proof, No Smell, Durable.

Proved to resist the White Ant.

TRADE WILLESDEN WATERPROOF WW UNIQUE REGD 1880. MARK.



WILLESDEN PAPER.

Willesden Paper for use up country, etc. 4-ply for Roofing. 2-ply and 1-ply for Linings. 100 yds 4-ply 60-in. wide, 2/6 per lineal yd. = 1500 sq. ft. (*i.e.* 15 *Squares of Roofing*), packed for shipment (1 bale), weighs about 2 cwt.

Willesden 4-ply Polo Goal Posts.

4-ply Roofing.

Two and One-ply Papers for Understating.

Sole Manufacturers and Patentees of the Green Rot-Proof Process for treating Paper, Canvas, etc.:

WILLESDEN PAPER AND CANVAS WORKS,
WILLESDEN JUNCTION, LONDON, N.W.

NOTICE.

All Advertisements and Bills for the next issue must be received by the 15th inst.

ADVERTISEMENT DEPARTMENT, 5, Queen Victoria Street, Mansion House, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000057

مكتبة قطر الوطنية
Qatar National Library

Invaluable to Tourist or Traveller. It is never called a Liebig.

ARMOUR'S EXTRACT OF BEEF.

The most concentrated and best Beef Extract. Makes delicious Bouillon in a minute, and provides the means of obtaining many excellent dishes at home or abroad. Keeps any length of time. Has a more natural flavour and goes further than any other kind.

Full particulars in Cookery Book, sent free by
ARMOUR & CO., 59, Tooley Street, London, S.E.
MENTION THIS PAPER.

IMPROVED
KEY CAMERA.
Simplest and Best Hand Camera Made. Measures only 8 × 4¾ × 4 ins.
PRICE, QUARTER PLATE, £7 7s. SIZE, 5 × 4 INCHES, £10 10s.
Used by the best Scientific and Artistic Photographers, including
CAPTAIN ABNEY, G. DAVISON, F. HOLLYER, R. KEENE, &c., &c.
Our FINDER, *which is the only one that can be used in bright sunshine, can be supplied, if desired, price* 7s. 6d.

USE PLATINOTYPE
If you wish to gain Medals—If you wish for Permanent Results—If you wish for Artistic Effects—If you seek the Simplest Process.
PRICE LISTS AND FULL INSTRUCTIONS UPON APPLICATION.
THE PLATINOTYPE COMPANY, 22, Bloomsbury St., New Oxford St., London, W.C.

SPORTING REQUISITES.
Guns, Rifles, Air and Saloon Guns, Revolvers, Pistols, Walking-Stick Guns, and Sporting Implements of all kinds, etc.
Wholesale, Export, and Retail. Estimates free.
WITTON & CO.,
TEWKESBURY, GLOS.

LINCOLN ALBUM.


Lincoln Postage Stamp Album and Descriptive Priced Catalogue (Tenth Edition). Illustrated by 3000 Engravings of Stamps, and containing Atlas of 16 Coloured Maps, with spaces to hold over 6000 Stamps, and giving the dates, colours, and values of every Stamp, and market values of most of them. The little notes in this Edition describing the names of the various portraits and other information will be found very useful.
Bound in cloth, 5s.; *post free,* 5s. 6d.
W. S. LINCOLN,
2, Holles St., Oxford St., London, W.

DOLLOND & CO.,
35, LUDGATE HILL, E.C., and Branches.
PHOTOGRAPHIC APPARATUS
OF EVERY DESCRIPTION.
SPECIAL "SETS" FOR TOURISTS.
¼-Plate, £3 15 0 | ½-Plate, £4 17 6 | Whole Plate, £6 17 6
DEVELOPING, PRINTING, ENLARGING,
and other work, carried out with dispatch.
LANTERN SLIDES PRODUCED FROM NEGATIVES.
DOLLOND'S COMPENSATED ANEROIDS, BINOCULARS, POCKET TELESCOPES, SPECTACLES, &c.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006e

مكتبة قطر الوطنية
Qatar National Library



TENTS

FOR THE

TRAVELLER

AND

EXPLORER.

Write for our "Red Bound Catalogue" of Tents and Camp Equipment, post free.

THE MOST PERFECT TENT is PIGGOTT BROS. & CO.'S "PROSPECTING TENT." Made double. The inner roof being suspended 12 inches below the ridge, allows of a free circulation of air between the outer and inner roofs. The inner roof has ventilators, protected by mosquito net. *Made from Green Waterproof and Rot-Proof Canvas.*

PIGGOTT BROS. & CO., MANUFACTURERS,
57, 58, 59, Bishopsgate Street Without, LONDON.

"Woollen goods are to be preferred for all countries and for all climates."—HINTS TO TRAVELLERS (published by Royal Geographical Society), 6th edition, p. 12.

JAEGER

PURE WOOL UNDERWEAR, HOSE, PYJAMAS, RUGS, BLANKETS, CASHMERE SHEETS, DRESSING GOWNS, SHAWLS, CORSETS, CYCLING OUTFITS, BOOTS AND SHOES, etc., etc.

PROTECTION FROM CHILL. FIXED, MODERATE PRICES.

TRADE MARK ON JAEGER UNDERWEAR.

JAEGER DEPOTS:

3 & 4, Princes Street, Cavendish Square (near Regent Circus).
Special Depôt for Alpine Requisites.
126, Regent Street (near the Quadrant).
30, Sloane Street (adjoining M'Pherson's Gymnasium).
456, Strand (near Trafalgar Square).
85 & 86, Cheapside (near King Street).
TAILORING (only):—42, Conduit Street, New Bond Street, W.

"HEALTH CULTURE" AND JAEGER PRICE LIST SENT FREE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The
Geographical Journal.

No. 5. NOVEMBER, 1896. Vol. VIII.

JOURNEY ROUND SIAM.*

By J. S. Black, First Assistant of Her Majesty's Consular Service in Siam.

Within recent times the importance and magnitude of British interests in Siam have been, by the course of events in that country, brought prominently before the public. These interests arise from the presence of large numbers of British subjects and the investment of British capital in the various industries of the country. Our subjects are not only English people, but Indians, Malays, Burmese, and Chinese; in fact, every species of Asiatic who can lay claim to have been born in British possessions, and they are to be found not only at Bangkok, the capital of Siam, but are scattered in thousands throughout the most distant parts of the kingdom. The great proportion of this foreign population is composed of Burmese or Shans, who migrate from their homes into the adjoining Siamese territory as traders or gem-diggers. By virtue of the existing treaties with Siam, all her Majesty's Asiatic subjects are entitled to Consular protection and assistance, and the object of the journey which forms the subject-matter of the paper to-night was to hold district courts, settle a number of long-pending disputes between British subjects and Siamese in the provinces, and generally acquire information regarding the nature of British interests in these little-known regions.

I shall not in this paper allude to the details of my official business, but I may be permitted here to remark that I was occasionally extremely busy, and, after a hard day's work as Consular Court Judge (the Court sometimes consisting of a tent and the bench of a small camp table), I did not feel much inclined to worry the natives in search of that precise and scientific information which one ought to be able to

* Paper read at the Royal Geographical Society, April 27, 1896. Map, p. 540.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

present to such a learned body as the Royal Geographical Society. My journey was official, and naturally the greatest part of my attention was devoted to my official business, and, being versed neither in geology, zoology, nor any other "ology," I must crave the indulgence of this Society for venturing to lay before them such facts as would come under the observation of an ordinary traveller. The course of my journey, however, lay through some districts which have not to my knowledge yet been described, at least from the point of view from which I propose to treat them to-night, and geographical, as well as public, curiosity about these districts has been considerably heightened within the last few months. I might add that, having resided seven years in Bangkok, and devoted a large share of that time to the study of the Siamese language, I was in a position to communicate freely with the natives and obtain information at first hand; and thus I might say, with all modesty, I possessed an advantage, emphasized as it was by my official position, that is given to few travellers in a strange country.

Siam, as will be observed from the map, is, geographically speaking, roughly divided into two great basins—the basin of the Menam, and the basin of the Mekong. The course of my journey struck eastwards from Bangkok to the Talesap Lake, northwards through the western side of the Mekong basin, and, crossing the watershed south of Luang Prabang, I cut across the rough and hilly country of Northern Siam to Chiengmai, whence I descended the rivers Meping and Menam, a distance of nearly 600 miles, to Bangkok again. It is not possible, within the brief limits of such a lecture as this, to enter into the details of a journey which lasted six months, and during which I traversed over 2000 miles. I can, therefore, endeavour merely to describe new districts as concisely as possible, and treat generally of a few salient features such as might be imagined to be of interest to those who desire to add to their knowledge of this country.

Chantabun, which is situated 14 miles from the mouth of a stream of the same name, and lies 188 miles from Bangkok, was my first stopping-place—a place which has of late years been honoured with an amount of public attention which its intrinsic merits would not by any means have attracted to itself. It is generally spoken of as the second port of Siam, but it is a port in which only a few miserable canoes can be seen at any time, except on the one day of the week when a small Siamese steamer calls from Bangkok. Nor is its population considerable, for, on the authority of the Governor, that amounts to four thousand only, of whom at least one quarter are the descendants of Annamites who some generations ago migrated from their homes in Cochin-China. The whole province does not contain a population of more than thirty thousand, and this is concentrated on the Chantabun stream and near the coast. The Annamites, as well as many Chinamen, who are numerous in the province, are converts to the Roman Catholic faith, and their spiritual wants are

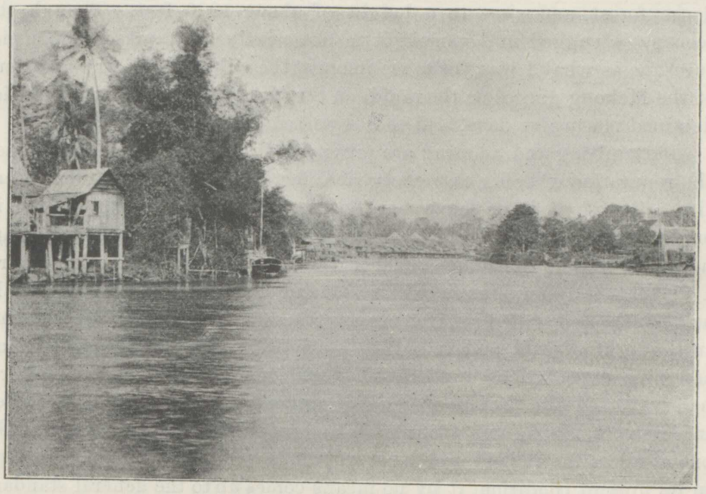
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000015

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ministered to by a French missionary, assisted by several native pastors. The exports are insignificant in value, with the exception of pepper, which amounts to about £60,000 per annum. The pepper plant, the sight of which reminds one of the hop gardens of Kent, flourishes at the base of the Sabap hills, and is cultivated exclusively by Chinese. These industrious individuals have, as usual, the monopoly of all lucrative business in their hands, keep the best shops, and control the liquor and opium trade.

Chantabun is on the way to the sapphire and ruby mines, which are situated in the adjoining provinces of Battambong and Krat, and a



CHANTABUN.

number of Burmese reside here for the purpose of buying the precious stones from the diggers, and of trading in the necessaries of food and clothing required at the mines. These mines contain a population of over two thousand Burmese-British subjects, and here lay the chief scene of my official labours in this part of the country.

I might add, by the way, before leaving Chantabun, that the presence of the few French troops just outside the town have not produced any noticeable difference in the place, except that the price of chickens and eggs has been slightly enhanced—a fact which the old Burman in whose house I lodged was careful to communicate to me. The civil government is entirely in the hands of the Siamese authorities, and trade and business go on as usual.

The province of Chantabun is separated from the province of Battambong by a range of hills from 2000 to 3000 feet high, and one

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000091

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

peak—Sai Dao—is passed on the route which, judging roughly, must be 5000 feet high. It will thus be observed that Chantabun is not, as has sometimes been erroneously supposed, the port and outlet of the provinces of Battambong and Siamrap. These provinces drain into the Talesap Lake, and finally into the Mekong, whilst the province of Chantabun drains into the Gulf of Siam. Indeed, there would be little or no communication between the two places were it not for the fact that the sapphire mines are situated near the frontier of Chantabun.

Pailin is the name given to that place, and the journey thither, which is done by pack-bullock or elephant, occupies about four days. The narrow footpath—impassable for bullock-carts—winds its way through dense forest, and rises to a height of about 1000 feet. Though the scenery is rugged and varied, it is not nearly so impressive and picturesque as what I was yet to see amongst the wild and solitary grandeur of the Mekong gorges or the rapids on the Menam. At Pailin my duties detained me twelve days, and then I passed on to Battambong.

Battambong and Siamrap are provinces which have somehow gained the reputation of being extremely rich, fertile, and populous. In recent times these provinces have hardly ever been referred to except in euphuistic language describing their wealth, population, and magnificence. As no Consular official had ever been in this direction before, I was naturally anxious to explore this unusual land flowing with milk and honey, and scrutinize, if necessary, these vague and glowing accounts in the light of cold and relentless statistics. I must confess that any sanguine expectations I possessed were considerably shattered after I had traversed the province, seen Battambong the capital, and succeeded in getting a few figures about trade and population. It does not strike one at all as the richest and most populous province of Siam. In fact, in its present condition, it by no means comes up to the general standard of wealth of the Menam valley.

I do not speak of the potentialities of the place—far from it—as almost every part of Indo-China is capable of enormous development under proper European management, but I take things as they now stand. And what do we find? The population of the combined provinces of Battambong and Siamrap I estimate at about eighty thousand, and the import and export trades combined may be valued at about £80,000 per annum. I must state that these figures are only approximations, as *boná fide* statistics are not to be obtained in any part of Indo-China, and the data upon which even the most painstaking inquirer bases his results are necessarily very imperfect. My figures of trade were obtained from individual merchants and from calculations based on the amount of taxes, and population from rough guesses at the number of able-bodied men in the different subdivisions. In any case, the statistics are accurate enough to show that the terms of "rich, fertile, and populous" are hardly applicable to this part of Siam.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The town of Battambong itself is a scattered village of about four thousand inhabitants lying on both sides of the Sangkai stream, which, when I was there during the dry season, did not contain enough water to float an ordinary boat. Three miles beyond the town the cultivation of rice ceases, and nothing is to be seen but a vast expanse of treeless, grassy plain stretching out to the jungle which fringes the distant horizon.

The imports are chiefly cotton cloth for the clothing of the population, and small quantities of other articles, such as lamps, slippers, silks, looking-glasses, brass dishes, etc. The principal export is rice, and this



ON THE WAY TO THE GREAT LAKE, EAST SIAM.

amounts to about £20,000 per annum, and fish to about £15,000. The other exports are hides and horns, cardamums, mats, etc. The Siamese share of the fisheries of the lake is quite insignificant compared with that of Cambodia.

It is gratifying to learn that, in spite of the close connection which exists geographically between Battambong and Saigon, the cloth trade here is almost exclusively British, and is in the hands of two wholesale British Indian dealers. It is an extraordinary fact that British goods can be conveyed to Battambong overland from Bangkok, a long and toilsome journey of two days by steamer and about twenty days by bullock-cart, and yet undersell French goods in Battambong, though the latter can in the rainy season be brought up by steamer from Saigon in two days. In this season the Indian traders often get their cloth through Saigon by paying a heavy transit duty. The bulk of the exports naturally find their way to Saigon, but French imports are insignificant, and consist chiefly of liqueurs and brandy, silk goods, and knickknacks.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000be

مكتبة قطر الوطنية
Qatar National Library

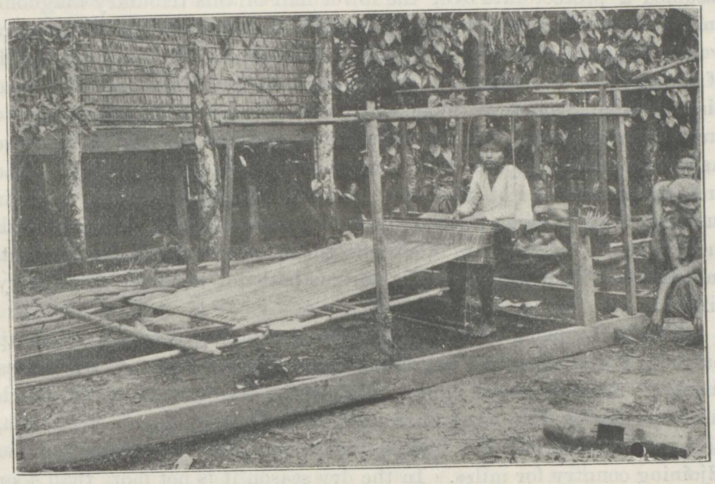
A rich spot, however, in this province is at the sapphire mines situated up amongst the hills at the sources of the Khonburi stream. It is a curious geological circumstance that a range of hills forms a distinct line of demarcation between the sapphire mines at Pailin and the ruby mines at Nawong, in the province of Krat. Sapphires are found on the northern slope of these hills, and rubies on the southern. The mines are of two kinds, surface and deep. The former are 2 or 3 feet deep, or, in fact, sometimes the surface of the ground is merely scraped with a piece of iron or stick, carefully powdered to bits with the hand, and stones picked out. The other mines are from 15 to 20 feet deep, and have generally an aperture of 4½ feet square. The upper stratum of earth is loam, then loamy and clayey, and finally the ruby or sapphire layer is reached with a thickness varying from 4 to 18 inches. This layer is hoisted up with a rude crane and basket, and carried down to the nearest stream, where it is washed and carefully examined in little flat baskets with closely woven meshes. From the waterworn appearance of the fragments of rocks embedded in the layer, it would seem that the precious stones are not found in the original matrix, but have been washed down from the hills. A British company was formed some years ago to work the ruby mines, but, as the Burmese miners resented the right of the company of insisting upon all the stones being handed over at a price fixed by the company's expert, they left the mines in large numbers. No other class of men can be found to work in these pestilential and malarious jungles, and thus the production of stones and the existence of the company gradually came to an end. In 1895 another British company, the Siam Exploring Co., Ltd., received from the King of Siam the exclusive right of working the sapphire mines at Pailin, and they also bought up the rights of the former company at the ruby mines. The entire mining-field is thus in their hands, and there is no doubt but that it is a most valuable concession, as the annual output of stones from this region is very large. The mining district at Pailin covers an area of 6 miles long by 1½ miles in breadth, and large portions of this are still untouched, and are doubtless gem-bearing. Immense quantities of cheap stones are found, but some of the Siam sapphires are as good as any that are brought into the market. The rubies do not bear so good a reputation. They are nearly all tinged with a dark "clarety" colour instead of that clear pigeon-blood hue so prized in this valuable stone. The difficulty that the company has to overcome—and it is by no means a small difficulty—is to get hold of the stones. In such an extensive area supervision of the miners is almost impossible, and, besides, the Shans, who up to the present have been working each man for himself, will not labour for wages, nor will they naturally give up good stones when they find them.

While at Battambong, the governor, who is a frank, genial young

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006c

مكتبة قطر الوطنية
Qatar National Library

man, and whose acquaintance I had already made in Bangkok, planned a deer-hunt for my distraction. Deer are hunted here in an extraordinary and, I should think, quite a unique fashion. They are, in fact, run down by ponies, and that in a remarkably short space of time. The ponies are small, hardy, and very active animals, as one may judge from their success in this hunt. The entertainment was got up in grand style, with twenty elephants and thirty ponies, and the ponies were ranged across the plain outside Battambong in a line extending about a quarter of a mile, whilst the elephants followed up behind with spectators. The deer, which are by no means small animals, but the ordinary *sambur* of these tropical countries, swarm in



A CAMBODIAN GIRL WEAVING CLOTH.

great numbers amongst the thick deep grass, and as soon as the head and horns of one was seen bobbing up and down as it bounded away like an arrow, the nearest half-dozen ponies started off after it at a break-neck pace. The natives ride barebacked, and, as the ground is full of depressions and empty water-holes, it is marvellous how well they retain their seats.

In three or four minutes' time we saw from our elevated perch the foremost rider stop and jump off. When the elephants came up, the deer was already nearly skinned, and a few moments afterwards it was cut in two, tied together with its own skin, and slung across the back of an elephant, there in readiness to carry home the spoil. The deer, it seems, drop down breathless, and the rider gives it the *coup de grâce* with his hunting-knife. I calculated the course of two of these runs, and put it down at three-quarters of a mile for the one and three miles

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000009

مكتبة قطر الوطنية
Qatar National Library

for the other. The spirited little ponies appear to enjoy the fun with as much zest as the men themselves, and one animal, whose rider was sent flying headlong into the grass, enthusiastically galloped riderless in to the death. The hunt lasted from nine in the morning till three in the afternoon, and in that time we caught four deer, and seven or eight escaped, either by superior speed or due to the fact that the ponies did not get the sight of them in time.

Battambong and Siamrap are provinces of the ancient kingdom of Cambodia, which, after centuries of struggle with Siam, varied with internal dissension, finally came under the suzerainty of the latter power towards the end of the seventeenth century. In 1867 France assumed a protectorate over the lower half of this tributary kingdom, and the possession of the remaining portion, Battambong and Siamrap, was by a Franco-Siamese treaty assured to Siam. The current speech of the country is Cambodian—a language which differs radically from Siamese—but Siamese is the official language, and all the officials, who are, one might say, both the aristocracy and the plutocracy of these Asiatic countries, speak both languages with equal facility. The present descendants of the once powerful Kmer race have, in their customs, religion, and general characteristics, much in common with the Siamese; but they are inferior to them both in physique, intellect, and morals. They are, indeed, notorious both for mendacity and petty pilfering.

From Battambong I descended the river Sangkai, crossed the Talesap Lake in three and a half hours, and proceeded to Siamrap, which lies about 10 miles from the shore. This great sea of fresh water, which measures nearly 100 miles in length and 20 at its greatest breadth, rises no less than 21 feet during the rainy season, and floods all the adjoining country for miles. In the dry season it is not more than 4 or 5 feet deep, and it is at this time, during the months of March, April, and May, that the surrounding population flock to its shores to catch the numerous fish.

Siamrap is itself a stagnant little place of about two thousand inhabitants; but the pretty rivulet here of pure sparkling water, with its old-fashioned water-wheels and its banks shaded by the wavy palm and cocoanut tree, forms a refreshing scene after passing through the low and swampy country that fringes the Talesap Lake.

I only stayed a day and a half in Siamrap, as my time was exceedingly limited, and as the only case I had to investigate was a trifling one of bullock theft, which I settled with the governor in about three minutes. The celebrated ruins of Angkor Wat and Angkor Thom lie about 4 miles from the village, but I do not intend to launch out into any disquisition on a subject which is now well worn. I might remark, however, that though I am not an enthusiast by any means about ruins, and particularly ruins of Indo-Chinese temples, of which we get rather

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

tired out there, even the most casual spectator cannot fail to be overwhelmed with admiration and amazement as he gazes upon these wonderful galleries, pretty side buildings, and lofty sculptured towers rising up before him in silent grandeur and magnificence. It is a solitary and desolate spot, and nothing is to be heard but the gentle sighing of the wind as it rustles the leaves of the melancholy palm trees, or whistles along the deserted corridors, now damp with age and infested with swarms of ghost-like bats. All round and in the centre of the ruined city itself grows dense and lofty jungle, and one can well imagine the beasts of the field holding high carnival amongst the fallen and broken pillars when the clear moon looks down upon these ancient monuments of human greatness. The imagination pictures to itself, too, the time when Angkor Thom, the city, was the capital of a powerful empire, and Angkor Wat the holy shrine and temple of the dense and busy population that once trod these jungle-covered plains; and now, though empire and race have long since disappeared almost without leaving a trace of their history, the immense blocks of stone which the hands of these people dragged here and piled high one upon another, the highways radiating from the capital, the stone bridges and distant scattered monuments, still remain to attest the former might and opulence of the country.

Before hurrying onwards, however, I inquired about the traditions lingering among the present inhabitants, and at my request the Governor ordered forth one of the oldest inhabitants of the place—a patriarch of seventy-five, who was represented to be the best repository of this vague traditional knowledge. As he squatted humbly on the ground before me, I regarded this curiosity with considerable interest, and enjoined him in judicial language to "tell the truth, the whole truth, and nothing but the truth." This is what he said, as I took it down word for word—

"There was once a king of Angkor Thom, Chao Pratum Suriwong by name, and he had a son Pra Ketmala. Pra In came down from heaven and saw Pra Ketmala. He asked Chao Pratum Suriwong that Pra Ketmala might be taken up to heaven. He was taken up to heaven, but the smell of the Thewada (angels) being too strong for him to bear, he returned to Earth again, and then Pra In ordered Pra Weesanukam to build Nakon Wat. Pra Weesanukam accordingly came down and told Chao Pratum Suriwong to build the temple, and Chao Pratum Suriwong impressed men to do the work. Men to seven times the number that could stand within the walls of Angkor Thom were impressed, and they completed the whole building in seven days. When the building was finished, Pra Ketmala did not stay in it himself, but placed therein Pra Putta Kosa Chan, who had been a priest in Ceylon. Then Pra Ketmala went to Beng Melia, near Pnompenh."

Mythology is not a strong point with me, and besides there is no

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003d

مكتبة قطر الوطنية
Qatar National Library

time to construct ingenious theories from this little statement, but I put it on record, and perhaps the learned in these matters may find that it forms at least a condensed version of the already received notions about the construction and object of these wonderful structures.

The next portion of my journey lay through the western side of the Mekong basin, with the town of Korat as a halfway resting-place. Bullock-cart is the method of locomotion in this district, and as these crazy vehicles are dragged along at a pace of about 1½ mile an hour, an ordinary day's march is a long and toilsome business. It was now the month of March, and the heat was becoming oppressive—so much so that I found it necessary, in order to get any progress at all out of the bullocks, to make my caravan travel during the coolness of the night, and rest, if possible, in some shady spot during the day. Our usual marching hours were from three in the morning till eight or nine, and then again from three in the afternoon till eight, and the average number of miles covered in that time was only about 15 or 16. I rode a pony myself, and a very small animal he was—so diminutive, in fact, that I could barely keep my feet off the ground; but he was a hardy little beast, and gallantly carried me all the way between Siamrap and Nongkhai, on the Mekong, a distance of nearly 500 miles. I sold him then for 30*s*., but as he only cost £2 originally, it could not be called an expensive ride, particularly as he ate nothing but burnt-up grass and a little rice.

The character of the country throughout the whole of this region is much alike, and becomes to the traveller exceedingly tiring and monotonous. The trail, as one may call it—for there is no pretence at road-making—winds through open jungle, the trees being about 30 feet high, and mostly mai rang, mai teng, and mai yang, as they are called in Siamese—resinous trees of the *Dipterocarpus* genus. The landscape is flat, with the exception of the rise up to the Korat plateau, and there the highest average level above the sea is about 800 feet, with a very gentle dip in an easterly direction towards the Mekong. The population, which is Cambodian up to and somewhat beyond Dong Rek hills and Lao north of that, is exceedingly scanty. In the neighbourhood of Dong Rek hills are found a race called Suey, who speak their own peculiar dialect in addition to Cambodian or Lao. They would appear to be the remnants of aboriginal tribes, and are, if anything, uglier, dirtier, and more primitive-looking than the surrounding Cambodians and Lao. The Korat people, who are also an ugly but sturdy race, seem to be a hybrid of Lao and the aboriginal Suey; but, from the neighbourhood of Cambodian settlements in this district, there is every probability that the limit of the ancient Kmer kingdom extended right up to Korat.

In and around the town of Korat, however, Siamese is the prevailing language, and the "panung," or Siamese loin-cloth, which is drawn

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

between the legs in the shape of trousers, is the usual dress of both sexes. The difference in the dress of the Lao is that the women wear a brightly striped petticoat instead of the "panung." The silk-worm is extensively cultivated, and the natives are skilful in manufacturing beautiful silks, some kinds of which bear a striking resemblance to Scotch tartans. They weave most of their own clothing, which consists only of this loin-cloth and a breast-scarf.

The whole of the Mekong region beyond 50 miles north and east of Korat is peopled by these Lao, a race who are as much akin almost to our own Shans as to the Siamese. The language differs both in character and sound from Siamese; but, as the Lao country has been under



SIAMRAP DURING THE DRY SEASON.

the domination of Siam now for a hundred and twenty years, Siamese is widely understood and spoken.

This extensive tract of country suffers from two great and serious evils—the want of inhabitants and isolation. The want of population may be exemplified by one fact, namely, that the largest town in the whole of the Mekong valley from Pnompenh to Luang Prabang is Nongkhai, and that place, as I was careful to ascertain, contains between 700 and 800 houses, or say a population—to be liberal in calculation—of about 5000. In Ubon there are 632 houses, and Korat is, I should think, somewhat larger. These three towns constitute the great centres of population in the whole of this immense territory. For days and weeks almost, even on the main routes of communication, a traveller will pass villages which number only a few squalid huts, and when I came to a place of two hundred huts it was thought a great event by all

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000023

مكتبة قطر الوطنية
Qatar National Library

my men, for in a metropolis of that size there was some kind of market where they might replenish the camp larder.

Why the population should be so scarce is difficult to say. In olden times war and bloodshed certainly ravaged the country; but now, from my own observation, I should think the principal check on the growth of population is pestilence. The year of 1895 may have been exceptional, but everywhere I went I saw signs of widespread epidemics of fever, small-pox, and cholera. In and around Korat and some other places this was particularly noticeable, as the people have the custom of sticking up in front of a house where there is illness, a little earthenware pot marked with blue or white bands. This was not done out of consideration, it seems, for the neighbours, but was a visible token of supplication for mercy to the demon of fever or cholera. The number of these pots in some places was perfectly alarming, and on more than one occasion we marched right into a village where cholera was rampant.

This region, too, is by nature cut off from communication with the outside world. Outlet by the Mekong on the east is barred by the precipitous rapids at Khone (or Khawn, as it is locally pronounced), and what trade there is has always tended in the direction of Korat. The route from Korat to Bangkok, again, is extremely difficult and dangerous, as it passes through a dense and dark forest, which has such a frightful reputation for fever that the name is always mentioned by the Siamese with bated breath—and with good reason too, for it is beyond doubt a most pestilential and malarious spot. The narrow and tortuous trail can only be traversed by pack-bullocks, and they take ten days to accomplish the journey to Saraburi, which is within three days of Bangkok by boat.

It is by this route that trade is carried on, and, considering the difficulties and cost of transport, it is rather surprising to find that there is any trade at all. Not that it amounts to very much, for, judging roughly in the absence of any reliable statistics, I should not be inclined to estimate the total import and export trade at more than £200,000 per annum. The imports consist, as usual, principally of cotton cloth and a few other articles of clothing, brass dishes and crockery, and the exports of cardamums, raw silk, gum benjamin, cattle, and hides. On account of this isolation, the inhabitants do not seem to possess that instinct for trade which renders a country valuable. They grow their own rice and tobacco, weave their own clothes of silk and cotton, and in many places have not even got beyond a system of barter for their few wants, and of paying their taxes in kind.

Korat is important in one sense, as being the depôt for the whole of the Hinterland, extending even across to the left bank of the Mekong, but it cannot be said that this is a region which, in its present

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

condition, offers much attraction to a foreign market. Easy and cheap communication by railway would doubtless create a much larger demand for foreign commodities, but that will be naturally limited by the scarcity of population. Even judging liberally from the data which I accumulated on this journey, I do not think that the total population of the whole of the Mekong basin still remaining in the possession of Siam can, at the utmost, amount to more than 1,000,000. As for the left bank of the Mekong, it is, in comparison, practically uninhabited, as all the villages are situated on the right bank.

The whole of this country swarms with wild animals, and at different places are to be found wild elephant, tiger, leopard, bear, pig, and deer. I occasionally saw the huge, circular tracks of wild elephant on the path in the forest, and once or twice the spore of tiger in the vicinity of our camp attested the presence of that uncanny nocturnal visitor. Several times my faithful "boy" told me in the morning, with a tremor in his voice, that he had heard the roaring of a tiger during the watches of the night. I never had that luck myself, I'm sorry to say, as the deep and dreamless slumber of a tired wanderer generally made me oblivious to all the nightly sounds of the forest, however strange or weird they might be. I, however, had the pleasure, such as it was, of seeing a real live leopard at home in his native jungle. Not that I had any desire to call on the gentleman, and cultivate a closer acquaintance—an unsocial disposition which, I rejoiced to see, was even more marked on the part of the leopard. It was early morning, and I was quietly trotting along on my Lilliputian charger, when a kind of exaggerated cat, so to say, slouched across the path. Without condescending to take the slightest notice of a British Consular official, he disappeared through the undergrowth at a rapid pace, and took with him, I might add, my hearty wishes for a *bon voyage*.

I heard of few fatalities of natives from attacks of tiger, but in several places I was informed of their depredations on ponies and cattle. Not only is the population scanty, but there is apparently such abundance of deer and pig that little necessity exists for beasts of prey to approach the haunts of men in search of food. At one place, however, near where we camped at the ruby mines, a native, who was sleeping out in the open with two others, was pounced upon by a tiger, and so severely mauled that he died. And in the north of Siam the sad story of an old woman who had been devoured by a hungry tiger—and a very bold and hungry beast he must have been to have tackled an old Siamese woman—kept our whole caravan in a state of excitement till the scene of the unhallowed repast was left far behind.

The journey from Siamrap to Korat occupied eighteen days, and that from Korat to Nongkhai fifteen days, and we suffered greatly from heat and want of water. Not that the temperature went up to abnormal heights, but on the close stuffy day that it reached 105° in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006e

مكتبة قطر الوطنية
Qatar National Library

my double-roofed tent under the shade of trees, I felt it was quite as high as any human being would care to see it. This is the hottest season of the year, and the temperature, even in the substantial well-built house which I occupied in Korat, generally ranged up to nearly 100°, and remained over 90° till some time after sundown. The nights, luckily, were cool, the minimum in the early morning just before daybreak often marking 76°.

All the small streams were dried up, and the rivers reduced to mere driblets of water. We depended for drinking-water on stray pools, which marked here and there what would be the bed of a stream in the rainy season, and as cattle and buffaloes had been wallowing in these for months back, the water was not, to put it mildly, of the sweetest and most inviting description. In the neighbourhood of Korat the surface of the ground is in some places covered with an excrescence of salt like hoar-frost, and the streams are brackish. Here part of my impedimenta was a cart-load of green cocoanuts, with which I quenched my thirst; but a sickly and disagreeable drink it is when taken in any quantity. The town of Korat, like many others in this district, depends for its drinking-water on an immense marsh outside the walls. When I was there in the height of the dry season, the water was so low that the people had to wallow through the mud and carefully dip up the precious fluid with dippers, and even when it was both boiled and filtered it did not lose its marshy taste and aroma. In the rainy season, again, there is plenty of water everywhere; too much of it, in fact, as communication by bullock cart is rendered extremely difficult, if not impossible. Altogether, on account of heat, want of water, a monotonous jungly country, a toilsome and dreary method of locomotion, disease and pestilence, I was glad to reach the banks of the mighty Mekong, and turn my back on this desolate country.

At Nongkhai I received a warm and cordial welcome from H.R.H. Prince Prachak, the Siamese Chief Commissioner, who not only lodged me in a specially built house and treated myself and men in a right princely fashion, but, to my astonishment and delight, presented me on arrival with a bottle of Bass cooled in ice made in his own royal ice-machine. He also distilled the brackish water of the place, and my recollections of this pleasant spot are mostly connected with the joys of revelling in an unlimited quantity of distilled water and Bass beer in ice.

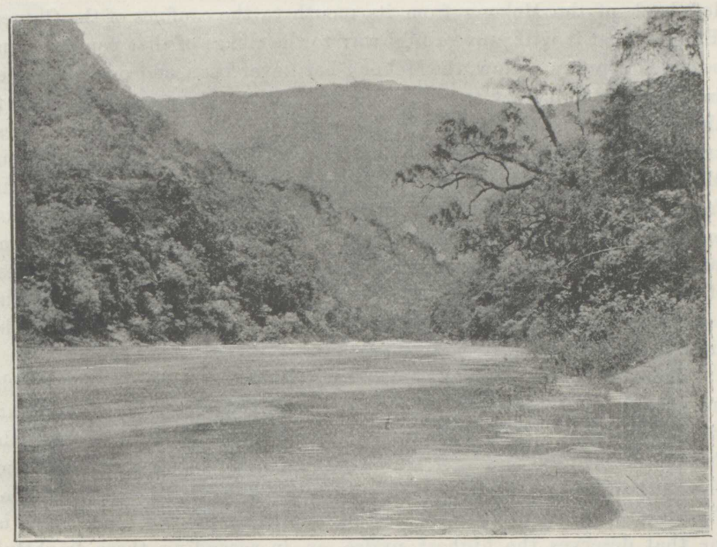
It was at Nongkhai that I first gazed upon the great river of Indo-China, the Mekong. Even at this point, more than 1000 miles from its mouth, the Mekong is a magnificent stream, and the sight of this vast volume of water nearly half a mile wide, issuing from the unknown regions of Tibet and sweeping on grandly towards the distant ocean, gives rise to feelings of the deepest admiration and awe. My feelings of admiration and awe were, however, quickly changed

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000022

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to those of dismay and abhorrence when I reached the Chiengkhan rapids, and spent eight long and anxious days battling against the surging and boiling waters, creeping cautiously round jagged rocks, pulling strenuously with ropes, shoving with boat-hooks, struggling and shouting, or simply sitting helplessly in the bottom of the rude dug-out with secret terror in my heart, as I gazed at the wildly hissing water, and speculated how far a body would be carried before it reached the surface of these boiling whirlpools. Twice we had to unload the boats and transport all baggage across the rocks and sand, but this was the most difficult season of the year, on account of the lowness



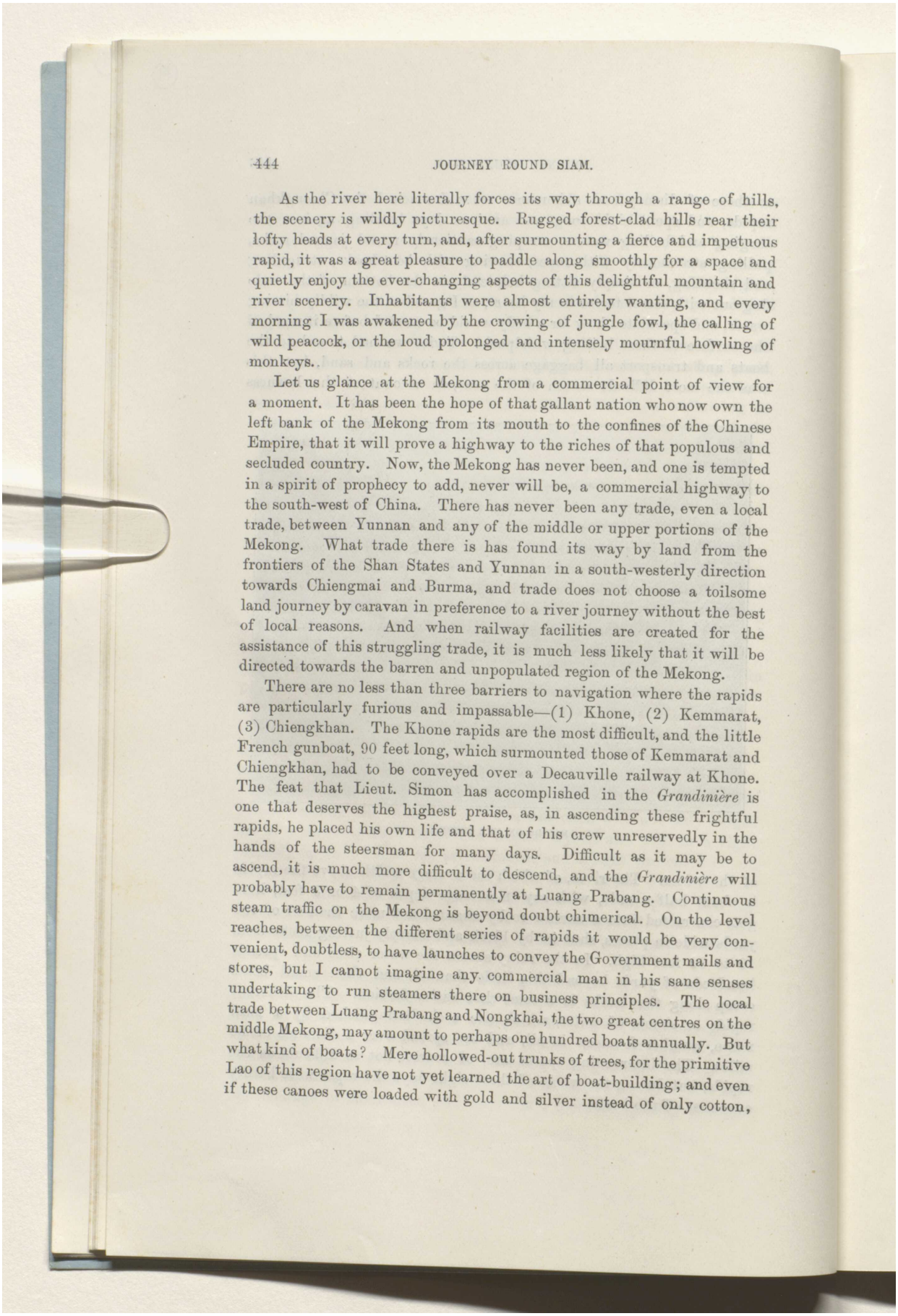
RAPIDS ON THE MEKONG.

of the water. The river, of which the average width above the rapids is about half a mile, with say an average depth of 4 or 5 feet, here gets contracted into a narrow rocky channel not more than 60 or 100 yards wide in places, shut in by black and sharply jutting rocks from 10 to 30 feet high. In the rainy season the water rises and spreads hundreds of yards beyond this little channel, and then small boats creep along the banks in a somewhat easier fashion. The different rapids or shoots of water, which are each distinguished by a local name, number fourteen in all, and are spread over a distance of 50 miles. The intervening spaces are, of course, not so difficult as the rapids, but during the whole of these eight days the ropes were hardly ever cast off the boats.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



As the river here literally forces its way through a range of hills, the scenery is wildly picturesque. Rugged forest-clad hills rear their lofty heads at every turn, and, after surmounting a fierce and impetuous rapid, it was a great pleasure to paddle along smoothly for a space and quietly enjoy the ever-changing aspects of this delightful mountain and river scenery. Inhabitants were almost entirely wanting, and every morning I was awakened by the crowing of jungle fowl, the calling of wild peacock, or the loud prolonged and intensely mournful howling of monkeys.

Let us glance at the Mekong from a commercial point of view for a moment. It has been the hope of that gallant nation who now own the left bank of the Mekong from its mouth to the confines of the Chinese Empire, that it will prove a highway to the riches of that populous and secluded country. Now, the Mekong has never been, and one is tempted in a spirit of prophecy to add, never will be, a commercial highway to the south-west of China. There has never been any trade, even a local trade, between Yunnan and any of the middle or upper portions of the Mekong. What trade there is has found its way by land from the frontiers of the Shan States and Yunnan in a south-westerly direction towards Chiengmai and Burma, and trade does not choose a toilsome land journey by caravan in preference to a river journey without the best of local reasons. And when railway facilities are created for the assistance of this struggling trade, it is much less likely that it will be directed towards the barren and unpopulated region of the Mekong.

There are no less than three barriers to navigation where the rapids are particularly furious and impassable—(1) Khone, (2) Kemmarat, (3) Chiengkhan. The Khone rapids are the most difficult, and the little French gunboat, 90 feet long, which surmounted those of Kemmarat and Chiengkhan, had to be conveyed over a Decauville railway at Khone. The feat that Lieut. Simon has accomplished in the *Grandinière* is one that deserves the highest praise, as, in ascending these frightful rapids, he placed his own life and that of his crew unreservedly in the hands of the steersman for many days. Difficult as it may be to ascend, it is much more difficult to descend, and the *Grandinière* will probably have to remain permanently at Luang Prabang. Continuous steam traffic on the Mekong is beyond doubt chimerical. On the level reaches, between the different series of rapids it would be very convenient, doubtless, to have launches to convey the Government mails and stores, but I cannot imagine any commercial man in his sane senses undertaking to run steamers there on business principles. The local trade between Luang Prabang and Nongkhai, the two great centres on the middle Mekong, may amount to perhaps one hundred boats annually. But what kind of boats? Mere hollowed-out trunks of trees, for the primitive Lao of this region have not yet learned the art of boat-building; and even if these canoes were loaded with gold and silver instead of only cotton,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000023

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

mats, silk, and salt, would the value of their trade be enough to justify a flotilla of steamers on the Mekong?

It was May 9, and the rainy season had begun, when I left the river at Paklai and struck across country to Nan and Chiengmai. I travelled now at the head of a train of twelve elephants, and, as the season was advancing and the streams getting full of water, we hurried on, marching generally from dawn to dusk, with frequent changes of elephants. The country is exceedingly rough and hilly between Paklai and Nan, and the roads are mere mountain paths, more often than not only the rocky beds of streams. It was marvellous with what patience and skill the



A STREET IN KORAT.

ponderous elephants carefully toiled up precipitous ravines as steep as a staircase, and slid down fearsome inclines with all the facility of trained acrobats.

What a trumpeting and bellowing of content there was from these tired and footsore elephants, as we halted for the night and unstrapped from their backs their howdahs and burdens; and what bustle, confusion, and shouting there was every morning getting them loaded again at the earliest break of dawn! Life then was reduced to a daily worry of packing and unpacking, as everything had to go into handy form to fill up the small recesses of the howdah. But once on the march, safely hoisted upon the back of my unwieldy Jumbo, I was comfortable for the day. The rain might fall in torrents, as it generally did, or the sun come out with blinding glare, but I was secure under

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

cover; and whether the elephants were slouching through a bog, or slowly zigzagging up the face of a hill, was a matter of indifference as far as my comfort was concerned. With a book, a sandwich, and a bunch of bananas for lunch, and a packet of Siamese cigarettes, I was happy for the day, and often went peacefully to slumber for an hour or two, even though it was rather a tight fit to squeeze inside the narrow limits of the howdah.

Soon after the watershed between the Mekong and Menam was passed, the character of the country and people changed for the better. Instead of passing through interminable flat jungly plains as in Eastern Siam, we traversed now a country of sparkling streams, fertile valleys, and beautiful blue hills. The people had the look of being more active and well-to-do; their houses were large and solidly built, and their temples substantially constructed of durable teak and brick. One of my men, who was a Chiengmai Lao—that is, tattooed from waist to knee in contradistinction to the Lao of the Mekong, who are only slightly tattooed on the thighs—had all along, during this journey, been sounding the praises of the Northern Lao country, and expressing his contempt for his brethren of the east. Now at every turn he was calling on his companions to admire the riches and beauties of his own country. Inwardly I assented to all he said, and felt that the change was most striking from the miserable, poverty-stricken Mekong valley to the flourishing Menam, where there was not only beauty of landscape, but the bustle and animation of business and material prosperity.

The extensive forests of teak are at present the chief source of the wealth of this country. Northern Siam divides with Burma the monopoly of supplying the world with this valuable timber, and the share that Siam annually turns out is valued at over a quarter of a million sterling. These teak forests are worked almost exclusively by Burmese British subjects, and the wood is bought and shipped by British firms to London. The amount of British capital invested in this industry alone must amount to at least a million sterling.

It is a curious fact that the zone of teak seems to stop at the limit of the Menam watershed, for on the Mekong slope teak does not appear to grow in any quantity, and what has been observed is small and stunted. The only exception to this is on the Me Ing. It has never been heard of on the left bank of the Mekong.

Nan is a pleasant little town of three or four thousand inhabitants, and is likely to be a busy centre of the teak trade in the near future, as one of the large British teak firms is anxious to extend its operations to that province.

At Pre, which is the next place of importance on the way to Chiengmai, I was delayed a few days by heavy rains and floods. I was very kindly entertained here by Dr. Briggs, a medical missionary, who employed his skill and knowledge in doctoring three of my men who

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000064

مكتبة قطر الوطنية
Qatar National Library

were prostrated with malarial fever. My cook—a Chinaman—had suffered a great deal during the journey, and I had only kept him alive, on the way from Nan to Pre, by repeated brandy cocktails and spoonfuls of bovril. I had, to my surprise, entirely escaped fever myself, and I attribute this chiefly to the strict precautions I took with water, which I never touched unless both boiled and filtered. Even at native banquets, which it was my fate to attend in ceremony in all parts of the country, I invariably smuggled in, more or less surreptitiously, a bottle or two of my own precious water. The uninterrupted use of a mosquito-net, too, even when there were no mosquitoes, probably assisted greatly in keeping off an attack of malarial fever. I also took five grains of quinine every three or four days, and in particularly malarious regions, two grains night and morning.

At Pre I remember, as one of the many curious experiences of this journey, that I attempted to join in the Lao hymns which the worthy missionary and his household sang at family worship. Dr. Briggs is a Canadian, and his favourite tune was "God save the Queen." To sing Lao hymns to the tune of the National Anthem whilst a bevy of merry brown native girls chimed in with their sweet voices is an experience, I am sure, which is given to few men.

Chiengmai, which I reached on June 20, is the capital of Northern Siam, and a very flourishing, busy, and cheerful town it is. It contains a population, I should think, of twelve thousand, and is prettily situated on the Meping 1000 feet above sea-level, with the lofty and forest-clad peak of Doi Suthep towering up behind to a height of 5500 feet. The European population here numbers about twenty, and they are all missionary or teak-timber men, with the exception of Her Britannic Majesty's Consul.

The latter part of my journey was by boat from Chiengmai to Bangkok, a distance of 537 miles, and that was accomplished with the rising floods in eighteen days, including stoppages for official purposes of four days. The rapids on the Meping, which are not nearly so dangerous or impressive as those on the Mekong, were all passed in a day and a half, and I found it much more exhilarating to shoot swiftly down such watery inclines like an arrow, than slowly fight our way up them. The gorges are quite narrow, lofty, and covered with dense masses of green vegetation, and every sweep of the river brings to view new and exquisite panoramas of rugged landscape. On the way down I called in at Lopburi, one of the ancient capitals of Siam, and there I took a photograph of the ruined palace of Constance Phaulkon, a Greek adventurer, a man apparently of great genius, who attained the post of prime minister in Siam towards the end of the seventeenth century. He was ultimately assassinated in a court intrigue, and his memory is still preserved in Lopburi.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000097

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Menam valley is, comparatively speaking, well-known country, and I shall here only endeavour to draw your attention to one or two significant facts about it, so that you may picture to yourselves the contrast between the Mekong and the Menam valley.

Siam, as I have remarked at the opening of this paper, may be divided into the two valleys of the Menam and the Mekong, and the total average import and export trade for the kingdom of Siam, based on the returns for the past three years, amounts to four and three-quarter millions sterling per annum. As I have estimated the total export and import trade that passes to and from the Mekong region at about a quarter of a million, it follows that the balance of the remaining trade of four and a half millions sterling per annum is carried on with the Menam valley. These statistics show at a glance the relative importance, as far as the outside world is concerned, of these two regions; and, as the great proportion of this trade is carried on by British energy and British capital, you can well understand the satisfaction of the mercantile community to find that this, the important and vital portion of the kingdom of Siam, has, by the recent agreement concluded between England and France, been placed in a position of absolute security and freedom from armed interference on the part of either country.

Nor does four and a half millions sterling represent in any degree the trade that the valley of the Menam is capable of when properly developed, and when its five or six millions of inhabitants are brought within easy reach of British markets. The export of rice, the principal production of the country, which averages nearly two millions sterling per annum, is drawn to a very great extent from the delta of the Menam alone, and not many miles from Bangkok there are extensive tracts of rich alluvial soil which need only canals to bring them within the area of cultivation.

The fertile valleys of Northern Siam, too, require to be brought into closer connection both with Bangkok and Burma, and it is to the object of constructing a Trunk railway up the valley of the Menam, and throwing off branch lines to the Burmese frontier, that the Government of Siam should strenuously devote itself. Nor should the extension and repair of the canals in the Menam delta be forgotten, for in that low alluvial land canals are even a more important factor for development than railways.

In concluding this paper, I might take the opportunity of paying a brief tribute of thanks to the Siamese authorities, and particularly to H.R.H. Prince Damrong, the active and talented Minister of the Interior, by whose special orders my transport throughout the whole of this extensive journey was admirably arranged. It was to his foresight, and to the care and energy displayed by the local officials, that I was nowhere subjected to delay, and that I completed this tour round Siam without any serious mishap.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Before the papers were read, the PRESIDENT said: We are honoured this evening by the presence of the Prince of Siam, son of his Majesty the King of Siam. The papers to be read are on kindred subjects. The first by Mr. Clifford,* on some of the Malay States on the eastern side of the peninsula—about which we are almost in complete ignorance, I think, until we shall have heard his paper; and the other will be an account of a very interesting journey round Siam, by Mr. Black, of her Majesty's consular service in Siam. I will now ask Mr. Clifford to read his paper.

After the reading of the papers, the following discussion took place:—

Sir HUGH LOW: I am afraid I can add very little to what Mr. Clifford said in his admirable paper. I don't know that part of the country well, having only visited parts of it. Mr. Clifford has travelled through it, and, I suppose, knows it better than any other person who has ever been in it. He came to the country, where I was at the time, about twelve years ago, when quite a young man, and at once showed his great powers of endurance by going into the jungle in all kinds of weather; and he has told us how he forced himself to live upon the native food, which I don't think any other person could have done, and carried out the expedition he undertook with so little difficulty. He is about to go back to these countries, and, although Pahang has not been under the care of British officers long, I have not the least doubt that, when he has been there for a short time, we shall have great improvements by federation with the most prosperous states on the western side of the Peninsula; and federation will enable Pahang to be developed, a policy which has been successful—as all our policy has been lately—so successful that scarcely anything can be compared with it in recent history. It is not for us to talk about the commercial advantages of the place, but the jungles, and the country through which Mr. Clifford travelled, really contain some of the most glorious scenery, the richest botanical products, and the most beautiful zoological productions in the world. Mr. Black mentioned the peacocks. These are far more handsome than those we have in England; it is a most glorious bird. I don't think I can say anything which would add to our knowledge, but I am sure that this Society will wish Mr. Clifford every possible success in this most important post to which he has been appointed, as Resident at Pahang—that country which is said to contain minerals in abundant quantities, which are already profitably produced, though scarcely prospected at all by Europeans. They are crudely worked by the Chinese and Siamese, but could be produced in greater abundance than in any other part of the world; and I have not the least doubt that many other rich productions will soon be developed now that this federation is under the protection of officers who are going to take charge of it.

The PRESIDENT: We also, I believe, have to welcome here this evening the presence of Mr. Swettenham, who has been kind enough to bring some interesting curiosities from the Malay Peninsula, and I trust he will address you on some part of the subject Mr. Clifford has brought before us.

Mr. F. A. SWETTENHAM: There are one or two things I should like to say, not so much with reference to Mr. Clifford's paper, because he has said all there is to be said. His journey was very remarkable, and I am specially glad to be here this evening, because I think I may claim some credit for having suggested to this Society that they should ask Mr. Clifford to read this paper. I should like to say, with reference to the geographical portion of the question, that Mr. Clifford has been able to fill up a blank space on the map. Twenty years ago the map showed

* Mr. Clifford's paper will be published in a subsequent number.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

only the outline; since that time we have done something to fill up all the western part of it; but until the other day—I speak of last year—the part that is now filled up was quite blank, and this Mr. Clifford and his friends have done. I hope this Society will put it in the way of being seen by the public. If the Royal Geographical Society would aid the efforts that are being made in the East by a sister society, a branch of the Royal Asiatic Society, we might in a short time get a really good map of the Malay Peninsula. As I said, twenty years ago nobody thought it worth while to try and fill in any part of the Malay Peninsula. Sir Hugh Low reminded us that we must not discuss commercial topics here, but I trust that, as we are a nation of shopkeepers, you will forgive me if I allude to matters which are, in a way, commercial. Our interest in the Peninsula has been forced upon us. The British Government for many years absolutely refused to have anything whatever to do with the Malay Peninsula. We were established in a few small places marked in bright red on the map. The British had a colony, and outside that they declined to go, until the state of things in what I may call the Hinterland became so bad that we were compelled to go in against the wishes of the British Government. The result of our going there has been that we have done a great deal of good. The places which yielded a very small revenue indeed ten years ago, $400,000, now yield $8,000,000, the colony itself only yielding $4,000,000. The colony is more than a hundred years old, and we have been in the Malay Peninsula only twenty years. There is not a railway in the colony, and we have 200 miles inside the Malay States. I ask your pardon for mentioning these commercial matters, but they are of some importance. I hope that, by means of the scheme for federation which has lately been sanctioned by the Secretary of State for the Colonies, we shall be able to so extend these railways that by-and-by the Malay Peninsula will become quite an important place, and that Malacca will become the port for the valuable mineral and agricultural products of the Peninsula. All that is due to one great fact which I think we are far too apt to forget, which is, that our presence in the Straits of Malacca is due to the foresight of one man, Sir Stamford Raffles. Everybody who knows anything about his life must recognize that he is one of the greatest Englishmen that ever lived, probably the greatest who ever got as far as he did, and I fear one whose history, character, and career have been the least recognized and least known, although whatever we are and whatever we shall be in the Straits of Malacca is really due to his great foresight and desire to advance the interests of this country.

Mr. F. Verney: I have really nothing to add to the very excellent remarks which have been made by those who have had the opportunity of serving in that distant and most interesting country. Perhaps I may be allowed to say a word with regard to the relations which have recently been established between England and France in the country of Siam. I must not trench on the question of politics, but would say this, that we must fervently hope that the arrangement may tend to the advancement and progress of the country, which we have so much at heart. I hope that no one here will think for a moment that commercial rivalry need be co-existent with a kind of commercial hostility. I think there is plenty of room for healthy commercial rivalry in this great country, and we should not in the least deny to France the rights we claim. We hope, by advancing in healthy rivalry, we may, without doing any harm to the king and country of Siam, go ahead in a way advantageous to Siam itself, and not disadvantageous, but of great gain, to the two commercial countries which have their interests so largely developed in Indo-China. We must have been immensely interested by the excellent papers we have heard. It requires splendid health, first-rate temper, a knowledge of the language of the country, and great experience, to produce such

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

good explorers as we have listened to to-night, and Englishmen, going into these countries, and making nothing of the toil and hardships they go through, giving such excellent representations of the journeys they have made and the countries they have visited, offer us the main chance we have of learning something of, and adding to our interest in, those distant lands. We feel heartily obliged to these two gentlemen who have been exploring these countries, and who have brought back such interesting accounts of them to us.

Mr. J. G. Scott: After the two papers which have been read to us, it seems rather invidious to call upon a person like myself, with a superficial acquaintance of the country, to make any remarks at all; but I think I shall be only representing the feeling of this meeting when I say that the little we have heard will make us look forward to the proceedings of the Society with the greatest interest. I should like to make some remarks with regard to Siam. A little earlier than Mr. Black, I travelled in Siam, and crossed his route. A few remarks which Mr. Clifford made about his hardships in Trengganu and Kelantan suggest to me that it would be as well, seeing that Siamese listeners are here to-night, that I should thank the Siamese Government for the facilities they placed at the disposal of myself and Mr. Black in travelling about the country. So far as I am concerned, I can safely say that I never had to test my capacity for putting away the rice which Mr. Clifford spoke of as the diet of which one has to take a great deal before being satisfied. There are a great many British subjects in the north of Siam, a great many Burmans and Shans. It is a curious fact that both Burmans and Shans are agriculturists in their own country. Agriculturists in this country are not in so good a position as they, for in Siam you only have to tickle the ground. Considering the number of British subjects in Siam, it is a matter of great pleasure to us that that country, which was in a dubious position owing to its two neighbours calling each other bad names, is now guaranteed on both sides. In travelling through the country, one sees an extraordinary number of ancient ruined cities, the city walls grown with trees, which shows they must have existed more than a hundred years ago, and from the ruins it would appear that the population must have been very great. We may hope, now that Siam is settled and at ease, that the population will grow to be as great as ever, and it is in this central part of the country that the population will settle. The country to the east, which some people seem to think belongs to France, is much less interesting. Mr. Black's paper, when it is published, will give you an idea of the country, but I think it is waterless, and that the population from there will most probably go to the centre of Siam, and will help to swell the amount of British trade, which is already 97 per cent. of the whole trade of Siam. The Mekong, of which I saw the upper part, and Mr. Black the middle, is a very fine river to look at, but it is not such a fine river as the British river, the Salwen. It never can become a commercial river at all. Lieutenant Simon has taken a gunboat up above the rapids to Luang Prabang, which shows it is feasible for pluck to conduct steamers up the river; but what a brave man will do a commercial man will not do, because it won't pay. Mr. Verney said that we might look upon the French rivalry with friendship. I think that if they intend to use the Mekong river, we may look upon their efforts to take the trade down with indifference.

Mr. R. L. Morant: I don't wish to keep the meeting; but, if I may, I should like for a moment to add my humble testimony to what has been said about the work done round the Peninsula. I had the honour of going to each centre of government there with H.M. the King of Siam in 1889, on which occasion I was able to look at it, not only as a Britisher, but also, of course, through Siamese spectacles —that is, looking at the methods of the British Government from the point of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000049

مكتبة قطر الوطنية
Qatar National Library

view of an Eastern monarch. We went down the west and up the east coast. The contrast was striking as one came up to the more northern ports of the Peninsula, where the suzerainty is not British. I well remember the remarks his Majesty made at the time, that it was quite visible what could be done by good administration. I only wish to ask a question upon two points of some importance. On most maps there is marked a river flowing through Korat down to the Mekong; when I went to Korat in 1894 I did not see anything in the nature of a river which would be of any use. The question is of some importance politically as well as geographically. Perhaps Mr. Black, who was there at a different season, saw something of the kind. As far as I can make out, everything in the nature of commerce must come westwards, that is to say, westwards from Korat. I would also like to know whether it is yet finally decided for the railway to go as far as Korat, or to stop at the point it has now reached. In its present condition it will not largely assist trade, though it has its uses. I shall never forget with what delight we walked along the top of the embankment after toiling over heavy jungle tracks. At the same time, if rails were laid it would be probably somewhat more useful to Siam generally. One would like to know if Mr. Black has any opinion on these points.

Mr. Black: As regards Mr. Morant's first question about the river flowing eastwards from Korat to the Mekong, there is such a river called Nam Mun. It flows past Korat, about 13 miles distant. It is a very small stream there, and in the dry season it contains only a few inches of water. Where it enters the Mekong its course is obstructed by rapids, and even the native boats, which at present go down that river, are obliged to have their goods taken out and carried overland; so that in its present condition, for the purposes of commerce it is not what might be called a practicable river. In the rainy season, of course, there is a great deal of water, and launches could, and, in fact, I believe a couple of launches were run for a short time from a place near Korat called Ta Chang down to Ubon, below which the rapids begin. Trade on this river could be fostered and developed, but this would take some time. As regards the railway, I am sorry to say that I have no information to give. If it were continued to Korat, it would develop an entirely new country, and pass over a tract which is now very difficult to traverse. At present this railway has been constructed for a distance of 75 miles, or half way. There still remains a distance of from 80 to 85 miles to Korat to be constructed.

The President: It now only remains for us to thank the authors of these two papers. Mr. Clifford has opened to us countries which, I may say, were almost entirely unexplored. It is true that the coasts of these countries have been known for centuries. I remember well that the great Arctic navigator, John Davis, was becalmed for many days off that coast of Trengganu and Pahang, and in sight of these lands he lost his life through the treachery of some Japanese pirates. But with regard to the interior of these states, we know next to nothing. We must all admire the hardihood and pluck with which Mr. Clifford explored them, and I think we must also applaud the gallantry of those youngsters who, in a dark night, risked their lives down the rapids; for, although it was only to bring their master his dinner, still it was an act of heroism. His account of the country is instructive, and his narrative of the journey most interesting. I am very sorry that Mr. Black was obliged to skip a large portion of a very valuable part of his paper, because he was afraid of boring you, which I am sure he would not have done. What he has told us is certainly most instructive and interesting, and I know you will desire me to return your cordial thanks to Mr. Black and to Mr. Clifford for the papers we have listened to this evening.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

A JOURNEY IN THE VALLEY OF THE UPPER EUPHRATES.

By VINCENT W. YORKE.*

Divrik at present contains about 4000 families, of which 800 are said to be Turkish, and the rest Armenian. The town, which is situated on the edge of an extensive plain, is loosely built, with many gardens, and has a fair bazar. Its name and situation would point to its identity with Tephrike, an important fortress of the Paulicians in the ninth century A.D. It was founded by Carbeas, the leader of this powerful sect, in 855, and for nearly twenty years was the cause of much trouble to the Byzantine Empire. It was eventually taken by the Byzantines during the reign of Basil I. in 873.† The place afterwards came into the hands of the Seljuks, who, according to St. Martin,‡ were driven out by the Mongols in 1243.§

After a thorough search for antiquities, we could find no remains which can be with certainty ascribed to any period older than that of the Seljuk occupation. There are two ruined castles at Divrik, the largest of which occupies a strong position on a steep rock overhanging the modern town. Round the top of this rock there exists a circuit of walls, preserved at some points to a considerable height, which may in places be as old as the time of the Paulician occupation. Within these there are also remains of what may once have been a church, though, if this was ever the case, it has been largely modified in the Seljuk style. The other castle is built on a high pinnacle of rock on the further bank of the Chalta Irmak. It is much smaller in extent, and less well preserved. The graveyards of the town did not contain a single inscription, or even any worked stones which can be assigned to the Byzantine age. Remains of the Seljuk period, on the other hand, were abundant; there are numerous small chapels and tombs, for the most part octagonal in shape with pyramidal roofs, which show Seljuk work

---

* Paper read at the Royal Geographical Society, May 13, 1895. Map, p. 428. Continued from p. 335.

† Other settlements of the Paulicians in this district mentioned by the Byzantine historians are Argaoun and Amara (or Abara), founded by Carbeas, Koptos Spathe, and Tauras. None of these have as yet been identified.

‡ *Op. cit.*, p. 188.

§ Divrik has been identified with Abrik of the Arab geographers by l'Estrange in his notes to a translation of Ibn Serapion (*Jour. Roy. Asiat. Soc.*, 1895, p. 54), but he has changed his opinion subsequently in deference to Hogarth, who would identify Abrik with the modern Arabkir (*vide J.R.A.S.*, 1895, p. 740). But his original identification is confirmed to a certain extent by the occurrence of the variant Αφρικὴ for Τεφρικὴ in two passages of the Byzantine historians (Sym., 8. 455, B.; Leon., 255.16), while the old name of Arabkir, as given in the fiscal archives, appears to have been Nareen (Taylor in *Jour. R.G.S.*, *loc. cit.*, p. 311). Abrik was visited by Ali of Herat in the twelfth century, and was then a place of pilgrimage held in veneration alike by Christians and Moslems. A curious passage from Yakut (i. 87), giving Ali's description of the place, is translated by l'Estrange (*J.R.A.S.*, *loc. cit.*).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009a

مكتبة قطر الوطنية
Qatar National Library

in various parts of the town; and on an eminence below the larger of the two castles there stands a magnificent mosque, built, according to an inscription on the north door, for Kai Kosru II. (*c.* 1240), which must be one of the most splendid monuments of its style and period in existence. As it has attracted very little notice from previous travellers, it will be well briefly to describe it.

The mosque is oblong in shape, lying north and south, and measures 87 yards by 47 yards. It has three great stone portals, two on the west side, and one on the north. The north door is very richly decorated, and, except at the bottom, where it has been in part rebuilt, is in a good state of preservation. The system on which it is designed is that of a pointed arch within a rectangular frame. The sides of the frame are supported by clusters of pillars, and on each side of the arch and above it a line of very elaborate ornament, consisting of rose-medallions, crescents and stars, and lotus-buds, is worked. These are in many cases almost completely detached from the background. The south door of the west side is similar in shape and design to the north door, the chief ornament used being heavy and elaborately carved foliage. The third door is more simple in style, and is ornamented almost entirely with the honeycomb pattern. On each side of it, in panels cut in the projecting buttresses, are representations of the two-headed eagle, the badge of the Seljuk sultans; and against the main wall, close to them, another strange bird, which is probably meant for a hawk. The mosque inside has a stone vaulted roof, ornamented at the keystones with bosses, on which shells and flowers are carved. It was originally supported by sixteen hexagonal piers, which have been roughly built up in recent times. From one of the cupolas hangs a "blue stone," *i.e.* a ball of Persian porcelain, to which magical properties are ascribed. The whole building is now, unfortunately, in a very bad state of repair, and a large portion of it will probably within a short time fall into ruins.

From Divrik we made our way back to Zimarra by a longer but easier route, which skirts the base of the high mountain which we had climbed in coming. We followed the Sivas road on leaving Divrik for half an hour, and then took a path which goes off to the right and crosses the river by a stone bridge with two arches. We then followed the course of one of its tributaries, the Hornova Chai, until we reached the Armenian village of Hornova, and soon after crossed the watershed between that stream and another which flows into the river of Divrik. Our path then led us down a small and gradually deepening gully to the village of Karageban, which is six and a half hours distant from Divrik. Karageban is a village of sixty houses inhabited by a singularly handsome race of people, who spoke Turkish and claimed to be Turks. Here we spent the night, and the next day proceeded to Zimarra, which we reached in two and a half hours. From Zimarra we took the direct route by Hassan Ova to Kemakh.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006d

مكتبة قطر الوطنية
Qatar National Library

At one hour beyond Zimarra we stopped at some ruins on a small stream a short distance below the village of Zinika. These ruins, to which allusion is made in 'Arch. Epigr. Oester.' (1884, p. 239), are those of a small fortress of circular shape, built round a low mound about 50 feet high and 200 yards in circumference. The walls consist of an outer line, within which, at an interval of about 20 yards, is a small enceinte; they are built of large mostly unsquared blocks of limestone laid in uneven courses, the gaps being filled up with small stones and a little mud mortar. It is difficult to determine the period to which these remains belong; the rude style of building would point perhaps to a pre-Roman date for the walls, and the mortar used in them to a Roman



THE EUPHRATES ABOVE CHERMUK (LOOKING SOUTH).

restoration of the same, but without further evidence no definite conclusion can be arrived at with respect to their age.* There is a direct path leading from these ruins to Pingan, not more than 4 or 5 miles distant.

From these ruins we proceeded by an easy path, which led us, after three hours' travelling over bare and undulating country, to the village of Dostal, situated only a short distance from the western Euphrates. The inhabitants of this village, which consists of forty houses, though they described themselves as Kurds, talked nothing but Turkish. At Dostal we were told of the existence of a "written stone" a short distance from the village and close to the road which we were following

* It is quite possible that the remains may be those of the fortress of Hisn-al-Minshar mentioned by Ibn Serapion, as Hogarth suggests (*vide J.R.A.S.*, 1895, p. 746).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000099

مكتبة قطر الوطنية
Qatar National Library

to Hassan Ova. This stone we found to be a Latin inscription bearing the name of the Emperor Decius on a panel cut in the living rock on the further or left bank of the Kara Budak, a tributary of the Euphrates at a point situated about 4 miles from Dostal, and about the same distance from the junction of the tributary with the river. On the right bank of the Kara Budak, opposite the inscription, there are remains of an abutment of a bridge, and on the left bank the rock is cut away for a short distance to carry a road.

As is often the case, the name of the river over which the bridge was built is given in the inscription, and, curiously enough, it appears to be the same as that by which the Romans called our own Severn, *i.e.* Sabrina. Its discovery gives certain indication that a Roman road passed the stream at this point.

From the spot where we found the remains Hassan Ova is reached in one and a half hour, and a road to Kuru Chai goes off to the left fifteen minutes after leaving the bridge. At Hassan Ova, which is situated close to the Armidan Chai,* another considerable tributary of the Euphrates, and one which has as yet found no place in Kiepert's maps of Asia Minor, we saw some signs of an ancient site in some columns and capitals, probably of Byzantine date, lying in a ruined hut by the side of our path. Unfortunately, we were prevented from searching the village for further evidence of antiquity by the fear of being detained in quarantine. Hassan Ova lies on the frontier between the vilayets of Sivas and Erzingan, and eleven days' quarantine had been imposed on all travellers coming from the former province. Any delay might have led to our detention in the wretched village, which is notorious in this part of Asia Minor for its bad water, for eleven days, so we hastened on, fortunately without being perceived by the official to whom the supervision of this part of the frontier had been entrusted.

A short distance above Hassan Ova the country through which the western Euphrates flows becomes mountainous on the right bank, and our path struck up into the hills, and, after a long and easy ascent, reached the height of 6458 feet.

We then crossed a well-cultivated upland plain until we came to the valley of the Nezgieb Chai, which we followed down to Nezgieb, a Turkish village of fifty houses, distant three hours forty minutes from Hassan Ova. After leaving Nezgieb, we travelled for rather more than an hour down the bed of the same stream; the path then mounts from the left bank, and crosses the heads of numerous *derés* formed by small tributaries of the Euphrates. In this manner we gradually ascended to the edge of a high cliff, from which we had a view of the

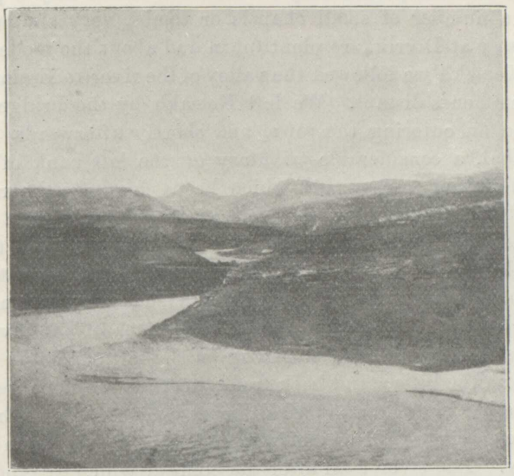
* It is also called the Kuru Chai Su. Its course was followed by Taylor in 1866 (*loc. cit.*, pp. 308 ff.).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000060

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Euphrates and Kemakh on the further bank. At this point a severe thunderstorm, which had been brewing all day in the Dersim mountains behind Kemakh, broke over us, with the result that a small stream which lay between us and the town was turned into an almost unfordable torrent. By making a considerable détour we succeeded in passing this obstacle, and so reached the Euphrates. The river, which flows at this point through a high and precipitous ravine, is here spanned by a wooden bridge, which we crossed to ride down a ladder-like staircase into the town of Kemakh. We rode the whole distance from Hassan Ova to Kemakh in nine hours twenty minutes, but we travelled very slowly for the last two hours, and the journey could easily be accom-



THE WESTERN EUPHRATES ABOVE AGHIN (LOOKING NORTH).

plished in eight and a half hours. It is quite possible that the road which was so often traversed by Byzantine armies (Sebastea—Tephrike—Kamacha *) may have coincided with the route along which we travelled from Hassan Ova to Kemakh, but we saw no sign of any ancient road along our path.

Kemakh is a small town of about fifteen hundred houses, of which only thirty-five are Armenian. The town is clustered round a precipitous rock, which rises close to the left bank of the river, and on which there are remains of what must once have been an impregnable fortress. It most probably occupies the site of one of the several towns called Theodosiopolis, which existed in this part of the Byzantine Empire.† In

* Ramsay, 'Hist. Geogr.,' p. 56.
† *Vide* Ramsay, *op. cit.*, pp. 282 and 447.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000056

مكتبة قطر الوطنية
Qatar National Library

later times it was one of the so-called Mesopotamian fortresses which the Arabs held along the line of the Byzantine frontier.* We stayed two nights in Kemakh, but were unsuccessful in our search for remains of the Byzantine period. Portions of the walls of the castle, which are in places still preserved to a considerable height, may be as old as those times; but it is more probable that the greater part of them are later in date, and the work of the Mohammedan conquerors. Within the walls of the castle there are ruins of many houses which may possibly be the remains of the Byzantine town, but we found no inscriptions or other evidence to support such an hypothesis. The churches which are reported to have been seen by other travellers who have visited Kemakh, do not exist at the present day.† Remains of the Seljuk period, consisting of a number of small chapels or tombs, very similar to those which we saw at Divrik, are plentiful in and about the modern town.

From Kemakh we followed the valley of the river to Erzingan, which is about ten hours distant. We left Kemakh by the bridge which we had crossed on entering the town, and shortly afterwards forded the Kiumur Chai, a considerable tributary of the left bank of the river. We then followed an easy path which keeps closely to the right bank. The river between Erzingan and Kemakh is generally from 80 to 100 yards broad; the stream is yellow in colour, and flows at the rate of about 6 miles an hour. We found the temperature of the water on June 6, at 4.30 p.m., to be 59° Fahr. The Dersim mountains descend abruptly to the left bank all along this part of the course of the river, but for seven hours of our journey the country on the left bank was fairly easy in character; the hills stand back from the river or slope gently down towards the bank. Three and a half hours before reaching Erzingan we came to the carriage-road which is in course of construction along the river-valley. The river, soon after the point at which we got on to this road, is hemmed in on both sides by hills, which continued until we reached the plain of Erzingan, when the road leaves the river. A ride of one and a half hour along the road over the plain then brought us to Erzingan. We met with few human habitations, except *khans*, in the river-valley between Erzingan and Kemakh, and we saw no sign of any old road or other antiquities along our route.

The following table is a list of distances and heights between Egin and Erzingan:—

Miles.		Feet.
—.	Egin	3342
14.	Top of ridge ...	5913
11.	Pingan	3331
14.	Kesmé	4874
8.	Summit	7922
7½.	Divrik	3642

Miles.		Feet.
23.	Karageban	4695
23.	Dostal	—
9.	Hassan Ova	—
13.	Nezgieb	5807
17.	Kemakh	3877
35.	Erzingan	4267

* L'Estrange, 'Palestine under the Moslems,' p. 38.
† Ritter, vol. x. p. 785.

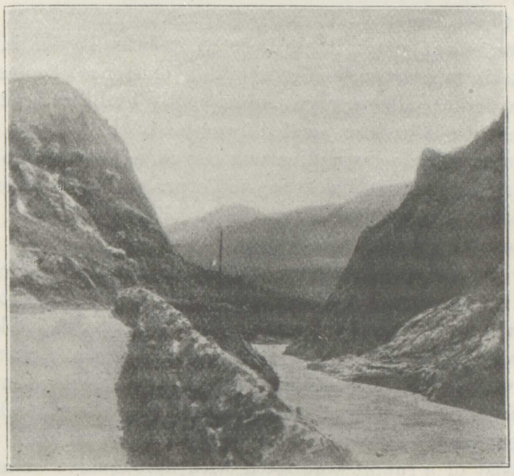
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000048

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Erzingan is situated in a large plain, which is surrounded on every side by high mountains. It is at the present day the principal military outpost against Russia on this part of the Turkish frontier, and the head-quarters of the 4th Army Corps. The town, which is badly built, is said to contain from 30,000 to 35,000 inhabitants. We could find no ancient buildings or other antiquities in Erzingan, which does not seem to represent any ancient site. The chief monument of the place is a modern mosque built in classical style.

At Erzingan we finally left the Euphrates, and made our way northwards to Sadagh, about ten hours distant on the other side of the high mountain range which bounds the plain of Erzingan to the north, and forms part of the watershed between the Black Sea and the Persian



GORGE OF THE WESTERN EUPHRATES BELOW EGIN.

Gulf. Sadagh, where ruins and antiquities have been reported by several travellers, lies close to the route which is travelled by the postal service between Erzingan and Trebizond. Following this route, an ascent of nearly four hours, by a path which nowhere presents any great difficulties, brought us from the plain of Erzingan to the top of the pass (8805 feet) over the Sipikor Dagh. The carriage-road, which is in course of construction between Erzingan and a point on the Erzerum-Trebizond *chaussée* near Giumush Khané, begins a short distance before the top of the pass is reached, and, though it is not yet metalled in many places, it is probable that before long the whole road will be completed, and it will be possible to drive all the way from Erzingan to Trebizond. After reaching the top of the pass, we rode down a green and pleasant valley to Sipikor, a Turkish village of one hundred houses.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000060

مكتبة قطر الوطنية
Qatar National Library

From here we followed the carriage-road, which keeps to the left bank of a small stream flowing into the Kelkid Irmak (Lycus), and in five and a half hours reached Sadagh, which lies a short distance to the left of the road. Sadagh is a Turkish village of about a hundred and fifty houses, built for the most part of old squared stones. It is situated in a depression in the hills on the left bank of one of the main sources of the Kelkid Irmak, and has a fine water-supply which flows from a reservoir, which is artificially banked up above the village. The site lies close to the route up the Kelkid Irmak from Enderes *viâ* Ashkaleh to Erzerum. This route, inasmuch as it formed part of the old route by land from Constantinople to Erzerum,* was of great importance before the half-sea route *viâ* Trebizond to Erzerum was opened up, and in consequence the village has been mentioned in the writings of some of the early travellers to the East.†

In more recent years, it has been visited by Taylor in 1868, who copied a Latin inscription, and reported the existence of some Byzantine inscriptions in the village;‡ and subsequently by Biliotti, who sent in a description of the site, accompanied by a plan of the ruins, to the British Government. A Latin inscription was also copied on the site by Colonel Everett, and has been published in the Corpus.§ On the strength of the reports Sadagh was identified by Kiepert in his maps with Satala, the camp of Legio XV. Apollinaris.‖

There was nothing, however, in these reports and inscriptions to make this identification certain, and we devoted two days to an examination of the site, and a search for further epigraphical evidence. Our efforts were rewarded by the finding of several legionary titles inscribed with the words "Leg. XV. Apol.," the discovery of which must remove all doubt as to the identity of the site with Satala. Considerable remains of an ancient fortified town exist near the modern village. The walls, which consist of a rubble core faced with well-squared stones, seem to have formed a square enclosure, the sides of which faced the four points of the compass. They are best preserved on the north side, where the towers are still standing along the whole line and at the two corners. On the south and along part of the west side the ancient walls have been almost obliterated by the modern village, which is built over the south-west corner of the enclosure. As far as can be judged from the style of construction, the walls would seem to be of Byzantine rather than of Roman date, and are probably in their present form not older than the time of Justinian, who is known ¶ to have restored the fortifications of

* It is described in Ritter, vol. x. p. 751.

† Tournefort, Let. 21; Morier, 'Persia,' p. 331.

‡ Taylor, *loc. cit.*, pp. 287 ff. The inscription which he copied can be partially restored, and is undoubtedly one of the Emperor Aurelian. It has not yet found its way into the Corpus.

§ 'C.I.L.,' vol. iii. Suppl. No. 6744. ‖ 'Notit. Dignit. Orient.,' cap. xxxv.

¶ Procopius, 'De Æd.,' iii. 4.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004d

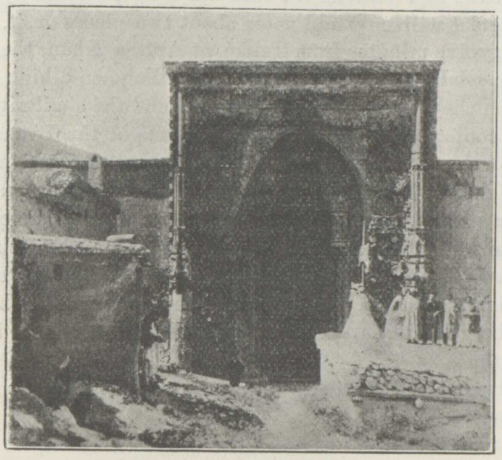
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the town. A short distance south-east of the site there are remains of an aqueduct, of which five arches are still standing. Above the modern village, near the reservoir, there are remains of earthworks, which possibly represent the site of a small fort which guarded the water-supply. There are also some foundations of a building outside the north wall, but not enough of it is preserved to indicate its character.

In the course of our stay we succeeded in finding, besides the legionary tiles and a considerable number of unimportant Byzantine epitaphs, seven Latin inscriptions. Of these two are mere fragments, and another, a milestone, is so weather-worn as to be wholly illegible.

With regard to the famous bronze head which was found at Sadagh



MOSQUE AT DIVRIK (NORTH DOOR).

and is now in the British Museum, we could obtain but little information. We were shown the place where it was found; the spot is within the walls of the site, and the man who turned it up was at the time of our visit still alive, though at the point of death. From the accounts of the oldest inhabitants, it appears that a thorough search was made at the time when the head and hand were discovered, and they all agreed in saying that nothing else was found, so that the reports which have been in circulation to the effect that the body of the statue is still in possession of the natives of the place, are probably without any foundation. Exactly the same account was given by one of the *beys* at Kemakh, the government engineer of the district, and our *Khanji* at Erzingan.

From Sadagh we made short excursions along two of the valleys which converge on the village from the west, the valley of the Lycus,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000004

مكتبة قطر الوطنية
Qatar National Library

and that of another smaller stream to the south. In the valley of the Lycus, on the road to Kelkid Chiflik, at a village one hour distant from Sadagh, there are two columns, which may once have been milestones, though neither is inscribed.

On leaving Sadagh we regained the post-road from Erzingan to Trebizond, and went *viâ* Keusse over a high pass (7389 feet) to strike the Erzerum-Trebizond *chaussée* at a point fifteen minutes short of Tekké. The point where the two roads join is ten hours distant from Sadagh. One hour and a half after leaving Sadagh we saw what may be a Roman fort, 2 miles to the right of our road. We did not have time to visit it, but could make out with a glass that its walls consist of a rubble core faced with squared stones.

From Tekké to Trebizond the road has been described by numberless travellers, and I will only add notes about two places on it. At seven hours twenty-five minutes from Tekké, at Ardasa Khan, there are ruins of a castle, probably Byzantine, above the village on a high rock to the right. From the existence of these remains and the similarity of names, it may be conjectured that Ardasa = Αραδάση of the Byzantine lists.* At two and three-quarter hours beyond Ardasa, and ten hours before reaching Trebizond, a small group of *khans* is passed on the south side of the pass, which are called by the collective name of Zigana Khan. The name of one of the stations on the road of the Antonine Itinerary from Trapezus to Satala is preserved in Zigana,† but there is not the faintest trace of antiquity on the spot, and if the distances given in the Itinerary are correct, the station must have been rather further south.

At Trebizond our journey came to an end, and we took ship for Constantinople.

PART II.

The Roman Roads and Defences on the Upper Euphrates.

Having thus described our journey, I shall now endeavour to show what new light can be thrown by its results on the subject of the Roman roads and defences on this part of the frontier, discussing, firstly, the course taken by the roads, and the position of some of the stations on them; and, secondly, the history of their construction.

The general system of the Roman roads leading to and along the upper Euphrates may be said to be fairly understood, and is well set out in the writings of Professor Ramsay ‡ and Hogarth § on the subject. The system has as its centre Melitene, the *caput viæ* of the great road from Ephesus and Cæsarea, which doubtless followed the same course as the old trade-route to the East, the κοινὴ ὁδός of

* Ramsay, p. 319.
† Zigana was also a station for troops ('Notit. Dignit. Orient.,' cap. xxxv.).
‡ *Op. cit.*, p. 55. § *Op. cit.*, pp. 69 ff.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Artemidorus. From Melitene a road ran north to Satala, and south in two branches across the Taurus to Samosata, these three points being the *stativa* of the three legions stationed on the upper Euphrates. From Melitene another road led in a north-westerly direction to Sebastea, and from Sebastea another went eastwards to Nicopolis and Satala, from which point it was continued through Armenia Major to Artaxata. From Nicopolis another road ran south to cut into the road Satala—Melitene, according to Kiepert at Analibla, according to Ramsay at Carsagis. From Satala the road from Melitene was prolonged to Trapezus on the Black Sea, which was also a station of Roman troops.

The Roads Melitene—Samosata.

The roads given in the authorities are—

I. Antonine Itinerary: Melitene, XII.; Miasena, XXVIII.; Lacotena, XXVI.; Perre, XXIV.; Samosata.

II. Peutinger Table: Melentenis, VIII.; Corne, XIV.; Metita, XII.; Glaudia, XLVI.; Barsalium, VIII.; Heba, XXX.; Charmodara, XII.; Samosata.

Melitene is at Malatia (Eski Shehr), Samosata at Samsat. Of the sites of the other stations on these two roads very little is known, but we have one fixed point in Perre which is near Adiaman (*vide*, p. 322). Corne, Metita, Claudias * (Glaudia), Barzalo † (Barsalium), Cholmadara (Charmodara) of road II. are placed on the river by Ptolemy, and Laudias (Claudias) and Barzalo are mentioned in a passage of Ammianus Marcellinus (XVIII., 7. 11), in which it is implied that they were forts on the Euphrates. A Greek inscription exists at Gerger, and has been published in Humann and Puchstein's book, from which it appears that the place was called Arsameia in the first century B.C. But, unfortunately, this name does not occur either in the roads of the Tables or in Ptolemy. No milestones have as yet been found in the country which lies between Samosata and Melitene, and the only other piece of positive evidence pointing to the course, taken by either of the two roads which joined the camps, is the great bridge of Kiakhta.

In view of the fact that no one of the stations mentioned in two lists of the Tables is common to both, it seems highly probable that the two roads must have taken wholly divergent routes. Moreover, it appears, from the testimony of Ptolemy and the passage of Ammianus Marcellinus, that road II. kept more or less closely to the river-bank. Hence there is no reason to depart from the arrangement which has been adopted with regard to this road in all the most recent maps of the ancient world, making it follow the course of the river. The precise route taken by the road can only be laid down when further exploration has been carried out along the river above Gerger.

With regard to road I., Ramsay ‡ has suggested that it is probably represented by the modern route by Elemenjik, Khan Bunar, Viran Shehr, and Adiaman. But at the time when his work was published, the existence of a Roman bridge at Kiakhta had only just been made generally known, and if the situation of this bridge, which

* Claudias seems also to be the same as the Claudiopolis of Pliny (V. 24. 85), and Claudiana, a station of the Notitia Dignitatum. It is twice mentioned by Barhebræus ('Hist. Dynast.,' trans. Pococke, pp. 140 and 333). The name seems to have survived into the last century, as Otter ('Voyage en Turquie et Perse,' vol. ii. p. 284) speaks of Arcloudieh as an important fortress near Malatia. However, it is not to be found in the modern maps.

† Barzalo is placed by Ainsworth ('Travels in A. M.,' vol. i. p. 263) at Bersel, a village near Tokariz.

‡ 'Hist. Geogr.,' p. 280.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000067

مكتبة قطر الوطنية
Qatar National Library

lies in a direct line between Perre (Adiaman) and Melitene, and the easy nature of the country between Perre and Kiakhta, are taken into consideration, the conclusion seems to be inevitable that road I. must have used the bridge. The distance, too, of the route which he selects for the road, seems to be far too great, if the distances are correctly given in the Itinerary.*

If then, as seems fairly certain, the bridge at Kiakhta belongs to road I., the question remains still to be answered: What route did road I. take over the high Taurus between Kiakhta and Malatia?†

The best authority on the roads across this part of the Taurus is undoubtedly Von Moltke. In 1838 he was stationed with the Turkish army at Malatia, and was in great degree responsible for moving the troops across the mountains from Malatia to the plain of Samsat. He crossed the mountains several times, and must naturally have spared no trouble in obtaining information as to the different passes. He says that there are only three routes practicable for troops,‡ one of these being the waterway of the river, down which he travelled on a raft. The other two are (*a*) the route by Surghu Erkenek and Pelwere, which he describes as practicable for artillery. This route follows, after leaving Malatia, the Sultan Su, a tributary of the Tokhma Su, and is the same as that thought by Ramsay to represent road I.; (*b*) a route along another tributary of the Tokhma Su by Abdul Kharab over high mountains, and practicable only for infantry and cavalry. It is improbable, as has been shown above, that route (*a*) can be the same as the road of the Itinerary, and route (*b*) keeps a long way to the west of the line which we should expect a road using the bridge of Kiakhta to take. It is possible, however, that the Roman road which crossed the Bolam Su at Kiakhta may have followed that stream to its source, which, according to the maps, is close to Abdul Kharab, and from this point to Malatia may have coincided with route (*b*). A further possibility remains that it took a line up the basin of the Gerger Chai to the east of the mountain path which we followed from Kiakhta to Malatia. We were told of the existence of such a route at Kiakhta, but were assured that it was considerably longer than the one by which we travelled—in fact, thirty-two hours as compared with eighteen and a half.

Thus, in the present state of our knowledge of the passes through this part of the Taurus, there is but little evidence to show which one was chosen for road I., and it is probable that the old road has not yet been trodden by any European traveller. It seems not unlikely that it may have kept along the valley of the Bolam Su,

* The ruins on this road at Viran Shehr (*vide* 'Ainsworth Travels in A. M.,' vol. i. p. 258) correspond well enough in position to the site of Zibatra, an important fortress in late Byzantine times. Its position is fairly accurately defined in the Arab geographers as lying between Malatia, Samsat, and Hisn Mansur (Adiaman), and close to the source of the Jihan (l'Estrange, 'Palestine under the Moslems,' pp. 554 and 562). l'Estrange, however, in his notes on Ibn Serapion, just published in *J.R.A.S.*, 1895, pp. 739 ff., is inclined to adopt a suggestion by Hogarth, that Zibatra might possibly be Derendeh.

† Very strong arguments have been brought together by Hogarth in Macan's new edition of Herodotus, to prove that the Royal Road of Persian days, and subsequently the κοινὴ ὁδὸς of Artemidorus, took a route from Malatia across the Taurus by Kiakhta to Samsat. If this theory holds good, it is highly probable that road I. followed the same route across the mountains.

‡ 'Briefe a. d. Turkei,' p. 316. The value of Moltke's statements, however, is to some slight extent discounted by the fact that in his time Kiakhta and Gerger were occupied by rebellious Kurds. This may have led him to choose routes avoiding these two places.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

joining route (*b*) at Abdul Kharab, and thence have followed a tributary * of the Tokhma Su down to Malatia. More than this cannot be said until we are better informed as to the nature of the valley of the Bolam Su.

The Roads north of Melitene.

The whole of the road Melitene—Satala is given in the Antonine Itinerary. It is described as having led *per ripam*.

I*a*. Satala, XVII.; Suissa, XVIII.; Arauracos, XXI*b*.; Carsagis, XXVIII.; Sinervas, XXVIII.; Analiba, XVI.; Zimara, XVI.; Teucila, XXVIII.; Sabus, XVI.; Dascusa, XXXII.; Ciaca, XVIII.; Melitene.

A considerable portion of the same road is given in the Peutinger Table, but it starts from Draconis, the second station from Satala on the direct road Nicopolis—Satala (*vide infra*, II*a*. and II*b*.).

I*b*. Draconis, XVI.; Haris, XVII.; Eregarsina, VIII.; Bubalia, XXVII.; Zimara, XVIII.; Zenocopi, XVIII.; Vereuso, XIII.; Saba, XVIII.; Dascusa, XVIII.; Hispa, XVIII.; Arangas, VIIII.; Ciaca, XXVII.; Melitene.

A direct road, Nicopolis—Satala, is given both in the Itinerary and the Table.

II*a*. In the Antonine Itinerary: Nicopolis, XXIV.; Olotoedariza, XXVI.; Dracontes, XXIV.; Haza, XXVI.; Satala.

II*b*. In the Peutinger Table: Nicopoli, XIV.; Caltiorissa—Draconis, XIII.; Cunissa, X.; Hassis, XIII.; Ziziola, XII.; Satala.

Another road, Nicopolis—Satala, which, if Carsagis is taken to be the same as Carsat, joins road I*a*. at that point, is given in the Itinerary—

II*c*. Nicopoli, XXIV.; Olotoedariza, XXIV.; Carsat, XXIV.; Arauracos, XXIV.; Suissa, XXVI.; Satala.

A road from Nicopolis which cuts into road I*a*. at Analiba and road I*b*. at Zimara, is given in the Peutinger Table.

III. Nicopoli, XXI.; Ole Oberda, XV.; Caleorsissa, XXIII.; Analiba, XV.; Zimara.

The stations on these roads are evidently much confused; Eregarsina of I*b*. is most probably the same as Carsagis and Carsat of I*a*. and II*c*., and the stations Hispa and Arangas of I*b*. are taken from the Melitene—Sebastea road. Probably Hassis of II*b*. = Haris of I*b*., and Dracontes of II*a*. = Draconis of I*b*. and II*b*. Analiba should be changed, as Ramsay has pointed out, to Analibla, in accordance with Ptolemy and 'Acta Conciliorum.'

Melitene, as has been shown already, is at Malatia (Eski Shehr); Satala, now that we have found the legionary tiles, may with certainty be identified with Sadagh, and Nicopolis is at Purk.† In the country through which the roads must have passed, there are only two places which can confidently be considered to be ancient sites. One of these is the place opposite Pingan, from which three

* There is some evidence pointing to the fact that in late Byzantine times there was a road in use along this tributary. The stream may very probably be identified with the Az Zarnuk of the Arab geographers, as its junction with the Tokhma Su (Kubakib) is accurately defined in a passage of Ibn Serapion (translated by l'Estrange, *J.R.A.S.*, 1895, pp. 63 ff.). The Byzantine historians (Ced., 207. 4; Theoph. Cont., 167 B.) record that Basil, in A.D. 872, marched from Ceramisium on this stream (ἐπὶ τῷ Ατζάρνουκ ποταμῷ) to the Euphrates along the road to Melitene. I owe the references to de Muralt, 'Chronographie Byzantine,' p. 453.

† *Vide* Ritter, xviii. p. 214; and J.A.R. Munro in 'R.G.S. Suppl. Papers,' vol. iii. pp. 725 ff.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

inscriptions have been published, and where we copied another.* The site is identified by Ramsay with Dascusa on the authority of one of the inscriptions found there, in which Ala II. Ulpia Auriana, according to the Notitia Dignitatum stationed at Dascusa, is mentioned.† But Ramsay, in his map of Cappadocia, assigns a position to Dascusa 50 miles south of the position given to it in his text, and places Zimara in the map, where, according to the text, Dascusa should be. The position given by Ramsay to Zimara is confirmed by the existence of the modern village with the same name, Zimara, very near to the spot at which the inscriptions were found, and just about in the position in which we should be inclined, if working from the Tables, to look for the site. So that if, following the evidence of the inscription, we place Dascusa on the river-bank opposite Pingan, it will be at a spot only about 6 miles distant from the probable site of Zimara. But the Peutinger Table and Itinerary place Dascusa at a point from 60 to 70 miles south of Zimara, and their testimony is supported by a statement of Pliny,‡ who says that Dascusa was 75 miles lower down the river than Zimara. Hence, if the evidence of the inscription is to hold good, it seems necessary to conclude that the station of Dascusa is wrongly placed by the Table, the Itinerary, and Pliny, and has been shifted by these authorities from its real position, which is where the inscription was found opposite Pingan. A minute examination of the literary evidence bearing on these places makes, however, another explanation open to us, by the adoption of which we should do less violence to the authorities. Ptolemy mentions a Δασκοῦσα in conjunction with Zimara in Armenia Minor on the Euphrates, and another place, Δάγουσα, in conjunction with Sinis and Melitene, also on the river, in the στρατηγία of Melitene. A Dagusa is mentioned also by Orosius§ as being situated "in confinio Armeniæ et Cappadociæ," so that there is some evidence in favour of there having been two places on the Euphrates with very similar names, Dascusa and Dagusa. The position of the first of these, as defined by Ptolemy, would fit in very well with the site opposite Pingan; the name is the same as that of the station of the Ala II. Ulpia Auriana, given in the Notitia, and the coincidence of its being joined with Zimara by Ptolemy, and of the preservation of the name Zimara only 6 miles from the spot where the inscription of the Ala was found, is very striking. The position of Dagusa may, then, be found in that of the Dascusa of the Table and Itinerary, and would be, according to the distances which they give and the statement of Pliny, about 70 miles lower down the river. The confusion of two so similar names is so likely to have happened as to require no explanation. On the whole, this theory of there having been two places, Dascusa and Dagusa, on the Euphrates seems to offer the simplest way out of the difficulty, though of course it adds complication to the topography of the district. If it is adopted, the Dascusa, which is placed in Ramsay's map at a point near the junction of the two branches of the Euphrates, must be changed, on the authority of Ptolemy, into Dagusa, and Dascusa must be placed, in accordance with the evidence of the inscription, on the river-bank opposite Pingan. A point in favour of this arrangement is the fact that Zimara is one of the few stations between Melitene and Satala which has no troops assigned to it in the Notitia, and if this

* *Vide* p. 335, note.

† The evidence of the inscription, however, is not conclusive, as it is merely the tombstone of a soldier belonging to this Ala, and it is quite possible that he died while away from his post.

‡ *V.* 24. 84. He says, however, that Zimara is only 12 miles from the source of the Euphrates, so that it is possible that there were two places with this name, as Ritter (vol. x. pp. 822, 823) maintains.

§ I. 2. 23.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000087

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

theory is adopted, the omission can be explained by the proximity of Dascusa, for the troops there stationed would serve to protect the two posts.

The other site is that seen by Boré* near Melik-Sherif, and identified by Kiepert with Arauraca.

With regard to the other stations on these roads, the only suggestions that we can make are that Dascusa of the Table and Itinerary may have been near Korpanik (see p. 330), that the ruins at Zinika (p. 455) may represent the old Zimara, and that Analibla may have been at Hassan Ova, where we saw some signs of a Byzantine site; but none of these identifications can be made with any degree of certainty.

Two fixed points on the main road on the right bank of the Euphrates are given (1) by the bridge at Korpanik (p. 330); (2) by the bridge over the Kara Budak (Sabrina) (p. 456). Between Malatia and Korpanik the country along the river is easy; and, though we saw no certain traces of any Roman road during this part of our journey, it is highly probable that the old road kept close to the earthy bank, and possible that it has been long ago washed away. Above Korpanik, the country through which the river passes soon becomes mountainous, and from Egin to Pingan the path along the right bank is reported to be most difficult by the natives, and all traffic goes by the route which we followed on the left bank. Hence it seems likely that the Roman road between the bridge at Korpanik and the probable site of Zimara took a line to the west of the route by which we travelled. Taylor,† on his way from Zimara to Arabkir, between Gamkeui and Arabkir, high up on the Sarichichek Dagh, saw a paved road, which he speaks of as being "solidly and ingeniously constructed," and it is not improbable that this may be a portion of the road for which we searched in vain in the river-valley. Moreover, the further west that we place this portion of the road, the more easy it is to understand how Hispa and Arangas—which belong to the Melitene—Sebastea road—were introduced among the stations of road I*b*. in the Peutinger Table.

Beyond the bridge over the Kara Budak, my personal knowledge of the country, through which the road passed in two branches to Nicopolis and Satala, ceases, and I will merely make one criticism of the views advanced by Ramsay as to the course which it took. From the lists of the Table and Itinerary, it appears to be fairly certain that in the district which lies south of Nicopolis and Satala, there was a triangle of roads of which the direct road Nicopolis—Satala was the base. The apex of this triangle is placed by Ramsay at Carsagis, by Kiepert at Analibla. Two sides of the triangle are made by the important roads Nicopolis—Satala and Melitene—Satala, and the third side by the cross-road from Nicopolis to a point in the Melitene-Satala road between Zimara and Satala. Ramsay makes several most ingenious conjectures with regard to the stations Ole-Oberda, Aladaleariza, and Caltiorissa, and makes out what is on paper a very fairly satisfactory restoration of the roads. But in deviating from the view upheld by Kiepert, that road III. struck into the road Melitene—Satala at Analibla, he leaves out of consideration the existence of a natural route which appears to answer very exactly to the requirements of a road from Nicopolis to Zimara. The object in laying out a road from Nicopolis to strike into the Satala—Melitene road would naturally be to make it join the latter at a point in as direct a line as possible between Nicopolis and Melitene; for the road in question cannot have been intended merely to join Satala and Nicopolis, between which points a direct road is given in the Peutinger Table and the Itinerary (II*a*. and II*b*.) This purpose would be best secured by a road going

* Referred to by Ritter, vol. xviii. p. 215.
† *Loc. cit.*, p. 209.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

direct from Nicopolis to the probable site of Zimara, near Pingan, and joining the Satala—Melitene road near the bridge over the Kara Budak, in the neighbourhood of which Ramsay and Kiepert agree in placing Analibla. A possible course for such a road is given us in the route travelled by Taylor * from Purk (Nicopolis) to Zimara. This road, which Taylor implies is practicable for wheels as far as the gorge of the upper Armidan or Kuru Chai Su, passes, soon after leaving Purk, at Ashkhar, a Roman milestone, of which he published a copy, and which has been subsequently seen by Messrs. Hogarth and Munro.† From Purk to this point, an old road was observed by him and by the other travellers. Subsequently Taylor crossed the Kara Budak at or very near the spot where we found the remains of the bridge. The milestone at Ashkhar is assigned by Mr. Munro to the road Nicopolis—Sebastea, but it is equally possible that it may have belonged to the road Nicopolis—Zimara—Melitene, which, if it followed Taylor's route, would have joined the Satala—Melitene road near the bridge over the Kara Budak. It is impossible to prove that this route represents the Roman road from Nicopolis, but it seems to be the most likely course to have been chosen for that road. It hits off the bridge over which the main road certainly passed, and there are remains on it which show that for some part of the way a Roman road once went. There is no epigraphical evidence in favour of Ramsay's restoration of this road, and if the position of the bridge over the Kara Budak as regards the line of Taylor's route and the direct and easy nature of the road from Purk to the bridge are taken into consideration, the conclusion seems to be inevitable that Kiepert's restoration of the road is the more probable.

The History of the Lines.

We cannot claim to have discovered much which throws new light on the history of the roads and fortifications of the Euphrates. Unfortunately, the evidence of milestones, which is so abundant on the Cæsarea—Melitene road, and from which the history of this section of the great highway to the East can be written with some degree of certainty, vanishes when the valley of the Euphrates is reached. Along the course of the river from Samosata to Satala only five inscriptions which bear the names of Roman emperors have as yet been found. These are at the bridge of Kiakhta,‡ on a milestone near Melitene (p. 328), at the bridge over the Kara Budak (p. 456), on a milestone near Melik Sherif,§ and at Satala (p. 460, *note*).‖

On account of this dearth of inscriptions, the history of the roads, which have been briefly discussed above, must be written mainly from the very few literary references to this part of the Roman Empire, and the records which we possess of the legions there stationed.

In the reign of Augustus Cappadocia and Commagene were both client states under native princes, and there is no evidence of any regular Roman troops having been posted then on the Euphrates.¶ Tiberius first made Cappadocia a province, and brought Commagene under direct control; but the latter state was given back

* *Loc. cit.*, pp. 301 ff.

† Munro, *loc. cit.*, p. 727; 'C.I.L.,' vol. iii. p. 6057.

‡ 'C.I.L.,' vol. iii. Suppl. 6709–6714.

§ 'C.I.L.,' vol. iii. p. 306.

‖ To these may be added the milestone of Trajan, near Purk (p. 465) ('C.I.L.,' vol. iii. 6057), and possibly one of the empress, Julia Domna, which we found at Satala.

¶ Hogarth ('Suppl. Papers of R.G.S.,' vol. iii. p. 710) makes a mistake in saying that, according to Dion Cassius (lv. 23), there were two legions stationed in Cappadocia as early as the time of Augustus. Dion Cassius, in this passage, only gives the stations of the legions in his own day.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000024

مكتبة قطر الوطنية
Qatar National Library

to its former rulers under Caligula. The northern districts which lie along and above the western Euphrates as far as Trapezus, were first made Roman probably in 63 A.D.* During the wars of Corbulo it seems probable that Melitene was used as one of the bases of operations for the campaigns beyond the river (Tac., 'Ann.,' xv. 26), but whether a camp was established here as early as this is not certain.† In these wars the two legions, XII. Fulminata and XV. Apollinaris, which, at least from Hadrian's time, were both always stationed in Cappadocia, were first employed in Asia Minor; but at this time they were attached to the army of Corbulo for special duty, and did not belong in any way to Cappadocia, the legate of which had no army in times of peace.‡ Under Corbulo we learn that a fort was established at Ziata,§ near Kharput, on the further side of the Euphrates; but for the establishment of other forts on the nearer bank evidence is wanting.

In the Jewish war under Titus both the twelfth and the fifteenth legions took part, and, after the capture of Jerusalem in 70 A.D., the twelfth was sent to Melitene, but the fifteenth was ordered back to its old quarters in Pannonia. ‖

Of Vespasian we are told that he "addidit legiones" to Cappadocia, and gave a legate of consular instead of one of equestrian rank to the province. He also brought Commagene again under direct Roman administration, adding it to the province of Syria. In this province he also raised the number of legions from four to seven; one of these being the new legion, XVI. Flavia Firma, of which we found two inscriptions at Samosata (p. 322). Whether this legion was stationed from the first at Samosata—which was certainly afterwards for some time its head-quarters—is not known, but Mommsen inclines to the view that it was.¶ The milestone near Melik Sherif, and most probably on the line of the Melitene—Satala road, to which allusion has already been made, seems to prove that Vespasian laid out a portion of this road. Its date, if Mommsen's restoration of the inscription is right, is 75 A.D., in which year a Roman garrison is known to have been stationed at Harmozica (Tiflis).** It is thought probable by Mommsen †† that Satala was a station of troops as early as this reign, but, except for the milestone, there is little evidence to support his view. Legio XV. Apollinaris was sent to Pannonia after the Jewish war, and the monuments of its stay there are so abundant that, even if some of them are to be referred to an earlier period, it is most probable that it remained here for a considerable number of years after the war. ‡‡

Thus, while there are no grounds for supposing any military post or road to

* Armenia Minor rather later, but at any rate by 75 A.D. (*vide* Mommsen, 'Provinces,' vol. i. p. 324).

† It is possible that the ἔρυμα ἐν τετραγώνῳ, built by the Romans ἐν τοῖς ἄνω χρόνοις, may have dated back to this time (Procop., 'De Æd.,' iii. 5).

‡ Tacitus, 'Hist.,' ii. § 1, "Inermes legati regebant nondum additis Cappadociæ legionibus." § 'C.I.L.,' vol. iii. Suppl. 6741-6742.

‖ Josephus, 'Bell. Jud.,' vii. 1. 3; vii. 5. 3.

¶ Dion Cassius (lxviii.) implies that Samosata was not held by the Romans at the time when Trajan arrived there in 109 A.D., so that if the legion was stationed then at Samosata, it must have left its post.

** 'C.I.L.,' vol. iii. 6052. †† 'Provinces,' vol. i. p. 324, note.

‡‡ Mommsen's view, stated in the Provinces *loc. cit.*, is at variance with the conclusions at which he arrived in discussing the history of the Pannonian legions ('C.I.L.,' vol. iii. p. 550). For the inscriptions of this legion at Carnuntum, *vide* 'Arch. Epigr. Oester.,' vol. v. pp. 208 ff. (Hirschfeld); and for a review of the whole question, 'Arch. Epigr. Oester.,' vol. x. pp. 12 ff. (Domaszewski).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

have existed on the right bank of the Euphrates previous to Vespasian's reign, we have one piece of positive evidence that the latter laid out a road in Armenia Minor. Seeing also that he re-made Commagene into a province, and strengthened the defences in Cappadocia and Syria, it is probable that the camps, not only at Melitene but also at Samosata, may be attributed to him. And if so, it is more than probable that he would have laid out a road to connect the two posts. Hence it is fair incidentally to suggest that he may have built the original bridge at Kiakhta, which we know, from the inscriptions found by Humann and Puchstein, to have been restored by Septimius Severus. The fact of the existence of an older bridge* tells against the attribution of the southern lines to Septimius Severus, suggested by Hogarth, and, if they are to be attributed to an earlier emperor, there is no one more likely to have laid them out than Vespasian, who first organized the two districts, which are joined by the bridge, for military purposes.

In the reign of Domitian, according to two inscriptions,† roads were constructed in Cappadocia and Armenia Minor, but the district of Armenia Minor is perhaps only mentioned in order to give the full list of the administrative districts under the governor who made the roads, and no definite inference can be drawn from the inscriptions that Domitian planned any of the roads on the frontier. In Trajan's reign a milestone was placed on some road at a point 7 miles from Nicopolis, and may perhaps, as I have tried to show, belong to a road Nicopolis-Zimara, but the evidence is so slight, as compared with that of the roads laid out by Trajan in Galatia and Pontus,‡ that not much stress can be laid on it. It is possible, however, that this road was made by him as a connection between the main system in that region and the frontier-road along the Euphrates. Trajan is also said to have made Melitene a city (Procopius, 'De Æd.,' iii. 5), but this fact does not carry much weight, as a camp most probably existed at this point, according to Procopius's own testimony (*loc. cit.*), before Trajan's time, and Legio XII. was certainly sent here after the Jewish war. Procopius's statement may very likely refer only to some honours conferred on Melitene by Trajan, who must have passed through the place on his march from Samosata to Satala. Whether Legio XV. Apollinaris was stationed at Satala at the time of Trajan's campaign is uncertain. It is supposed by Domaszewski that the legion was not moved from Carnuntum till Hadrian's reign, but no definite evidence as to the date of the change of legions at that camp has as yet come to light. At any rate, by the end of Hadrian's reign this legion had been brought back to the East,§ and seems to have remained till the end of its history at Satala.

Thus it appears that before the middle of the second century the two legions, the twelfth and the fifteenth, were both stationed on the frontier. An Ala Auriana is mentioned by Arrian as having taken part in an expedition against the Alani, and may be the same as the Ala II. Ulpia Auriana of the Notitia, which will thus have been stationed on the Euphrates as early as Hadrian's reign.

With regard to the Legio Prima Pontica, which was stationed at Trapezus,‖

---

* It is confirmed by the erased inscription which we saw on it (*vide* p. 322).

† 'C.I.L.,' vol. iii. pp. 312–318.

‡ Hogarth, *loc. cit.*, p. 711; Ramsay, 'Hist. Geogr.,' p. 258.

§ It is mentioned by Arrian (100 and 103) as taking part in the expedition against the Alani. (The only inscription which can be approximately dated at Satala is that of Aurelian, *vide* p. 460.) Legio XII. also took part in the expedition.

‖ 'Notit. Dignit. Orient.,' cap. 32.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000095

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

nothing seems to be known; it does not occur in any of the early lists of legions, and would seem not to have come into existence till the third century A.D., and to have been one of the lesser auxiliary legions.* In the reign of Septimius Severus, as Hogarth has shown, the great road Cæsarea—Melitene was improved on a magnificent scale, but the only evidence for similar improvements due to this emperor along and to the north of the valley of the Euphrates is given by the inscriptions on the great bridge at Kiakhta. Of the later emperors, Decius restored the bridge over the Kara Budak, and there is a milestone, probably the second from Melitene, of the emperors Constans and Constantius, either on the road Melitene—Sebastea or Melitene—Satala. The inscription of Aurelian at Satala need not be any evidence of his having improved that camp, and may be merely an inscription in honour of his great achievements in the East. In still later times, we know that the fortifications at Melitene † and Satala ‡ were repaired by Justinian.

Of the arrangement of the posts and disposition of the troops along the frontier very little is known. Between Samosata and Melitene, Claudiana and Metita are mentioned as posts in the Notitia; Barzalo and Laudias are called *castra præsidiaria* by Ammianus Marcellinus,§ and may be the same as Barsalium, Claudia and Metita of the Peutinger Table. Between Melitene and Satala, along the road of the Antonine Itinerary, seven of the ten stations (all except Carsagis, Sinibra, and Zimara) are assigned troops by the Notitia.‖ Between Nicopolis and Satala Aladaleariza of the Notitia may be the same as the Olotoedariza of the Table and Itinerary. North of Satala, on the road to Trapezus, Domana and Zigana were both stations of troops. So that an unbroken line of posts at fairly regular intervals must have existed in later times along the river as far as Satala, and been extended northwards to Trapezus.

With regard to the strategical importance of these posts, Samosata and Melitene, two of the three great legionary camps, guarded two important crossing-places of the Euphrates. Barsalium and Claudia, as may be inferred from the passage of Ammianus Marcellinus (*loc. cit.*), probably were chosen with the same object. If Dascusa was situated opposite Pingan, it doubtless protected another crossing-place. The river is narrow at this point, and a bridge could always have been thrown over it with little trouble similar to the wooden bridge now existing there. It is probable that another station was near the crossing at Keban-Maden, but no troops are assigned to the other Dascusa (*vide*, p. 466), which should be near this point. The importance of Satala seems to lie in its position on the route to the East, which was still much used until the middle of this century,¶ and in the advantages which it

---

* The name is confirmed by 'C.I.L.,' vol. iii. 306; *vide* also vol. iii. Suppl. 6746; but I do not know that it is otherwise mentioned. In earlier times, possibly the garrison was furnished by the twelfth and fifteenth legions, as inscriptions of both these have been found at Trapezus (*vide* 'C.I.L.,' vol. iii. Suppl. 6745, 6747).

† Procop., 'De Æd.,' iii. 5.

‡ *Ibid.*, iii. 4.

§ XVIII. 7. 11.

‖ 'Notit. Dignit. Orient.,' cap. 32 and 35.

¶ This route goes from the modern Sadagh to Erzerum, and passes Ilija, usually identified with Elegeia. Trajan went from Satala to Elegeia (Dio. Cass., lxviii.). Ilija, it must be remembered, however, is a very common Turkish name for a natural hot spring, and is used in many places all over the Ottoman empire. If its identity here with Elegeia could be proved from other evidence, it would afford an interesting example of the common practice of preserving an ancient name, slightly altered so as to bear a meaning in a modern language.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

thus offered as a starting-place for expeditions into Armenia from the north. The fact also that it lies on the natural road from Trapezus to the Euphrates, and was thus open to communications with the sea, may have led to the choice of the site for a legionary camp. The legion stationed here seems to have supplied some of the garrisons in Armenia, for we know that in A.D. 185, a *vexillatio* of the Legio XV., Apollinaris was stationed at Valarschapat (Caenepolis).*

Judging from our experience, it seems probable that very slight remains of the Roman defensive posts along the frontier from Samosata to the Black Sea exist at the present day, and, even though further evidence may be forthcoming in the future, it seems certain that the lines on the eastern frontier were not laid out on nearly the same scale as on the other Roman frontiers, on the Rhine and the Danube, in Britain and in Africa. This is more easily to be explained on the more southern reaches of the Euphrates above Samosata, where the great size and swiftness of the stream, and the inaccessible nature of the mountains through which it flows,† render the river, except at certain easily guarded spots, a formidable barrier to the crossing of an army. But north of Melitene, and especially at and above Keban-Maden, near which the two branches of the Euphrates meet, the river is not so serious an obstacle to an invading force,‡ and it is natural to expect to find remains of defensive works on a large scale near the river-bank. Such remains do not appear to exist at the present day, and the inference may with probability, but not with complete certainty, be made that no great defensive works were ever carried out between the camps. In the same way little care seems to have been bestowed on the connecting roads, and, with the exception of the work of Septimius Severus on the Cæsarea—Melitene road and the bridge which he built at Kiakhta, there is no evidence which points to the roads having been constructed differently to the generality of Roman roads in Asia Minor.§

If we are to seek a reason for this apparent neglect, it is doubtless to be found in the different character of this frontier to that of the other frontiers of the empire. This difference lies in the continual change of relations between Armenia and Rome during the first two centuries of our era. During this period Armenia was hardly ever regarded as a hostile country, and was often reduced nearly to the condition of a Roman province with Roman troops quartered in it. Probably, as Hogarth has pointed out, Septimius Severus was the first to depart from the traditional views of the emperors. He is known to have laid out roads to Melitene from the west and from the south; that he intended to extend these roads to the north as well is not improbable, but the negative results of our journey tend to show that, if ever conceived, this project was not carried out.‖

Before the reading of the paper, the PRESIDENT said: The paper we are to listen to this evening is an account of an expedition under Mr. Hogarth by the upper waters

---

* 'C. I. L.,' vol. iii. Suppl. 6052.

† This part of the river is best described by Von Moltke ('Briefe a. d. Turkei,' edit. vi. pp. 308 ff.).

‡ It was easily forded by Taylor in September at a spot near Korpanik (Taylor, *loc. cit.*, p. 315).

§ Ramsay (*op. cit.*, p. 46) describes the usual character of the roads in Asia Minor.

‖ Since this paper has been in the printer's hands, a most valuable article on the campaign of Basil I. against the Paulicians has been published by Mr. J. G. C. Anderson in the *Classical Review* (April, 1896), in which he discusses many of the points of historical geography which are dealt with above. It is most satisfactory to me to find that the conclusions at which he has arrived agree most remarkably with the views expressed in this paper.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000039

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of the Euphrates and in the Taurus. Unfortunately he is not at present in England, but Mr. Vincent Yorke, a member of the expedition, has kindly prepared a paper, and will read it to us, and exhibit some interesting photographs; and after his paper Mr. Myres will give a short account of his explorations in the Karian country of Asia Minor.*

After the reading of the paper, the following discussion took place :—

Mr. THEODORE BENT: At this late hour of the evening, after dining and hearing two papers, I feel that you will excuse me if my remarks are rather double, but I should like to ask one or two questions especially upon the paper we have last heard from Mr. Myres. At one time I was much interested in the history of the primitive races which migrated from this part of Asia Minor to Greece, probably by means of the islands as stepping-stones. In these islands there are to be found peculiar little marble figures found in the tombs; these are popularly believed to be Karian, and Herodotus, I believe, called them Karian, and I should like to know if Mr. Myres ever saw any of these marble figures of the female goddess in any tombs. When we were on the sister peninsula of Cnidos we heard rumours of several figures found there, and if they are found at Halicarnassus, it would be a considerable point that the peoples who inhabited the islands of Greece before the Greek period came from this part of Asia Minor, and it would make Herodotus right. With regard to Mr. Yorke's paper, I have been somewhat near the country which Mr. Hogarth and Mr. Yorke explored, and which has been so graphically described to us. The point which struck me more particularly was about the Armenians. The Armenians I have seen were at the Patriarchate of Sis, and there I must say they did not seem in a happy frame of mind. In Russian Armenia they are very far advanced in civilization, but in Turkish Armenia they are quite the reverse. I know nothing about the atrocities, and it is many years since we were there; but at the same time it seems to me that if they had the chance they would be better than the Greeks. In Russia they have had the chance, and the result in several places has proved that they are capable of becoming civilized and a credit to the world in general, which I think is more than can be said about the Armenians of Asia Minor. The country of the Euphrates is certainly one of the most interesting parts of the world, and I am sure we are extremely obliged to Mr. Yorke for giving us so much information about an almost unknown part of the world.

The PRESIDENT: I had no idea Mr. Myres was going to give us so full an account as he has done. I think the papers we have heard this evening fully justify us in having assisted the expeditions of Mr. Hogarth and Mr. Myres. They were also assisted by other societies, but for geography they have produced most valuable results. An important tributary of the Euphrates, before unknown, has now been brought to light, and several other interesting points have been brought out in connection with the positions of the legionary stations at the extreme eastern frontier of the Roman Empire, and the Hogarth expedition has actually discovered the site of one previously unknown, one of the four important frontier stations. These discoveries alone fully justify us in having given our aid to these expeditions, and I am sure that the meeting will instruct me to give its very hearty thanks to Mr. Yorke for the trouble he has taken in preparing the paper describing Mr. Hogarth's expedition, and to Mr. Myres for his most interesting account of his discoveries in Karia, especially in the Peninsula of Myndos. We must not forget to thank Lieut. Green, who accompanied Mr. Hogarth's

* The paper by Mr. Myres will appear in a subsequent number.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

expedition, for the extremely valuable mapwork he executed. In your names I return thanks to Mr. Yorke, Mr. Myres, and Lieut. Green.

Mr. Yorke's Map.—The map of the valley of the Upper Euphrates has been constructed by Mr. F. W. Green. The bearings were taken by prismatic compass, distances estimated by time, and the heights above the sea-level obtained by aneroid. Some of the detail has been added from Captain Maunsell's Survey, 1892, and other sources.

DE MORGAN'S "MISSION SCIENTIFIQUE" TO PERSIA.

By Major-Gen. Sir F. GOLDSMID, C.B., K.C.S.I.

We have now before us the second volume of the 'Études Géographiques,' or results of the scientific mission to Persia, conducted by M. J. de Morgan, of which the first part was noticed in the *Journal* for August, 1895. The large amount of information which it contains, original and compiled, renders it a valuable reference to those who seek a closer acquaintance with the tracts in North-Western and Western Persia; but it can hardly be said to open out any great extent of new country. Notes of available bibliography—almost identical with those to be found in Curzon's 'Persia' *—disclose at once to us how many older travellers have helped to a due appreciation of that portion of Kurdistan which tacitly admits, if it does not openly proclaim, the sovereignty of the Shah; and it is equally evident that a like attention has been given to non-Kurdish districts.

The geographical limits of the country under exploration are shown under nine heads: (1) The Kurdistan of Mukri; (2) the Kurdistan of Sehna; (3) the Kurdistan of Kirmanshahan; (4) the Province of Hamadan; (5) Malayer and Burujird; (6) Northern Luristan; (7) the Pusht-i-Kuh; (8) Susiana; and (9) the Persian Gulf. For each of these there are subdivisions discussing respectively physical geography, climate, flora and fauna, and population; while for the greater number separate treatment is accorded to towns, villages, and monuments, mineral riches, as also commerce, agriculture, and local industries. Under the Pusht-i-Kuh, or "back of the hill," special notice is taken of ruins. On the other hand, there is no mention made of towns or villages for the Persian Gulf.

M. de Morgan's 'Kurdistan de Moukri,' with which his volume opens, is a comprehensive chapter relating to the country traversed by Mr. Walter Harris, some five years later than the French writer, and described by sketch-map and letterpress in our *Journal* for November last. The actual route taken by the two explorers was not always

---

* Twenty-two out of the twenty-three books of reference on Persian Kurdistan, for instance, are the same, and placed in precisely the same order, as those noted by Mr. Curzon.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000013

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

identical, for Mr. Harris, on leaving Suj-bulak, abandoned the caravan-road for a straight cut across the mountains, so as to visit the Kurds in their summer quarters; but they seem to have been on one and the same track again at Sardasht, Bana (or Bahireh), and Sakiz. Independently of questions of hydrography, orography, and geology, separately grouped, the chapter is rich in illustrative detail, and the author has much to say on the character, language, and customs of the people, which comes under the head of light as well as instructive reading. This description of a marriage at Namashir, in the Balmik district, may be thus rendered in English:

"The bride lived with her parents in a neighbouring village; she had been purchased for the modest sum of twenty *tumáns* (say £8½ to £9½) by an inhabitant of the village in which we were encamped. About five o'clock in the afternoon—when the religious part of the ceremony had been performed—she arrived on horseback, escorted by her own country-folk, and bringing upon a beast of burden two boxes, painted in red, containing her wearing apparel. As soon as the small caravan came in sight, there was a general discharge of firearms; and directly she arrived and had alighted, the bride was conducted to the house of her lord, and the female villagers crowded around her. Much and loud talk ensued among men and women gathered together; then three large coal fires were lighted, and dancing began. The men and women danced in separate groups, holding one another by the waist, whirling round the fires, and adapting their steps to the time of the songs sung by a man placed in the foremost rank of the males, and a woman occupying a like position among the females. The song was slow, with a measured fall, in a monotonous air, often broken in upon by the bursts of laughter of the whole assembly."

Our author endeavoured to obtain some specimens of the words, as strung together for a vocal accompaniment to the dancing on these festal occasions. But, although he was able to collect a certain number, he could not find any that would bear translation. While allowing a high importance to Mukri literature, he regrets that the equivocal taste of its songs and stories is fatal to their publicity in Europe. To the above extract in reference to a wedding, let us add another which relates to a funeral—

"During our stay at the village of Passawa, among the Mamishes, a native of the place, through some unexplained visitation, ceased to show any signs of life. Instantly the air was filled with the lamentations of the whole neighbourhood; the men cried in moderation, but the women and children yelled and shrieked in despair. Although the wretched man thus mourned for was not actually dead, it was not long before he was found to be so in every respect.

"Half an hour after the news of his supposed decease was spread abroad in the village, the male inhabitants took the body to a stream, and, having stripped it of clothes, were about to wash it, when the corpse revived and began to struggle. 'He is possessed with the devil!' they exclaimed; and, struck by a vigorous blow at the back of the head, the victim fell stiff, now no more to rise again. The arrangements for his burial having been completed, the business of the hour was resumed, and the body borne to the cemetery; the whole village followed, weeping and vociferating, as if the practically murdered man had been an object of adoration

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000076

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to all his fellows. When the grave was closed, the female mourners came and encircled it, continuing their cries and wailings. Then, at a given signal, they suddenly became silent, to resume shortly, in unanimity of cadence, their moan of despair, *wai, wai, wai, wai, wai, wai*, and so on for about an hour. During this time the men, who had accomplished their funeral task, were seated, smoking their *kalians* and discussing their private affairs."

M. de Morgan alludes to the practice of despatching invalids who had grown unconscious as common throughout Kurdistan, and not infrequent in Persia generally. Sometimes, he affirms, the supposed dead man only revives when he has been deposited under the earth. Should his voice at such time be heard, it is said that a great calamity has come upon the country, and every one seeks to escape from the presence, as it were, of an exorcised demon, throwing over the body the largest available stone. Stoning for adultery is mentioned as a national law, but not often put into practice, owing, on the one hand, to the few cases which present themselves, and, on the other, to the difficulty of finding four witnesses to give evidence, a lesser number being insufficient for conviction.

Among the ancient customs of Mukri may also be mentioned the festival of the "sham governor," celebrated at Suj-Bulak in the spring of every year, which is thus described:

"The townspeople appoint a governor (*Amir*), who for three days exercises control, and abandons himself to the eccentricities of the occasion. As soon as this official is installed, he selects his ministers, secretaries, and *Farrash-bashi* (head servant), chooses his body-guard, and proceeds in state, followed by the whole population, to announce to the real governor that he has been deprived of office.

"This festival has often been productive of trouble, for the inhabitants of Suj-Bulak have taken advantage of the occasion to belabour the actual Amir with blows. So that now the sham ruler is always accompanied by soldiers and a government delegate, whose duty it is to prevent the joke being carried too far. For three days the mock rule continues. The governor decides the most absurd cases, and punishes the assumed culprits; but as, in the exaction of penalty inflicted, the dinar ($\frac{1}{100}$ part of a kran) counts for the kran, a fine of one hundred *tumans* (or 10 × 100 krans) is, in reality, that of one kran only. Thus payment is readily made and amusement afforded. The whole procedure is, practically, the 'Carnival of Mukri.'"

There are some noteworthy observations on the mineral riches of the Kurdistan of Kirmanshahan which may be commended to the attention of present and future explorers. Not only do they possess a general interest for the geographical world, but they indicate the existence of a special field of investigation, to turn which to good account no serious effort seems yet to have been made. We are reminded that marble, such as utilized in the wonderful sculptures at Besitun and Tak-i-Bustan, is still abundant in the locality of these monuments. Moreover, the perfect quality of the plaster procurable from the gypsum—the presence of which in the Zohal district and neighbourhood has been certified by

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Loftus and others—is cited to show how natural gifts are suffered to lie profitless by a community, whether the governors or the governed, who prefer conventional dwelling-places of bad brick which entail little labour, to solid and durable houses involving abnormal effort. Above all, the reader is enjoined to give heed to the possibilities of a vast and profitable trade in petroleum, of which the aspect of this part of the country amply warrants the anticipation. Our author is of opinion that what he designates a *bande petrolifère*, stretching out in a south-westerly direction from Kerkuk, in Turkish Arabia, to the Persian "Pusht-i-Kuh," may be found the most important source of wealth throughout the whole region. The proximity of Baghdad and the advantages which it offers as a port of embarkation are pointed out, and it is argued that while the naphthas of Baku must pass through the Suez Canal to reach India, those of Zohab might be despatched thither in a direct line that would be of inestimable value in competition. This question is discussed with much useful and careful detail.

Amid the problems treated in the Kirmanshahan chapter, M. de Morgan discusses the better means of developing traffic between the tablelands of Persia and the Persian Gulf, but he himself supports the ambitious proposal of connecting Tehran by rail with Baghdad. His opinion on the feasibility of this connection is, no doubt, worthy of attention. Moreover, Constantinople to Baghdad, and Baghdad to Tehran, are combinations not only desirable, but likely, as main lines of railway in the future. One stated objection to the fulfilment of his project, in the fact that the city of the khalifs is out of Persia, he considers unimportant, because of the good understanding (*très bonnes relations*) which exists between Shah and Sultan. But we are rather inclined to accept his view on other grounds. Throughout the length of the Turko-Persian frontier, the hostility between the Sunni and Shiah on either side is proverbial; nor is this feeling less marked between Kirmanshah and Baghdad than elsewhere. Some years ago, when the Turkish iron poles of the Indo-European telegraph were about to join the Persian wooden poles across a tract of disputed territory, so great was the international jealousy, and fear of ceding a yard of doubtful land, that proceedings were summarily stopped. Her Majesty's Resident and Consul-General at Baghdad fortunately hit upon the happy expedient of using iron and wooden poles alternately over the whole tract under litigation, or the junction of the wires might have remained a *fait non-accompli* to the present day.

Space will not admit of extracts from other than the two first chapters, but all are worth reading and remembering, in connection with the geographical study of the western side of Persia. Illustrations abound in this handsome volume: these are, for the most part, good and helpful to the due comprehension of the text; some are especially attractive and artistic. Had we to select the more excellent, we might

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000062

مكتبة قطر الوطنية
Qatar National Library

point to the Lake Gohar, situated in the narrow valley south of Ushtaran Kuh, in Northern Luristan, and three of the many views of the Ushtaran Kuh itself. The Tang-Azna, in the country of the Lurs of Sagwand, is a charming photograph.

SOME BOOKS ON EAST AND SOUTH AFRICA.

THE first book on our list* supplies a welcome exception to the general applicability of the statement, so often made, that the work of British explorers falls far short of that of the Germans in permanent scientific value. In this respect it may rank with the best German publications that have appeared in recent years. Although primarily a geologist, Dr. Gregory has given much attention to other branches of natural science, and his conclusions with regard to the various scientific questions touched upon are the result of long and careful study. The plan of his book is that followed by many German writers, the account of the journey itself being followed by chapters dealing with the various scientific aspects of the country.

The general results of Dr. Gregory's journey were fully given in the series of articles published in the *Journal* in 1894 (vol. iv.). The most striking features of the country dealt with are the Great Rift Valley, which gives the book its name, and Mount Kenya, on which so much new light was thrown by the journey. To non-geologists the term "rift valley" may be apt to suggest an exaggerated idea of depth and narrowness, the height of the walls being after all very slight compared with the width of the floor. It would not be easy, however, to suggest a better. Dr. Gregory followed its eastern side through two degrees of latitude, besides crossing its floor near Lake Baringo. The illustration at p. 94 gives a good idea of the level nature of the floor and the sudden rise of the bounding walls.† It may be remarked that the results of Dr. Donaldson Smith's journey hardly bear out the idea of its prolongation as a marked line of depression north-east of Lake Rudolf, while it is not quite clear, from the allusion to Lake Nyasa as in the *eastern* branch of the valley, whether the author rejects the notion that the western trough is indicated south of Tanganyika by the furrow of the Songwe and Saisi valleys.

The account of Dr. Gregory's adventures in the romantic region of snow-fields and glaciers around the central peak of Kenya is of extreme interest, and will, it is to be hoped, induce others to follow in his steps. Kenya appeals more to the imagination than Kilimanjaro, whose

* 'The Great Rift Valley.' By J. W. Gregory. London: Murray. 1896.

† The illustration (after Giraud) intended to show the steep sides of the narrow type of lakes, is accidentally referred to Tanganyika instead of Nyasa. Another slip is the statement that only one of the lakes has an outlet to the sea.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000063

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

massive simplicity is more easily taken in; the various peaks and toothed pinnacles of Kenya, separated by upland valleys, show a more complicated general structure. The route followed is not marked on the sketch-map, but the names given to the chief features are an assistance in tracing it. Dr. Gregory does not appear to have named the striking rock-pinnacle, which rises above the moraines of the Lewis glacier, and which might readily be mistaken for the highest summit, though a comparison with the map and the other views shows that it is not. Though lacking the precision of photographs, the views alluded to give a vivid general idea of the features of the great mountain.

An interesting chapter deals with problems connected with the distribution of the flora and fauna, on which new light has been thrown by the discovery of moraines on Kenya at a much lower level than is reached by the present glaciers. In his division of the country into botanic zones, Dr. Gregory has introduced a slight modification since publishing his paper in the *Journal*. He defines a somewhat greater number than Mr. Scott-Elliot, but does not discriminate so minutely as Prof. Engler, whose eight floral zones, laid down for Usambara, do not include the higher mountains. The high mountain forests of Usambara correspond, according to Dr. Gregory, with the mountain forest which clothes the lower slopes of the main peaks.* We cannot do more than refer to the section dealing with the native tribes, which gives, perhaps, the best summary of our present knowledge which exists in English. Special attention is paid to the history of tribal migrations, and the main war-paths of the Masai are shown on one of the accompanying sketch-maps.

Mr Chanler's volume† takes the form of a detailed narrative of the events connected with his expedition to the north-east of Mount Kenya, in conjunction with Lieut. von Höhnel. Although the difficulties encountered caused a partial failure of the original plan, enough new ground was broken to give a considerable value to the results attained, a previously unknown area of over 100 miles in each direction being carefully mapped. The excellence of the former surveys of von Höhnel, on whom this work devolved, is a voucher for the trustworthiness of the map, which is on the large scale of 1:750,000. The colouring, according to contours of altitude—though the data available can hardly admit of great exactitude—no doubt gives a good general idea of the relief of the country. The chief geographical discovery was the tracing of the river Guaso Nyiro through the greater part of its course to the Lorian swamp, the position of which was thus for the first time defined. Much

* In the case of Kenya the forest zone is almost at the base, owing to the height of the plateau on which the mountain is placed; but on Kilimanjaro it begins only at a considerable height.

† 'Through Jungle and Desert.' By William Astor Chanler. London and New York: Macmillan. 1896.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

new information was collected regarding the tribes met with, especially the Rendile, a race of doubtful affinity, but probably allied to the Gallas and Somalis, who own large herds of camels. The failure to obtain transport animals from them was largely responsible for the curtailment of the route.

On several occasions fights occurred, and in this respect the expedition compares unfavourably with Dr. Gregory's, which succeeded in maintaining friendly relations with the natives in spite of its small numbers. Mr. Chanler holds that the first intercourse of Europeans with new tribes is bound to involve bloodshed, and was, perhaps, not so determined to avoid it as some travellers have been without ill result. The difficulties encountered were, however, undoubtedly great. He apparently lacks the sympathetic feeling towards the Zanzibaris * which Dr. Gregory displays in spite of a consciousness of their many faults, and this may partly account for, without excusing, the desertion of his men after von Höhnel's departure for the coast, dangerously wounded by a rhinoceros. These animals seem to have been particularly plentiful and troublesome. The numerous and characteristic cuts are from photographs by the author, and, being evidently faithful copies, are a welcome change from the process-reproductions now almost universal in books of travel.

Before proceeding to books on South Africa, we may notice that the second volume of Dr. Paulitschke's 'Ethnographie Nordost Afrikas' has now been published. It deals in a thorough and comprehensive way with the moral culture of the Danakil, Galla, and Somal tribes, the first volume (noticed in the *Journal*, vol. iii. p. 503) having been concerned with their "material culture."

There is, perhaps, no part of the continent about which so many misconceptions prevail as German South-West Africa, the numerous works already published with reference to it having often been too scientific for popular comprehension. The connected account of the colony † which Lieut. H. von François—not to be confounded with his brother, Major C. von François—has prepared in a form suitable for general use, is therefore likely to prove serviceable in giving a clear conception of the present state and capabilities of the country. As the writer has served there for a considerable time, he has had good opportunities of becoming well acquainted with it personally. The book begins with a general description of the physical geography, plant and animal life, etc., followed by a sketch of the native inhabitants. Having thus given an idea of the material to be worked upon in the development of

* The Zanzibaris, Mr. Chanler thinks, are perfectly satisfied with their present condition of serfdom, and he doubts whether they would be benefited by a change.

† 'Nama und Damara, Deutsch-Süd-West-Afrika.' Von H. von François. Magdeburg: Baensch. [1896.]

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003f

مكتبة قطر الوطنية
Qatar National Library

the country, the author proceeds to relate the chief events connected with the German occupation (some space being devoted to the relations of the government with Hendrik Witbooi), and describes the various industries practised, concluding with a forecast for the future. Of the native population the Hill Damaras and the "Bastards" will probably prove most valuable allies in the work to be done. Political relations with the Hottentots will always be on a somewhat doubtful basis. British merchants and others still form a large proportion of the white population, and Boers are present in some numbers. Although the latter give little trouble, the author sees a danger in the possible preponderance of the Dutch element, and insists on the need of a larger number of German settlers, as well as of improved internal communications and a direct line of steamers to Germany. Want of practical experience at present puts the German immigrants at a disadvantage. The book is well and abundantly illustrated.

Prof. Wallace's book* is a valuable addition to our knowledge of the economic resources of the Cape, and must deeply interest all who are concerned in the welfare of that colony. The information it contains was acquired at first hand during journeys through the length and breadth of the country, carried out in 1895 at the request of the Cape Government, which gave constant opportunities of intercourse with the farmers themselves. Although much of the book naturally deals with more or less technical subjects, it is also most instructive from a geographical point of view, enabling the reader to grasp clearly the general surface features and their effect on the plant and animal life of the colony.

The series of maps by Bartholomew, which are excellent specimens of cartography, is a valuable feature of the work. The orographical features are shown in a two-sheet map of the scale of 1 : 2,500,000, coloured according to contours of altitude at every 1000 feet up to 4000, and at every 2000 feet above that height. Another map shows, under the title "Land surface features," the prevailing forms of vegetation, with the limited areas in which agriculture is practised.† Others give the proportions of the different kinds of stock in different localities, and a useful set of meteorological maps concludes the series. One of the most interesting chapters is that on ostrich-farming. The total number of birds now exceeds a quarter of a million. Fruit-growing, for which the climate is particularly favourable, is unaccountably neglected, and enterprise and skill are much needed to show what might be done in this direction.

* 'Farming Industries of Cape Colony.' By Robert Wallace, F.L.S., etc. London: King. 1896.

† The tints of this map do not in every case agree with those of the reference at the side. Thus the thorn-bush is green in the latter, but a light-brown in the former, apparently owing to the omission of a component tint.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

GEOGRAPHY AT THE BRITISH ASSOCIATION, LIVERPOOL, 1896.

THE meeting of the British Association at Liverpool, from September 18 to 23, 1896, was the largest and most successful of recent years. The total number of tickets issued, amounting to 3180, has only twice been exceeded—at Newcastle in 1863, and at Manchester in 1887. If it were possible to distinguish the Liverpool meeting from all others by any one feature, that would be the convenient and even magnificent housing of the Association as a whole and all the sections. Section E certainly fared the best of all, for the "Small Concert Hall," in the same building with the great St. George's Hall, which served as the reception-room, was allotted to it. The hall is circular, of large dimensions, seating comfortably about a thousand people; it has just been redecorated, and was effectually darkened to admit of the use of the lantern. The attendance at the meetings of the section was very large, and much more uniform than usual. Very few papers were read to a small audience, and the number of communications sent in was so great (thirty-four) that a meeting had to be held on Saturday forenoon, in addition to the four days which usually suffice.

The Organizing Committee had arranged the papers of which intimation had been given in such a way that similar subjects were kept together; but the failure of some authors to put in an appearance, the changing of dates, which had been fixed to suit themselves, by others, and the presentation of valuable communications at short notice by gentlemen who could only attend on particular days, broke down the prepared order, and made the proceedings of each day too varied to be altogether profitable. It must, however, be recognized that the papers submitted were in themselves of great interest and value, and many of them afforded satisfactory proof of the sound study of geography as a science, and not as the mere record of explorations. But in exploration the story of some splendid successes was told, and an unexampled collection of the finest lantern-slides brought the scenery of many distant parts of the world vividly before most appreciative audiences. The large diagram maps of the Royal Geographical Society were as usual lent to the section.

The constitution of the section was as follows, the names of those nominated as vice-presidents or members of Committee who were disqualified by absence from the meeting or by not becoming *members* of the Association being omitted:—

President:—Major L. Darwin, Hon. Sec. R.G.S.; *Vice-Presidents*:—John Coles, F.R.A.S.; Admiral Sir Erasmus Ommanney, C.B., F.R.S.; Lieut.-Col. Sir Lambert Playfair, K.C.M.G.; P. L. Sclater, F.R.S.; E. G. Ravenstein; Coutts Trotter; Horace Walker. *Secretaries*:—Lieut.-Col. F. Bailey, Sec. R.S.G.S.; H. N. Dickson, F.R.S.E.; H. R. Mill, D.SC.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000088

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

(*Recorder*); Commander E. Dubois Phillips, R.N. *Committee*:—J. Bolton; A. Montefiore Brice; G. G. Chisholm, M.A., B.SC.; Sir W. Martin Conway; Vaughan Cornish, M.SC.; H. T. Crook; B. V. Darbishire, M.A.; Chas. Gatehouse; E. Heawood, M.A.; A. J. Herbertson; Rev. J. F. Heyes, M.A.; J. Scott Keltie, Sec. R.G.S.; Prof. J. Milne, F.R.S.; Count Pfeil; George Philip, Jun.; Ralph Richardson; Eli Sowerbutts; Major-Gen. Sir Charles Wilson, R.E., K.C.B., F.R.S.

Thursday, September 19.—The address of the President (p. 488) was listened to with close attention by a large audience, and on its conclusion Count Pfeil proposed a vote of thanks, which was seconded by Sir Charles Wilson and heartily carried.

Mr. H. S. Cowper gave a preliminary account of his journey in March, 1896, through Northern Tripoli, a continuation of his work published in the *Geographical Journal*, vol. vii., 1896, p. 150, which it is hoped will shortly be submitted in full to the Society. The Rev. C. J. Robinson gave an account of his travels in the Hausa country.

Mr. John Coles explained the methods of photographic surveying, exhibiting two different types of camera adapted for such work, and expressing his belief that photographic methods in surveying were destined soon to take a very prominent place.

Mr. H. N. Dickson stated the present position of his research on the chemical composition and circulation of the water of the North Atlantic, specimens having been collected for him by the observers of the Meteorological Office and other sea-captains. Prof. Hjort, of Christiania, referred to the admirable oceanographical work being carried on by the Norwegian Government.

Dr. H. R. Mill explained his scheme for a geographical description of the British Islands, based on the 1-inch maps of the Ordnance Survey, and invited discussion on it. Mr. H. T. Crook criticized the Ordnance maps, complaining that they did not give as much information as they should do, and stating that if they were properly constructed no written description would be necessary. Prof. Hull pointed out that the Ordnance maps, with geological colouring superimposed, were as full as any maps could be made; and Mr. Coles paid a high tribute to the great beauty and accuracy of the British maps as compared with the state maps of any country in the world.

Friday, September 18.—The Rev. W. K. R. Bedford described the old tapestry maps of parts of England, woven during the latter part of the sixteenth century, specimens of which are preserved at York and in the Bodleian Library at Oxford. They showed several features of the topography of the counties represented which do not seem to have been shown on any of the published maps of the period.

Dr. Tempest Anderson showed photographs of the Altels avalanche of September, 1895, in which a mass, partly snow, partly glacier ice, swept for 4000 feet down the mountain-side, causing great destruction.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The fracture afforded an interesting glimpse of the internal structure of a glacier far from its termination.

Lieut. G. Vandeleur, of the Scots Guards, gave a preliminary statement of his observations in Uganda and on the Upper Nile, which will shortly be presented in full to the Royal Geographical Society.

Dr. F. P. Gulliver, of Harvard College, discussed the form of the coast-line of Romney Marsh, and described the origin of Dungeness. His paper will probably be published with diagrams in the *Journal*.

Mr. A. Montefiore Brice, secretary to the Jackson-Harmsworth Arctic Expedition, gave an address to a crowded house on the second year's work of the expedition, illustrated by slides, showing the life of the expedition and the scenery of Franz Josef Land. Sir Erasmus Ommanney, Sir Martin Conway, and Mr. Coles, expressed the feeling of the meeting as to the valuable work which had been done. It will be fully recorded in the *Journal*.

Mr. G. F. Scott Elliot communicated a paper on the influence of climate and vegetation on African civilization, an abstract of which appears in the Monthly Record. It gave rise to a brief discussion.

Mr. Vaughan Cornish contributed the results of a valuable original investigation on the forms, origin, and distribution of sand-dunes and sand-banks, which we hope to publish in full, with diagrams, at an early date.

Saturday, September 19.—Mr. A. J. Herbertson exhibited a series of monthly mean rainfall maps of the world, which, in conjunction with Dr. A. Buchan, he has prepared for the great physical atlas now being compiled by Mr. Bartholomew, on the basis of Berghaus. These maps are the first of their kind to be made, and are full of interest from the point of view of climatology.

Mr. Ravenstein presented the report of the Committee on the Climatology of Tropical Africa (Secretary, Mr. H. N. Dickson), the text of which is given in the Monthly Record.

Mr. J. Howard Reed sent in a paper describing the efforts of the Manchester Geographical Society in the popularization of geographical education.

The feature of the day was an eloquent address on Canada and its gold-resources by Sir James Grant, K.C.M.G., which was warmly received. He said that Canada contained both coal and gold, and within the last few years remarkable discoveries had been made. In Nova Scotia the coal area covered 635 square miles. In New Brunswick it was estimated that there were upwards of 150,000,000 tons of coal; while in the north-west territory Dr. Dawson had arrived, after careful investigation, at the fact that there were over 50,000 square miles of coal-bearing strata. It was a remarkable fact that the Dominion had coal on the Atlantic and Pacific seaboards and in the interior—as if nature had intended to supply it with the requisite material in the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005f

مكتبة قطر الوطنية
Qatar National Library

event of an emergency to send its ships to any part of the world, and thus contribute materially to the strengthening of the Empire. With reference to gold, discoveries were made in Nova Scotia in 1860, and since 1885 the mines in the province had become exceedingly lucrative, owing to the utilization of appliances for the recovery of gold from low-grade ores. It was estimated that that province had produced gold to the value of $11,500,000. In the province of Quebec Prof. Hardman made some investigations. After running a tunnel 600 feet in length, he struck the bed of an old river, and in three weeks removed enough gold to pay the entire expense of his operations. The consequence was that to-day there was feverish excitement in the province, and every acre of land was being taken up. In Ontario the discoveries had been of a remarkable character. At Manatou there were numerous seams in which the gold appeared on the surface, and could be removed with the greatest ease. This district was only 100 miles distant from Winnipeg and 40 miles from the Pacific Railway. In British Columbia 400 miners in one day took from Williams Creek 200 lbs. weight of gold, and he predicted that the future output in this province would surprise not only Canadians, but the whole of the civilized world.

Monday, September 21.—Mr. W. A. L. Fletcher, who accompanied Mr. and Mrs. St. George Littledale on their great journey across Tibet from north to south, gave an account of his journey toward Lhasa; and our readers, who have already had an opportunity of knowing the facts of this journey, will be pleased to learn that Mrs. Littledale has recovered from the results of the hardships she underwent, and was present at the reading of the paper.

Iceland was the subject of two short papers, both illustrated by very fine slides of scenery. Mr. Frederick W. Howell described his journey through the glacier-region of Northern Iceland, and Dr. K. Grossman spoke of the volcanic scenery surrounding Hecla.

Mr. G. G. Chisholm treated of the Relativity of geographical advantages in an able paper, for the adequate discussion of which there was, unfortunately, no time. He considered geographical advantages: (1) as relative to the condition of the surface of a country, *e.g.* the extent of forests, marshes, etc. The former and present relative importance of Liverpool and Bristol might be explained, in part at least, by changes that had taken place under this head. Also the difference in direction by some of the great Roman roads and those of the present day, and the consequent fact that some important Roman stations in Britain were not now represented even by a hamlet. (2) As relative to the political condition of a country and of other countries. (3) As relative to the state of military science. Under these two heads the difference in the situation of the Roman wall between Tyne and Solway and the Anglo-Scottish boundary suggested some considerations. Also

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000097

مكتبة قطر الوطنية
Qatar National Library

the difference in the situation of some important Roman towns or stations and their modern representatives (Uriconium, Shrewsbury; Sorbiodunum, Salisbury). (4) As relative to the state of applied science—well illustrated in this country, in the history of the iron and textile industries. (5) As relative to the density of population—another important consideration in the industrial history of our own country. (6) As relative to the mental attitude of the people where the geographical advantages existed. Many Chinese travellers and students of China had recognized the excessive reverence for ancestors in that country as one great hindrance in the way of turning the advantages of the country to account.

Mr. Ralph Richardson read a paper on the boundary of British Guiana and Schomburgk's line, which called forth a very lively discussion, but did not reach any definite conclusion.

In the afternoon Sir W. Martin Conway gave a preliminary account of the expedition to Spitzbergen which he, together with Dr. J. W. Gregory, Messrs. Garwood, Trevor-Battye, and H. Conway, made in the summer of 1896. He vividly described the difficulties in the way of land travel presented by soft snow and interminable marshes which he had successfully overcome in crossing the south-western island.

Mr. J. Ferguson, in the absence of Mr. H. W. Cave, exhibited a fine series of photographs of the ancient ruined cities of Ceylon, which were taken by Mr. Cave to serve as illustrations for a forthcoming work on the subject.

Prof. J. Milne, F.R.S., discoursed on earthquakes and sea-waves. During the whole day the audience in the section had been large, and highly appreciative of the papers submitted to them.

Tuesday, September 22.—Mr. A. E. Fitz Gerald gave a short account of his mountaineering journey across the Southern Alps of New Zealand, and announced his intended departure for an expedition of some magnitude to the Chilian Andes, in the course of which it is his intention to attempt the ascent of Aconcagua.

Sir Charles W. Wilson was listened to with the deepest attention while he gave an address on the Egyptian Sudan, a report of which, it is hoped, will appear in the *Journal*, and after he concluded, a number of questions were asked as to the prospects of trade by the different routes proposed to the interior.

Mr. A. W. Andrews read a practical paper on the teaching of geography in relation to history, and his arguments will appear later in the *Journal*.

Mr. E. Odlum, of Vancouver, described the border zone between British Columbia and Alaska, referring especially to the region under consideration in the present boundary negotiations. Sir Charles Wilson, as the surveyor responsible for fixing the 49th parallel, the boundary between Western Canada and the United States, and Mr. John Coles as

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000086

مكتبة قطر الوطنية
Qatar National Library

the first settler in British Columbia, congratulated Mr. Odlum on his paper.

Mr. J. Scott Keltie, who had just returned from Christiania, gave an account of the triumphal reception of Dr. Nansen, and a sketch of the achievements of the great Arctic expedition. He read extracts from an article by Professor Mohn (see the October number of the *Journal*), who expressed the highest possible delight and admiration at the scientific results of the observations, especially those on meteorology and terrestrial magnetism. Sir Erasmus Ommanney and Mr. Coles spoke of the unique value of Nansen's work.

Mr. A. J. Herbertson demonstrated the use of a simple arrangement for explaining the principle of map-projections. It consists of a hemisphere made up of wire meridians and parallels, the shadow of which is thrown on a sheet of paper by means of a candle sliding along a graduated bar. The nature of the projection, of course, varies with the position of the candle.

Mr. B. V. Darbishire showed a new population map of the South Wales coal-district. It gave the position of all detached inhabited houses as well as the villages and towns, and having the contour-lines of elevation, it brought out the relation of population to land-form.

Mr. A. J. Herbertson read the interim-report of the Committee on Geographical Teaching, in which he stated that he had collected a large amount of material; but the Committee, having been unable to obtain access to some important returns, wished to delay the full report until next year, when it could be presented in its entirety.

Mr. Coutts-Trotter proposed, and Mr. Eli Sowerbutts seconded, a vote of thanks to the president (Major Darwin), the vice-presidents who had assisted him in the chair (Messrs. John Coles and Horace Walker), the secretaries of the Section, and the local secretaries for the admirable hall provided.

Papers of geographical interest were as usual read in many sections besides that specially devoted to geography. In Section A (Mathematics and Physics), Dr. L. A. Bauer discussed some problems in terrestrial magnetism, Mr. H. M. Taylor read a paper on great-circle sailing, and reports were submitted by the Committees on seismological observations and on meteorological photographs. In Section C (Geology), Mr. Man's presidential address abounded in allusions to results of physical geography, and much interest was aroused in a series of papers on ocean depth and deposits, introduced by Mr. E. B. Wethered, on the depths of the sea in past epochs. Mr. T. Mellard Reade discussed the oscillations in the level of the land near Liverpool from geological evidence, and Mr. G. H. Morton spoke of the erosion of the sea-coast of Wirral, the tongue-shaped peninsula between the Mersey and the Dee.

In Section D (Zoology), the president, Professor Poulton, reviewed the evidence regarding the age of the Earth from the physical as well

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

as the biological point of view, and contended for a great extension of its habitable period beyond that usually conceded by physicists. A report was read on the biological investigation of oceanic islands; and in Section H (Anthropology), Prof. Haddon called attention to the need of the immediate study of such islands from the anthropological point of view. In the latter section, the president, Mr. A. Evans, spoke on the pre-historic migrations of people and the origin of European races; and Mr. J. L. Myres read a paper on "Cyprus and the Trade-routes of South-Eastern Europe." Mr. Thiselton Dyer, Director of the Royal Gardens at Kew, gave a lecture in Section K (Botany) on the geographical distribution of plants. Section G (Mechanical Science and Engineering) listened to two communications of much geographical interest, one a "Report on the Effect of Wind and Atmospheric Pressure on Tides;" the other by Mr. G. F. Lyster, on "The Physical and Engineering Features of the River Mersey and the Port of Liverpool." Mr. Lyster's paper was felt to be of such value that it was ordered by the General Committee to be printed in full in the Report.

Prof. W. A. Herdman, in addition to his arduous duties as local secretary, has edited the Association's "Handbook to Liverpool," which, although smaller than some similar books in the past, is admirably compiled, and will serve as a valuable scientific guide to the Liverpool neighbourhood for years to come. It contains the following chapters: History and Antiquity of Liverpool, by W. H. Picton; Geology of the Country around Liverpool, by G. H. Morton, with a geological map specially compiled; The Vertebrate Fauna of the Liverpool District, by Dr. H. O. Forbes; The Marine Fauna of the District, by Prof. Herdman; The Entomology of the Liverpool District, by W. E. Sharp; The Botany of the Liverpool District, by Robert Brown; The Climate of Liverpool, by W. E. Plummer; The River and the Tides, by Prof. Oliver J. Lodge; Docks, and other Engineering Works, by Prof. H. S. Hele-Shaw and H. Percy Boulnois; Trade and Commerce of Liverpool, by Sir William B. Forwood; Chemical Industries, by Dr. C. A. Kohn. An appendix is added giving some similar particulars relating to the Isle of Man, the scene of one of the largest excursions of members after the close of the meeting.

RAILWAYS IN AFRICA.*

By Major DARWIN, Sec. R.G.S.

In reviewing the record of geographical work during the past year, all other performances pale in comparison with the feat accomplished by Nansen. It is not merely that he has gone considerably nearer the North Pole than any other explorer, it is not only that he has made one of the most courageous expeditions

* Address delivered to the Geographical Section of the British Association at Liverpool, September 17, 1896, by Major Darwin, as President of the Section. Map, p. 540.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ever recorded, but he has established the truth of his theory of Polar currents, and has brought back a mass of valuable scientific information. When Nansen comes to England, I am certain that we shall give him a reception which will prove how much we admire the heroism of this brave Norwegian.

Besides the news of this most remarkable achievement, the results of a considerable amount of useful exploratory work have been published since the British Association met last at Ipswich. With regard to other Arctic expeditions, we have had the account of Lieutenant Peary's third season in Northern Greenland, from which place he came back in September last, and to which he has again returned, though without the intention of passing another winter there. In October the *Windward* brought home more ample information as to the progress of the Jackson-Harmsworth Expedition than that communicated by telegram to the Association at Ipswich, and on her return from her remarkably rapid voyage this summer she brought back the record of another year. As to geographical work in Asia, Mr. and Mrs. Littledale returned safely from their explorations of the little-known parts of Tibet; the Pamir Boundary Commission, under Colonel Holdich, has collected a great deal of accurate topographical information in the course of its labours; Dr. Sven Hedin continues his important researches in Turkestan; and the Royal Geographical Society was glad to welcome Prince Henry of Orleans when he came to tell us about his journey near the sources of the Irrawaddy. As to Africa, the most important additions to our knowledge of that continent are due to the French surveyors, who have accurately mapped the recently discovered series of lakes in the neighbourhood of Timbuktu, Lake Faguibine, the largest, being found to be 68 miles in length; Dr. Donaldson Smith has filled up some large blanks in the map of Somaliland; and Mr. and Mrs. Theodore Bent have investigated some interesting remains of ancient gold workings inland of the Red Sea. In other parts of the world less has been done, because there is less to do. Mr. Fitz Gerald has proved for the first time the practicable character of a pass across the Southern Alps, thus supplementing the excellent work of Mr. Harper and other pioneers of the New Zealand Alpine Club; and Sir W. M. Conway has commenced a systematic exploration of the interior of Spitzbergen, a region to which the attention of several other geographers is also directed.

It is impossible in such a brief sketch to enumerate even the leading events of the geographical year, but what I have said is enough to remind us of the great amount of valuable and useful work which is being done in many quarters of the world. It is true that if we compare this record with the record of years gone by, we find a marked difference. Then, there was always some great geographical problem to be attacked; the sources of the Nile had to be discovered; the course of the Niger had to be traced; and the great white patches on our maps stimulated the imagination of explorers with the thought of all sorts of possibilities. Now, though there is much to be learned, yet, with the exception of the Poles, the work will consist in filling in the details of the picture, the general outlines being all drawn for us already. Personally I cannot help feeling a completely unreasoning regret that we have almost passed out of the heroic period of geography. Whatever the future may have in store for us, it can never give us another Columbus, another Magellan, or another Livingstone. The geographical discoverers of the future will win their fame in a more prosaic fashion, though their work may in reality be of even greater service to mankind. There are now few places in the world where the outline of the main topographical features is unknown; but, on the other hand, there are vast districts not yet thoroughly examined. And, in examining these more or less known localities, geographers must take a far wider view than heretofore of their methods of study in order to accommodate themselves to modern conditions.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

But even if we confine our attention to the older and more narrow field of geography, it will be seen that there is still an immense amount of work to be done. We have been filling in the map of Africa during recent years with extraordinary rapidity, but yet that map is likely to remain in a very unsatisfactory condition for a long time to come. Englishmen and other Europeans have always shown themselves to be ready to risk their lives in exploring unknown regions, but we have yet to see how readily they will undertake the plodding work of recording topographical details when little renown is to be won by their efforts. It should be one of the objects of geographical societies to educate the public to recognize the importance of this work, and General Chapman deserves great credit for bringing the matter before the International Congress last year in such a prominent manner. He confined himself to four main recommendations. (1) The extension of accurate topographical surveys in regions likely to be settled by Europeans. (2) The encouragement of travellers to sketch areas rather than routes. (3) The study of astronomical observations already taken in the unsurveyed parts of Africa in a systematic manner, and the publication of the results. (4) The accurate determination of the latitude and longitude of many important places in unsurveyed Africa. I am certain that all geographers are in hearty accord with General Chapman in his views, and it is, perhaps, by continually bringing this matter before the public that we shall best help this movement forward.

Not only do we want a more accurate filling in of the picture, but we have yet to learn to read its lessons aright. The past cannot be understood, and still less can the future be predicted, without a wider conception of geographical facts. Look, for example, at the European colonies on the West Coast of Africa. Here we find that there have been Portuguese settlements on the Gold Coast since the year 1471, the French possibly having been established there at an even earlier date; whilst we English, who pride ourselves on our go-ahead character, have had trading factories on the coast since 1667. I have here a map showing the state of our geographical knowledge in 1815. Why was it that Europeans have never, broadly speaking, pushed into the interior from their base on the coast, which they had occupied for so many centuries? That they had not done so, at least to any purpose, is proved by this map. Why had four centuries of contact with Europeans done so little even for geographical knowledge at that time? The answer to this question may be said to be mainly historical; but the history of our African colonies can never be understood without a study of the distribution of the dense belt of unhealthy forest along the shore; of the distribution of the different types of native inhabitants; and of the courses of the navigable rivers, all strictly geographical considerations.

Geography is the study of distribution, and early in that study we must be struck with the correlation of these different distributions. If we take a map of Africa, and mark on it all the areas within the tropics covered with dense forest or scrub, we shall find we have drawn a map showing accurately the distribution of the worst types of malarial fever; and that we have also indicated with some approach to accuracy—with, however, notable exceptions—the habitat of the lowest types of mankind. These are the facts which give the key to understanding why the progress of European colonization on the West Coast has been so slow.

Along the coast of the Gulf of Guinea we find settlements of Europeans at more or less distant intervals. All along, or nearly all along this same coast, we find a wide belt of fever-stricken forest, fairly thickly inhabited by uncivilized negro and Bantu tribes. Inside this belt of forest the country rises in altitude, and becomes more open, whilst at the same time there is a distinct improvement in the type of native; and the more we proceed inland, the more marked does this improvement

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

become. There appears, in fact, to have been a number of waves of advancing civilization, each one pressing the one in front of it towards these inhospitable forest belts. Near the coast the lowest type of negro is, generally speaking, to be found; then, as the more open country is reached, higher types of negroes are encountered—for example, the Mandingoes of the Senegal region are distinctly higher than the Jolas inhabiting the mouths of the Gambia; and the Hausas of the Sokoto empire are vastly superior to the cannibals of the Oil rivers. In both these cases the higher types are probably not pure negroes, but have Fulah, Berber, or Arab blood in their veins; for we see, in the case of the Fulahs, how they become absorbed into the race they are conquering. Near the Senegal river they are comparatively light in colour, but in Adamawa they are hardly to be distinguished by their features from the negroes they despise. Thus the process appears to have been a double one; the higher race driving some of the lower aboriginal tribes before them out of the better lands, and, at the same time, raising other tribes by means of an admixture of better blood. These waves of advancing civilization seem to have advanced from the north and east, for the more we penetrate in these directions, the higher is the type of inhabitant met with, until at last we reach the pure Berbers and the pure Arabs. Thus there are two civilizing influences visible in this part of Africa; one coming from the north and east—a Mohammedan advance—which keeps beating up against this forest belt and occasionally breaking into it; the other, a Christian movement, which, until the middle of this century, was brought to a dead halt by this same obstacle. The map of Africa, showing the state of geographical knowledge in 1815, makes it clear that, except in a few cases where rivers helped travellers through these malarial regions, nothing was known about the interior. No doubt much has been done since those days, but this barrier still remains the great impediment to progress from the West Coast; and those who desire our influence to spread more effectively into the interior must wish to see some means of overcoming this obstacle. On the East Coast of Africa the conditions are somewhat different, as there is comparatively little dense forest there; but the districts near that coast are also usually unhealthy, and how to cross those malarial regions quickly into the healthy or less unhealthy interior is the most important problem connected with the development of tropical Africa.

Other influences have been at work, no doubt, in checking our progress from the West Coast. In old days, the European possessions in these districts were mere depôts for the export of slaves. As the white residents could not hope to compete with the natives in the actual work of catching these unfortunate creatures, and as the lower the type the more easily were they caught, as a rule, there was no reason whatever for attempting to penetrate into the interior, where the higher types are met with. But, though this export trade in human beings is now no longer an impediment to progress, the slave trade in the interior still helps to bar the way. When the forest belt is passed, we now come, generally speaking, to the line of demarcation between the Mohammedan and the pagan tribes, and here slave-catching is generally rife; when it is so, the constant raids of the Mohammedan chiefs keep these border districts in a state of unrest, which in every way tends to impede progress. Thus a mere advance to the higher inland regions will not by any means solve all our difficulties, but it will greatly lessen them; and it is universally admitted that the more communication with the interior is facilitated, the more easy will it be to suppress this terrible traffic in human beings. By the General Act of the Brussels Anti-Slavery Conference of 1890–91, it was agreed by the assembled delegates that the construction of roads, and, in particular, of railways, connecting the advanced stations with the coast, and permitting easy access

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000073

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to the inland waters, and to the upper courses of rivers, was one of the most effective means of counteracting the slave trade in the interior. Here, then, we have the most formal admission which could be given of the necessity of opening up main trunk lines of communication into the interior.

But not only does geographical knowledge help to demonstrate the necessity of improving the means of communication between the coast and the interior, but it helps us to decide where it is wise to make our first efforts in this direction. In the first place, it is essential to note that if the continent of Africa is compared with other continents, its general poverty is clearly seen. Mr. Keltie, in his excellent work on the Partition of Africa, tells us that "at present (1895) it is estimated that the total exports of the whole of Central Africa by the east and west coast do not amount to more than 20,000,000*l.* sterling annually." For the purposes of comparison, it may be mentioned that the export trade of India is between sixty and seventy million sterling annually, and that India is only about one-seventh or one-eighth of the area of the whole of Africa. On the other hand, the trade of India has been increasing by leaps and bounds, largely in consequence of the country being opened out by railways, and there is every reason to hope that somewhat similar results would occur in Africa under similar circumstances, though the lower civilization of the people would prevent the harvest being so quickly reaped. But, however it may be as to the future, the present poverty of Africa is enough to demonstrate the necessity of pushing ahead cautiously and steadily, and of doing so in the most economical manner possible.

M. Decle, in an interesting paper, read before the International Geographical Congress in London last year, strongly advocated the construction of cheap roads for use by the natives, taking precautions to prevent any traffic in slaves along them. His suggestions are well worthy of consideration; but the cost of transport along any road would, I should have thought, soon have eaten up any profits on the import or export trade to or from Africa. What must be done in the first instance is to utilize to the utmost all the natural lines of communication which require little or no expenditure to render them serviceable; in fact, to turn our attention at first to the rivers and to the lakes. I have already pointed out that the early maps of Africa prove that the rivers have almost invariably been the first means of communication with the interior, and until this continent is rich enough to support an extensive railway system, we must rely largely on the waterways as means of transport.

It may be as well here to remark that geographical knowledge is often required in order to control the imagination. I do not know why it is, but almost every one will admit that, if he sees a lake of considerable size depicted on a map, he immediately feels a desire to visit or possess that locality in preference to others. A lake may be of far less commercial value than an equal length of thoroughly navigable river, and yet it will always appear more attractive. Look at the way in which the English, the French, and the Germans are all pressing forward to Lake Chad; and yet Lake Chad is in reality not much more than a huge swamp, and, in all probability, it is excessively unhealthy. Again, it is probable that the Albert Nyanza will prove to be of comparatively small value, because the mountains come down so close to its shores. Of course, the great lakes form an immensely important feature in African geography, but we must judge their commercial value rationally, and without the bias of imagination.

To develop the traffic along the rivers and on the lakes is the first stage in the commercial evolution of a continent like Africa. But it cannot carry us very far. Africa is badly supplied with navigable rivers, chiefly as a natural result of the general formation of the land. The continent consists, broadly speaking,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of a huge plateau, and the rivers flowing off this plateau are obstructed by cataracts in exactly the places where we most want to use them—that is, when approaching the coasts. The second stage in the commercial evolution will therefore be the construction of railways with the view of supplementing this river traffic. Finally, no doubt, a further stage will be reached, when railways will cut out the rivers altogether; for few of the navigable rivers are really well suited to serve as lines of communication. This last stage is, however, so far off that we may neglect it for the present; though it must be noted that there are some parts of Africa where there are no navigable rivers, and where, if anything is to be done, it must be entirely by means of railways.

Thus, as far as the immediate future is concerned, the points to which our attention should be mainly directed are (1) the courses of the navigable parts of the rivers, and (2) the routes most suitable for the construction of railways in order to connect the navigable rivers and lakes with the coast. As to the navigable rivers, little more remains to be discovered with regard to them, and we can indicate the state of our geographical knowledge on this point with sufficient accuracy for our purposes by means of a map. Of course the commercial value of a waterway depends greatly on the kind of boats which can be used, and that point cannot well be indicated cartographically.

As to the railways, we must study the physical features of the country through which the proposed lines of communication would pass. All the obstacles on rival routes should be most carefully surveyed when considering the construction of railways in an economical manner. Great mountain chains are seldom met with in Africa, and from that point of view the continent is as a whole remarkably free from difficulties. But drifting sand is often a serious trouble, and that is met with commonly enough in many parts. Wide tracts of rocky country also form serious impediments, both because of the cost of construction, and also because the supply of water for the engines becomes a problem not to be neglected. Such arid and sandy districts are, of course, thinly inhabited, and we may, therefore, generally conclude that where the population is scanty, there railway engineers will have special difficulties to face. On the other hand, dense forests are also very unsuitable. We have not much experience to guide us, but it would appear probable that the initial expense of clearing the forest, and the cost of maintenance, in perpetually battling against the tropical vegetable growth, will be very heavy; for it will not do to allow the line to be in constant danger of being blocked. The dampness of the forest, which will cause all woodwork and wooden sleepers to rot, will be no small source of trouble, and the virulent malarial fevers, always met with where the vegetation is very rank, will add immensely to the difficulty, both of construction and of maintenance. The health of the European *employés* will be a most serious question in considering the construction of railways in all parts of tropical Africa, for the turning up of the soil is the most certain of all methods of causing an outbreak of malarial fever; and the evil results would be most severely felt in constructing ordinary railways in dense forests. In making the short Senegal railway, where the climate is healthier than in many of the districts further south, the mortality was very great. Perhaps we shall have to modify our usual methods of construction so as to mitigate this danger, and, in connection with this subject, I may perhaps mention that the Lartigue system seems to be specially worthy of consideration—a system by which the train is carried on a single elevated rail. This is perhaps travelling rather wide of the mark of ordinary geographical studies, but it illustrates the necessity of a thorough examination of the environment before we try to transplant our own methods to other climes.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

We may, however, safely conclude that we must as far as possible avoid both dense forests and sandy and rocky wastes in the construction of our first railways.

Then, as to the lines of communication, considered as a whole, rail and river combined, we must obviously, if any capital is to be expended, make them in the directions most likely to secure a profitable traffic. In considering this part of the question, it will be seen that there are several different problems to be discussed: (1) trade with the existing population in their present condition; (2) trade with the native inhabitants when their countries have been further developed with the aid of European supervision; and (3) trade with actual colonies of European settlers. To many minds the last of these problems will appear to be the most important, and in the end it may prove to be so. But the time at my disposal compels me to limit myself to the consideration of trade with the existing native races within the tropics, with only an occasional reference to the influence of white residents. We must, no doubt, carefully consider which are the localities most likely to attract those Europeans who go to Africa with the view of establishing commercial intercourse and commercial methods in the interior; and there can be no doubt that considerations of health will play a prominent part in deciding this point. Moreover, as the lowest types of natives have few wants, the more primitive the inhabitants of the district opened up, the less will be the probability of a profitable trade being established. For both these reasons the coast districts are not likely in the end to be as good a field for commercial enterprise as the higher lands in the interior; for the more we recede from the coast, the less unhealthy the country becomes, and the more often do we find traces of native civilization. To put it simply, we must consider both the density of the population and the class of inhabitant in the districts proposed to be opened up. Of course, the exact nature of the products likely to be exported, and the probability of demands for European goods arising amongst the natives of different districts, are vitally important considerations in estimating the profits of any proposed line of railway; but to discuss such problems in commercial geography at length would open up too wide a field on an occasion like this.

If the importance of considering the density of the population in the different districts in such a preliminary survey is admitted, we may then simplify our inquiry by declining to discuss any lines of communication intended to open up regions where the population falls below some fixed minimum—whatever we may like to decide on. Of course, the question of the greater or less probability of a locality attracting white temporary residents is very important, but unless there is a native population ready to work on, there will be little done for many years to come. Politically, it may or may not be right to open up new districts by railways for the sake of finding outlets for our home or our Indian population; but here I am considering the best lines for the development of commerce, taking things as they are. What, then, shall be this minimum of population? The population of Bengal is 470 per square mile; of India, as a whole, about 180; and of the United States, about 21 or 22. If it is remembered that the inhabitants of the United States are, per head, vastly more trade-producing than the natives of Africa, it will be admitted that we may for the present exclude from our survey all districts in which the population does not reach a minimum of 8 per square mile; it might be right to put the minimum much higher than this. On the map now before you, the uncoloured parts show where the density of population does not come up to this minimum, and we can see at a glance how enormously this reduces the area to be considered. The light grey indicates a population of from 8 to 32 per square mile, and the darker grey a denser population than that. Of course, such a map, in the very imperfect state of our knowledge, must be very inaccurate, as I am

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000080

مكتبة قطر الوطنية
Qatar National Library

sure the compiler would be the first to admit. On the same map are marked the navigable parts of rivers. I should like to have shown the dense forests also, but the difficulty of giving them with any approach to correctness is at present insuperable.

Here, then, is the kind of map we want in order to consider the broad outline of the questions connected with the advisability of attempting to push lines of communication into the interior. The problem is how to connect the inland parts of Africa, which are coloured grey on this map, with the coast, by practicable lines of communications, at the least cost, with the least amount of dense forest to be traversed, and, in the case of railways, whilst avoiding as far as possible all thinly populated districts.

It is, of course, quite impossible here to discuss all the great routes into the interior, and I should like to devote the remaining time at my disposal to the consideration of this problem as far as a few of the most important districts are concerned, confining myself, as I have said, to trade with existing native races within the tropics. Taking the East Coast first, and beginning at the north, the first region sufficiently populous to attract our attention is the Valley of the Nile, and parts of the Central Sudan. Wadai, Darfur, and Kordofan are but scantily inhabited, according to our map, and this is probably the case now that the Khalifa has so devastated these districts; but, without doubt, much of this country could support a teeming population, and is capable of great commercial development. The Bahr-el-Ghazal districts are especially attractive, being fertile and better watered than the somewhat arid regions further north. These remarks remind me how difficult it is at this moment to touch on this subject without trenching on politics. Few will deny that the sooner this region is connected with the civilized world the better, and it is only as to the method of opening it up, and as to who is to undertake the work, that burning political questions will arise. The geographical problems connected with the lines of communication to the interior can be considered whilst leaving these two points quite on one side.

A glance at the map reminds us of the well-known fact that below Berber the Nile is interrupted by cataracts for several hundred miles, whilst above that town there is a navigable waterway at high Nile until the Fola rapids are reached, a distance of about 1400 miles, not to mention the 400 to 600 miles of the Blue Nile and the Bahr-el-Ghazal, which are also navigable. The importance of a railway from Suakin to Berber is thus at once evident, and there is perhaps only one other place in Africa where an equal expenditure would open up such a large tract of country to European trade. This route, however, is not free from difficulties. Suakin is hot and unhealthy. Then the railway, about 260 miles in length, passes over uninhabited or thinly inhabited districts the whole way. Though the hills over which it would pass are of no great height, the highest part of the track being under 3000 feet above the sea, it is often said that the desert to be traversed would add greatly to the difficulty of construction. According to Colonel Watson, R.E., however, these difficulties have been greatly exaggerated, for the water-supply would give no great trouble. The sixth cataract, between Metemma and Khartum, would, it is said, make navigation for commercial purposes impossible when the waters are low; if this is so, it is probable that this impediment could be overcome by erecting locks, but it is impossible to estimate the cost of such works. Then again, the Nile above Khartum is much obstructed by floating grass or sudd, making navigation at times almost impossible; but it was Gordon's opinion that a line of steamers on the river, even if running at rare intervals, would keep the course of the stream clear; this, however, remains to be proved.

If the canalization of the sixth cataract should prove to be a necessary, but too

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

costly an undertaking, then it would be most advisable to carry on the railway beyond that obstacle. This might be done by prolonging the line along the banks of the Nile, or by adopting an entirely different route from Suakin through Kassala. I hope we shall hear something from Sir Charles Wilson as to the relative merits of these proposals during the course of our proceedings. Proposals have also been made for connecting the Nile with other ports on the Red Sea, and all of these suggestions should be carefully examined before a decision is made as to the exact route to be adopted. But in any case, considering the matter merely from a geographical standpoint, and putting politics on one side—a very large omission in the case of the Sudan—it would appear that one or other of these routes should be one of the very first to be constructed in all Africa.

Passing further south, it is obvious from the configuration of the shore, and from the distribution of the population, that the lines of communication next to be considered are those leading to the Victoria Nyanza, and on to the regions lying north and west of the lake.

Two routes for railways from the coast to the Victoria Nyanza have been proposed, one running through the British and the other through the German sphere of influence. Looking at the matter from a strictly geographical point of view, there is perhaps hardly sufficient information to enable us to judge of the relative merits of the two proposals. Both run through an unhealthy coast zone, and both traverse thinly inhabited districts until the lake is reached. The German route, as originally proposed, would be the shorter of the two; but there is some reason to think that the British line will open up more country east of the lake, which will be suitable for prolonged residence by white men. Sir John Kirk, in discussing the question of the possible colonization of tropical Africa by Europeans, said, "These uplands vary from 5000 to 7000 feet in height, the climate is cool, and, as far as known, very healthy for Europeans. The district is separated from the coast by the usual unhealthy zone, which, however, is narrower than elsewhere on the African littoral. Between the coast zone and the highlands stretches a barren belt of country, which attains a maximum width of nearly 200 miles. The rise is gradual, and throughout the whole area to be crossed the climate is drier and the malarial diseases are certainly much less frequent and less severe than in the regions further south." These very advantages, however, may have to be paid for by the greater difficulty of railway construction. Putting aside future prospects, the map shows that the populous region to the west of the lake makes either of these proposed lines well worthy of consideration, though it would perhaps be rash to predict how soon the commerce along them would pay for the interest on the capital expended. What will be the fate of the German project I do not know, but we may prophesy with some confidence that the British line, the construction of which has been commenced, will be completed sooner or later.

The two lines of communication we have discussed—the Suakin and the Victoria Nyanza routes—are intended to supply the wants of widely separated districts; but, looking to a more distant future, they must sooner or later—probably later—come into competition, one with the other, in attracting trade from the Central Sudan. Before this can occur, communication by steamboat and by railway must be opened up between the coast and the navigable Nile by both routes. This will necessitate a railway being constructed, not only to the Victoria Nyanza, but also from that lake, or round it, to the Albert Nyanza; and, as the Nile is rendered unnavigable by cataracts about Dufile, and as the navigation is difficult between Dufile and Lado, here also a railway might be necessary in order to complete the chain of steam communication with the coast. If goods were brought across the Victoria Nyanza by steamer, and taken down the Nile in the same manner from the Albert

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000095

مكتبة قطر الوطنية
Qatar National Library

Nyanza to Dufile, this route would necessitate bulk being broken six times before the merchandise was under way on the Nile; by the Suakin route, on the other hand, bulk would only have to be broken twice, provided the sixth cataract were navigable. Thus, if this latter difficulty does not exist, or can be overcome, and if the sudd on the Nile is not found to impede navigation very much, this Nyanza route will certainly not compete with the Suakin route for any trade on the banks of the navigable Nile until a railway is made from the coast to Lado, a distance of over 800 miles as the crow flies, and certainly over 1000 miles by rail. It must be remembered, also, that the Nyanza route passes over mountains 8700 feet above the sea; that the train will have to mount, in all, nearly 13,000 feet in the course of its journey from the coast; and that a difficult gorge has to be crossed to the eastward of the Victoria Nyanza. From these facts we may conclude that it will be a very long time before the Nyanza route will draw any trade from the Central Sudan; so long, that the idea may be neglected for the present.

The line through the British sphere of influence runs to the northern end of Victoria Nyanza, but from Mr. Vandaleur's recent expedition into these regions we learn that a shorter route, striking the eastern shore of the lake, is under consideration. To lessen the expense of construction would be a great boon, but if we look to the more ambitious schemes for the future, something may be said in favour of the original proposal as being better adapted to form part of a line of railway reaching the navigable Nile.

With regard to the comparison between the German and British routes to the Victoria Nyanza, the latest accounts seem to imply that the Germans have practically decided on a line from the coast to Ujiji, with a branch from Tabora to the Victoria Nyanza. This would be a most valuable line of communication; but it seems a pity that capital should be expended in competitive routes when there are so many other directions in which it is desirable to open up the continent. If the Germans wish to launch out on great railway projects in Africa, let them make a line from the south end of Lake Tanganyika to the northern end of Lake Nyasa, and thence on to the coast; they would thus open up a vast extent of territory, and Baron von Schele tells us that a particularly easy route can be found from Kilva to the lake. Such a line of communication, especially if eventually connected with the Victoria Nyanza to the north, would be more valuable than any other line in Africa in putting an end to the slave trade, as it would make it possible to erect a great barrier, as it were, running north and south across the roads traversed by the slave-traders.

A line through German territory connecting Lake Nyasa with the sea would, no doubt, come into competition with the route connecting the southern end of that lake with the Zambesi, and thus with the coast. The mouths of the Zambesi, though they are passable, will always present some impediment to commerce. But after entering the river navigation is not obstructed until the Murchison Rapids on the Shiré river are reached. Here there are at present 60 miles of portage to be traversed, and this transit must be facilitated by the construction of a railway, if this route is to be properly developed; Mr. Scott Elliot tells us that 120 miles of railway, from Chiromo to Matope, would be necessary for this purpose. Beyond this latter point there is a good waterway to Lake Nyasa. Thus a comparatively short line of railway would open up this lake to European commerce, and this route is likely to be developed at a much earlier stage of the commercial evolution of Africa than the one through German territory above suggested. It will be seen that these routes connect fairly populous districts with the coast, and it must also be recollected that the high plateau between Lake Nyasa and the Kafue river is one of the very few regions in tropical Africa likely to attract white men as more or less permanent residents.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Further south we come to the Zambesi river, which should, of course, be utilized as far as possible. But this line of communication to the interior has many faults. The difficulties to be met with at the mouths of the Zambesi have already been alluded to. Then the whole valley is unhealthy, and white travellers would prefer any route which would bring them on to high land more quickly. Moreover, the Kebrabasa rapids cause a serious break in the waterway, and, as the river above that point is only navigable for canoes, it is doubtful if it would ever be worth making a railway for the sole purpose of connecting these two portions of the river.

As the population of the upper Zambesi valley is considerable, and as the country further from its banks is said to be likely to be attractive to white men, there can be no doubt of the advisability of connecting it with the coast. This naturally leads us to consider the Beira route, as a possible competitor with the Zambesi. A 60-centimetre railway is now open from Fontesvilla to Chimoio (190 kilometres), and it is probable that during the course of the next two years the construction of the railway will be completed from the port of Beira itself as far as the territory of the Chartered Company. This will form the first step in the construction of a much better line of communication to the upper Zambesi regions than that afforded by the river itself. It is true that the gauge is very narrow, and that the first part of the line passes through very unhealthy districts; but this line will nevertheless be a most valuable addition to the existing means of penetrating into the interior of the continent. It is needless to say that the object of this railway is to open up communications with Mashonaland, not for the purposes now suggested.

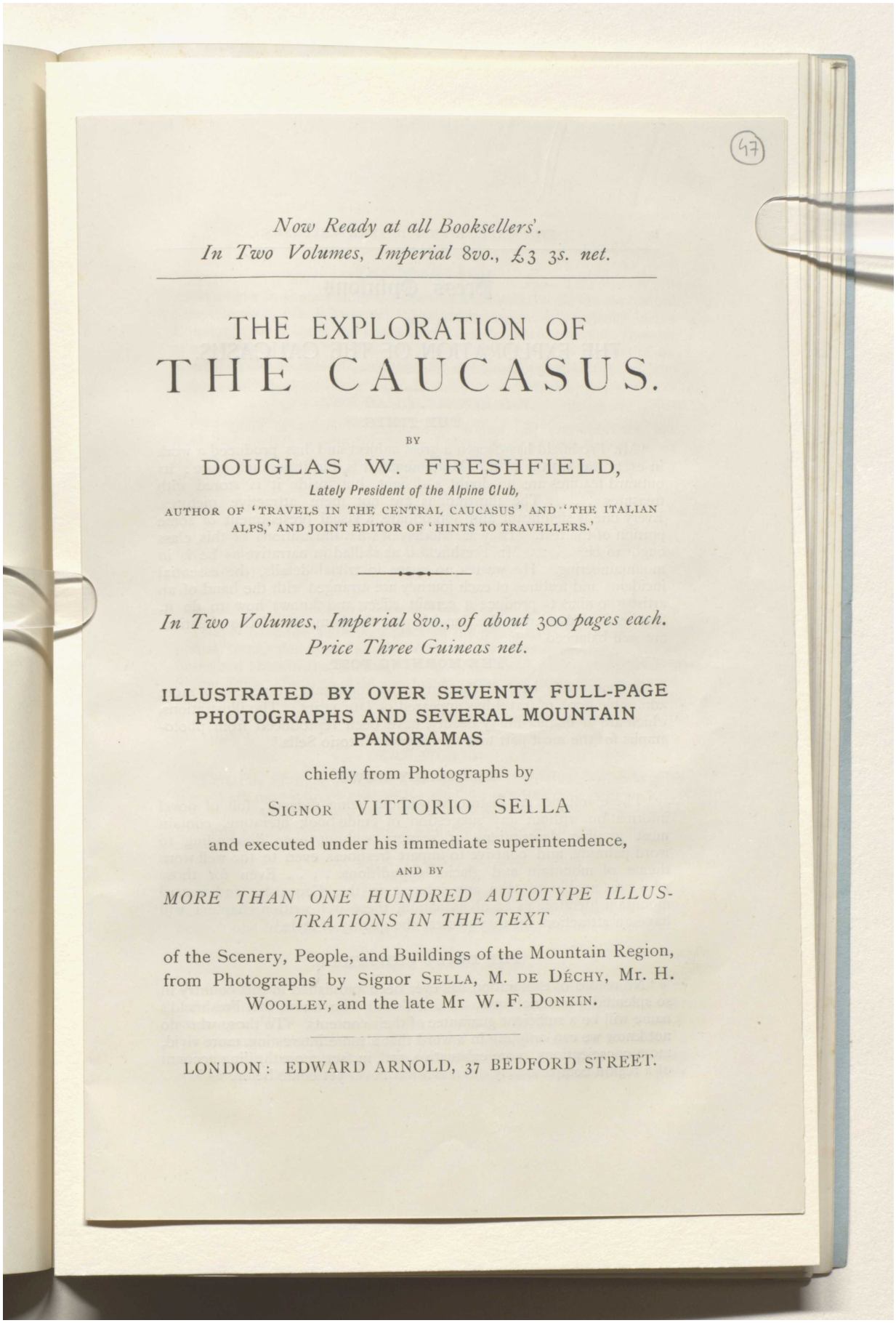
South of the Zambesi the map shows us that there are no regions in tropical Africa where the density of the native population reaches the minimum of eight per square mile. Here, however, we come to the gold-fields, where there is attractive force enough to draw white men in great numbers within the tropics, and where, no doubt, some of the most important problems connected with railway communications will have to be solved in the immediate future. But, for reasons of time and space, I have limited myself to the discussion of districts within the tropics, where trade with the existing native races is the object in view. The Beira railway does not in reality come within the limits I have imposed on myself, except as to its future development. Had time permitted, I should like to have discussed the route leading directly from the Cape to Mashonaland, its relative merits in comparison with the Beira railway, and as to where the two will come into competition one with the other. But I must pass on at once to consider the main trunk routes from the West Coast leading into the interior of Africa.

Passing over those regions on the West Coast where railways would only be commenced because of the probable settlement, temporary or permanent, of white men—passing over, that is, the whole of the German sphere of influence—we first come to more dense native populations near the coast towns of Benguela and St. Paul de Loanda. The latter locality is the more hopeful of the two, according to our map, and here we find that the Portuguese have already constructed a railway leading inland for 191 miles to close to Ambaca. The intention of connecting this railway with Delagoa Bay was originally announced, and I am not aware to what extent this vast project has now been cut down, so as to bring it within the region of practical proposals. A further length of 35 miles is, at all events, being constructed, and 87 more miles have been surveyed. The Portuguese appear to be very active at present in this district, as there are several other railways already under consideration; one from Benguela to Bihe, of which 16 miles is in operation, another from Mossamedes to Huilla Plateau, and a third from the Congo to the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Now Ready at all Booksellers'.
In Two Volumes, Imperial 8vo., £3 3s. net.

THE EXPLORATION OF
THE CAUCASUS.

BY
DOUGLAS W. FRESHFIELD,
Lately President of the Alpine Club,
AUTHOR OF 'TRAVELS IN THE CENTRAL CAUCASUS' AND 'THE ITALIAN ALPS,' AND JOINT EDITOR OF 'HINTS TO TRAVELLERS.'

In Two Volumes, Imperial 8vo., of about 300 pages each.
Price Three Guineas net.

ILLUSTRATED BY OVER SEVENTY FULL-PAGE PHOTOGRAPHS AND SEVERAL MOUNTAIN PANORAMAS
chiefly from Photographs by
SIGNOR VITTORIO SELLA
and executed under his immediate superintendence,
AND BY
MORE THAN ONE HUNDRED AUTOTYPE ILLUSTRATIONS IN THE TEXT
of the Scenery, People, and Buildings of the Mountain Region, from Photographs by Signor SELLA, M. DE DÉCHY, Mr. H. WOOLLEY, and the late Mr W. F. DONKIN.

LONDON: EDWARD ARNOLD, 37 BEDFORD STREET.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000033

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Press Opinions

ON

THE EXPLORATION OF THE CAUCASUS.

THE TIMES.

'Mr. Freshfield has chosen a great subject and has produced a work in every way worthy of it. Monumental it is, but it is much more: its outward features are no doubt a delight, but inside it is stored with treasures. . . . . The illustrations are not mere attractive pictures. Every one is significant and appropriate, a visual presentment of some portion of the text. They are models of what illustrations of this class ought to be. . . . . Mr. Freshfield is as skilled in narrative as he is in mountaineering. He wastes no space in trivial details, the essential incidents and features of each journey are arranged with the hand of an artist who aims to produce a certain effect and knows how to do it. Sentiment and science, the dangers and the humours of the situation, are well balanced.'

THE MORNING POST.

'It may safely be said that in many important respects no more admirable book of travel has appeared of late years. The illustrations, which are of extraordinary beauty, have been reproduced from photographs for the most part taken by Signor Vittorio Sella.'

THE DAILY NEWS.

'These volumes are instructive without being didactic, full of novel information without any suggestion of guide-book literature, contain most graphic descriptions of scenery without even descending to word-painting, and contrive to impart freshness even to the well-worn theme of mountain and glacier expeditions. . . . . Even for those who are unable to take any interest in the Caucasus, and regard mountain literature as an abomination, these well-written chapters will have an attraction, for they possess the quality of style.'

THE DAILY CHRONICLE.

'No record of exploration has ever been published in this country in so splendid a material form. . . . . To all who know, Mr. Freshfield's name will be a sufficient guarantee of their contents. To those who do not know we can only say in a word that a more interesting, more vivid, more conscientious, more exhaustive, and, in fact, more thrilling account of a region comparatively unknown has never yet come before us.'

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000087

مكتبة قطر الوطنية
Qatar National Library

THE STANDARD.

'We have in these volumes a book of like character to, but even more complete than, Mr. Whymper's "Travels among the Great Andes of the Equator"; for it is not too much to say that no such complete memoir of a mountain chain has been published since the first awakening of an interest in the ascents of peaks and the structure of glaciers.'

THE DAILY TELEGRAPH.

'No book of travel or exploration within our remembrance has disclosed such a wealth of illustration as the one now before us—a deeply interesting work, the typographical production of which is worthy of unstinted admiration.'

THE ST. JAMES'S GAZETTE.

'If all works of mountaineering had the attraction of Mr. Douglas Freshfield's, such reading would become popular instead of being limited to the shelves of collectors.'

THE PALL MALL GAZETTE.

'Never have the majesty of glaciers, the awe-inspiring silence of perpetual snow, the splendour of mountain scenery, been more vividly described than in the language of Mr. Freshfield and the pictures of Signor Sella. Smooth style and fine humour add to the attractions of a book which will kindle the enthusiasm of mountaineers and spur them to make every corner of this remote range as familiar as the recesses of the Alps.'

THE WORLD.

'Certainly nothing could be more splendid than these volumes with the superb mountain pictures of Signor Sella to adorn their pages. . . . . The whole work forces us to believe that mountaineering is nowadays not only a mere recreation but a valuable handmaid of geography.'

THE ATHENÆUM.

'Mr. Freshfield's book contains the digested study and experience of nearly thirty years. Perhaps, if we must give him a class, we must borrow one from Carlyle, and call him the traveller as man of letters.'

THE ALPINE JOURNAL.

'We heartily congratulate Mr. Freshfield, Signor Sella, and all who have contributed to these noble volumes—appropriately dedicated to the memory of W. F. Donkin.

'The map—the first authentic map of the whole Central Caucasus—will be to future travellers in the Caucasus what the Alpine Club map was to travellers in the South-western Alps, and much more. How

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000055

مكتبة قطر الوطنية
Qatar National Library

many expeditions will the enthusiastic climber be able to devise from studying it, especially when Appendix B supplies him with a Climber's Guide in addition.'

THE GEOGRAPHICAL JOURNAL.

'Mr. Freshfield has brought together the material for two monumental volumes, which are placed before the public in a form more splendid than any other book of recent travel can boast.

'The refined and scholarly literary style of the text is Mr. Freshfield's own; the illustrations of unexampled beauty are transmitted direct from Nature through Signor Sella, whose name deservedly shares the title-page, and the skilful German photo-engravers who have reproduced them, enhanced in clearness, if that be possible, and disfigured by no trace of retouching or "artistic improvement." With these photographs and the new map of the Caucasus, drawn by Mr Reeves, the reader is more nearly in the position of an actual traveller than the reader of a book of travel ever was before. To study one of the long panoramas in conjunction with the map is to seem to see the mountain system itself, with its forests, rocks, and snows, its lofty passes and deep-cut valleys, tenanted by the strange remnants of peoples who make their last stand there against the inevitable absorption into Europe.

'While the illustrations are beautiful in themselves, and form a gallery of mountain pictures which it is a pleasure for the least instructed to pore over, their chief value lies in the fact that they are in the truest sense illustrations, supplementing the written description, and enabling it to tell its story with additional effect.'

THE SATURDAY REVIEW.

'We have given but a poor idea of the riches of these two superb volumes. As we have said, there is abundance of climbing adventure. But there is much more. . . . . A monograph of permanent value on one of the most interesting mountain ranges of the world, written in a style that gives it the quality and attraction of literature.'

THE FIELD.

'One of the most charming and instructive books of travel that it has ever been our good fortune to read. . . . . The best series of illustrations that we have ever seen in any work of travel. . . . . It is not too much to say that the map at the end of the book, both as regards its accuracy and beauty, is far and away in advance of any maps of this region that have ever been published in this or in any other country. . . . . Everything seems to have been done to make the book not only attractive but scientifically useful.'

LONDON: EDWARD ARNOLD, 37 BEDFORD STREET.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000031

مكتبة قطر الوطنية
Qatar National Library

Zambesi. It is difficult to foretell what will be the outcome of these schemes, but our population map is not very encouraging.

Next we come to the Congo, and here there is a grand opportunity of opening up the interior of the continent. In going up this great stream from the coast we first traverse about 150 miles of navigable waterway, and afterwards we come to some 200 miles of cataracts, through which steamers cannot pass. Round this impediment a railway is now being pushed, 189 kilometres of rails (117 miles) being already laid. Then we enter Stanley Pool, and from this point we have open before us—if Belgian estimates are to be accepted—7000 miles of navigable waterway. If this fact is correct, and if the population is accurately marked on our map, then there is no place in all Africa where 200 miles of railway may be expected to produce such marked results. The districts traversed are unhealthy, and the natives are, generally speaking, of a low type; but in spite of these drawbacks, which no doubt will delay progress considerably, we may confidently predict a grand future for this great natural route into the interior.

To the north of the Congo, the next great navigable waterway met with is the Niger. Again, granting the correctness of the population map, it can be seen at a glance that there is no area of equal size in all Africa so densely inhabited, and no district where trade with the existing native population appears to offer greater inducement to open up a commercial route into the interior. Luckily, little has to be done in this respect, for the Niger is navigable for light-draft steamers in the full season as far as Rabba, about 550 miles from the sea; here the navigation soon becomes obstructed by rocks; and at Wuru, about 70 miles further up the river, the rapids are so unnavigable that even the light native canoes have to be emptied before attempting a passage, and there are frequent upsets. From Wuru the rapids extend to Wara, after which a stretch of clear and slow-running river is met with. Above this, again, the Altona rapids extend for a distance of 15 miles, then 15 miles of navigable waterway, and then 20 miles more of rapids are encountered. Yelo, the capital of Yauri, is situated on these latter cataracts, above which the Middle Niger is navigable for a considerable length. The Binue is also navigable in the floods for many miles, the limits being at present unknown; part of the year, however, it is quite impassable except for canoes. The trade with the Western Sudan, which has been made possible by the opening up of this river, is still only in its infancy, and to get the full benefit of this waterway a line of railway ought to be carried on from Lokoja to Kano, the great commercial centre of Hausaland; Mr. Robinson's recent journeys over this country, which we hope to hear about at a later period of our proceedings, have served to confirm the impression that no great physical difficulties would be encountered. The political condition of the country may, however, make the construction of this railway quite impossible for the present; for here we are on the borderland between Mohammedanism and Paganism, where the slave trade always puts great impediments in the path of progress, but where the same circumstances make it so eminently desirable to introduce a higher condition of civilization. The only drawback to the Niger as a line of communication to the Western Sudan is the terribly unhealthy nature of the coast districts which have to be traversed. Any man, who finds a means of combating the deadly diseases here met with, will be the greatest benefactor that Africa has ever had; but of such a discovery there are but few signs at present.

It is perhaps too soon to speculate as to the best means of opening a trade route to Wadi, and the more central parts of the Western Sudan; for we may be sure that little will be done in this direction for years to come. Several competing routes are possible. From the British sphere, we may try to extend our

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

communications eastward from the navigable parts of the Binue. The French, on the other hand, may push northwards from Ubangi; whilst, in a later stage of commercial evolution, the best route of all may be found through German territory, by pushing a railway from the shore in a direct line towards Bagirmi and Wadai. To compare the relative merits of these trunk lines is perhaps looking too far into the future, and traversing too much unknown country, to make the discussion at all profitable.

Proceeding northwards, or rather westwards, along the coast we find ourselves skirting the belt of dense forest already described as being the great obstacle to advance in this part of Africa. It is to be hoped that this barrier will be pierced in several places before long. Naturally we turn our attention to the different spheres of British influence, and here we are glad to learn that there are several railways being constructed or being considered, with a view to opening up the interior.

At Lagos a careful survey of a railway running in the direction of Rabba has been made, and the first section is to be commenced at once. To connect the Niger with the coast in this way would require 240 miles of railway, but the immediate objectives are the towns of Abeokuta and Ibadan, which are said to contain more than a third of a million inhabitants between them. No doubt the populous coast region makes such a line most desirable; but whether it would be wise to push on at all quickly to the Niger, and thus to come into competition with the steamboat traffic on that river, is a very different question.

Surveys have also been made for a railway to connect either Kormantain or Apan on the Gold Coast with Insuaim, a town situated on a branch of the Prah. It is believed that the local traffic will be sufficiently remunerative to justify the construction of this line. But, looking to the further prolongation of this railway into the interior, it appears possible that those who selected this route were too much influenced by the desire to reach Kumasi, which is a political rather than a commercial centre. According to the views I have been advocating to-day, the main object of a railway in this quarter should be the crossing of the forest belt, and if, as there is some reason to believe, that belt is exceptionally wide and dense in this locality, the choice of Kumasi as a main point on the route will have been an unfortunate selection. A little further south, nearer the banks of the Volta, it is probable that more open land would be met with, and, moreover, that river itself, which is navigable for steam launches from Ada to Akusi, would be of use as a preliminary means of transport. It is to be hoped that the merits of a line from Accra through Odumase will be considered before it is too late.

I am now approaching the end of my brief survey of tropical Africa, for the best method of opening communication between the upper Niger and the coast is the last subject I shall touch on. With this object in view, the French have constructed a railway from Kayes, the head of steam navigation during high water, on the Senegal to Bafulabe, with the intention of ultimately continuing the line to Bamaku on the Niger. Unexpected difficulties have been met with in the construction of this railway, and, as the Senegal river between Kayes and St. Louis is only navigable for about a quarter of the year, it would hardly appear as if the selection of this route had been based on sound geographical information. No doubt the French will find some other practicable way of connecting the upper Niger with the coast, and surveys are already in progress with that object in view. It may be worth mentioning that the Gambia is navigable as far as Yarbutenda, and that it affords on the whole a better waterway than the Senegal; it is possible, therefore, that a railway from Yarbutenda to Bamaku might form a better means of connecting the Niger with the coast than the route the French have selected.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000035

مكتبة قطر الوطنية
Qatar National Library

At Sierra Leone a railway is now being constructed in a south-easterly direction with a view of tapping the country at the back of Liberia. But here, as in the case of the Gambia route, political considerations are of paramount importance; for no doubt the best commercial route, geographically speaking, would have been a line run in a north-easterly direction to some convenient point on the navigable part of the upper Niger. If such a railway were ever constructed, it would connect the longest stretch of navigable waterway in this region with the best harbour on the coast. But the fact that it would cross the Anglo-French boundary is a complete bar to this project at present.

Proposals for connecting Algeria with the upper Niger by rail have often been discussed in the French press, the idea being to unite the somewhat divided parts of the French sphere of influence by this means. If the views here sketched forth as to the necessity of selecting more or less populous districts for the first opening up of lines of communication into the interior are at all correct, these projects would be simple madness. For many a year to come Algeria and the Niger will be connected by sea far more efficiently than by any overland route, and I feel sure that when the details of these plans are properly worked out we shall not find the French wasting their money on such purely sentimental schemes.

I must now conclude, and must give place to the other geographers who have kindly undertaken to read papers to us on many interesting subjects. All I have attempted to do is briefly to sketch out some of the main geographical problems connected with the opening of Central Africa in the immediate future. Such a review is necessarily imperfect, but its very imperfections illustrate the need of more accurate geographical information as to many of the districts in question. Many blunders may have been made by me in consequence of our inaccurate knowledge, and, from the same cause, many blunders will certainly be made in future by those who have to lay out these routes into the interior. In fact, my desire has been to prove that, notwithstanding the vast strides that geography has made in past years in Africa, there is yet an immense amount of valuable work ready for any one who will undertake it.

Possibly, in considering this subject, I have been tempted to deviate from the strictly geographical aspect of the case. Where geography begins and where it ends is a question which has been the subject of much dispute. Whether geography should be classed as a separate science or not has been much debated. No doubt it is right to classify scientific work as far as possible; but it is a fatal mistake to attach too much importance to any such classification. Geography is now going through a somewhat critical period in its development, in consequence of the solution of nearly all the great geographical problems that used to stir the imagination of nations; and for this reason such discussions are now specially to the fore. My own humble advice to geographers would be to spend less time in considering what geography is and what it is not; to attack every useful and interesting problem that presents itself for solution; to take every help we can get from every quarter in arriving at our conclusions; and to let the name that our work goes by take care of itself.

FROM TEHERAN TOWARDS THE CASPIAN.

By Lieut.-Colonel HENRY L. WELLS, R.E.

TEHERAN, the capital of Persia, occupies a depression on the lowest slopes of the Elburz range of mountains which, running east and west, separates the entirely dry province of Irak from Gilan and Mazanderan, provinces situated on the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000039

مكتبة قطر الوطنية
Qatar National Library

southern shores of the Caspian, and consequently deriving abundance of moisture from the fogs and rain produced by the sun's action on that inland sea. In the latter region the forests recall those of the Indian Terai, and, like them, are infested by tigers and intersected by ricefields. The fogs that roll almost perpetually southwards from the Caspian would, if unchecked by the Elburz, impart their refreshing influence to the arid plains of Persia; but they are vigorously met by the hot, dry air of the central desert, and the mountain-tops of the intervening watershed become, as it were, a battle-field for the ceaseless contests of the two great genii of damp and drought. In summer the climate of the upper mountain slopes is most enjoyable. The sides facing north have a fauna and flora like those of Central and Northern Europe; facing south, they remind one rather of Italy and Spain. All who can, quit the city of Teheran during June, July, and August, to take up their abode in the picturesque villages of the southern slopes of the Elburz range. The most frequented summer resorts are situated at a distance of 7 or 8 miles from the city, and at an altitude varying from 1000 to 1500 feet above it. There are in all some 400 Europeans in Teheran, including members of the various legations, *employés* of the Indo-European Telegraph Department, the English and Russian banks, and the tramway, sugar and glass manufactories, as also hotel-keepers and owners of shops. The head-quarters of the English for the summer months is the village of Gulahek, which was presented to them by Fath 'Ali Shah at the commencement of the present century. It is situated at a distance of $6\frac{1}{2}$ miles from the city and 920 feet above it—that is, at an altitude of 4800 feet above the sea.

A German capitalist has lately obtained a concession for a light electric tramway or railway to connect the various summer resorts with the city, and the enterprise promises to be lucrative. There is already a railway, $4\frac{1}{2}$ or 5 miles in length, from the south-eastern gate of Teheran to a favourite shrine; and a road fit for wheeled vehicles is in course of construction to the Caspian, so that ere long the capital will be reached from the seashore with comparatively little difficulty.

On June 18, 1895, at 7 a.m., three of us left Gulahek for Mazanderan. The lofty Tuchal mountain—a branch of the Elburz—which lies north of Teheran, is so covered with snow in the early summer that the track across its summit, the most direct route to the north, cannot be used before August. Therefore we had to skirt the mountain range in an easterly direction along its base till a suitable pass was reached. Such we found in the Jager Rud, or river, which, rising near the Elburz watershed, flows south until lost in the great desert. The *détour* was picturesque. On our left were rocky heights still crested with snow; in the far distance, behind many intervening ranges, peeped the cone of Demavend, the crater-lip of which has an altitude of 19,400 feet above the sea; in the mid-distance, the morning sun threw lovely tints upon the barren hills; in the foreground, the ripening crops of barley, with patches of luxuriant lucerne and sweet-scented beans, showed the extent of the fertilizing streams. Blue jays and brilliant bee-eaters sat in the trees along the roadside, whilst quails and buntings made a merry noise in the adjoining crops.

About 2 miles east of Gulahek is Sultanetabad, one of the Shah's summer resorts. Another one, Niaveran, is situated a mile further up the slope. These palaces are surrounded by groves of mulberry, poplars, and willows; here, too, thickets of cherry and apricot afford good harbour for woodcock in winter. We followed an avenue of prim *navend* trees, a kind of witch elm, common in Persia, in shape, for all the world, like trees from a toy-box, but very bright and pleasing in colour. Their matted branches give absolute protection to small birds, and must account for the numbers which escape from the hawks infesting the country.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Save for the existence of a few isolated gardens east of Sultanetabad, the limits of cultivation were now attained. On the border waste lands flourish the flowered chickory, and pale yellow and pale pink hollyhocks, through whose wan petals the sunshine has a pretty effect. There is also a picturesque thistle, with flowers varying in hue from ultramarine ash to French grey, which take the form of perfect spheres. In contrast with ripe corn these produce a wonderful effect. Another greyish-blue plant, very common on the edges of the cornfields, has a blue foliage, and the younger sprouts of spiky leaves are of a bright metallic colour. Once beyond the limit of water-supply, all is barren except in spring-time. The remainder of our two hours' ride over the spur which forms the watershed between the Teheran drainage-area and valley of the Jager had, consequently, but little interest.

We commenced ascending the right bank of the river through a deep gorge. The way led over a very rough though well-cared-for mule-track. After four hours in the saddle we reached the picturesque village of Uchan, situated at the junction of two branches of the river, at an altitude of 5800 feet. The valley opens out to a quarter of a mile in width at this place; and the stream, beside which our camp was pitched, has a stony and rocky bed, over which the waters roll in a deafening torrent. Behind us was a narrow strip of cultivation, bordered by poplars, walnuts, and willows, while above were seen the mountains, rising to some 11,000 feet, along the base of which we had travelled from Lashkerek. The air at Uchan was perceptibly cooler than that at Gulahek; between the two places there is a short cut by a steep and difficult pass known as the "Talhouse." On June 19 we started, on mules with a muleteer guide, up the left branch of the Jager river, for general purposes of exploration, as well as to visit a coal-mine belonging to the Teheran gas company. The track, well preserved hitherto, practically disappeared beyond Uchan, but reappeared after two miles at the village of Pachemp. By a bridge in course of construction and other signs, we became aware that the Shah was expected to pass shortly in this direction, *en route* to Lar and Kujur, favourite camping-grounds of his Majesty. The scene was very beautiful. In this upper part of the river's course, the banks lend themselves to cultivation better than below Uchan, and the peasants, like hill-men in all countries, have taken advantage of every available square inch of ground. The crops were all fresh-looking; the wheat was hardly yet in ear; the lucerne, in flower, stood quite 2½ feet high, and men clad in picturesque rags were cutting it. In the patched garments of these peasants was displayed every shade of blue, from indigo to ultramarine ash, the shades being somehow all harmonized by wear and tear. Occasionally a man might be seen wearing a tunic of old crimson plush, which at threadbare points had a plum-coloured sheen.

At the borders of the tiny fields and beside the roaring torrents were clumps of luxuriant stuff, with handsome leaves and large white flowers of the umbellifera class, the size of a saucer. This plant emits a noisome odour when touched. There were plenty of pretty flowers, and quantities of barberry, briars, and dog-roses in full bloom. Above the cultivation the valley was bounded by frowning cliffs of conglomerate and ironstone, in the crevasses of which were patches of frozen snow, whence rushing streams issued across our path.

At Saigon, a small village, we left the king's highway, a track 7 feet broad, but we could trace it for many miles, till it was lost behind a spur surmounted by a white dome, known as the shrine of Aborek. The track we now had to follow was only just passable for laden mules. However, after moving for two miles up the side valley, we arrived at the large village of Lalan. Making for certain black patches which marked the entrance to the coal workings, visible in the distance,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002c

مكتبة قطر الوطنية
Qatar National Library

and almost at the summit of a range of mountains fronting us, we managed, after a hard and hot climb, to reach the door of the manager's hut, a grimy one-roomed abode, having on one side of its walls prints of a religious character, and on another guns, rifles, and game-bags. Zakhary, the owner, we found a remarkable man in his way. He is a Chaldean Roman Catholic from the neighbourhood of Urumia (or Urmi), and thus a subject of the Shah, and he spoke in raptures of his native country. Grizzled hair, a calm handsome face, and beautiful teeth made up a countenance not soon forgotten. Above all, his cheerfulness and contentment with his lot most favourably impressed us. He has one fellow-Catholic with him, whose children welcomed us in Chaldean. Zakhary himself, whose own belongings were shortly to join him, spoke excellent French. He has twenty Turks, from the neighbourhood of Tabriz, employed on the works, the Persians refusing to labour underground. The miners are paid 5 *krans* for 650 lbs. (a Persian measure known as *kharwar*),* and can earn up to that sum (or about two shillings) a day. Zakhary has to procure rice, dried fruit, with bread stuff for their consumption, and sells them these articles at cost price, plus carriage. Three mules, to fetch provisions, are provided by the gas company, and these carry broken tools to the city for repairs, making up their loads with coal.

There is a forge at the mine, and hutting for the miners; also an iron-roofed store to protect the coal "got" in the winter from the action of snow and rain. From Zakhary's account, the climate at the mines, which are situated on the southern slope of a range running east and west, is most salubrious. It is only in March and April that rain and mists are annoying. In summer it is not hot, and in winter the snow does not lie for any length of time. Our informant only quits his home twice a year, to attend the festivals of Christmas and Easter respectively in Teheran.

South of the manager's hut is seen a rocky ridge, said to harbour leopards. On the mountains behind the mines are pastures for moufflon, and wild rhubarb abounds. To the east there is a glorious view of Demavend towering into the sky.

The quality of the coal did not impress us much, for it "comes out" as dust; but for the production of gas, in which it is said to be very rich, this does not greatly matter. It is found in sandstone, and it seems likely that it only exists in pockets, *i.e.* is the remains of lacustrine deposits. The seams are vertical, *i.e.* have a "dip" of 90°. They vary from 1 foot to 5 feet in thickness. The "strike" seems to be east and west. One working into which we went was pronounced unsafe, and nothing was going on there, pending the arrival of timbering from Mazanderan. This gallery ran horizontally in from the face of the hill, and wound about, following the seam or pocket. The whole of the roof was coal, and in one place a shaft had been sunk to get at the coal below; this was now full of water.

Zakhary had ingeniously arranged a syphon for the emptying of this shaft. One of our servants nearly fell into it, having followed us along the working without a light; in fact, but for our timely return, to find him on the brink of the shaft, he must have been lost. Two men lost their lives owing to the falling of the roof at the mouth of a working last year—otherwise there have been no accidents. There is said to be no fire-damp, but as no working has yet been pushed more than a hundred yards into the hill, it is possible it may yet be met with.

Zakhary went to Europe to learn printing, and then took to brewing—not a

* Wollaston gives this at 725 lbs; perhaps 625 to 675 lbs., of which 650 is the mean, is more strictly correct.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000081

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

useful education for a miner. His statement that the whole mountain near his mine is full of coal is not to be relied on. We bade him adieu after promising to revisit him in the shooting season, and started homewards, making the 14 miles to be covered one long race. In camp we were joined by two friends, who had delayed their departure from Gulahek a day later than ourselves, and also by a personage who announced that he was the Shikarchi Bashi to the Shah. The last, a spare wiry man, with small bright eyes and somewhat sly expression, withal an incessant talker, introduced himself by saying that he had been sent to see that we got good sport, and received due honour and hospitality at the hands of the population. It was only by feigning inability to comprehend his egotistical chatter that we contrived to rid ourselves of this intrusive *attaché*; so that, after the first day's proceedings, he changed his tactics, and favoured us but little with his company, except at the hour of starting in the morning. At such time he would appear accompanied by his henchman, both decently mounted. His occupation, apparently self-imposed, was to go ahead and turn out the greybeards of every village through which we passed, all of whom appeared, bringing a lamb as an offering. Had we accepted these lambs, we should have been possessed of a large flock before reaching Mazenderan. What the Shikarchi Bashi made out of the transaction, it was difficult to gather. He probably told each headman that he had persuaded the *sahibs* not to take the lambs, and therefore merited a small sum for his good offices. As regards any service to ourselves, he never came near our camp when we reached the ibex-ground at Sheristanek; and the same thing happened on our entering the bear country in Mazenderan.

From Uchan our road led up the Egil river, a tributary of the Jager, and followed the actual bed of the stream for some distance. The valley is rugged and less picturesque than that of the main stream. We passed Egil village, which has an evil reputation, as it is said to harbour the much-dreaded "stranger-biter" (*gharib gez*), or poisonous bug.

We breakfasted in a lovely spot beyond a village named Ahah (altitude 6700 feet), beneath the shade of walnuts, with a roaring torrent in front. From Ahah the watershed which divides the sources of the Jagerud and Sheristanek rivers has to be crossed by those who wish to get into the valley of the latter. This takes two and a half hours of mountain roads. The summit of the watershed has an altitude of 8700 feet. Except for the first 600 feet, the road presented no serious difficulty, and our muleteer, who lost an animal by falling over the mountain-side, was himself to blame for the mishap.

From the watershed there is a wonderful view of bare mountains; not a tree is to be seen anywhere. The contorted and variegated strata of the mountains to the north-east, in which direction we were going, are suggestive of an enormous slate quarry, about the size of an English county, with altitudes varying from 4000 to 10,000 feet. To the south, and close by, lie the northern slopes of the Touchal range, the southern side of which forms so conspicuous a feature in the Teheran landscape. The track, rising to nearly 12,000 feet, by which the distance from Gulahek to Sheristanek may be traversed in eight hours in the late summer, was visible, with large patches of snow lying across it.

From the watershed down to the Sheristanek valley was a comparatively dull march, though relieved by an occasional peep at the terraced fields and the sight of the Shah's red-roofed *chateau*, situated at the head of the valley. The river appeared a perfectly white roaring torrent. The *chateau* looked prim enough, but badly placed in what must be a stifling hole.

On reaching the valley, we found the crops all green and luxuriant, the foliage of the poplars and walnuts in perfection, and the roaring river even more

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000067

مكتبة قطر الوطنية
Qatar National Library

picturesque than when seen from a distance. Four miles down the valley we reached our camp at the extremity of the cultivation, altitude 6300 feet. Here the torrent enters a wild rocky gorge, foaming and boiling with a deafening noise, and yet in the swirls behind the stones trout are harboured, as we proved when whipping these eddies with a fly. How trout come to be in this river, or why they should exist in this and not in the Jager, or any other river which has a similar course, viz. from the Elburz range into the great central desert, is an unexplained mystery. On the 21st we halted, one of our party going after ibex, the others fishing. Another animal of our caravan met its death here by falling down a precipice when turned out to graze. A tall coarse sword-grass, poisonous to horses, mules, and asses, grows on the watershed between the Jager and Sheristanek rivers. The animals, unconscious of its dangerous properties, eat of it with deadly effect, unless happily prevented from doing so.

On the 22nd our road lay for half a mile down the Sheristanek river, to where it joins the Laura, a stream three times the size of, and, if possible, more rapid and turbulent than, the first-named. Its ochre-coloured waters dashed onwards, swollen with melted snow. The Dcab, or junction of the two streams, is at a wild romantic gorge, in which they are lost to sight amid precipitous crags of red rocks. When united, they bear the name of the Kerij river. There is no road out of this Kerij, nor indeed out of the Sheristanek valley, more practicable than that by which we entered, *viâ* Uchan. We now followed the left bank of the Laura, passing northwards through gap and gorge, in red sandstone and conglomerate, standing rugged and bold with vertical "dip." Further up-stream, where the river-banks are edged by a few trees, the views are very picturesque. Where the strata are less hard, they have weathered into slopes of fine *detritus*; and down them the peasants come at a great rate, almost as if they were snow-slides. Eight miles up the Laura we encamped at *Gachisar*, literally, "head or source of gypsum," where the geological character of the country changes, and the mountains have rounded contours, with some grass, but still not the vestige of a tree. Here, at an altitude of 6700 feet, we passed a very cold night. On the 23rd, when we started across the Kendevan pass, ominous white clouds were overhanging the mountains to the north.

At Gachiser, the main stream of the Laura is crossed by a one-arch bridge, and its right bank is followed for about three-quarters of a mile. Then its valley is abandoned, for it turns sharp east. The gorge, down which a small tributary flows, is followed for another 1½ mile. This gorge had still snow lying in it where the road takes huge zigzags up the rounded slope of the mountain to the north. In an hour and three-quarters from Gachiser, the summit of the watershed between the Caspian and the central plateau of Persia is reached. At an altitude of 10,000 feet, the sandy loam on the south slope of the watershed is covered with flowers; many of the vetch tribe and wild fennel grow here in large clumps. The wind at the top of the pass was bitterly cold; the driving mist was freezing on the posts placed at intervals to keep the traveller from losing the track. There is a small refuge near the summit built in brick; in fact, the whole road shows that an amount of care is bestowed on it such as is observable on no other track in Persia. The zigzags for the descent on the Caspian side are required for a shorter distance than for the ascent from the south. In three-quarters of an hour from the summit we were following the course of one of the branches of the Touchal river, in a country clearly under the influence of the refreshing rain-clouds from the Caspian. Grass, yellow irises, ferns, and succulent water-plants fringed the streams. Further up the mountain-sides, clumps of magnificent columbines, of bluish-purple with white centres, and scarlet poppies, with blooms the size of breakfast-cups and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000b

مكتبة قطر الوطنية
Qatar National Library

buds the size of walnuts, formed lovely masses of colour. Lavender, and many varieties of a sort of white campion, of the most delicate form, with the flowers arranged with curious regularity, were to be recognized amongst many other beautiful plants which it would require a botanist to classify and describe.

A wetting mist hid all distant features. We descended rapidly, and found the slopes further down clothed with scrub of oak, hornbeam, and sycamore, interspersed with wild pear and apple, buckthorn, and brambles. Here and there more open patches showed hawthorns and other flowering shrubs. The ground between them was literally carpeted with flowers. The presence of the tall yellow spikes of a flowering plant, similar in character to those observed in the hedgerows and brakes in the west of England, prepared us to find cowslips, periwinkles, crowsfoot, wild strawberries, and a crowd of other flowers that fringe the woods at home, besides quantities that were new to us. Wild roses and sweetbriars with blooms of every hue, from darkest pink to white, scented the air. The impression that we were following the drive to some domain on the coast of Devon constantly recurred. We saw also a beautiful shrub of handsomer growth, but with a flower resembling in shape that of the laburnum, only a richer chrome in tint. Another was quite beautiful, like honeysuckle both in leaf and flower, only growing as a rounded bush of graceful form. There were quantities of everlasting pea with dark crimson flowers, and here and there the giant poppy, already described, blazed in deep scarlet grandeur. The roar of a torrent replaced that of waves. We could fancy ourselves at Mount Edgcombe and that, when the mist lifted, Plymouth breakwater or the "Mewstone" would appear in the distance. The mist did eventually lift, to disclose the Chel-haus river boiling below, with precipitous cliffs of ruddy rock clothed in forest wherever trees could hold. These formed the foreground to a magnificent view of gorge, rock, and wood, leading the eye to distant spurs, overtopped in the far distance by a snow-capped range of great altitude and rugged outline. The moisture in the atmosphere gave the soft cobalt tint to the distant mountains so grateful to eyes long used to the glare and the crisp outlines of dry inland Persia. Our camp was pitched on the right bank, about 300 feet above the river, so we were spared the deafening din of its surging torrent, and able to hear the familiar notes of a blackbird which rang out in the stillness of the evening. About a mile south of our camp was the village of Valiabad. The younger brother of the Nasru's-Saltaneh, who came to visit us, thoughtfully brought with him his two *shikaris*, as well as presents of rice and sheep. Talking on the prospects of sport, we were told of bear and stag in the neighbouring forests, and of ibex and moufflon on the hilltops; moreover, that salmon was to be found one day's march further down-stream. The *shikaris*, father and son, were accompanied by a *mirza*, to represent the governor himself, and see that the villages sold us good provisions. These men were of a distinctly Mazanderani type, somewhat darker in complexion than the ordinary Persians. Their jet-black hair was curled in ringlets; moreover, they had brighter eyes and expressions, and were of handsomer face, than the inhabitants of the plateau. They informed us that a certain part of the country was the Shah's preserve, the remainder that of their own immediate master; but that we, having the royal permission to shoot, were privileged to avail ourselves of the whole. We tried for trout that evening, but, after reaching the river with great difficulty, we found it unfishable. On the 24th, owing to the report of three of our party who made a reconnaissance, we decided that the road towards the Caspian was too steep and dangerous for horses, and proceeded to negotiate it on our baggage mules.

Looked at from our camp, the road was found to rise gently as it wound northwards along the face of steep slopes and overhanging precipices. From it no fence

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

or wall prevents your seeing the abyss, some 1000 or 1500 feet in depth. We looked to our surcingles. Perched on the top of a pack-saddle as high as if riding a 16-hand horse, but with no command over your quadruped, you soon come to the conclusion that such a position is far more dangerous than it would be if one were riding one's own horse, even if he were somewhat fresh, for, at all events, he would not insist on always keeping along the outer edge of the track, as pack-mules obstinately do. When we had once started, the road proved to be less risky than it looked, as it had a width of 7 or 8 feet, and was in good repair. The view from it into the abyss beneath is superb. Numerous cascades, hundreds of feet in height, fall over the bare rock faces of the lower precipices. Issuing from glades hundreds of feet below the road, these cascades form a picture of great magnificence. From where they commence the mountains are more or less clothed in forest to their summits. Nothing can be seen or heard of the torrent that is eating its way into the strata far, far below.

Forty minutes' trotting on our mules brought us to a point whence the road, rounding a spur, dives zigzagging down the crumpled side of the gorge in the Hazar champ, or 1000 twists. From hence is obtained the loveliest of the many lovely views of the Chel-haus chasm. Thence it can be seen for some 20 or 25 miles of its length, viz. from the snow-clad watershed which marks the source of the river to the south, to beyond the Takht-i-Shah (which is hereafter to be described) on the north. Nothing in Kashmir, the Himalayas, or Switzerland resembles it. Maybe it may find a parallel in the rifts in California. Here, close to the road, a rough kind of pagoda has been erected to shelter the Shah when he comes this way, and entice him to stop and admire the loveliest scene in his dominions. Was this building the outcome of his Majesty's own wish, or the result of an inspiration on the part of the Austrian engineer who constructed the road some twenty-six years ago? The zigzags below the pagoda are so steep as to make riding impossible, and the excuse to dismount may be appropriately made, notwithstanding that a stout fence of stonework pillars, with wooden beams, now precludes all danger of falling into space. Towering isolated rocks, which here overhang the track, would each, in a more frequented country, have its distinctive name, and be recognized as the "Eagle's nest," the "Cathedral rocks," or the "Cheddar cliff," respectively. About half a mile below the pagoda a boring or tunnel, 15 feet in length, has been made in the live rock. Gasteiger Khan, the Austrian who built the road, apparently made the most of this, to the Persian mind, extraordinary feat in engineering. On the south side of the tunnel are two inscriptions; and a bas-relief in alabaster has been let into the eastern side. This slab represents his Majesty, Nasiru'd-din Shah, shooting from horseback at a leopard or lion, whilst hounds and hawks pursue other game both in the foreground and on the horizon. In the rear of his Majesty is seen an escort drawn up with military precision. On the north side and over the centre of the arch of the tunnel, Gasteiger has immortalized himself in a Latin inscription, setting forth his distinctions and titles. The strings of mules that bring charcoal, dried fish, and the main rice supply from Mazanderan and the shores of the Caspian to Teheran pass this way.

We soon got into less rocky ground, where the slopes are covered with forest of sycamore, oak, and hornbeam, with underwood of medlar and crab-apple. Butterflies flit about; a lovely large one with black wings is very remarkable. From far below is heard the chop, chop, chop, of the charcoal-burner, while a thin wreath of smoke marks the spot where his devastation is going on. In two places small rills of water cross the track, and here and there rude limekilns show where the stone had been burnt to make mortar for the pillars of the protecting parapet.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

One hour and twenty minutes from the pagoda, and we are at the end of the next great spur, and 400 feet below the former. Here the zigzags begin again with a vengeance, and we decide to stop for breakfast. Gasteiger Khan has chosen this point as another suitable halting-place for royalty, and an elevated platform with a rude stone seat gives an excellent place to spread our carpet. The view from this platform (named the "Takht-i-Shah," or King's throne) is in its way as fine as that from the "pagoda." Looking up-stream, you seem to be absolutely in the centre of the valley or causeway. One thousand feet below, still invisible in its tortuous chasm, runs the course of the river. Picturesque precipices, fringed with forest, scored with cascades, and rich with verdure wherever grass can grow, lead the eye up to gentler slopes and park-like clumps accidentally spared by the charcoal-burner, whose fire is ever at work, but is unable to more than temporarily unclothe these verdant mountains. Such fairy glades and cool grots did we look into across the chasm! What a place for *shikar!* But what a chance of breaking your neck and of losing your quarry if you killed it! Whilst we were thus soliloquizing, the sound of three shots rang out from across the chasm, and the sense of distance and the vastness of the scene was brought home to us by the fact that our three pairs of eyes could not see the smoke of the shots, much less the game or the hunter. A passing peasant informed us that the sportsman was one Hidáyat by name, and that he was after ibex, of which he had killed two on the previous day. How this man had got news from such a distance, for there was no way nearer than round by Valiabad, was a puzzle to us. He looked too much a man *ingenui vultus* to have invented his facts for our benefit; yet, in spite of his manner and appearance, we very much doubted them. Looking down-stream, the rift is observed through which the Ogham river comes to meet the Chel-hauz, and the latter shows itself, a foaming white streak, for a few short twists of its madding course. There is no sign of a definite opening through which the river can escape to the sea; ridge interlocks ridge, and snow-capped mountains rise into the distant sky, apparently leaving no means of exit. After breakfast, our baskets were filled with hart's-tongue, spleenwort, *Adiantum nigrum*, and polipodium ferns. Many varieties of seedum were seen in bloom, one species being almost as large as a house-leek. Roman laurel and grass-fern were plentiful.

The morning of the 25th broke cloudless and bright. Two of our party were preparing to make an exploration seaward, to trace the egress of the waters to which our attention had been drawn, when the two shikaris of the Nasru's-Saltaneh arrived in camp with the news that they had marked two bears up-stream in the Shah's preserves, and that they were sleeping amid brushwood and tall grass in one of the mountain valleys, only a few miles from our recently traversed road. The information seemed so authentic, and the men who brought it gave such straightforward replies to our cross-questions, that all other arrangements were put aside in favour of a proposed bear-hunt. Accordingly, we filed out of camp, and took the road to the Keravend pass, revisiting the hill which had attracted us by its luxuriant flowers, but on the summit of which the main object was now a bevy of tawny-coloured vultures awaiting an opportune moment to assail the carcase of a horse. We were soon joined by the *Shikarchi-Bashi* and four beaters, or keepers of the royal preserves; but they professed ignorance as to the presence of the bears, and the first-named functionary took upon himself to deny the truth of the report about them. His action did not, however, shake our confidence in the veracity of the Nasru's-Saltaneh's men.

Having come out of the scrub on to the grass of the upper mountain slopes, we were sitting at luncheon by a stream, when our informants were seen to conduct the *Shikarchi Bashi* over a neighbouring crest; and ere we had completed

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000033

مكتبة قطر الوطنية
Qatar National Library

our repast by partaking of the conventional cup of coffee, one of them returned to announce that the bears were still in their old place. Our first impulse then was to toss for places and shots. We were four in number. Two, who had previously shot big game in India as "strokes," merely tossed who should accompany them. It was settled that "stroke" No. 1, with his "bow," should remain beside the ravine at the head of which the bears lay, and that "stroke" No. 2 and "bow" No. 2 should accompany the beaters, and, making a *détour*, head the game down the ravine. This was all very well to talk about, but when it came to going up the side of the mountain at anything like the pace the beaters set, "bow" and "stroke" Nos. 2 found it a most difficult proceeding. The young *shikari* Ali was leading at a prodigious pace, and had to be spoken to very roughly, even threatened with punishment, ere he would slacken it. At length it was evident that, if the ravine head was reached, "bow" and "stroke" Nos. 2 would be so blown that it would be hopeless for them to try and shoot; so they took up a position behind rocks commanding the brushwood clump where the bears were said to be lying, as well as the opposite slopes—in fact, similar to that occupied by "stroke" and "bow" Nos. 1, only some 250 yards higher up. Between the two positions, on the opposite slope, were other clumps of brushwood, and the bears were as likely as not to be in them. The energetic beaters were soon seen throwing stones into the brushwood, and for some moments without result. Then suddenly out dashed a lovely fluffy brown bear, and made for the waterway down the ravine. She was followed by a youngster of a year's growth, about the size of a large sheep-dog. In colour the young one was dark brown. The beaters caught sight of the youngster, though they had not seen the old one, and set up frantic yells. Immediately after breaking cover they were lost to view, but the old one soon reappeared, making straight for No. 2. "Stroke" No. 2, having won the toss for the first shot, waited till she was within 70 yards, where she paused and turned half round, apparently to look for the youngster. The beast was then hit hard in the shoulder, and eventually fell plugged with four more bullets than were necessary for her destruction. The youngster now appeared running across the stony side of the mountain to the left front. It was a difficult shot, as he was going a good pace and rather uphill. The result was he was missed clean, and by the time the guns were reloaded there was nothing to be seen but the ears of the beast as it crossed the ridge within easy range. The youngster pegged away gaily over the mountain, and was lost to view. The behaviour of the natives around us, when the dead bear was hauled out of the thicket, supplied a good illustration of the excitability of the Persian character. One youth completely lost his head, and it was only when our own servants arrived that we could get the carcase slung on a stick and carried to a mule for transport to camp.

The Persians had no idea of the meat or skin of a bear being of the slightest value, and it seems that when the Shah shoots one he throws the body, skin and all, into the nearest river, after having shown it to his wives and his other women. There was great difficulty in getting the beast skinned, but liberal *bakhshish* eventually prevailed. The *Shikarchi Bashi*, meanwhile, was taking the credit of the whole affair, and pointing out how well *he* had arranged the beat, and how that all presents that were to be made should be made through him. This meant that no one else would get a *sou*. Eventually by plain speaking he was subdued, and retired, not to appear again for the next three days, *i.e.* till there was a further chance of extorting lambs from villagers.

On June 26 two of our party started for our projected trip to Lower Mazanderan, past the pagoda, and down the Takht-i-Shah, a road already described beyond

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000088

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the latter point. The face of the mountain is again rock, and the road twists round the contortions of the strata in a very ingenious way. About 3 miles from Takht-i-Shah, Gasteiger Khan seems to have run out of patience, or, more likely, of funds, for he makes a dash for the bottom of the gorge by zigzags such as no laden beast but a mule could get over. Just at the end of these a beautifully clear tributary joins the Chel-hauz on its right bank, and here we watered our tired animals. The river itself was disappointing; rushing and plunging as madly as ever, its turbid waters gave no prospect of fly-fishing, and it seemed doubtful whether even salmon could be hoped for. We had reached a new flora of fig-trees, alders, and elms, with thorny shrubs for undergrowth. Beside the river, patches of corn, ripe for the sickle, were being cut by men and women. The latter made no pretence of covering their faces, and their crimson or scarlet bodices and petticoats, though generally ragged, were extremely picturesque. As a rule handsome, they had, like most women condemned to hard work out-of-doors, a sad expression. Here the small fields were more or less fenced; and the mountains, less precipitous than at Hazar Champ, were clothed with forest to their summits, except where patches of cultivation occupied moderately level spurs. Now and again the encampments of the reapers, hard by the boiling river, showed where they ate, drank, and slept in the open, a tree felled by fire forming a bridge of ingress and egress with some otherwise isolated field. At the foot of the Hazar Champ, the Ogham Rud falls into the Chel-hauz. Up the rocky valley of the former river there is a road to the mountainous district of Hazar Be-ar.

Three miles below the aforesaid confluence of the Ogham Rud, the Maka Rud, with its gentle current, falls in on the left bank of the main river. The Maka Rud valley is most picturesque, more cultivated and less rugged than any we have yet seen. Half a mile below the bridge that crosses this tributary, a green sward hard by the river, with a lovely view in front and picturesque rocks behind, lured us to encamp. Here two alder trees, the one from the right bank having fallen over, as it were, into the arms of the one on our side of the river, formed the piers to a rustic bridge, leading to a small farmer's homestead or huts.

Whilst our tents were being pitched, we crossed over to eat our lunch under the shade of these trees, and were soon joined by a ragged but picturesque individual, who gave us a *salám* of welcome, and showed great interest in our proceedings. He, like all Mazanderanis, was of more civil and gentlemanly instincts than the ordinary Persian. Being one of the landed proprietors of the district, we dubbed him the Laird of Rudbarek, from the name of his domain. He was one, he said, of three brothers who had inherited the freehold of the mountains on either side, and of the cultivated ground on both sides of the river below the confluence of the Maka Rud, and that they paid taxes to the Nasru's-Saltaneh. The Laird was now threshing and winnowing his crop of barley, and anxious to sell us forage, milk, and butter-milk. If only he had been better clad and cleaner, our friend would have been quite an enviable personage. Accompanying us as he did during the remainder of that day and the greater part of the following, we got to know him very well. Indeed, from the first he seemed to have no reserve with us, and we treated him accordingly; moreover, as he was a keen sportsman, we had many subjects of conversation in common. He had shot bears close by his domain, and followed the Mazanderan stags every winter, when they were driven down from the upper ranges. Looking at the lovely glades high up on the mountain-side, he pointed out spots where he had killed extra fine animals, with antlers of twelve points, and more. Strange to say, he knew nothing about preserving skins, and the fact that they could be utilized as a warm covering for himself and children seemed to him quite a revelation. Stags' horns, he said, were in demand, and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000004

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

hucksters came round regularly to buy them, as well as salted salmon. He was much interested in our rods, flies, minnows, and tackle, and quite expected to see us haul out lots of fish, though August, he admitted, was the time when the rivers get clear and the pools yield their supplies, whether to the spear at night or to line by day. No hooks on lines are used on these occasions. The Laird said that he got on an average sixty salmon a season, varying from fourteen to twenty-five pounds each. We started whipping the milky waters of the river as soon as the sun got behind the mountains, our native friend showing us the pools where the salmon lay, and the spots where the brushwood and trees along the bank would allow of a fly being thrown. These two requirements for success did not often coincide, and the Laird looked quite crestfallen when told that some deep swirl was unapproachable with a fly. At length, as a fly would not entice, a minnow was put on, and the ground gone over again. Just as it was beginning to get dusk, at a lovely spot where the river, passing a huge rock, formed a magnificent run, a fish was hooked. The Laird, though delighted that this proof of his veracity had at length been vouchsafed, was not a bit over-excited, managed the landing-net like an old hand, and eventually brought a salmon trout to bank, weight about fifteen ounces. The fish was free when landed; probably it was accidentally hooked, and had not seen the minnow in the turbid water. In any case, it was the first salmon trout that had been killed with a rod in a Persian river flowing into the Caspian.

The next day, the 27th, we made an expedition northwards, down the river for a two hours' sharp ride. The scenery was magnificent. The river, ever headlong, had a more open valley, allowing of groves of stately alders here and there. The cultivation climbed higher up the slopes. Villagers in all directions were gathering the harvest, and stacking the corn on platforms raised to such a height that the cattle could find shelter underneath, whilst the straw could not be stolen. Wild grape-vine, figs, and pomegranates were in all the nooks, from which rills of water in many places crossed the road. Thick hedges of thorny stuff guarded the way on either side, and gave an impression of there being some sense of care and industry in the tillers of the soil, though this was dissipated by the sight of clumps of thorns dotted about amidst the crops. This charming foreground was even surpassed by the more distant views. We could now see far above the mountains that shut in the river. On its right bank forests clothed them as far up as the snow and cold of winter permitted. Above the forests grassy rounded slopes, fit pastures for deer, ibex, and moufflon, carried the eye to summits where snow still clung even in the mouth of June.

On the left bank the country was less steep, so clusters of mud huts could be seen here and there. Veritable snowy ranges formed the background far away to the south.

Further north, as the valley opened out the vegetation became more sparse, as though we had reached a belt where the rain-clouds seldom touched, but passed over to break on the higher ground. Further still away to the north, thick forest was again visible, clothing all the mountains, which rose to a considerable altitude. We lunched in a grove of ancient alders on an island in the river near to the mosque of Bandi, with its roof of picturesque shingle, showing we were near a forest land, and one where the ordinary mud roof of Persia was unable to cope with the rainfall.

Reluctantly we returned northwards; time would not permit of our pushing down to the sea. That evening a try was again made for fish, but without success. The 28th found us climbing up the Hezar Champ, and a terrible climb it proved. The black butterflies were gay as ever, and a Bohemian wax-wing visited us at lunch, which we ate in the shade of Gasteiger Khan's tunnel.

That night we pitched our tents near our former camping-ground of Valiabad, and the next day pushed over the Kendevan pass and down the Laura valley to-

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000059

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

where the Sheristanek falls into it at Doab. The next morning the *Shikarchi Bashi* appeared, but not till one of our party had started over the mountains by the short cut for home, hoping to get a shot at ibex on the way. The rest of us were honoured with a full parade of lambs at every village through which we passed, and on July 1 we reached our homes at Gulahek.*

THE MONTHLY RECORD.

THE SOCIETY.

The New Session.—The first meeting of the New Session will take place on Tuesday, November 10. It was hoped that Dr. Nansen might have been able to come to England and open the session with an account of his remarkable expedition. Unfortunately, he will not be able to leave Norway till towards the end of January, when it is expected that he will address the Society. The first paper of the session will be an account of the expedition under Mr. Jackson, which is pushing its way and carrying out scientific observations in Franz Josef Land; the paper will be by Mr. Arthur Montefiore Brice, as will be seen from the programme inserted in the present number. This will be followed before Christmas by papers on Uganda and Unyoro, by Lieutenant S. Vandeleur, and on the Sources of the Niger by Colonel J. K. Trotter. Other interesting papers, as will be seen, are in preparation for the meetings after Christmas. During the session special meetings will probably be held in connection with the 400th anniversary of the voyage to America by Cabot and of the route to India by Vasco da Gama. For other special features reference is made to the Programme.

Special Medal to Dr. Nansen.—At a recent meeting of the Council, it was decided to award a special gold medal to Dr. Fridtjof Nansen, in recognition of the value of the geographical and other scientific work which has been accomplished by his North Polar Expedition. Dr. Nansen has already received a Royal Medal from the Society.

EUROPE.

Geographical Work in Finland.—The Finnish Geographical Society at Helsingfors has recently sent us their publications for the years 1894, 1895, and 1896, which show a record of solid geographical work of a very satisfactory character. There appears to be an awakening to the value of geographical study in Finland, which is accompanied, not only by the production of such memoirs as the volumes under notice contain, but by an earnest effort to adopt whatever is good in the geographical teaching of other countries in the schools of Finland. The papers in the *Vetenskapliga Meddelanden af Geografiska Föreningen i Finland* are

* For a general illustration of the country traversed by Colonel Wells, the reader is referred to map of a Route along the Alburz Mountains, between Tehran, Astrabad, and Shahrud, by Lieut.-Colonel Beresford Lovett, R.E., to be found at page 120, vol. v., *Proceedings* (New Series) of the Royal Geographical Society. The section of country now treated may be identified by the names Gatchasir and Waliabad on that map, and is between long. 51° and 51° 40′.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000006

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

published in the Swedish language, with a German abstract. Thus, as in the memoirs of the Hungarian Geographical Society, which publishes French or German abstracts, the subject of the papers can be at once perceived by the scientific men of Western Europe, and a full translation can be undertaken when the importance of the memoir seems to warrant it. Much inconvenience would be saved, and the labours of geographers would be simplified, if other societies published in little-understood languages would follow the same example. It would be an excellent rule if every scientific paper not printed in English, French, or German were accompanied by an abstract in one of these languages. A. Thesleff gives a description of the sand-dunes of Eastern Finland, where they are increasing rapidly on account of the destruction of forests. The maximum height of these dunes is from 70 to 80 feet, and they are much less covered with vegetation than the dunes of other countries. J. E. Rosberg describes the sand-dunes of the eastern shore of the Gulf of Bothnia, which have been very little studied. All the dunes are found in the neighbourhood of rapid rivers carrying much sediment, and as a rule on the south side of the river-mouth, because of the prevailing northerly wind. They stretch in most instances in parallel chains along the coast, with lagoons between the ridges. The greatest height observed was about 65 feet, and the onward movement amounted to a little over 20 feet per year. The formations were found frequently at a considerable distance inland, up to 15 miles from the sea. The same author gives a long memoir on the deltas of the northern part of the Gulf of Bothnia, tracing the changes which have taken place in many of them in historic times, and endeavouring to arrive at a theory of delta-growth on a coast which is rapidly rising. He recognizes four main types: (1) True "Scheeren deltas" with widely distributed alluvium, like that of the Kyröelf; (2) partial "Scheeren deltas" with numerous false deltaic islands, like the Torneelf; (3) submarine deltas freshly upheaved to the surface, like that of the Uleelf; and (4) true submarine deltas not showing on the surface, like that of the Kalajoki. The memoir is fully illustrated by plans of a large number of Finnish deltas. R. Hammarström describes with maps the depth of Lake Lappajärvi, and R. Boldt that of Lake Lojo: the former lake, although larger and deeper, closely resembles Derwentwater in its bathymetrical type; the latter appears to form a deep uniform basin, surrounded by a wide shallow rim bearing numerous islands. R. Hult deals with the distribution of timber-trees in Finland, and R. Herlin elaborates the palæontological plant-geography of northern Satakunda.

Ancient Topography of the Étangs de Hourtin and Lacanau.—An interesting paper by M. Dutrait has recently been published in the *Bulletin* of the Bordeaux Society of Commercial Geography, on the ancient topography of the lagoons (étangs) of Hourtin and Lacanau and the probable position of the ancient port of Anchises, Department of Gironde. The results of the discussion are as follows: (1) The ancient coasts of Aquitaine were cut up into gulfs. (2) These gulfs have been obstructed and changed into lagoons, or lakes, owing to the deposition of the sands on the coast, arising from the destruction of soil resulting from forest clearing, and by the subsidence and erosion of a large island which formerly lay off the shore. (3) The lagoons of Lacanau and Hourtin, by their level, depth, and other details of their topography, agree exactly with this general rule. (4) The port of Anchises mentioned in 1538, in use until 1700, but which disappeared in 1770, was situated on a considerable estuary, the northern outflow of the Étang de Hourtin; the position of the mouth and the direction of the estuary are well known. (5) The village called Anchise was built on the edge of the marsh of Belsarieu, where the waters of the outflowing stream are lost from sight, being buried under the dunes to the south-west of the forest of Brisquette, the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

advance of which had obstructed the outflowing water. (6) The Étang de Lacanau has had two outlets, one to the north, the Trou-du-Fer, the other from the centre, the Port Saint-Vincent, whose position on the coast is exactly determined. The author adds that the name Balania, which he finds is derived from the celtic word *balan* = broom plant, occurs on many old charts in place of the name Anchise; and that the dunes to the south of the mouth of the Anchise bear the name "les Genêts" (*i.e.* brooms).

ASIA.

Exploration of the Amu-daria.—It appears that during the stay of the Khan of Khiva at Moscow at the time of the coronation of the Czar, it became known that the Amu-daria had again begun partly to flow in the Uzboi, since a dam, which directed all its waters into Lake Aral, had been destroyed by the inhabitants of the khanate of Khiva. The great river has already reached and partly filled up the Sari-kamish depression, which is situated, as is known, to the south-west of Lake Aral. Consequently, General Glukhovsky, who for years has devoted his energies to the scheme of diverting the Amu into the Caspian Sea, and has published a detailed work on this subject ('The Diversion of the Amu-daria into its Old Bed leading to the Caspian Sea, and the Acquisition of a Water-communication from the Frontiers of Afghanistan to the Caspian Sea, the Volga, and the Baltic Sea,' St. Petersburg, 1893), has induced the two ministries of War and Communications to send out a new expedition to explore the present possibilities for such a canal. The last telegraphic news is to the effect that General Glukhowsky is already on the banks of the Amu, and a full report of the present state of the river is soon expected.

M. Bonin's Journey in South-Eastern Tibet.—An important journey of exploration in the region between the upper Yangtse-kiang and its tributary the Yalung-kiang has lately been carried out by M. Bonin, French vice-resident in Tongking (*Comptes Rendus*, Paris Geographical Society, 1896, pp. 234, 250). South of the main route from Peking to Lhasa this region had remained unvisited by Europeans, and in great measure even by the Chinese themselves. A surprising result of the journey is the discovery that below the sharp angle made by the Kinsha near the town of Li-kiang (at which angle Captain Gill finally left the stream on his journey to Tali-fu in 1877), it makes a wide sweep to the north, joining the Yalung in about 28° N. lat. instead of 26° 35′, as has been hitherto supposed. The stream which has been considered as the Yang-tse, and which was crossed by Mr. Hosie under that impression in 1883, turns out to be merely a small tributary. The current delineation of the river has been derived from D'Anville's map, but as the agents employed by the Jesuits in their survey of China were unable to penetrate into these wild regions, that map was based (for his particular section of the country) on vague reports only. From Tali-fu M. Bonin proceeded north to Li-kiang, which town he was the first European to visit. Hence, instead of crossing the Yang-tse by the iron bridge over which passes the route to Yong-pe, he turned north-west, and crossed over to the left bank at the sharp angle above referred to. Before finding a route across the precipitous mountains which bound the stream on the north-east, M. Bonin was obliged to ascend the stream for several days. The plateau of Tsong-tien was at last reached by a snow-covered pass 14,500 feet high, and a terribly rugged and difficult path led thence to Yunning-tu-fu (Yung-ning). During the last day's march the traveller looked down on the Yang-tse flowing below in a deep gorge.* Yunning-tu-fu,

* M. Bonin did not, therefore, trace the river continuously during its northward sweep, but it is to be supposed that he did not fall into the error (otherwise attributable to Mr Hosie) of mistaking a tributary for the main stream. Is it just possible that a bifurcation takes place, such as was hinted at in a neighbouring region by Garnier? (see Yule's introduction to Gill's 'River of Golden Sand,' p. [107], (abridged edit.).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000015

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

about which hardly anything has been known hitherto, is peopled by a mixture of Chinese from Yunnan, Kutsongs, Mosos, and Sifans. North of this town the explorer traversed the Tibetan kingdom of Meli, into which the Chinese even have never penetrated. It is entirely in the hands of the yellow lamas, to whom the king himself belongs, and is known to the Chinese on this account as Huang-Lama ("yellow lamas"). The lamasery (placed on the side of a mountain) was composed of three-storied houses with white walls, balconies, verandas, etc., which recalled a town of South Europe. From Meli M. Bonin crossed the Yalung, and made his way over several very high passes to Ta-tsien-lu.

AFRICA.

Captain Bòttego's Expedition.—Letters describing the progress of Captain Bòttego's Expedition to Somaliland down to March last have been published in the *Memorie* of the Italian Geographical Society (vol. vi., 1896, p. 149). The leader himself writes, first from Lugh, the important Somali town on the middle course of the Jub, and afterwards from a point a little south of the Daua river, in about 40° 40′ E. long. Captain Ferrandi also writes from Lugh, where he has remained as chief of the newly founded Italian station. From Brava the route (shown on two sketch-maps accompanying the letter) led first westwards to the Webi Shabeli; then northwards to the district of Baidoa, where the population is said to be more dense than in the most thickly peopled parts of the valley of the Po (apart from the large cities); and thence again west to the Jub, or Ganana, at Lugh. Baidoa forms a perfectly level plain, about 1650 feet above the sea, with a soil devoid of pebbles, producing abundance of durra and cotton. Lugh had been attacked by a band of marauding Amharas (who had come from Imi by way of the Web) shortly before the arrival of the expedition, and the inhabitants had abandoned the place. They returned after Captain Bòttego's arrival, but the prevailing feeling of insecurity had prevented the arrival of the usual caravans from the Benadir coast for the interior. The country between the coast and Lugh is partly composed of red sandy clay, rich in magnetite, and occasionally mixed with fragments of crystalline rock, and partly of grey or yellowish strata. The former is covered with trees and thorny scrub, with little grass, while vegetation, and especially grass, is much more abundant in the grey soil. Beyond Lugh the expedition followed the south bank of the Daua for some distance, afterwards diverging from the stream and ascending the plateau to the south. Along the Daua the strata were generally horizontal, and seemed to represent an old sea or lake bottom. Salt is found over the whole district, especially east of the Web river, where is a mine, near which ruins of an ancient city were reported. Captain Bòttego heard frequently of a river named Sagan, in the direction in which he was marching. This river is said to flow into a lake (not Abbaia), and to be distinct from the Omo. The Amhara Burgi dwell on its banks. Meteorological observations have been made throughout by Captain Bòttego, who gives the broad results in his letters.

French Expedition across Equatorial Africa.—The two French travellers, M. Versepuy and Baron de Romans, have accomplished a journey across Africa from east to west by way of Lake Albert Edward and the equatorial forest (*Revue Française*, September, 1896). Their original intention had been to reach Mount Kenya and Lake Rudolf, but, the road in this direction being closed by hostilities with the Masai, they were obliged to change their plans. After leaving Katue, on Lake Albert Edward, they came into collision with hostile natives. Through the forest—in which they suffered severely from fever—they appear to have, on the whole, kept to Stanley's route, though in the reverse direction. We regret to state that M. Versepuy succumbed at Chantilly, soon after his return to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000072

مكتبة قطر الوطنية
Qatar National Library

France, to dysentery, contracted during the journey (*Mouvement Géographique*, No. 36).

French Steamer for the Shari.—M. Gentil, who is proceeding to the Shari basin by way of the Ubangi, taking with him a small steamer in sections to place upon the former river, has, according to the September number of the *Bulletin du Comité de l'Afrique Française* (p. 275), been delayed for some months at the station of Krebeje, founded by him in 5° 46′ N. lat., on the banks of the Tomi, an affluent of the Kemo, itself a northern tributary of the Ubangi. M. Gentil proposes to make for the Nana (a southern tributary of the Gribingi, explored by Maistre), on which he hopes to launch his steamer (see also *Revue Française*, 1896, p. 492).

The French in the Niger Basin.—The *Bulletin du Comité de l'Afrique Française* (1896, No. 8) contains the account of a journey in the west of Borgu by M. Deville, who, early in 1895, was commissioned to visit the district of Buay, which had not been reached by the French expeditions of 1894–95 to the region north of Dahomé. According to M. Deville, Borgu is composed of several independent kingdoms, of which Buay is one. The chief town is placed by him about 50 miles north-west of Niki (visited by Captain Lugard), and the kingdom is said to extend from 10° to 12° N. lat., and from 2° 20′ to 4° 20′ E. long. It lies on the watershed between the basins of the Weme and Niger, the line of partition nowhere attaining a greater altitude than from 1300 to 1650 feet. There are some forests on the side towards the Niger, but elsewhere the surface is covered with tall grass, interspersed with *karite* trees, and supplies pasturage for the flocks of the Fulah herdsmen. It is furrowed by many streams, which mostly dry up during the hot season, but enough moisture remains in the soil (which is very fertile) to admit of cultivation. The natives possess a small but active breed of horses. M. Deville thinks that the name Adafudia, given by Duncan as that of the chief town of this region, may be composed of two words used in the country as an expression of contempt, the meaning of which was misunderstood by the English traveller.

AMERICA.

Mr. Fitzgerald's Expedition to the Chilian Andes.—Mr. E. A. Fitzgerald, who recently returned to England from his expedition in the New Zealand Alps, has started on a fresh journey, the main object of which is the ascent of Aconcagua the highest summit of the Andes. The expedition consists of ten persons in all—Mr. Vine, geologist; Mr. de Trafford, surveyor; Mr. Philip Gosse, naturalist; and Mr. Fitzgerald, with guides and servants. From Buenos Aires, the party will proceed by railway to Mendoza. Here they will commence the ascent of the mountains, making direct for Aconcagua, and afterwards for the side valleys of the Andes. The objects of the expedition are scientific, and the ascent of the mountain will be made in a leisurely manner. Mr. Fitzgerald's object is to watch the effect of the various altitudes on the system, and from this to see whether it is possible to climb higher peaks in the Himalayas.

Project for a Route from the Amazons to Cuzco by way of the Purus.—The distance from the headwaters of the Purus to the left bank of the Amarumayu, or Madre de Dios, is about 90 miles. The advantage of such a route would be that there are no rapids on the Purus, as is the case on the Madeira. It is proposed by M. A. Pimenta Bueno that the mixed Commission which is to fix the Peru-Brazilian boundary-line between Madeira and Yavari, should also be instructed to explore the country between the headwaters of the Purus and Aquiry, and the left bank of the river Madre de Dios.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000039

مكتبة قطر الوطنية
Qatar National Library

Explorations in the Argentine Republic.—On May 15, 1896, Dr. F. P. Moreno, director of the Muséo de La Plata, returned to Buenos Aires from his great journey of exploration begun in January. In December last year Dr. Moreno had sent out from Mendoza several expeditions composed of twenty-six engineers, geologists, botanists, and cartographers for the exploration of the districts bordering on the Andes lying to the south. He himself followed in the middle of January, and traversed the country between Mendoza and 47° S. The route followed was across the Rio Grande and the Colorado to Chos-Malal, the capital of Neuquen, thence to Codihue, to the Rio Bio-Bio, across the Collon Curá to Junin de los Andes and the lakes of Nahuel Huapi, Lacar, Caleufú and Miaten. These explorations complete a series begun about the end of 1894 on the Bolivian frontier, in the course of which 25,000 miles have been travelled over by the various expeditions. The collections, of the most various kinds, fill 400 chests, and 2000 photographs have been taken. The territories of Neuquen, Rio Negro, and Chubut have been explored and surveyed with special care. Dr. Moreno is convinced that the much-talked-of but still unidentified Bariloche pass lies on the Lago de Gutierrez. North of Lago Nahuel Huapi eight new lakes have been discovered, and fifteen south of it. The mysterious Rio Teteleufu is now accurately known from its source. In many places it has a depth of more than 25 feet. The beauty and fertility of the neighbourhood of Nahuel Huapi are much praised, and it is stated that a brilliant future awaits this tract as soon as it is connected with the east coast by a railway.—Dr. Polakowsky in *Petermanns Mitteilungen*, 1896, No. 9.

POLAR REGIONS.

Mr. S. A. Andrée's Polar Expedition.—In the last issue of *Ymer* (1896, Häft 3), Mr. S. A. Andrée publishes a report on his balloon expedition to Spitzbergen. It is known that the *Virgo*, which had on board, besides the balloon expedition, a party of geologists and zoologists, left Tromsö on June 14. After the steamer had called at Isfjord, and next at the Norway islands, a suitable place for building the balloon-house was found, on June 23, on Danes' island. It took nearly one month to land the balloon and to build a house for filling it. It was ready on July 20; the filling of the balloon began on July 23, and in the evening of July 27 the balloon was filled and ready to start. But the expected winds from a southern quarter did not come, and on August 17 the expedition had to pack up the balloon (the ship was freighted till August 20 only), and it started on its return journey on August 20, reaching Göteborg nine days later. From a table of the directions and force of the wind, from July 27 to August 16, which is given by Andrée, it appears that during these three weeks the wind blew chiefly from northern quarters, or was very feeble and changing. Only on July 29 and 30, and next on August 2 and 3, was there for a few hours a feeble southern wind, which, however, changed in the afternoon to a wind from the north or north-east. It appears, moreover, from the journal of Captain H. C. Johanessen, who cruised north of Spitzbergen during the same time, that, with the exception of August 9, when a fresh wind blew for a few hours from east-south-east, and the next day when a feeble south-east, with snow, was felt, the wind was always from northern quarters. Andrée explains at length why he did not take advantage of these short hours, the chief reason being that these winds were too feeble to carry the balloon, with its guide-rope, any distance northwards. The idea of taking advantage of any wind for a polar balloon-journey evidently was also discussed, but was abandoned because it offered relatively little interest, and because all probabilities were in favour of the balloon being lost, if landing took place, as it probably would, in some uninhabited spot. The loss of the balloon would have raised the costs of a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007f

مكتبة قطر الوطنية
Qatar National Library

new expedition to 106,000 kroner, while now, the balloon being in working order, the costs of a new expedition would not exceed 53,000 kroner, provided that the next year's expedition is taken to Spitzbergen on board a ship of the Swedish navy. Mr. Andrée fully believes in the possibility of such an expedition, if only the balloon-house is ready earlier in the summer. There was no lack of southern winds in the earlier part of the stay at Danes' Islands. This year's expedition is not quite fruitless. It has proved the possibility of a balloon being filled in Spitzbergen, and of a pigeon-post being established between Spitzbergen and the Continent, while astronomical, magnetic, and meteorological observations were made, as well as geological explorations under Prof. De Geers, and hydro-geographical measurements under Prof. Arrhenius. At the same time Mr. Grönberg has made good natural history collections.

MATHEMATICAL AND PHYSICAL GEOGRAPHY.

Vertical Distribution of Snow Plants and Habitations.—Two papers on vertical distribution, by pupils of Prof. Ratzel, appear in the second volume of the *Wissenschaftliche Veröffentlichungen des Vereins für Erdkunde zu Leipzig*. Dr. Magnus Fritzsch gives the following figures (English feet) as the results of his survey of the Ortler Alps:—

Exposure.	N.W.	W.	S.W.	S.	S.E.	E.	N.E.	N.	Mean.
Snow-line, climatic...	9510	9840	10,070	**10,130**	9780	9750	9370	*9360*	9720
„ orographic	8330	8620	9000	**9040**	8940	8630	8420	*8310*	8630
Trees	**7620**	7420	7600	7350	7410	7340	*7110*	7280	7390
Woods	7000	7070	**7080**	6990	6960	6960	*6640*	6890	6950
Shepherds' huts ...	—	*6675*	**7680**	7150	7410	7070	7310	6880	7180
Cattle-tenders' huts...	—	6540	**7070**	6670	6290	6290	*5760*	6040	6400
Meadow hay ...	5290	5700	**6920**	6510	5840	5630	5670	*4840*	5800
Cereals	*3960*	4660	**5390**	5340	5120	4960	4020	4080	4560
Permanent habitations	3890	4930	**5460**	5200	4920	4120	3860	*2760*	4520

The south-western and western slopes of the mountains are the most favourably situated, as is indicated by the bolder figures, which show the maximum height of each line; while the figures in italics, denoting the lowest position of each line, are found for the north-eastern and northern slopes. The orographic snow-line is "the line which joins the wreaths of snow protected by their position and the nature of the surrounding ground." It is interesting to compare these figures with those obtained by Dr. Hupfer for Etna. In summer some wreaths of snow lie on the mountain, as they do on Ben Nevis in our own country, although its summit is below the climatic snow-line. On Etna, in 1893, there were five small snow-wreaths on the north-west, north, and north-east of the summit plateau, between 9000 and 9900 feet. Dr. Hupfer gives the vertical zones of the mountain as follows:—

III. Waste region { (*b*) Snow-wreath region. (*a*) Pasture region (8850 feet).
II. Forest region { (*b*) Summer-green or birch region (6560 feet). (*a*) Ever-green or pine region (6070 feet).
I. Cultivated region { (*b*) Summer-green cultivated plants, and upper limits of agricultural region (5080 feet). (*a*) Ever-green cultivated plants, and upper limits of the olive (2620 feet).

It would appear that the forest limit is somewhat lower on Etna than on the Ortler Alps, while agricultural operations are carried on only about 500 feet

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004f

مكتبة قطر الوطنية
Qatar National Library

higher on the slopes of the volcano, despite its more southerly and insular position, which may be partly explained by the dryness of Sicily during the warm months. The beautiful map which accompanies Dr. Hupfer's paper shows that the distribution of trees is neither so high nor so extensive as it was seventy years ago.

GENERAL.

Population Maps.—In the second volume of the scientific publications of the Leipzig *Verein für Erdkunde* there are two papers on the distribution of population, one on the kingdom of Saxony, by Dr. Richard Buschick, and the other on West Central Africa, by Dr. Vierkandt. The former is of especial interest from the map, which shows the distribution of the people by using various symbols for small settlements, and various combinations of thin and thick lines which follow the boundaries of the settlements, whose areas are large enough to be traced. The map is fairly effective, and gives more precise information than that constructed on the usual plan of colouring the chosen political region according to the average number of inhabitants per unit area. In the case of a large-scaled map, such as that given for the Zwickau district, the white space is actually uninhabited. The value of these maps would be enhanced if the space inside the lines bounding an area of settlement were shaded or coloured to show the average density of the population per unit area, as well as the approximate number of inhabitants within these lines. The large number of villages with between twenty and two hundred inhabitants, and their regular distribution on the lower lands, is in marked contrast to the relatively much greater number of single settlements and larger villages in the mountains. It is interesting to compare these maps with that constructed by Mr. Bosse for the Royal Scottish Geographical Society's beautiful *Atlas of Scotland*, recently prepared and published by Mr. Bartholomew. In this map the country without any permanent inhabitants has been outlined and left white, and the density of population below this line calculated for each parish and indicated in the usual way. In addition, the number of inhabitants in each town has been indicated by special signs. This makes the map exceptionally graphic and precise in the way it presents population statistics. On comparing this with a contour map, it is seen that comparatively few inhabitants live permanently above 500 feet in Scotland. Dr. Vierkandt's population maps of West Central Africa are constructed in the usual way. The data, however, are very defective, and the author has usually to rely on the qualitative estimates of travellers. These differ according to the ideas of their authors, which are usually affected by the nature of the country previously traversed. The explorer coming from the desert is likely to term a region thickly inhabited that another, after passing through the populous parts round the lower Niger, would call thinly settled. The result of a critical discussion of the available information leads Dr. Vierkandt to conclude that ordinary estimates of the population of West Central Africa are too high, and he reduced Prof. Supan's total of nearly 37 millions to nearly 24 millions. With this alteration he points out that the total number of inhabitants in Africa, as estimated by Prof. Supan, is about 150 millions.

Place-Names.*—Besides a glossary of 266 pages, containing compact and interesting explanations of a number of well-selected names from all parts of the world, this new work by Canon Taylor contains a prologue of 35 pages, discussing and expounding many points of interest with reference to place-names, and an appendix

* 'Names and their Histories, alphabetically arranged as a Handbook of Historical Geography and Topographical Nomenclature.' By Isaac Taylor, M.A., etc., Canon of York. London: Rivington, Percival & Co. 1896.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of 88 pages, in which the elements most commonly met with in Indian, Turkish, Magyar, Slavonic, French, German, and English names are treated of. The last section is naturally the fullest. It extends to 46 pages, and is divided into five sections—on names containing survivals of grammatical inflection; on personal names; on names indicating occupations and status; on names of hundreds, shires, and parishes; and on those of towns and townships. This plan of relegating much of the matter to an appendix has many recommendations. It not only saves space, but it makes the subject dealt with more interesting and instructive. It ought, however, to be supplemented by an index containing references, both to the elements of names treated of and to the names explained or given as examples. In the prologue, curiosity is roused again and again about names about which no explanation is given in the glossary, at least under the names in question, and which cannot be found in the appendix (if they are there at all) without a long search. It is also to be regretted that there is no section in the appendix dealing with Celtic names in general, or Scotch and Irish names of Celtic origin in particular.

Geological Survey Report.—The Annual Report of the Geological Survey and Museum of Practical Geology for 1895 is a record of steady progress and much useful work. It contains the usual summary of work accomplished during the past year, to which every geographer studying a special region should refer. Perhaps the most interesting item in the report is the announcement that the half-crown machine-coloured geological map of the London district, on a scale of 4 miles to the inch, has sold well enough to justify "the expectation that the same system may be continued and extended." The issuing of geological maps at a reasonable and not prohibitive price will help geographers in every district, and we hope that the department will soon issue fresh sheets at a similar cost.

Popular Geography in Manchester.—At the Liverpool meeting of the British Association, a paper by Mr. J. Howard Reed was submitted, describing the work of the "Victorians," a number of members of the Manchester Geographical Society who deliver popular lectures free of charge. During the past five years over three hundred lectures have been delivered in Manchester and the surrounding districts, and over ninety thousand hearers have been reached. The audiences are principally of the working class, but also include the members of many well-known literary and scientific clubs, and students of continuation schools. The lectures given include such titles as: "Shaping of the Earth's Surface by Water-action," "Map Projection," "India," "China, Korea, and Japan," "Polar Exploration," "Across the Rocky Mountains," "Canada," "Across Africa with Stanley," "Uganda," etc. Applications for lectures are made to an honorary secretary, who conducts all correspondence and makes arrangements with the local societies and the lecturers. The engagement of the halls, printing, and similar matters are carried out on the spot by the local people. This system has proved so satisfactory, and the enthusiasm of the voluntary workers has been so well maintained, that no hitch has ever occurred. The terms on which the lectures are given are very simple. Any member of the Manchester Geographical Society or any affiliated society is entitled to apply for lectures. Lantern apparatus and volunteer operator are supplied when required. A nominal fee is charged for each lecture, travelling and lantern expenses being added when incurred. Any balance in hand at the end of each season is applied to the upkeep of lantern plant and the making and purchase of new slides. Another important branch of voluntary work consists in the analysis of some two hundred British and foreign scientific journals. This is most useful for scholars and students. It enables them to follow up, with ease, the literature on any special subject.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009f

مكتبة قطر الوطنية
Qatar National Library

OBITUARY.

Baron Sir Ferdinand von Mueller.

We learn with much regret of the death of Baron Sir Ferdinand von Mueller, K.C.M.G., F.R.S., the eminent Government Botanist of Victoria, Australia. For nearly half a century Von Mueller's name has been intimately associated with the progress of science and exploration in Australia, and especially with the development of its vegetable resources. He was born at Rostock, in Germany, in June, 1825, losing his parents at an early age. He obtained a training in pharmacy, and in his leisure time devoted himself to the study of botany and chemistry. In 1846–47 he studied at the University of Kiel, where he took the degree of Ph.D. For several years he investigated the botany of Schleswig and Holstein. In 1847, in order to counteract a hereditary tendency to phthisis, he emigrated to Adelaide, in South Australia, where he commenced his career as assistant to a chemist, and during the following four years devoted himself to the investigation of the flora of the colony. From 1848 to 1852 he travelled over 4000 miles, mainly for botanical purposes. In 1852 he was appointed Government botanist to the colony of Victoria by Mr. Latrobe, the first Governor, and here he at once entered upon the labours for the exploration of the continent and development of its vegetable resources and capabilities that only ceased with his death. From this year dates also his series of publications on the botany of Australia, which in extent and value represent no small proportion of an Australian bibliography. In 1855–56 he accompanied as botanist the expedition under the command of A. C. Gregory for the exploration of North and Central Australia, and was one of the four to reach Termination Lake in Central Australia. Some 6000 miles of previously unknown land was traversed, and abundant collections made of the various forms of vegetation. On Mueller's return to Melbourne he was appointed Director of the Botanical Garden of that city. Whilst rendering immense services, not only to Australia, but to many other countries, he failed to satisfy the wishes of the colonists for a garden which should, like Kew, be as ornamental as useful. Mueller was neither a practical horticulturalist nor a landscape gardener, and the Victorians, seeing with envy in the capital of a sister colony (Adelaide) the erection of a garden as æsthetic as scientific, relieved him of the directorship of the garden, at the same time, with rare liberality, retaining him in the position of Government botanist, with undiminished salary, library allowances, and appliances for pursuing his labour in scientific and economic botany.

Though mortified almost beyond endurance by this action of his fellow-colonists, Mueller, with undiminished zest and liberality, continued his exertions as their benefactor to the day of his death. He was the introducer into Australia of many useful plants from other regions, in exchange sending abroad plants native to Australia of more or less economic value. He had a leading hand in introducing that most useful of Australian trees, the eucalyptus, into Algeria, India, the Riviera, and other countries, in some of which it is of essential service as timber and fuel, and in others as an aid in draining marshy land. He was the first to raise the great *Victoria Regia* water-lily. Indeed, his immense knowledge as a botanist had almost always a practical end in view, and not a few Australian industries are largely indebted to him for their development. It was also partly due to his suggestion that the camel was introduced into Australia and first used for exploring purposes in 1860. His own travels in Australia for botanical purposes, on foot and on horseback, covered some 25,000 miles. After he himself had ceased, owing to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000073

مكتبة قطر الوطنية
Qatar National Library

his official duties, to be able to travel, he had a directing hand in many of the important expeditions that went out from Victoria as well as other colonies.

In recent years Baron von Mueller was actively interested in the promotion of Antarctic exploration, and was greatly disappointed that the efforts made, both in this country and in Australia, proved futile. He was a voluminous author, but his writings are mostly of a strictly scientific character. The titles of over a hundred papers by Mueller are given in the Royal Society's catalogue of scientific papers. This is exclusive of independent works on descriptive and economic botany, and of which his 'Fragmenta Phytographiæ Australiæ' covers about a dozen volumes. Almost from the date of his arrival in his adopted continent, he had entertained the ambition of producing a 'Flora Australiensis,' and when the several governments of the Australian Colonies appointed one of the most distinguished botanists in England, Mr. G. Benthan, F.R.S., to undertake the work, Mueller, at once recognizing the wisdom of the selection, and that an access to the Australian collections contained in European Herbaria was essential to the perfection of the work, generously offered the use of his own unrivalled Herbarim, notes, and observations, in aid of the undertaking. During the whole sixteen years occupied in the publication of this gigantic undertaking, which extended to seven volumes, Mueller was unceasing in his efforts to contribute to its success, working in unbroken harmony with its author throughout. Of his own numerous works three especially are of permanent value, the 'Eucalyptographia,' a history with excellent drawings of the Eucalypti of the continent; the 'Select Extratropical Plants eligible for Industrial Culture in Australia,' a work unique of its kind, and overflowing with valuable suggestions of a thoroughly practical nature; and his 'Introduction to Botanic Teaching in the schools of Victoria.'

Few men have received so many honours as the late baron. He was one of the first three in Australia to receive the Order of St. Michael and St. George; he was promoted to Knighthood in the Order in 1879. In 1871 he was made a hereditary baron by the King of Würtemberg. From Portugal and from Spain he received high orders. He was made a Fellow of the Royal Society in 1861, and in 1888 the society awarded him one of its Royal medals. He was a corresponding member of some 150 scientific societies. He had been a Fellow of the Royal Geographical Society since 1858.

Personally Baron von Mueller was a man of a warm heart and great kindliness of nature. Though a botanist by choice and profession, he was in other respects a man of great culture, interested in many branches of knowledge, and a lover of music, the practice of which art he zealously advocated amongst the young and old of the colony. He was a voluminous correspondent, ever ready to help his friends; somewhat vain, perhaps, but of a vanity that was never offensive. He has rendered services of a high order to Australia, in the history of the advancement of which his name will always be held in high honour.

Professor Josiah Dwight Whitney.

Professor Josiah Dwight Whitney, who died last August 24 at the age of seventy-seven, commenced the long series of geological labours which have made his name famous in 1840, when he was at work on the survey of New Hampshire. After spending two years of study in Europe, supplementary to his university training at Yale, he worked out the geology of the Lake Superior region in conjunction with Mr. J. W. Foster, the results being published in 1849, 1850, and 1851. These surveys involved a large amount of topographical mapping as a necessary preliminary to the geological delineation; and in most of his subsequent

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000011

مكتبة قطر الوطنية
Qatar National Library

work Mr. Whitney had occasion to lay the foundations by means of a pioneer geographical survey. In 1854, after several years' travelling in the west of the United States, he produced a work on the 'Metallic Wealth' of that country, including a comparison with the rest of the world. A similar volume, 'The Mineral Resources of the United States,' has since been made an official annual publication of the national geological survey, and is a document of the utmost value to students of economic geography. Mr. Whitney was engaged in succession on the geological surveys of Iowa, Wisconsin, Illinois, and California, devoting ten years' work to the scientific study of the last-named state. He was for a time Professor of Chemistry in Iowa University, and from 1865 until his death he has occupied the chair of geology at Harvard. It is impossible, in a brief note, to enumerate his published contributions to geological and geographical science. The name of Mount Whitney, the highest summit of the Rocky mountains in the United States, perpetuates his memory and records the esteem in which he was held by his contemporaries. Professor Whitney had been an Honorary Corresponding Member of the Royal Geographical Society for many years.

Dr. J. A. Moloney.

Dr. Moloney's death, at the early age of thirty-eight years, adds another name to the long list of victims to the hardships of African exploration, for to these must, no doubt, be attributed the aortic aneurism from which he suffered, and which ended fatally on October 5 last. Dr. Moloney was the son of the late Captain Moloney, of the 60th Rifles. He was born at Newry, in Ireland, and graduated at Dublin University, after previously studying medicine at St. Thomas' Hospital. His name first came into prominence as an African traveller through the part which he took in Captain Stairs' expedition to Katanga on behalf of the Congo Free State, which resulted in the extension of the state's authority over that part of the Congo basin. The death of Captain Bodson (the second in command) at Bunkeia, King Msidi's capital, and the dangerous illness of Captain Stairs, threw the task of bringing the expedition back to the coast on Dr. Moloney, who succeeded in so doing after countless difficulties and hardships. In 1893 he published an account of the expedition under the title 'With Captain Stairs to Katanga.' In 1895 Dr. Moloney was entrusted with a mission to the country west of Lake Nyasa, and succeeded in inducing several of the native chiefs to place themselves under British protection. He had been a Fellow of the Royal Geographical Society since 1892.

CORRESPONDENCE.

Makran.

Davos Platz, October, 1896.

If it will not be thought to be unduly prolonging the correspondence on this subject I should like to make a few remarks with reference to Colonel Holdich's letter in the *Journal* for the current month, and, in the first place, to express my regret for having misread him in the way he points out.

Colonel Holdich will, I dare say, be amused to learn that after putting Fahraj near Bampur "out of the question" I now find myself under the necessity of reinstating it as the starting point of Ibnu Khurdadhbeh's extremely puzzling route "from Fahraj to Sind." I am led to this by a further and more careful comparison of what is to be gathered on the point from the above-mentioned geographer with what is stated by Yakubi and Istakhri. After my previous and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007c

مكتبة قطر الوطنية
Qatar National Library

unfairly long communication I cannot ask for the space that would be requisite if I were to state the grounds of my new conclusion, which must await some other time and some different channel of publication, but I shall be happy to submit them privately to Colonel Holdich if he would care to know them. He would, I feel sure, be satisfied with them.

To put the result summarily, Fahraj near Bampur is the place locally called *Fahra* in the middle ages. Then the *Basurjan* of Ibnu Khurdadhbeh, the *Masurjan* of Idrisi, and the *Masakan* of Istakhri, are one and the same place. This, in all probability, occupied the site of the present Sarbaz. It is stated to have been 24 farsakhs from Fahra, while Sarbaz (according to Sir F. Goldsmid's route) is 73 miles distant from that place. In Ibnu Khurdadhbeh's time it was the chief town of "the Schismatics" (for his *Medinetu 'l Kharun* read *Medinetu 'l Khuruj*), and these people, we know from the later Arab writers, were settled along the course of the Sarbaz river. Subsequently *Rask* became their capital. This place, lower down the river and 40 miles from Sarbaz, is not mentioned by Ibnu Khurdadhbeh, but I would identify it with his "village of *Yahya bin Amr*," 10 farsakhs from Basurjan (*Sarbaz*), and would suppose that Yahya was then the headman of the place, or that he was, perhaps, its founder. From Rask onwards to Panjgur, I must confess I can make nothing of the route, nor can I identify a single one of the ten intervening stations. According to the later Arab geographers, there was a route from Rask through the present Bampusht district to Dizak, and thence to Panjgur, the entire distance from the first place to the last being 6 stages, while modern itineraries and maps would make it about 230 miles. How, then, can we account for Ibnu Khurdadhbeh's 93 farsakhs, or say 336 miles—perhaps 370 miles? The route cannot have proceeded from Rask through the Kej valley, otherwise Kej, the capital and probably the most ancient place in the valley, would surely have appeared among the stations; but it does not, nor does any other place east or west of Kej shown in published maps. There I must leave the difficulty. Perhaps Colonel Holdich, with the far greater advantages he possesses, can solve it. Allowing it its full weight, it does not, in my opinion, counterbalance the evidence in favour of the identifications above stated, though in present circumstances I can only offer these for provisional acceptance.

M. R. Haig.

The Discovery of the very Important Lundai Sin, or Swat River.

October 12, 1896.

In the *Geographical Journal* for this present month there is a letter on the subject of "Makran," by Lieut.-Colonel Holdich, R.E., on which subject I have nothing to say at present; but, in the last paragraph of the letter, referring to the serious mistakes made with respect to that part of the Kafiristan, which has caused some trouble, and more discussion, he says, "We found that the river flowing through Kafiristan from the west into the Chitral or Kumar [*sic*] river, and correctly called Arnawai, . . . was also called 'Bashgol' and '*Lundai Sin*;'" and that he has "*discovered one other very important Lundai Sin, which is also called the Swat river.*"

It is to this last "discovery" I have more particularly to refer. Any small or minor river may be, and is, called Landaey Sin—not "Lundai"—by the Afghan people and others dwelling near them. *Land* is the Pushto adjective for "small," "little," "short," etc., and the diminutive form of that adjective is *landaey* for the masculine singular, *landa'í* for the feminine, and *landí* for the plural, both masculine and feminine. Sin, or Sind, a corruption of Sanskrit *sindhu*, means a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004e

مكتبة قطر الوطنية
Qatar National Library

sea or river; consequently any small river would be called the Landaey Sin without that being the proper designation of such river.

As to the discovery that the "very important Lundai Sin is called the Swat river," it is a great mistake. The river of Panj-korah and the river of Suwat, or Suwad, having united, join the river of Kabul and its tributaries at Do-bandí, a little to the north of the village of Shaikh Isma'il, and is *then* known as the Landaey Sin, or Small or Little river, until north of Atak it unites with the Aba Sin, or Father River, or Father of Rivers, the name by which the Sindhu or Indus is known in those parts by the inhabitants generally. The Landaey Sin is also shown in the map of the "Mullah's Explorations" in 1876.

A person cannot stay long at Peshawar or in its district without soon knowing what Landaey Sin refers to; and in "An Account of the Province of Peshâwar" which I submitted to Government in 1851, for which I received the thanks of the Government of India, and which was subsequently published in the *Transactions of the Bombay Geographical Society* in 1852, I described the Landaey Sin. In my Pushto Dictionary, published in 1860, the Landaey Sin will be found described at pp. 636 and 877, in my "Account of Upper and Lower Suwát to the source of the Suwát river," in the *Journal of the Asiatic Society of Bengal* for 1862, and also in my 'Notes on Afghanistan,' etc., pp. 215 and 243, and other places; and by the name of Landaey Sin the united rivers have been known "from time immemorial."

H. G. Raverty, Major, Bombay Army (Retired).

GEOGRAPHICAL LITERATURE OF THE MONTH.

Additions to the Library.

By HUGH ROBERT MILL, D.Sc., *Librarian*, R.G.S.

The following abbreviations of nouns and the adjectives derived from them are employed to indicate the source of articles from other publications. Geographical names are in each case written in full:—

A. = Academy, Academie, Akademie.	Mag. = Magazine.
Ann. = Annals, Annales, Annalen.	P. = Proceedings.
B. = Bulletin, Bollettino, Boletim.	R. = Royal.
Com. = Commerce, Commercial.	Rev. = Review, Revue, Revista.
C. Rd. = Comptes Rendus.	S. = Society, Société, Selskab.
Erdk. = Erdkunde.	Sitzb. = Sitzungsbericht.
G. = Geography, Geographie, Geografia.	T. = Transactions.
Ges. = Gesellschaft.	V. = Verein.
I. = Institute, Institution.	Verh. = Verhandlungen.
J. = Journal.	W. = Wissenschaft, and compounds.
M. = Mitteilungen.	Z. = Zeitschrift.

On account of the ambiguity of the words *octavo*, *quarto*, etc., the size of books in the list below is denoted by the length and breadth of the cover in inches to the nearest half-inch. The size of the *Journal* is 10 × 6½.

EUROPE.

Austria—Alpine Provinces. *M.G. Ges. Wien.* **39** (1896): 529-540. **Richter.**

Ueber einen historischen Atlas der österreichischen Alpenländer. Von E. Richter.

On a projected historical atlas of the Austro-Hungarian monarchy, with suggestions for such a work dealing in detail with the alpine provinces. The paper is reprinted from a memorial volume to Prof. Franz von Krones of Graz, only fifty copies of which appeared.

Austria—Bosnia and Herzegovina. *Globus* **70** (1896): 165-170; 184-190. **Hoernes.**

Bosnien und die Hercegovina in Vergangenheit und Gegenwart. Von Dr. Moriz Hoernes. *With Illustrations.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002e

مكتبة قطر الوطنية
Qatar National Library

Austria-Hungary.

Monumenta Hungariae Juridico-Historica. Corpus Statutorum. Tomus iv. Pars Prima. Statuta et Articuli, Municipiorum Hungariae Cis-Danubianorum. Budapestini, 1896. Size 10 × 6½, pp. lxxxiv. and 916. *Presented by the Hungarian Academy of Sciences.*

Austria—Rainfall, etc.

Hydrographischer Dienst in Oesterreich. Jahrbuch des K. K. hydrographischen Central-Bureaus. II. Jahrgang 1894. Wien: W. Braumüller, 1896. Size 14½ × 10½, pp. xxvi. and 552. *Map and Diagrams. Presented by the K. K. Hydrographische Central-Bureau in Wien.*

Denmark. **Willaume-Jantzen.**

Meteorologiske Observationer i Kjøbenhavn bearbejdede af V. Willaume-Jantzen med et Résumé des Observations Météorologiques de Copenhague. Kjøbenhavn: G. E. C. Gad, 1896. Size 10½ × 8½, pp. 68 and xlviii.

Denmark—Bornholm. **Paulsen.**

Oversigt K. Danske Vidensk. Selsk. Forhand. (1896): 246–286.

Régime magnétique de l'île de Bornholm. Par Adam Paulsen. *With Maps.*

A very minute magnetic survey which led to some interesting results.

France—Aquitaine. *B.S.G. Com. Bordeaux* **19** (1896): 353–360, 385–396. **Dutrait.**

Topographie ancienne des étangs de Hourtin et de Lacanau et position probable du port d'Anchise. Par M. Dutrait.

Includes a sketch-map of the actual and the probable original outline of a section of the coast. See Monthly Record.

France—Chamonix. **Whymper.**

Chamonix and the range of Mont Blanc. A Guide by Edward Whymper. London: John Murray, 1896. Size 7½ × 5, pp. xiv. and 192. *Maps and Illustrations. Price 3s. Presented by the Author.*

Mr. Whymper's guide-book is, as might be expected, an original work of value to the student as well as to the mountaineer and the tourist. The historical chapters include what is practically a history of the origin of mountaineering, the first ascents of Balmat, Paccard, and de Saussure being described in detail. "A chapter of accidents" affords salutary warning to rash climbers, and an account of the observatories on the summit brings the scientific "record" of Mont Blanc up to date. The last seven chapters forming the guide-book proper describe the ways to Chamonix and the excursions to be made from it. Nine appendices supply statistical information as to peaks and passes, lists of guides and their tariffs, and tables for converting measures in feet and metres.

France—Garonne. *Ann. G.* **5** (1896): 368–385. **Lemoine.**

Essai sur l'hydrométrie du bassin de la Garonne. Par M. Georges Lemoine. *With Maps and Diagrams.*

France—Gascony. **Grandjean.**

B.S.G. Commerc. Bordeaux **19** (1896): 129, 170, 210, 238, 273, 289.

Les landes et les dunes de Gascogne. Par C. Grandjean.

France—Paris. **Baedeker.**

Paris and Environs, with Routes from London to Paris. Handbook for Travellers by Karl Baedeker. With 12 Maps and 33 Plans. Twelfth Revised Edition. Leipsic: Karl Baedeker, 1896. Size 6½ × 4½, pp. xlvi., 418, and 34. *Price 6 marks. Presented by Messrs. Dulau & Co.*

German Marine Observatory. *Ann. Hydrographie* **24** (1896): 252–258. **Neumayer.**

Ueber die Thätigkeit der Deutschen Seewarte. Vortrag des Direktors der Deutschen Seewarte, Wirklicher Geheimer Admiralitätsrath Prof. Dr. Neumayer.

Germany and Austria. **Joanne.**

Collection des Guides-Joanne. Allemagne Méridionale et Autriche-Hongrie. Paris: Hachette et Cie., 1896. Size 6¼ × 4½, pp. xxxvi., 524, and 94. *Maps and Plans.*

Germany—Bavaria. **Orff.**

Abh. Math.-Phys. Classe K., B.A. Wiss. München **18** (1895): 459–589.

Telegraphische Längenbestimmungen für die Königliche Sternwarte zu Bogenhausen. II. Theil. Von Carl von Orff.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000020

مكتبة قطر الوطنية
Qatar National Library

The calculations are given in full, fixing Bogenhausen as 18m. 55·123s. west of Vienna; 9m. 40·125s. east of Milan; 15m. 21·422s. east of Strasburg; 46m. 26·226s. east of Greenwich; and 7m. 8·793s. east of Berlin.

Germany—Moors. *Globus* **70** (1896): 73–78. **Krause.**
Die Existenzbedingungen der nordwestdeutschen Heidefelder. Von Dr. med. Ernst H. L. Krause. II.

Germany—Prussia. *Petermanns M.* **42** (1896): 173–187. **Helbfass.**
Der Arendsee in der Altmark. Von Dr. Wilh. Halbfass. *With Map.*

Germany—Prussia. *Globus* **70** (1896): 229–236, 281–285. **Tetnzer.**
Die Kaschuben am Lebasee. Von Dr. F. Tetzner. *With Map and Illustrations.*

Germany—Saxony.
Kalender und Statistisches Jahrbuch für das Königreich Sachsen nebst Marktverzeichnissen für Sachsen und die Nachbarstaaten auf das Jahr 1897. Dresden: C. Heinrich, 1896. Size 8 × 5½, pp. 90, viii., and 250.

Germany—Schleswig-Holstein. **Schück.**
Magnetische Beobachtungen auf den West-Inseln und einigen Punkten der Westund Südküste Schleswig-Holsteins, übertragen auf 1895, von Kapitain A. Schück, Hamburg. Schriften des Naturwissenschaftlichen Vereins für Schleswig-Holstein. Band xi., Heft 1, 1896. Pp. 36-38. Size 9½ × 6½. *Presented by the Author.*

Germany—Sunshine. *Ann. Hydrographie* **24** (1896): 313–325. **König.**
Dauer des Sonnenscheins im deutschen Küstengebiete. Von Helmuth König.

Italy—Lake Maggiore. *Le Globe, Mém. S.G. Genève* **35** (1896): 47–54. **Ritter.**
Morphométrie du lac Majeur, suivie d'une note sur les Tables de glacier en glace. Par Étienne Ritter. *With Plate.*

Netherlands—Bibliography. **Nijhoff.**
Bibliotheca Historico-Geographica Neerlandica. Catalogue de Livres, Anciens et Modernes, Cartes, Plans, etc., concernant l'histoire locale et la topographie des Pays-Bas. En vente aux prix marqués chez Martimes Nijhoff à la Haye, Nobelstraal 18, 1896. Size 9 × 6, pp. 50, 144, and 168.

Norway. *Rev. Scientifique* (4) **6** (1896): 399–401. **Antoniadi.**
Voyage en Laponie. Par M. Antoniadi.

Norway. *B.S. Normande G.* **17**, 1895 (1896): 351–369. **Le Roux.**
Voyage à travers la Norvège. Par M. Hughes Le Roux.

Rhine. **Baedeker.**
The Rhine from Rotterdam to Constance. Handbook for Travellers by Karl Baedeker. With 44 Maps and 24 Plans. Thirteenth Revised Edition. Leipsic: Karl Baedeker, 1896. Size 6½ × 4½, pp. xxxiv. and 422. *Price* 7 *marks. Presented by Messrs. Dulau & Co.*

For a new edition of a guide-book to contain no reference to touring cyclists and their requirements, is an omission which Mr. Baedeker might find it to his advantage to fill.

Russia—Novorossisk. *B.S.G. Commerc. Havre* **13** (1896): 70–92. **Fauvel.**
Le nouveau port russe de Novorossisk. Par A. A. Fauvel.

Spitzbergen. *Nature* **54** (1896): 437–438. **Gregory.**
The Conway Expedition to Spitzbergen. By Dr. J. W. Gregory.

Sweden—Water-Temperature. **Hamberg.**
Bihang K. Svensk. Vetenskaps- A. Handlingar **21** (1896): 26.
Temperaturobservationer i Mälaren och Saltsjön vid Stockholm. Af Axel Hamberg. *With Plate.*

Switzerland. **Messerschmitt.**
Relative Schweremessungen in der Schweiz. Von Johann Baptist Messerschmitt. Festschrift der Naturforschenden Gesellschaft in Zürich, 1746–1896. II. pp. 92–99. Zürich: Zürcher & Furrer, 1896. Size 9½ × 6½.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000054

مكتبة قطر الوطنية
Qatar National Library

Switzerland.

Régime des eaux en Suisse. Bassin du Rhin depuis ses sources jusqu'à l'embouchure de la Tamina. Première partie. Surfaces des Bassins de réception, des zones de 300 en 300 m. au-dessus de la mer, des rochers, des forêts, des glaciers et des lacs. Deuxième partie. Stations limnimétriques au point de vue de leur emplacement et de leur repèrage avec profils en travers pour chaque station et pentes relatives de l'eau à la surface. Travail exécuté par la Section hydrométrique de l'Inspectorat fédéral des travaux publics, 1895. Size 15½ × 10½, pp. 56 and 8. *Map and Plates. Presented by Professor Paul Chaix.*

United Kingdom—England. **Norris.**

Catalogue of the Huntingdonshire Books collected by Herbert E. Norris. Written with Notes by Himself. Cirencester, for Private Circulation, 1895. Size 8 × 5¼, pp. 52. *Presented by the Author.*

This bibliography of Huntingdonshire comprises about five hundred entries dating from 1610 to 1895, relating to the county and to the constituent parishes. The references are not only to books, maps, or other publications referring to the locality, but include works written by natives or residents of the county.

United Kingdom—England. **Ward.**

Thorough Guide Series. North Devon [including West Somerset] and North Cornwall from Exmoor to the Scilly Isles, with a description of the various approaches. By C. S. Ward. Twenty Maps and Plans by J. Bartholomew. Seventh Edition. Revised. London: Dulau & Co., 1896. Size 6¼ × 4½, pp. xvi. and 160. *Price 3s. 6d. Presented by the Publisher.*

Excellent maps on the scale of half an inch to a mile are included.

United Kingdom—Geological Survey. ——

List F. Memoirs, Maps, etc., issued by the Geological Survey of the United Kingdom and the Museum of Practical Geology. Size 10½ × 7½, pp. 68. *Index Maps. Presented by the Director-General of the Geological Survey.*

United Kingdom—Ireland—Donegal. *Blackwood's Mag.* **160** (1896): 467–480. ——

In Dark Donegal: The Tourist on the Celtic Fringe.

ASIA.

Central Asia—Bokhara. *Globus* **70** (1896): 138–142. **Vambéry.**

Bilder aus Bochara. Von H. Vambéry. *With Illustrations.*

Dutch East Indies. *Petermanns M.* **42** (1896): 187–192. **Zondervan.**

Die Entwickelung der Kartographie von Niederländisch-Ostindien. Von H. Zondervan.

Formosa. *Kew B.* (1896): 65–76. ——

Botany of Formosa.

India—Bengal. **Sunder.**

Final Report on the Land Revenue Settlement of the Western Duars, Bengal. By D. H. E. Sunder. Calcutta: Bengal Secretarial Press, 1895. Size 12½ × 8, pp. xiv., 164, and xxvi. *Index Map. Presented by the Author.*

India—Economic Products. **Watt.**

A Dictionary of the Economic Products of India. By George Watt (assisted by numerous contributors). Index. Prepared by Edgar Thurston. Calcutta, 1896. Size 10 × 6½, pp. 166. *Presented by the Government of India.*

This very useful index to a most valuable work could have been made much more convenient for reference by adopting bolder type for the leading words, and by repeating at the head of each column the word to which the entries apply.

India—Madras. *Miss. Catholiques* **28** (1896): 285–287, 296–298. **Bonaventure.**

Dans les forêts Khondes de Ganjam. Par le R. P. Bonaventure.

India—Madras. **Thurston.**

Madras Government Museum. Bulletin No. 4. Anthropology of the Todas and Kotas of the Nilgiri Hills; and of the Bráhmans, Kammálans, Pallis, and Pariahs of Madras City. By Edgar Thurston. Madras, 1896. Size 9 × 5½, pp. [96]. *Illustrations.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Indo-China. *Ann. G.* **5** (1896): 429–436. **Roux.**
Note sur les longitudes et altitudes observées et calculées par M. E. Roux (Expédition du prince Henri d'Orléans, de MM. Roux et Briffaut, du Tonkin aux Indes, 1895).

Persia. *B.S. Normande G.* **18** (1896): 1–28. **Dieulafoy.**
A travers la Perse (conférence). Par Mme. Dieulafoy. *With Portrait.*

Siberia. **Schrenck.**
Reisen und Forschungen im Amur-Lande in den Jahren 1854–1856 im Auftrage der Kaiserl. Akademie der Wissenschaften zu St. Petersburg, ausgeführt und in Verbindung mit mehreren Gelehrten herausgegeben von Dr. Leopold v. Schrenck. Band iii. Dritte Lieferung. Die Völker des Amur-Landes. Ethnographischer Theil. Zweite Hälfte. St. Petersburg, 1895. Size 13½ × 9½, pp. xvi. and [144]. *Plates.*
The bear-feasts and funeral ceremonials of the Amur Gilyaks are described and illustrated, the proceedings being similar to those of the Ainu.

Southern Asia. **Lapicque.**
Tour du Monde, **1** (*n.s.*) (1895): 409, 421, 433, 445, 589, 601, 613; **2** (*n.s.*) (1896): 37, 49, 61, 73.
A la Recherche des Négritos (voyage du yacht *Sémiramis*). Première Partie: Les Andaman; Deuxième Partie: Les îles Mergoui; Troisième Partie: La Péninsule Malaise; Quatrième Partie: La Sonde Orientale. *With Maps and Illustrations.*

Tibet. *S.G. Paris, C.R.* (1896): 234-241; 250–252. **Bonin.**
Voyage de M. Bonin. [De Tali à Tatsienlou à travers le Tibet.]
Sur le voyage de Bonin. *With Map.*

AFRICA.

Abyssinia. *B.S.G. Paris* (7) **17** (1896): 212–232. **Caillaud.**
Les tentatives des Franciscains au moyen age pour pénétrer dans la Haute-Éthiopie. Par F. Romanet du Caillaud.

Africa. **Leo Africanus.**
The History and Description of Africa and of the notable things therein contained, written by Al-Hassan Ibn-Mahommed Al-Wezaz Al-Fasi, a Moor, baptised as Giovanni Leone, but better known as Leo Africanus. Done into English in the year 1600 by John Pory, and now edited, with an Introduction and Notes, by Dr. Robert Brown. 3 vols. London: Printed for the Hakluyt Society, 1896. Size 9 × 6, pp. viii., cxii., and 1120. *Maps. Presented by the Hakluyt Society.*
The death of Dr. Robert Brown left his work on these volumes unfinished, but so near completion that it was judged advisable to issue it without further addition. The sheets were revised in passing through the press by Dr. E. Denison Ross, and a valuable series of maps with notes, which are the result of his independent study, was contributed by Mr. Ravenstein. The main body of the work is an exact reprint of Pory's translation, the editor's care having been devoted to a biographical and critical introduction and to explanatory notes.

Algeria. *B.S.G. Paris* (7) **17** (1896): 145–153. **Vuillot.**
Note sur un voyage de Nefta à Ghadamès (mars-avril 1893) exécuté par MM. Cazemajou, capitaine du génie, et Dumas, lieutenant au 4e spahis. Par Paul Vuillot. *With Map and Illustrations.*

Algeria and Tunis. *B.S.G. d'Alger.* **1** (1896): 32–34. **Périé.**
Projet de Carte de l'Algérie et de la Tunisie. Par M. A. Périé.

Algeria and Tunis. *P. American Philosoph. S.* **35** (1896): 39–56. **Pepper.**
Eucalyptus in Algeria and Tunisia, from an hygienic and climatological point of view. By Dr. Edward Pepper.

British Central Africa. **Johnston.**
Africa, No. 5 (1896). Report by Commissioner Sir Harry Johnston, K.C.B., on the Trade and General Condition of the British Central Africa Protectorate. April 1, 1895, to March 31, 1896. London: Eyre & Spottiswoode, 1896. Size 13½ × 8½, pp. 28. *Map. Price* 9*d.*

Central Africa. *B.S.G. d'Alger* **1** (1896): 24–31. **Rivière.**
Les Bambous aux Grands Lacs de l'Afrique Centrale. Par M. Ch. Rivière.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002f

مكتبة قطر الوطنية
Qatar National Library

Congo. *Missions en Chine et au Congo* (1896): 294–299. **Cambier.**
Congo: Lettre du P. Cambier: les troubles de Luluabourg.

Congo State—Coffee. *Mouvement G.* **13** (1896): 376–278. **Laurent.**
La Culture du Caféier au Congo. Par Em. Laurent.

East Africa. *B.S.G. Italiana* (3) **9** (1896): 272–273. **Millosevich.**
Seconda spedizione Bottego: Coordinate astronomiche di alcuni punti. Del prof. E. Millosevich.

East Africa—Somaliland. *Mem. S.G. Italiana* **6** (1896): 149–170. **Bòttego.**
La seconda spedizione Bòttego nella Somalia Australe. *With Maps and Illustrations.*
This will be referred to in the Monthly Record.

Egypt—Red Sea Coast. *Nineteenth Century* **40** (1896): 580–595. **Bent.**
On the Dervish Frontier. By J. Theodore Bent.

French Congo. *B.S.G. Paris* (7) **17** (1896): 154–187. **Barrat.**
Ogôoué et Como (Congo Français). Par Maurice Barrat. *With Map.*

French Congo. *B.S.G. Paris* (7) **17** (1896): 188–211. **Cholet.**
La Haute Sangha (Congo Français). Par Ed. Cholet.

French Congo. *B.S. Normande G.* **17**, 1895 (1896): 329–350. **Decazes.**
Le Haut-Oubangui. Par M. le Commandant E. Decazes. *With Map.*

French West Africa. *La Géographie* **9** (1896): 465–467. **Béhagle.**
Voyage Commercial au Bassin du Tchad (Afrique Centrale). Par Ferdinand de Béhagle.

French West Africa. *La Géographie* **9** (1896): 459–461. **Paroisse.**
Contribution à l'Étude du Climat de la Guinée Française. Par Georges Paroisse.

German East Africa—Mafia. **Baumann.**
Wissenschaftliche Veröffentlichungen des Vereins für Erdkunde zu Leipzig. Dritter Band, Erstes Heft. Die Insel Mafia. Von Dr. Oskar Baumann. Leipzig: Duncker and Humblot, 1896. Size 10 × 6½, pp. 38. *Map.*

German South-West Africa. *Globus* **70** (1896): 79–80. **Brincker.**
Bemerkungen zu Bernsmanns Karte des Ovambolandes. Von P. H. Brincker. Stellenbosch. *With Map.*

German West Africa—Togo. **Plehn, Gruner, Baumann, and Sprigade.**
M. Deutsch. Schutzgeb. **9** (1896): 117–147.
Bericht über den Verlauf meiner Reise nach Atakpame, Akposso und Kebu. Vom 4 März bis zum 17 April, 1896. Von Lieutenant R. Plehn.
Siedepunktbestimmungen. Von Dr. Gruner und E. Baumann in Togo.
Begleitworte zu der Karte des südlichen Theiles von Togo. Von P. Sprigade. *With Map.*

Madagascar. **Grandidier.**
Congrès des Sociétés Savantes. Discours [sur Madagascar] prononcé à la Séance Générale du Congrès le samedi 11 Avril 1896. Par M. Grandidier. Paris: Imp. Nationale, 1896. Size 11½ × 7½, pp. 16. *Presented by the Author.*

Madagascar. *Rev. Scientifique* (4) 6 (1896): 75–81. **Vincent and Burot.**
Le paludisme à Madagascar. Par MM. Vincent et Burot.
On malaria in Madagascar.

Madagascar—Sainte-Marie. *Rev. Maritime* **130** (1896): 419–445. **Landrieu.**
A Madagascar. L'île de Sainte-Marie. Par M. G. Landrieu.
A careful account of the island from personal knowledge and the study of local archives. The description deals with the island, inhabitants, productions, trade, and in his concluding remarks the author warns emigrants of the small farmer class from attempting to settle in a place where only native labour is possible.

North Africa. *B.S.G. d'Alger.* **1** (1896): 39–45. **Jenoudet.**
Monographie de la Tribu des Righas. Par M. Jenoudet.

South Africa. **Gill.**
Cape of Good Hope. Report on the Geodetic Survey of South Africa executed by Lieutenant-Colonel Morris, R.E., etc., in the years 1883–92, under the direction of David Gill, Her Majesty's Astronomer at the Cape, together with a Rediscussion

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001f

مكتبة قطر الوطنية
Qatar National Library

of the Survey executed by Sir Thomas Maclear, F.R.S., in the years 1841–48, by David Gill. Cape Town: W. A. Richards & Sons, 1896. Size 13 × 8½, pp. xiv., 174, and 292. *Maps, Plates, and Diagrams.*

This is a report of the utmost scientific value, presenting the full record of the great geodetic survey of South Africa, which forms the basis of all future cartography in that region. Dr. Gill's paper on the subject printed in the *Report* of the Sixth International Geographical Congress presents in brief the results which are here set forth at length.

Sudan Almanac.

Sudan Almanac, 1896. Compiled at the Intelligence Division, War Office. Size, 6 × 4, pp. 18.

Transvaal.

Transvaal, die Südafrikanische Republik. I. Geschichtliche und wirthschaftliche Entwickelung. Eine Studie von — R. Berlin: Commissions-Verlag von Kühling & Güttner, [no date]. Size 8½ × 6, pp. 30.

Transvaal. **Aburrow.**

Report of work done and general information relating to the Public Works Department of the Johannesburg Gezondheids Comite, S.A.R., for year ending December 31, 1895. By Chas. Aburrow. Johannesburg, 1896. Size 13 × 8, pp. 22 and 8. *Presented by the Author.*

Tripoli. *Mem S.G. Italiana* **6** (1896): 103–140. **Bricchetti-Robecchi.**

Il commercio di Tripoli, relazione del socio d'onore cav. ing. L. Bricchetti-Robecchi.

Tripoli—Cyrenaica. *Globus* **70** (1896): 236–240. **Grothe.**

Ein Besuch in Bengasi (Cyrenaïka). Von Hugo Grothe.

Tunis. *Ann. G.* **5** (1896): 386–406. **Larminat.**

Étude sur les formes du terrain dans le Sud de la Tunisie (Frontière de la Tripolitaine). Par le captitaine E. de Larminat. *With Map and Illustrations.*

West Africa—Borgu. *B. Comité l'Afrique Française* **6** (1896): 258–263. **Deville.**

Dans le Borgou: Le Royaume de Bouay. Par M. A. Deville. *With Map.*

West Africa—Fernando Po. *B.S.G. Madrid* **38** (1896): 49–56. **Bonelli.**

Exploraciones en Fernando Póo. Por D. Emilio Bonelli. *With Illustrations.*

Recent explorations by missionaries are referred to.

NORTH AMERICA.

Canada—Hudson Bay. *American J. Science* (4) **2** (1896): 200–205. **Tyrrell.**

Is the land around Hudson Bay at present rising? By J. Burr Tyrrell, of the Geological Survey of Canada.

Mexico. *P.I. Civil Engineers* **125** (1896): 243–281. **Corthell.**

The Tampico Harbour Works, Mexico. By E. L. Corthell, D.SC., etc. *With Plate and Illustrations.*

Includes the record of automatic tide-gauges on the Gulf of Mexico.

United States—Bureau of Ethnology. **Powell.**

Thirteenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1891–92. By J. W. Powell, Director. Washington, 1896. Size 12 × 8, pp. lx. and 462. *Illustrations.*

In addition to the official report, this volume contains papers on prehistoric textile art of Eastern United States, by W. H. Holmes; on stone art, by Gerard Fowke; on aboriginal remains and native dwellings in Arizona and Omaha, by various writers; and a remarkable translation of Zuni creation myths, by F. H. Cushing, showing the primitive ideas of the wanderings of the human race largely actuated by the search for the middle of the Earth.

United States—California. **Perrine.**

Earthquakes in California in 1894. By Charles D. Perrine.—Bulletin of the United States Geological Survey. No. 129. Washington, 1895. Size, 9½ × 6, pp. 26. *Presented by the U.S. Geological Survey.*

United States—California—San Francisco Peninsula. **Lawson.**

Sketch of the Geology of the San Francisco Peninsula. By Andrew C. Lawson.—Fifteenth Annual Report of the United States Geological Survey to the Secretary

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

of the Interior, 1893–94. By J. W. Powell, Director. Pp. 405–476. Washington, 1895. Size 12 × 8. *Map and Illustrations.*

The maps include some fine reproductions of relief models of the site of San Francisco.

United States—Census. ———

[Eleventh Census of the United States, 1890.] Report on Manufacturing Industries in the United States. Part i. Totals for States and Industries (pp. 1002). Part ii. Statistics of Cities (pp. xliv. and 828); Report on Real Estate Mortgages. Washington, 1895. Size 12 × 9½, pp. viii. and 944. *Diagrams.*

GENERAL.

Aërial Navigation. *Scottish G. Mag.* **12** (1896): 290–298. **White.**

Aërial Navigation. By A. Silva White.

Bibliography. ———

Catalogue of the Library of the India Office. Vol. i. Supplement. London: Printed by Eyre & Spottiswoode, 1895. Size 9 × 6, pp. 384. *Presented by the Secretary of State for India.*

Bibliography. ———

Ministère de la Guerre. Bibliothèque du Dépôt de la Guerre. Catalogue. Tome Huitième. (Supplément i.) Paris: Imp. Nationale, 1893. Size 10 × 6½, pp. ii. and 530. *Presented by the French Minister of War.*

The supplement contains the titles of works exclusively relating to military science, including military geography.

Bibliography. **Campbell.**

The Literature of Geography: how shall it be recorded? By Frank Campbell. Reprinted from the 'Report of the Sixth International Geographical Congress, London, 1895' (pp. 391–398). Size 10 × 6½, pp. 8.

Bibliography. ———

Geographical Index (Extra-European) to Books, Periodicals, etc., 1895. Map Room, Intelligence Division, W.O., 31st December, 1895. Size 11 × 7½, pp. xviii. and 86. *Presented by the Intelligence Division, War Office.*

This geographical index to books is now being published monthly.

Bibliography—Spanish. ———

Librería de Penella y Bosch . . . Barcelona. Catálogo de las Obras de fondo y surtido clasificadas por Materias y seguidas de un Indice alfabético de Autores y Traductores. Barcelona: Penella y Bosch, 1896. Size 8½ × 6½, pp. viii. and 228.

A priced catalogue of Spanish works.

British Colonies. **Gill.**

The British Colonies, Dependencies, and Protectorates, Physical, Commercial, Descriptive, Political, Social, Historical. By George Gill. London: G. Gill & Sons, [1896.] Size 7½ × 5½, pp. 472. *Maps. Price* 2*s.* 6*d. Presented by the Publishers.*

A fairly careful compilation. The maps printed in colour, if somewhat rough, are effective. The spelling on maps and in text differs in many cases; and the deviations from the R.G.S. rules for place-name orthography, which the author says he follows "as far as usage renders it desirable," naturally do not commend themselves to those who strive after uniformity.

British Empire. *Nineteenth Century* (1896): 27–33. **Young.**

Commercial Union of the Empire. By Sir Frederick Young, K.C.M.G.

Cartography. *XIV. Jahresb. G. Ges. Bern*, 1895 (1896): 169–174. **Brückner.**

Die Frage der Weltkarte im Massstab 1: 1,000,000 vor dem Londoner Geographenkongress. Bericht . . . von Herrn Prof. Dr. Ed. Brückner.

Church Missionary Society. ———

Proceedings of the Church Missionary Society for Africa and the East. Ninety-seventh year, 1895–96. London: Church Missionary House, 1896. Size 8½ × 6, pp. lxxiv., 432, and (366). *Maps. Presented by the Church Missionary Society.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001f

مكتبة قطر الوطنية
Qatar National Library

Colonization.

Bibliothèque Coloniale Internationale. 1re Série. La main-d'œuvre aux Colonies. Documents officials sur le contrat de travail et le louage d'ouvrage aux Colonies. Tome i. Paris: A. Colin et Cie., 1895. Size 9½ × 6½, pp. vi. and 570. *Price* 20 *fr.*

Colonization.

Institut Colonial International. Compte rendu de la Session tenue à la Haye les 9, 10, 11, et 12 Septembre 1895. Paris: A. Colin et Cie., 1895. Size 9½ × 6½, pp. 428.

Education. **Dubois.**

Les Colonies et l'Enseignement Géographique. Conférence faite sous le patronage de l'Union Coloniale Française. Par M. Marcel Dubois. Paris: L. Chailley, 1896. Size 8½ × 5½, pp. 32.

A plea for fuller instruction in Geography as an incentive to colonial enterprise.

Education. **Herbertson.**

On the Importance of Geography in Secondary Education and the Training of Teachers therein. By Andrew J. Herbertson. Reprinted from the 'Report of the Sixth International Geographical Congress, held in London, 1895' (Congress Report, pp. 83–87). Size 10 × 6½, pp. 6.

Education. **Lehmann.**

Die Vorbildung der Geographielehrer auf den Universitäten. Von Dr. Richard Lehmann. Separatabdruck aus dem Berichte des Sechsten Internationalen Geographenkongresses. London, 1895. [Congress Report, p. 72.] Size 10 × 6½, pp. 12.

A reprint of Dr. Lehmann's paper on the University education of teachers of geography.

Education. *B. Union G. Nord de la France* **18** (1895): 97–135. **Lejeal.**

La Géographie dans l'Enseignement primaire: Conférences faites devant les instituteurs de l'arrondissement de Boulogne-sur-Mer. Par M. Lejeal.

Education. **Levasseur.**

La Géographie dans les Écoles et à l'Université. Par E. Levasseur. Extrait des Comptes-rendus du Sixième Congrès International de Géographie tenu à Londres en Juillet, 1895. [Congress Report, pp. 27–70.] Size 10 × 6½, pp. 46.

This comprehensive paper gives the fullest description of the official French system of geographical education with specimens of the syllabus for different school-courses.

Educational—Text-book. **Wethey.**

A New Manual of Geography for Middle and Higher Forms in Schools. With a Preface on the Oral Method in teaching Geography. By E. R. Wethey. Vol. iv. Europe. London: Rivington, Percival & Co., 1896. Size 7½ × 6, pp. xii. and 314. *Maps and Plans. Price* 2*s.* 6*d. Presented by the Publishers.*

This is a new manual very carefully compiled, and containing a vast amount of information which is brought together with a surprisingly small number of mistakes. The plan resembles the old type of school-geography, being almost entirely tabular, and every artifice of variety of print and arrangement is employed to give full and clear expression to the grouping of facts. How far this improvement of the old style is preferable to the popular method of continuous narrative must be left for practical teachers to decide.

French Colonies. *B.S.G. Commerc., Paris* **18** (1896): 329–347. **Henry of Orleans.**

Madagascar, Indo-Chine Française, Yunnan, Assam. Notes commerciales et coloniales. Par le Prince Henri d'Orléans. *With Map.*

French Colonies. **Roux.**

Comment rendre nos Colonies prospères. Conférence faite sous le patronage de l'Union Coloniale Française. Par M. J. Charles-Roux. Paris: L. Chailley, 1896. Size 9 × 6, pp. 56.

Geneva Geographical Society. *Le Globe, Mém. S.G. Genève* **35** (1896): 1–46. **Claparède.**

Coup d'œil sur la Société de Géographie de Genève depuis sa fondation (1858–1896). Par M. Arthur de Claparède, Président.

Geographical Congress. *XIV. Jahresb. G. Ges. Bern* (1895): 3–26. **Brückner.**

Rapports du Comité du Ve Congrès international des sciences géographiques et des commissions spéciales sur l'exécution des résolutions votées à Berne en 1891. Rédigés par M. Ed. Brückner.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00000d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Geographical Papers. **Venukoff.**

M. Venukoff. Études géographiques. Paris: A. Reiff, 1896. Size 7 × 5, pp. 168. *Presented by the Author.*

A collection of papers reprinted from various French journals, dealing with various geographical questions, chiefly relating to Central-Asian explorations.

Geographical Progress. *B.S.G. Paris* (7) **16** (1895): 405–515. **Maunoir.**

Rapport sur les Travaux de la Société de Géographie et sur les Progrès des Sciences géographiques pendant l'année 1894. Par Ch. Maunoir.

Geographical Speculation. **Le Plongeon.**

Queen Móo and the Egyptian Sphinx. By Augustus Le Plongeon, M.D. London: Paul & Co., 1896. Size 10 × 7, pp. lxvi. and 278. *Portraits and Illustrations.*

This curious work argues that the Maya civilization was the most ancient, and gave origin to the civilizations of Egypt and Eastern Asia, professes to find documentary evidence of the former existence and disappearance of the mythical Atlantis, and even reproduces an ancient South-American sculpture which is held to contain a representation of the map of the western continent as known to modern cartographers.

Geographical Year-book. ——

Jahresbericht des Frankfurter Vereins für Geographie und Statistik. Siebenundfünfzigster bis neunundfünfzigster Jahrgang, 1892-93 bis 1894–95. Im Namen des Vorstandes herausgegeben von Dr. Friedrich Clemens Ebrard. Frankfurt am Main, 1896. Size 10 × 6½, pp. 152.

Geography. **Markham.**

Address to the Royal Geographical Society. By Sir Clements Markham, K.C.B., F.R.S., President. From the *Geographical Journal* for July, 1896. Size 10 × 6½, pp. 16.

Geography. *B. American G. S.* **28** (1896): 146–156. **Dodge.**

Geography from Nature. By Richard E. Dodge.

Suggestions as to home geographical studies in the neighbourhood of New York city.

Geography. *XIV. Jahresb. G. Ges. Bern* (1895): 73–86. **Poinsard.**

Curiosités géographiques. Comment la Géographie explique les phénomènes sociaux. Par M. Léon Poinsard.

Geography as a Science. **Batalha-Reis.**

On the definition of Geography as a Science, and on the conception and description of the Earth as an organism. By J. Batalha-Reis. Reprinted from the 'Report of the Sixth International Geographical Congress, held in London, 1895.' Size 10 × 6½, pp. 14.

German and Austrian Alpine Club. **Emmer.**

Register zu den Vereinsschriften des Deutschen und Oesterreichischen Alpenvereins einschliesslich jener des Oesterreichischen Alpenvereins und des Deutschen Alpenvereins. 1863–1894. Von Johannes Emmer. Graz, 1896. Size 9 × 6, pp. 166.

A valuable index to the publications of the German and Austrian Alpine Club.

German Colonies. **Meinecke.**

Koloniales Jahrbuch. Beiträge und Mittheilungen aus dem Gebiete der Kolonialwissenschaft und Kolonialpraxis. Herausgegeben von Gustav Meinecke. Achter Jahrgang. Das Jahr 1895. Berlin: Carl Heymanns Verlag, 1896. Size 9½ × 6½, pp. 318. *Portrait.*

German Colonies. *M. Deutsch. Schutzgeb.* **9** (1896): 49–52. ——

Geographische Positionen einiger Punkte in Deutsch-Ostafrika, in Kamerun, auf den Marshall-Inseln, sowie im Schutzgebiete der Neu-Guinea-Kompagnie nach den Angaben der Nautischen Abtheilung des Reichs-Marine-Amts.

German Colonies. *M. Deutsch. Schutzgeb.* **9** (1896): 115–116. ——

Geographische Positionen einiger Punkte in Kamerun und im Schutzgebiete der Neu-Guinea-Kompagnie nach den Angaben der Nautischen Abtheilung des Reichs-Marine-Amts.

Lady Travellers. *Blackwood's Mag.* (1896): 49–66. ——

Lady Travellers.

An inadequate account of some travellers who happened to be women. Those noticed are Ida Pfeiffer, Alexandrine Tinne, Lady Baker, Mrs. Bishop, Miss Gordon

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000070

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Cumming, Miss Helen Peel, Miss Annie R. Taylor, and Miss Kingsley. The principle of selection, if any, is difficult to find. So many ladies have made yachting tours, accompanied their husbands on excursions, and gone out as missionaries, that it is perhaps inevitable that some should be omitted.

Languages.

Thimm's Self-Taught Library. French (pp. 80, *price* 1*s.* 6*d.*); Spanish (pp. 80, *price* 1*s.* 6*d.*); German (pp. 80, *price* 1*s.* 6*d.*); Norwegian (pp. 80, *price* 2*s.* 6*d.*); Italian (pp. 80, *price* 1*s.* 6*d.*); Turkish (pp. viii. and 136, *price* 2*s.* 6*d.*); Arabic (pp. viii. and 94, *price* 2*s.* 6*d.*). London: E. Marlborough & Co. Size 7½ × 5. *Presented by the Publishers at the request of Captain C. A. Thimm.*

Lisbon Geographical Society.

Société de Géographie de Lisbonne. Annexe au Bulletin No. 10. Statuts adoptés par l'Assemblée Générale le 3 Juin et approuvés par l'Autorité Publique le 3 Juillet 1895. (Traduction.) Lisbonne, 1895. Size 10 × 6½, pp. 46.

Local Geography. *Aus allen Weltteilen* **27** (1896): 321–326. **Fitzner.**

Die Bildung von Abteilungen für Heimatskunde. Von Rudolf Fitzner.

Maps for Education. *J. Geology* **4** (1896): 484–513. **Davis.**

Large-Scale Maps as Geographical Illustrations. By W. M. Davis.

Gives lists of sheets of the official survey-maps of European countries which Professor Davis has found of value in teaching the types of geographical forms in his practical classes at Harvard.

Missionary Explorations. *B.S.G. Lyon* **13** (1896): 541–570. **Groffier.**

Explorations et travaux géographiques des missionnaires catholiques en 1894 et en 1895. Par V. Groffier.

Missionary Reports.

Free Church of Scotland. Missionary Reports (Foreign), May, 1896. I. Foreign Missions (including Report of Woman's Society). II. Colonial Missions. III. Continental Missions. IV. Missions to the Jews. Edinburgh, 1896. Size 9 × 6, pp. 114, 74, 26, 18, 32.

Mountaineering. *P.R.I.* **14** (1896): 451–459. **Dent.**

Influence of Science on Mountaineering. By Clinton T. Dent.

Ordnance Maps.

Committee on Sale of Ordnance Survey Maps. Report of the Departmental Committee appointed by the Board of Agriculture to consider the arrangements to be made for the Sale of Ordnance Survey Maps, with copy of the Minute appointing the Committee. Also Minutes of Evidence . . . with Appendices and Index. [2 Reports.] London: Eyre & Spottiswoode, 1896. Size 13 × 8½, pp. 10 and 90. *Price* 1½*d.* *and* 9*d.*

Phrase-book. **Thimm.**

English, French, Turkish, and Russian Vocabulary and Dialogues, for practical use by the Army and Navy, Travellers, Sportsmen, Cyclists, and others in the East. By C. A. Thimm. London: E. Marlborough & Co. Size 6½ × 4½, pp. [74]. *Presented by the Publishers at the request of Captain C. A. Thimm.*

Place-Names. **Burgess.**

Geographical Place-Names in Europe and the East. By Jas. Burgess, C.I.E., etc. Reprinted from the 'Report of the Sixth International Geographical Congress, held in London, 1895.' Size 10 × 6½, pp. 12.

Place-Names. *National G. Mag.* **7** (1896): 221–227. **Gannett.**

The Work of the United States Board on Geographic Names. By Henry Gannett.

Place-Names. **Taylor.**

Names and their Histories alphabetically arranged as a Handbook of Historical Geography and Topographical Nomenclature. By Isaac Taylor, M.A., etc. London: Rivington, Percival & Co., 1896. Size 7½ × 5, pp. viii. and 392. *Price* 6*s.*

A dictionary dealing with the origin of certain selected place-names, and containing some additional matter.

Political Geography—Cables. **Depelley.**

Les cables sous-marins et la Défense de nos Colonies. Conférence faite sous le patronage de l'Union Coloniale Française. Par M. J. Depelley. Paris: L. Chailley, 1896. Size 8½ × 5½, pp. 40. *Map and Diagram.*

The author shows, in a very striking diagram, how exactly the development of the British submarine cable-system has corresponded with the increase of trade between

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000042

مكتبة قطر الوطنية
Qatar National Library

the colonies and the mother-country. He points out the political bearings of the monopoly of submarine cables being vested in one nation; and gives a map of submarine lines coloured to distinguish British, French, and other cables.

Royal Navy List. **Lean.**

Lean's Royal Navy List. . . . By Lieut.-Colonel Francis Lean. London: Witherby & Co., 1896. Size 9½ × 6, pp. xviii. and 476.

Sixth International Geographical Congress.

Resolutions considered and passed by the Sixth International Geographical Congress, held in London, 1895. Size 10 × 6½, pp. 10.

Sixth International Geographical Congress. **Erödi.**

Jelentés a Londonban tartott hatodik nemzet-Rözi földrajzi congressusról ('Report of the Sixth International Geographical Congress of London'). [Dr. Béla Erödi.] Size 9½ × 6½, pp. [16.]

Sixth International Geographical Congress—Report.

Report of the Sixth International Geographical Congress, held in London, 1895. Edited by the Secretaries. London: John Murray, 1896. Size 10 × 6½, pp. xxxvi., 806, 84, and 190. *Maps and Illustrations.*

A note on this volume appeared in the *Journal* for September, p. 290.

Sixth International Geographical Congress. **Campos.**

La Geografía en 1895. Memoria Sobre el VI. Congreso Internacional de Ciencias geográficas celebrado en Lóndres. Por Rafael Torres Campos.—Bol. Soc. Geog. Madrid. Tomo xxxviii. Nos. 1, 2, y 3. 1896. Pp. 48.

Statesman's Year-Book. **Keltie and Renwick.**

The Statesman's Year-Book. Statistical and Historical Annual of the States of the World for the year 1896. Edited by J. Scott Keltie with the assistance of I. P. A. Renwick. [Second Edition.] London: Macmillan & Co., 1896. Size 7½ × 5, pp. xxxii. and 1164. *Maps. Price* 10*s.* 6*d. Presented by the Publishers.*

The Statesman's Year-Book, for, we believe, the first time, has been issued in a second edition on account of the great demand. This year's issue contains a series of excellent political maps bearing on burning questions in South Africa, the Pamirs, and Venezuela.

Tropical Hygiene. *Rev. Scientifique* (4) 6 (1896): 326–335. **Stokvis.**

La colonisation et l'hygiène tropicale. Par M. Stokvis.

Vasco da Gama Celebration. **Soveral.**

The Fourth Centenary of the Sea Route to India. Homage to Dom Vasco da Gama on the Anniversary of the Fourth Centenary of the Discovery of a New Route to India. Presented to the Geographical Society of Lisbon by Vicomte de Soveral. Lisbon: National Printing Office, 1896. Size 10 × 6½, pp. 6.

NEW MAPS.

By J. Coles, *Map Curator*, R.G.S.

ARCTIC REGIONS.

North Pole. **Herrich.**

Neueste Handkarte der Gebiete um den Nordpol. Scale 1 : 20,000,000. Nach zuverlässigen Quellen bearbeitet von A. Herrich. 3 Auflage, Glogau. Verlag von Carl Flemming. *Price* 1 *mark.*

This is a small circumpolar map, on which the routes followed by all the principal Polar expeditions since 1827 are laid down, and is specially interesting as showing the route followed by Dr. Nansen, and also the track of the *Fram.*

EUROPE.

Denmark. **Danish General Staff.**

Generalstabens topografiske Kaart over Danmark. Scale 1 : 40,000 or 1·5 inch to a stat. mile. Kalkograferet og graveret ved Generalstaben Kjobenhavn 1896. Sheets—Lögstär, Thisted, Feggeseind. *Presented by the Danish General Staff, through H.E. the Danish Minister.*

England and Wales. **Ordnance Survey.**

Publications issued since September 7, 1896.

1-inch—General Maps:—

England and Wales:—109, 153, hills photozincographed in brown, 1*s.* each; 100, 218, 235, 348, 351, 352 (revised), engraved in outline, with contours, 1*s.* each.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000046

مكتبة قطر الوطنية
Qatar National Library

6-inch—County Maps:—

England and Wales:—**Devonshire** (revision), 117 N.W., S.E., 124 N.W., 130 N.W., N.E., 1*s.* each. **Lancashire** (revision), 36, 2*s.* **Yorkshire** (revision), 63, 95, 164 W., 2*s.* each; 82, 83, 96, 97, 114, 118, 148, 151, 2*s.* 6*d.* each.

25-inch—Parish Maps:—

England and Wales:—**Durham** (revision), VIII. 1; XIII. 3, 7; XVII. 1, 2, 3, 7, 11, 12, 16; XVIII. 1, 5, 6, 9, 14, 16; XIX. 2, 8, 9, 10, 11, 14, 15; XX. 2, 3, 5, 6, 7, 10; XXV. 2, 3, 4; XXVI. 1, 3*s.* each. **Essex** (revision), XLI. 9; XLIX. 11; LVIII. 7, 10; LIX. 14, 15; LXVI. 16; LXVII. 3, 4, 5, 7, 8, 9, 11, 12, 13; LXVIII. 10, 13, 14, 15; LXXIV. 8; LXXV. 1, 4; LXVI. 1, 2, 3, 3*s.* each. **Hampshire** (revision), XII. 7; XIX. 1; XX. 1, 2, 6, 9, 10, 11, 15; XXVII. 16; XXVIII. 3, 7, 9, 10, 11, 13, 14, 15; XXXI. 16; XXXII. 2; XXXIV. 5, 7, 9, 15, 16; XXXV. 4, 5, 7, 8, 11, 12, 13, 14, 15; XXXVI. 1; XXXIX. 11, 12; XL. 1, 2, 3, 4, 5, 6, 7, 8, 10; XLI. 5, 10, 11; XLII. 1, 2, 4, 8, 11, 12; XLIII. 1, 2, 5; XLIX. 3, 3*s.* each. **Kent** (revision), XVII. 1, 3, 4, 7, 9, 10, 11, 12, 13, 14, 3*s.* each. **Middlesex** (revision), IX. 7, 11, 15, 16; XI. 2, 9, 13; XV. 1, 3, 4, 10, 14, 3*s.* each. **Northumberland** (revision), LXXXII. 12, 16; LXXXIII. 11; LXXXIV. 5, 7, 9, 11, 12, 14, 15; XCI. 4, 5, 7, 11, 12, 15; XCII. 8, 13; XCIII. 2, 10, 14, 15; CI. 1, 2, 3, 4, 5, 6, 7, 9, 10, 12; CII. 2, 4, 5, 8, 12, 15; CIII. 13, 14, 15, 16; CVIII. 3, 3*s.* each. **Surrey** (revision), X. 5; XI. 11; XVI. 14; XX. 12, 15; XXIII. 6, 16; XXIV. 3, 13, 14, 15, 16; XXV. 12, 13, 15, 16; XXVI. 1, 2, 3, 5, 6, 7, 10; XXXI. 1, 4, 5; XXXII. 1, 2, 3, 6, 7, 8; XXXIII. 1, 2, 3, 5, 6, 7, 3*s.* each.

(*E. Stanford, Agent.*)

England. **Bartholomew.**

New plan of Eastbourne from the Ordnance Survey, by John Bartholomew, F.R.G.S. Scale 295 yards to an inch. W. H. Smith & Son, London, 1896.—New plan of Hastings and St. Leonards from the Ordnance Survey, by John Bartholomew, F.R.G.S. Scale 335 yards to an inch. W. H. Smith & Son, London, 1896. *Price 1s. each, on cloth. Presented by Messrs. J. Bartholomew & Co.*

These plans are reductions from the Ordnance Survey, which have been corrected and brought up to date by the local authorities. They are accompanied by explanatory letterpress, and are furnished with indexes.

England. **Bartholomew.**

London Environs. Fifty mile radius. By John Bartholomew, F.R.G.S. Scale 1 : 253,440 or 4 stat. miles to an inch. J. Bartholomew & Co., Edinburgh. *Price 2s. on cloth. Presented by Messrs. J. Bartholomew & Co.*

The country within a radius of more than 50 miles is included in this map. The approximate distance of any place from the metropolis can be seen at a glance, as concentric circles, 5 miles apart, are drawn from London as a centre.

Germany. **Kgl. Preuss. Landes-Aufnahme.**

Karte des Deutschen Reiches. Scale 1 : 100,000 or 1·5 stat. miles to an inch. Herausgegeben von der Kartogr. Abteilung de Kgl. Preuss, Landes-Aufnahme, 1896. Sheets: 248, Friedeberg i. d. Neum; 347, Fraustadt; 353, Wesel; 372, Glogau; 378, Krefeld. *Price 1·50 marks each sheet.*

Scotland. **Bartholomew.**

Bartholomew's Reduced Ordnance Survey of Scotland. Sheet 9, Berwick and Haddington. Scale 1 : 126,720 or 2 stat. miles to an inch. John Bartholomew & Co., Edinburgh, 1896. *Price 2s. on cloth. Presented by Messrs. J. Bartholomew & Co.*

This is a revised edition of Sheet 9 of Bartholomew's reduced Ordnance Survey of Scotland.

ASIA.

Indian Government Surveys. **Surveyor-General's Office, Calcutta.**

Indian Atlas, 4 miles to an inch. Sheets: No. 14, district Peshawur and parts of districts Kohat, Rawal Pindi and Hazara (Punjab), Buneya, Swat, Kabul, and Terah (Afghanistan), additions to 1892; No. 103, parts of districts Azimgurh, Ghazipur and Benares (N.W. Provinces), Tirhoot, Sarun, Patna, Shahabad, and Gya (Bengal), additions to 1895; No. 121, district Howrah, and parts of districts 24 Paganas, Burdwan, Khulna, Nadia, Jessore, Faridpur, Backergunge, Midnapore, and Hooghly (Bengal), with additions to 1895. Quarter-sheets: No. 35 S.E., parts of native states Oodeypore, Jhallawar, Partabgarh and Banswara (Rajputana), and of Gwalior, Indore and Western Malwa Agencies (Central India), with additions to 1891; No. 38 N.W., parts of district Nasik and of Dang, Baroda, Bansda, and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007d

مكتبة قطر الوطنية
Qatar National Library

Dharampur States (Bombay Presidency), April, 1896; No. 69 S.W., parts of districts Jhansi, Hamipur (N.W. Provinces), Gwalior, Tehria, and Datia (Native States), C. I. Agency, with additions and corrections to 1891; No. 70 N.E., parts of districts Banda (N.W. Provinces) and Damoh (Central Provinces), of Native States Bijawar, Panna, Pathar, Kachhar, Chhatarpur, Ajaigarh, Jaso, Charkhari, Kothi, Sohawal, Nagode, and Chobe, Bundelkhand (C. I. Agency), additions to 1889; No. 114 N.W., parts of districts Lohardaga, Manbhum, Midnapore, and Singhbhum (Bengal), April, 1896.—Bengal Survey, 1 inch to a mile. Sheet No. 293 (second edition), districts Darjeeling and Jalpaiguri, Seasons 1858–59, 1861–67, 1880–81, and 1889–92. —Bombay Survey, 1 inch to a mile. Sheet No. 309, districts Dharwar and N. Kanara and Native State Savanur (Dharwar Agency), Seasons 1893–94.—Upper Burma Survey, 1 inch to a mile. Sheet No. 312, Southern Shan States, Season 1893–4.—Lower Burma Survey, 1 inch to a mile. Sheets: No. 272, district Toungoo, Seasons 1890–91 and 1892–93; No. 273, district Toungoo, Seasons 1890–91–92; No. 419, district Thaton, Season 1893–95; No. 423, district Amherst and Thaton, Seasons 1890–95.—North-Eastern Frontier Survey, 1 inch to 4 miles. Parts of Northern Shan States, Season 1894–95.—Gujarat, 16 miles to an inch, April, 1896.—Upper Burma, 16 miles to an inch. Second edition, 1894, with corrections to boundaries up to October, 1895, 2 sheets.—District Noakhali, Lower Provinces (Bengal), 5 miles to an inch, with additions and corrections to boundaries and roads to February, 1896.—District Hazaribagh, Lower Provinces, Bengal, 5 miles to an inch, with additions and corrections to roads up to April, 1896.—District Nowgong, Assam, 5 miles to an inch, additions and corrections to November, 1893.—District Raipur, 5 miles to an inch, Seasons 1862–64 and 1866–72, additions to March, 1892, 2 sheets. —District Mirzapur, 16 miles to an inch, February, 1896, 6 sheets.—District Mizapur (N.W. Provinces of Oudh), 12 miles to an inch, 1896.—District Garhwal (N.W. Provinces and Oudh), 12 miles to an inch, 1896.—District Meerut (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Moradabad (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Muttra (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Muzaffarnagar (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Partabgarh (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Shahjahanpur (N.W. Provinces and Oudh), 8 miles to an inch, 1896.—District Backergunge (Bengal), 8 miles to an inch, 1890.—District Bogra (Bengal), 8 miles to an inch, 1890.—District Purnea (Bengal), 8 miles to an inch, 1889.—District Rajshahi (Bengal), 8 miles to an inch, 1890.—Map of Sundarbans (Bengal), 16 miles to an inch, 1890.—Central Province Survey, Index to the Forest Surveys in District Sambalpur; No. 14 party, November, 1895.—Index to the Forest Surveys in district Bilaspur; No. 14 party, November, 1895. *Presented by H.M. Secretary of State for India, through India Office.*

AFRICA.

Swaziland. **Miller.**

Sketch-Map of Swaziland made for the Umbandine Swaziland Concessions Syndicate, Ltd. By Allister M. Miller. Scale 1 : 190,000 or 3 stat. miles to an inch. London: published by Edward Stanford, 1896. *Presented by the Publisher.*

In the absence of any regular survey of this part of South Africa, this will be of service to persons visiting the country. Means of communication are laid down, and a good general idea of the physical features is given. All land lower than 1500 feet above sea-level is coloured green, and the positions of native kraals, approximate elevations, and nature of the forests are indicated by symbols.

Tunis. **Babelon, Cagnat, and Reinach.**

Atlas Archéologique de la Tunisie. Edition spéciale des cartes topographiques publiées par le Ministère de la Guerre, accompagnée d'un Texte Explicatif par MM. E. Babelon, R. Cagnat, S. Reinach, membres de la Commission de l'Afrique du Nord. Description de l'Afrique du Nord entreprise, par ordre de M. le Ministre de l'Instruction Publique et des Beaux-Arts. Parts iii. and iv. Paris: Ernest Leroux, 1895–96.

This atlas is being compiled under the direction of the Minister of Public Instruction and Fine Arts. It is composed of the sheets of the large-scale government survey of Tunis, on which archæological information is given. It is accompanied by letterpress, written by MM. E. Babelon, R. Cagnat, and S. Reinach.

West Africa. **Marchand.**

Mission Marchand, le Transnigérien, le Bandama et le Bagoé. Carte levée et dressée de 1892 à 1895. Par le Capitaine Marchand. Scale 1: 500,000 or 8

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

stat. miles to an inch. 2 sheets and letterpress. Service Géographique des Colonies, Paris, 1896. *Presented by the Service Géographique des Colonies.*

This map is based on the results obtained by Captain Marchand during his third journey in the vicinity of the great bend of the Niger, the surrounding country having been taken from Captain Binger's map of 1892. In addition to this, the itineraries of other travellers have been used, while some of the country has been sketched in from native report. The lines of railway which it is proposed to construct are laid down, and the position of all military posts and the limits of forests are shown. The map is accompanied by an index of names and explanatory letterpress.

West Africa. **Pobéguin.**

Carte de la Côte d'Ivoire (Région Côtière de Fresco au Cavally). Levée et dressée par H. Pobéguin, Administrateur Colonial, par ordre de M. le Gouverneur Binger, 1895–96. Scale 1 : 150,000 or 2·3 stat. miles to an inch. Sheets : Cavally, Grabo—Haut San Pedro, Kremoue—Kouati, Doboue—Sassandra, Fresco—Haut Sassandra, Daguire—San Pedro, Drewin—Tabou, Béréby—Cap des Palmes, Cavally. Ministère des Colonies. Paris, 1896. *With Index. Presented by the Service Géographique des Colonies, Paris.*

These sheets complete the map of the Ivory Coast, which embraces the country between the Cavally river on the west and the Bandama on the east. It contains a large amount of detail, and is accompanied by an index sheet.

AMERICA.

United States. **U.S. Geological Survey.**

Geologic Atlas of the United States. Scale 1 : 125,000 or 2 stat. miles to an inch, and 1 : 250,000 or 4 stat. miles to an inch. Folios : Stevenson (Alabama, Georgia, Tennessee); Lassen Peak, Smartsville, Marysville (California); Pike's Peak (Colorado); Nomini (Maryland, Virginia); Three Forks (Montana); Cleveland, Pikeville, McMinnville, London (Tennessee); Knoxville (Tennessee, North Carolina); Fredericksburg (Virginia, Maryland); Staunton (Virginia, West Virginia). Department of the Interior, United States Geological Survey; J. W. Powell, Director. Washington, D.C. *Presented by the U.S. Geological Survey.*

Venezuela. **Sievers.**

Nördliches Venezuela. II. Hohenschichten, Hydrographie, Orte u. Verkehrswege. Scale 1 : 3,000,000 or 47·3 stat. miles to an inch. Von W. Sievers. Petermann's 'Geographische Mitteilungen,' Jahrgang 1896, Tafel II. Gotha : Justus Perthes. *Presented by the Publisher.*

AUSTRALIA.

Western Australia. **Stanford.**

The Western Australia Goldfields. Scale 1 : 1,647,360 or 26 stat. miles to an inch. Edward Stanford. London, 1896. *Presented by the Publisher.*

On this map the positions of all the principal goldfields of Western Australia are indicated, but, in addition to this, it is a good map of the south-west portion of the colony, on which all railways, roads, and explorers' routes are laid down.

World. **Bartholomew.**

Handy Reference Atlas of the World. Edited by J. G. Bartholomew, F.R.S.E., F.R.G.S. Fifth edition, with complete index and geographical statistics, 1896. London : John Walker & Co., Ltd. *Prices 7s. 6d. and 10s. 6d. Presented by the Publishers.*

This atlas has now reached its fifth edition. It has been revised, and several new maps have been added. Being of octavo size, it will be found very handy for reference when reading a newspaper or book.

PHOTOGRAPHS.

Malay Peninsula. ———

Four photographs of the Sakai natives of the Malay Peninsula, taken in 1894–95. *Presented by George C. Morant, Esq.*

These photographs will be chiefly interesting to anthropologists. They were taken for Mr. George C. Morant, 1894–95.

N.B.—It would greatly add to the value of the collection of Photographs which has been established in the Map Room, if all the Fellows of the Society who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they will be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

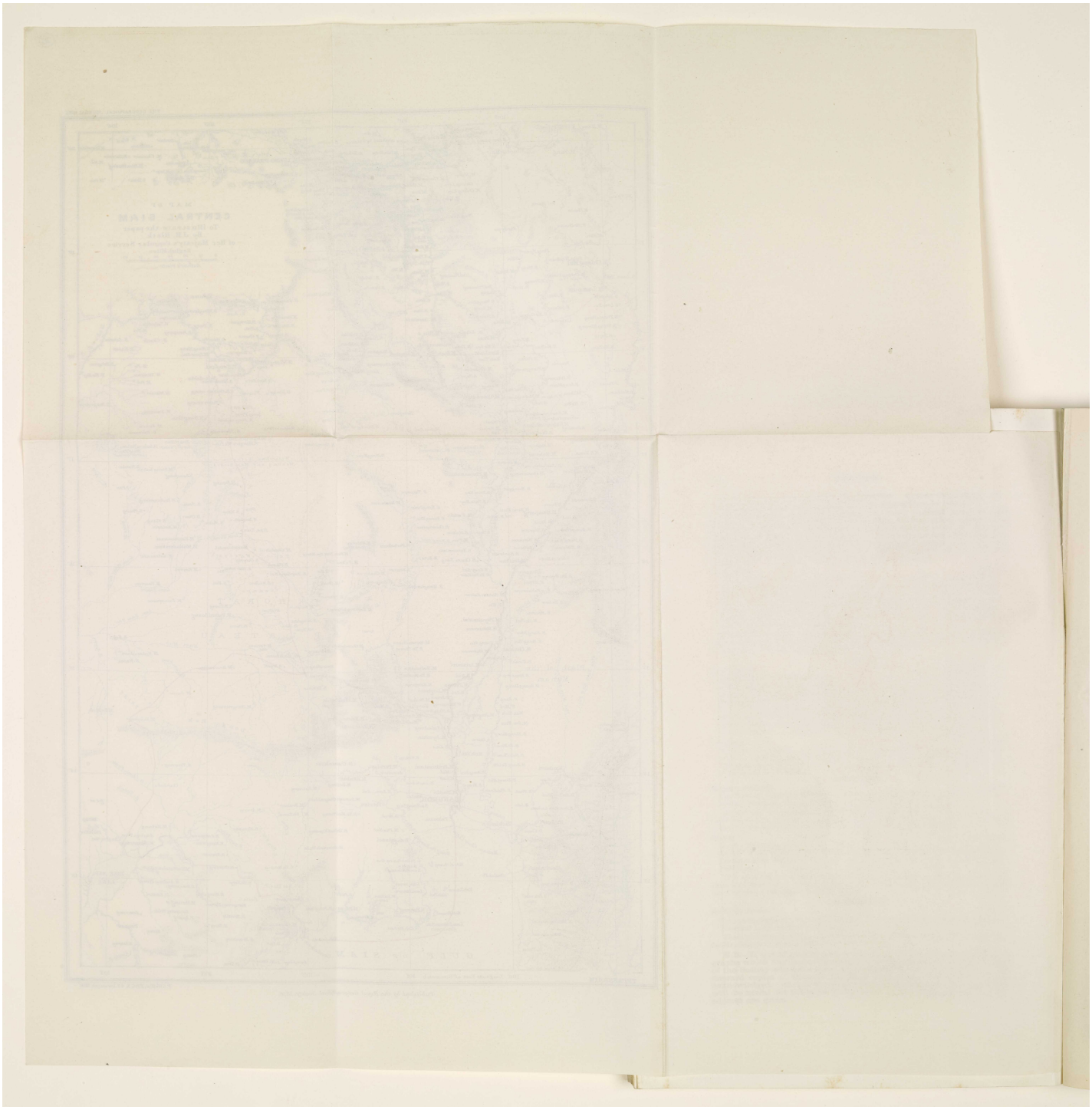
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000006

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00007b

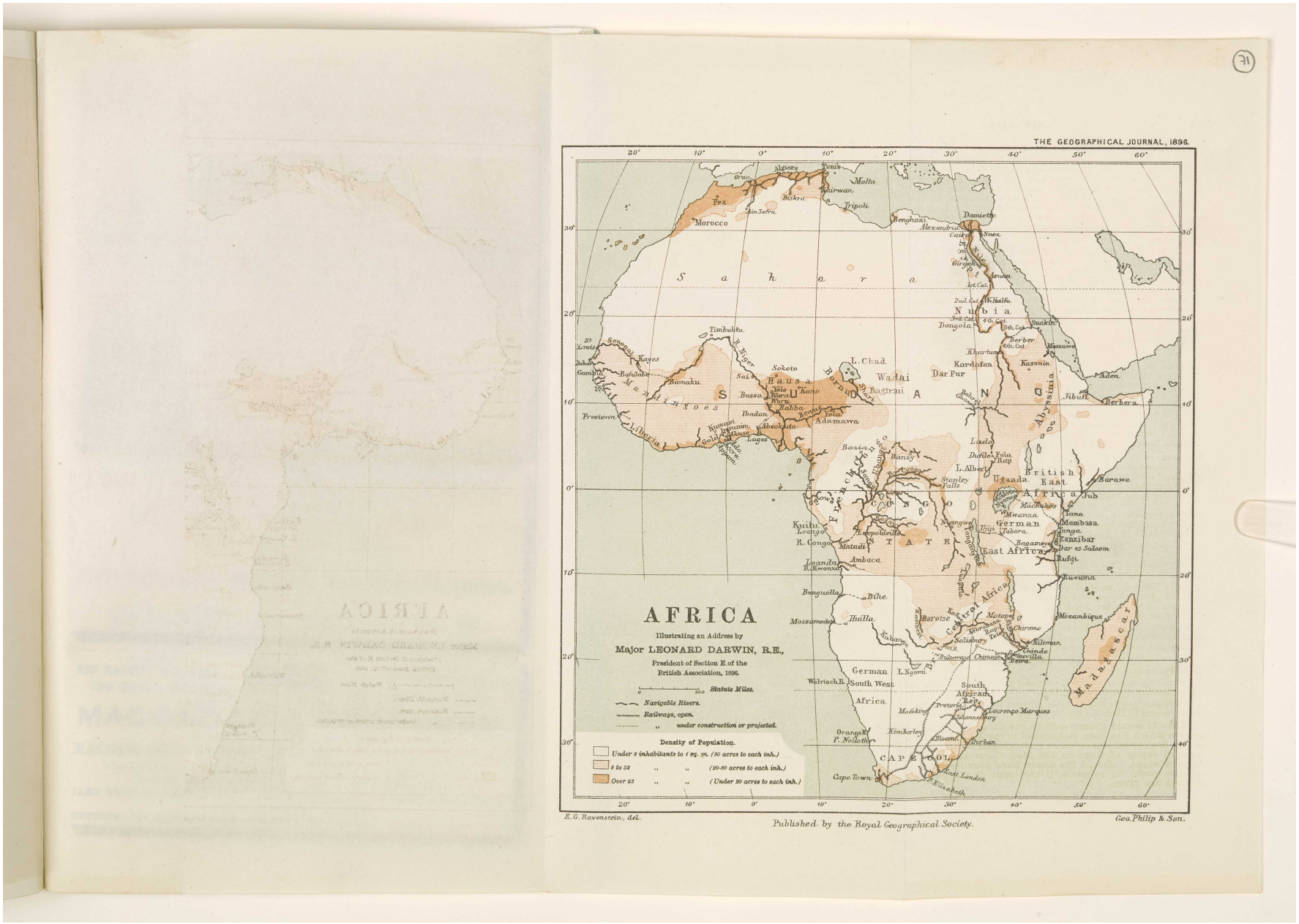
مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a3

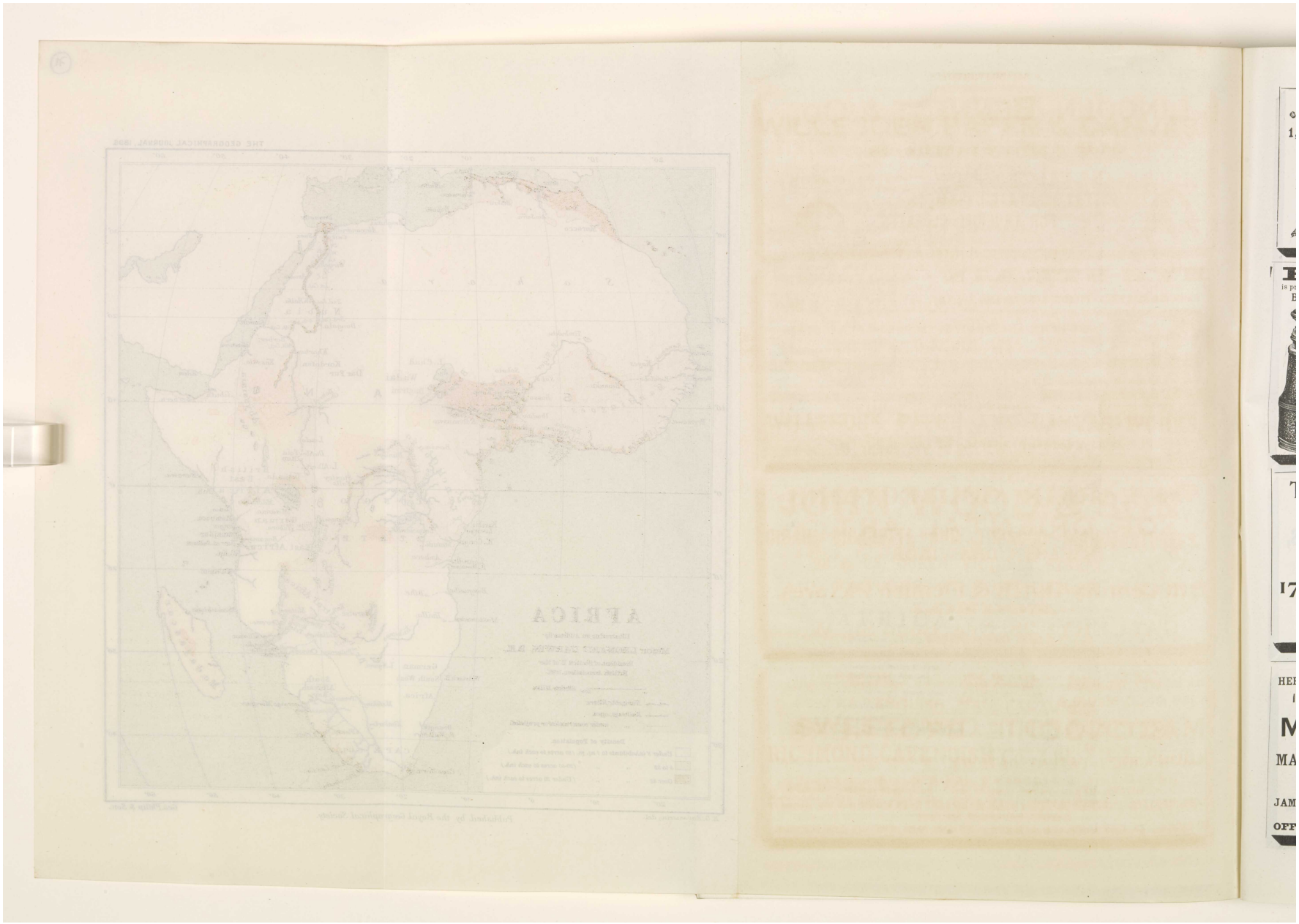
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY


THE GEOGRAPHICAL JOURNAL, 1896.
AFRICA
Illustrating an Address by
Major LEONARD DARWIN, R.E.,
President of Section E of the
British Association, 1896.
Statute Miles.
Navigable Rivers.
Railways, open.
under construction or projected.
Density of Population.
Under 8 inhabitants to 1 sq. m. (80 acres to each inh.)
8 to 32 (20-80 acres to each inh.)
Over 32 (Under 20 acres to each inh.)
Sahara
Nubia
Abyssinia
Wadai
Kordofan
Dar Fur
L. Chad
Bagirmi
Haussa
Sokoto
Kano
Timbuktu
Niger
Senegal
Gambia
Sierra Leone
Liberia
Gold Coast
Lagos
Adamawa
Bornu
Benue
Congo Free State
L. Albert
Uganda
British East Africa
German East Africa
Zanzibar
Mombasa
Madagascar
Mozambique
Zambesi
Nyassa
Tanganyika
L. Ngami
German South West Africa
Walvisch B.
Cape Colony
Cape Town
Port Elizabeth
East London
Durban
Kimberley
Pretoria
Johannesburg
Lourenço Marques
Orange R.
Transvaal
Zanzibar
Aden
Berbera
Suakin
Khartoum
Massawa
Tripoli
Benghazi
Alexandria
Cairo
Suez
Algiers
Tunis
Malta
Fez
Morocco
Tangier
Timbuktu
Sierra Leone
Freetown
Liberia
Gold Coast
Lagos
Abeokuta
Ibadan
Yola
Bassa
Banzy
Lado
Dufile
Fola
Rap
Stanley Falls
Kassala
Berber
Dongola
Wadi Halfa
Barawa
Jub
Machakos
Mwanza
Tabora
Mpwapwa
Bagamoyo
Dar es Salaam
Rufiji
Ruvuma
Kilimane
Beira
Chinde
Quilimane
Inhambane
Delagoa Bay
Lourenço Marques
Bihe
Benguella
Mossamedes
Huilla
Ambaca
Loanda
Kwango
Kasai
Kuilu
Loango
Leopoldville
Matadi
Congo R.
Lake Tanganyika
Lake Nyassa
Zambesi R.
Shire R.
Victoria Nyanza
Albert Nyanza
Albert Edward Nyanza
Baroze
Matopo
Chirome
Salisbury
Tete
Pungwe R.
Limpopo R.
Kuruman
Griqua Town
Bloemfontein
Aliwal North
Barberton
Pietermaritzburg
Durban
Port Elizabeth
East London
Cape Town
Orange R.
Kimberley
Mafeking
Pretoria
Johannesburg
Lourenço Marques
Zanzibar
Mombasa
Tanga

مكتبة قطر الوطنية
Qatar National Library

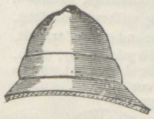
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000075

مكتبة قطر الوطنية
Qatar National Library

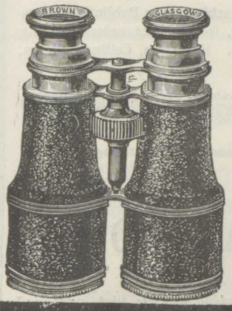
LINCOLN, BENNETT & Co.,
1, 2 and 3, SACKVILLE STREET, and 40, PICCADILLY, LONDON, W.
Hat Manufacturers.
BY SPECIAL APPOINTMENT
To T.R.H. THE PRINCE and PRINCESS OF WALES.



PATENT INSULATED HELMETS
FOR TROPICAL CLIMATES,
As supplied to Fellows of the Royal Geographical Society.



EYE-STRAIN, with its consequences—HEADACHE, GIDDINESS, SLEEPLESSNESS, etc.—
is prevented and relieved by timely use of
BROWN'S CORRECT VISION SPECTACLES and ANTI-PRESSURE EYE-GLASSES.
Prices from 2s. 6d., upwards. Gold frames from 21s.



BROWN'S CELEBRATED "SCORER" FIELD GLASS.
Shows number of people in boats 4 miles distant, and is unrivalled for all-round excellence. None are genuine without "Brown, Glasgow," on eye-pieces, and "Scorer" on top bar. Price 35s., post free.

BROWN'S POCKET ANEROID,
For measuring heights and forecasting weather, at 21s. is pronounced equal in value to many at double price.

BROWN'S OPTICAL LANTERNS,
For Teachers and Lecturers. Vary in price from 25s. to £20. They give 8 to 20 feet pictures, and possess all the latest improvements.

JAMES BROWN, 76, St. Vincent St., GLASGOW.

The LARKIN COLLECTIONS
OF ORIENTAL ART,
KWASON DRAWINGS,
AND
17th Century Dutch & Flemish Pictures.
GALLERY: 28, New Bond St., W.

Purveyors to
HER MAJESTY THE QUEEN.
139 GOLD MEDALS



Purveyors to
H.R.H. THE PRINCE OF WALES.
AND FIRST AWARDS.

MACONOCHIE BROTHERS,
MANUFACTURERS of all kinds of Preserved Provisions.
MACONOCHIE'S PATENT RATIONS. Prepared from Finest Scotch Beef or Mutton and Vegetables.
Your Hot Luncheon or Dinner in 5 minutes. Indispensable for all Exploring Parties.
POTTED MEATS, PATES, AND CAMP PIES A SPECIALTY.
JAMS, BOTTLED FRUITS, SOUPS, PICKLES, MARMALADE, FLAVOURING ESSENCES, SAUCES, SAUSAGES, etc., etc.
OFFICES: 131, LEADENHALL STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000088

مكتبة قطر الوطنية
Qatar National Library

ESTABLISHED 1870.

WILLESDEN PAPER & CANVAS
FOR ALL CLIMATES.

Proved to resist the White Ant.



Willesden 4-ply, for Sheds, Outbuildings, Leanto's, etc., fixed to open rafters and side studding without boarding. Supplied in rolls of any length. Very portable and easy of transit.

19 in. .. 9d. per yard run.
54 in. .. 2s. 3d. „ „ „
60 in. .. 2s. 6d. „ „ „

One roll, 100 yds., 4-ply, 54 in. (packed for shipment), weighs 2 cwt., covering 15 squares roofing approx.

Structures covered with Willesden Paper Roofing have been standing exposed to all weathers for the last 12 years.

TRADE WILLESDEN WATERPROOF W W UNIQUE REGD 1880. MARK.

Willesden 2-ply, for underlining Slates or Tiles. Largely specified by leading Architects for Public Buildings, Mansions, etc. Insulating Chill Rooms, on land and aboard ship. Recent large contracts, Government orders. Lining Corrugated Iron or Zinc Buildings, preventing drip from condensation and radiation of heat. Partitions, Ceilings, Floors, preventing penetration of dust, etc.

Willesden 1-ply, for Linings of all kinds, Damp Walls, Electrical Purposes, Labels, Press Damping Sheets, Stencils, etc. Supplied in rolls of continuous lengths. Suitable for all climates.

Sole Patentees and Manufacturers of the Green Rot-Proof Process, for treating Paper, Canvas, Cordage, etc.

All orders to be indented to—

WILLESDEN PAPER AND CANVAS WORKS,
WILLESDEN JUNCTION, LONDON, N.W.

[*Willesden Canvas, Scrim, Shading, etc., see Advt., page xiv.*]

JOHN WOOD & SON,
CIGAR, CIGARETTE AND TOBACCO MANUFACTURERS,
23 & 25, QUEEN VICTORIA STREET, E.C.;
AND FACTORY, 87, SOUTHWARK STREET,
LONDON.

ESTABLISHED 1836.

Awarded Gold Medal Liverpool International Exhibition, 1886.
Also Grand Prix (Highest Award) Antwerp, 1894.

ENGLISH MANUFACTURED
SWEETENED TOBACCOS.
RICHMOND CAVENDISH Co., Ltd., LIVERPOOL.

SPECIAL BRANDS:—

"Pioneer" Golden Flake Cut. Twin Clouds. "Richmond Smoking Mixture." Richmond Navy Cut. Superfine Bird's Eye. "Hand it Round." Fine Cigarette Tobacco. Golden Bird's Eye. "Golden Brown" Fine Cut. Bright and Black Plug Cavendish in all usual sizes.

PRICE LISTS ON APPLICATION. ESTABLISHED OVER THIRTY YEARS.

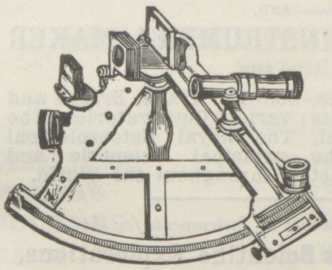
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

CARY'S

TRAVELLING SETS OF SURVEYING INSTRUMENTS,

Cary's Celebrated Edge-Bar Sextant.



Consisting of Barometers, Compasses, Sextants, Artificial Horizons, Binocular Glasses, &c., &c., specially made for the ROYAL GEOGRAPHICAL SOCIETY, by

H. PORTER

APPRENTICE AND SUCCESSOR TO THE LATE

W. CARY,

Optician by Special Appointment to the Admiralty, War Office, India Office, Trinity House, Swedish, Norwegian, and other Foreign Governments.

7, Pall Mall, London, S.W.

ESTABLISHED OVER 100 YEARS.

ONLY MAKER of Capt. George's Patent Barometers, Artificial Horizons, & Double Sextants.

GOLD MEDALS AND HIGHEST AWARDS.



FOLDING SPRING CAMP BED.

ISAAC CHORLTON & CO., 17, BLACKFRIARS ST., MANCHESTER.

AS USED BY THE ADMIRALTY; also In India, Africa, &c.

LIGHT BUT STRONG

NO CAST IRON. HEAD AND LEGS FOLD.

Patentees and Manufacturers of all kinds of Folding Beds, Berths, Spring Beds, Couches, &c., &c.

The Folding Beds may be fitted with detachable Mosquito Curtain Rods, and may be made to fold in centre of length. Only the Trade supplied.

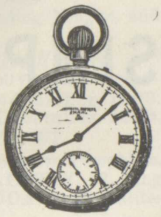
LONDON: 149, QUEEN VICTORIA ST., E.C.

HERBERT BLOCKLEY, SUCCESSOR TO LUND & BLOCKLEY

(Late VINER, Established 1801.)



Watch & Clock Makers



TO

The Queen, the Royal Family, Royal Geographical Society, Admiralty, Foreign and Colonial Offices, &c.

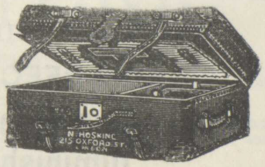
Sole Authorized Makers of the R. G. S. Watertight Half-Chronometer Keyless Fusee Watch. Watches for all Purposes. Marine Chronometers.

41, DUKE STREET, ST. JAMES'S, LONDON.



ESTABLISHED 1750.

As Supplied to Members of the Royal Geographical Society.



N. HOSKING,

Solid Leather Portmanteau, Trunk & Bag Manufacturer,

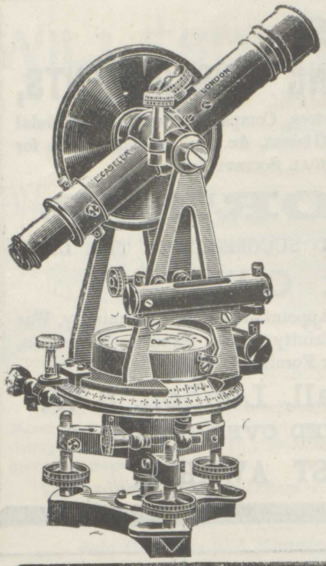
215 & 217, OXFORD STREET.

Speciality in Ladies' Light Travelling Dress Baskets and Cabin Trunks.

PURSES, LETTER CASES, AND FANCY LEATHER GOODS, AND ALL KINDS OF LEATHER BAGS.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000079

مكتبة قطر الوطنية
Qatar National Library



L. CASELLA,

Surveying, Mining, Meteorological,

AND

ELECTRICAL INSTRUMENT MAKER

TO THE

Admiralty, Ordnance, Board of Trade, British and Foreign Governments; various Observatories; The Royal Geographical, The Royal Meteorological Societies, and the principal Scientific and Meteorological Societies throughout the World.

Every improvement in Instruments for the

Army, Navy, & Scientific Explorations,

Many of these now being made in Aluminium, for portability.

And special sets of portable and other Instruments as supplied to the Royal Geographical Society and other Explorers.

147, HOLBORN BARS, LONDON, E.C.

Telegraphic Address: "ESCUTCHEON, LONDON."

ADMIRALTY CHARTS. The Latest Editions of Charts, Plans, and Sailing Directions, Published by the Admiralty,

CAN BE OBTAINED FROM

J. D. POTTER,

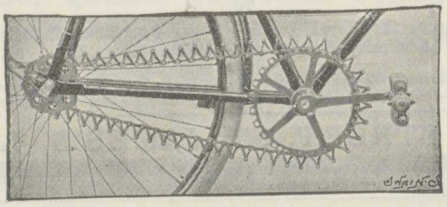
SOLE AGENT for the Sale of the Admiralty Charts, by appointment of the Lords Commissioners of the Admiralty, and

Publisher of Nautical Books,

31, Poultry, E.C., and 11, King Street, Tower Hill, E., LONDON.

THE

SIMPSON LEVER CHAIN.



NO MORE DIFFICULTY IN ASCENDING HILLS.

A PERFECT REVOLUTION IN CYCLING.

Increases EASE and SPEED.
Diminishes FRICTION and EXERTION.

INDISPENSABLE FOR LADIES.

CAN BE FITTED TO ALL MACHINES.

London Show Rooms: 119, REGENT STREET, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005b

مكتبة قطر الوطنية
Qatar National Library

INDIA, CEYLON, JAVA, QUEENSLAND, BURMAH, PERSIA, EAST AFRICA, &c.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED,
BRITISH INDIA ASSOCIATION.

MAIL STEAMERS FROM LONDON TO

CALCUTTA.	BOMBAY.	BRISBANE.
MADRAS.	KURRACHEE.	BATAVIA.
COLOMBO.	BAGHDAD.	ROCKHAMPTON.
RANGOON.	ZANZIBAR.	TOWNSVILLE.
MAURITIUS.	MOMBASSA.	MARYBOROUGH.

For Dates see Daily Advertisements.

Delivering Mails, Passengers, Specie, and Cargo to all the principal Ports of INDIA, BURMAH, EAST AFRICA, QUEENSLAND, and JAVA.

Every comfort for a tropical voyage.

Apply to GRAY, DAWES, & CO., 23, Great Winchester Street, E.C., and Craven House, Northumberland Avenue, W.C.; or to GELLATLY, HANKEY, SEWELL, & CO., Albert Square, Manchester; 51, Pall Mall, and Dock House, Billiter Street, London.

AUSTRALIA, HONOLULU, FIJI, NEW ZEALAND.

NEW SWIFT PASSENGER ROUTE by Swiftest Atlantic Steamers (any line) to Montreal or New York; thence *viâ*

CANADIAN PACIFIC RAILWAY AND VANCOUVER.

Taking in the Grand Scenery of the "Rockies." Many optional Routes, including Niagara and Chicago. Stopover privileges granted.

THE ROYAL MAIL STEAMSHIPS OF THE CANADIAN-AUSTRALIAN LINE.

Largest, Swiftest, and Finest running from American Continent to Australasia, leave VANCOUVER as follows:—

R.M.S. MIOWERA—Captain Chas. Wm. Hay ... ... 8th November, 1896.
R.M.S. WARRIMOO—Captain Campbell Hepworth, R.N.R. 8th December, 1896.

Calling at VICTORIA, B.C., HONOLULU, and FIJI, en route to SYDNEY.

Electric Light, Hot and Cold Baths, Good Cuisine, Large Cabins. For Descriptive Pamphlets, Tickets, and Berths, apply to Passenger Department, CANADIAN PACIFIC RAILWAY, 67, King William Street, E.C.; 30, Cockspur Street, S.W.; or to the Owner, JAMES HUDDART, 22, Billiter Street, London, E.C.

NORTH GERMAN LLOYD.

FAST MAIL STEAMERS will sail regularly from Southampton, as under:—

NEW YORK.—Direct, Wednesdays. Average passage 7 days. Special train from Waterloo Station on sailing day. Reduced rates of passage through from London. Liberal accommodation and high-class cuisine.

CHINA AND JAPAN.—By new Fast Mail Steamers, with all modern improvements, leaving every 28 days, taking passengers for Genoa, Naples, Egypt, Aden, Colombo, Singapore, Hong Kong, Shanghai, and Japan ports.

AUSTRALIA.—By new Twin-Screw Steamers of 10,500 tons register, every 28 days. First-class cabins for single passengers.

RIVER PLATE (Monte Video and Buenos Ayres), taking passengers to and from Las Palmas (return tickets). New steamers of good power and exceptional first-class accommodation. Low fares through from London.

Apply to KELLER, WALLIS, & CO., 32, Cockspur-street, Charing Cross; 65, 66, 67, Gracechurch-street, City. Telephone No. 2012; Telegrams, "Teutonic, London;" and at Manchester and Southampton. Or to Phillips & Graves, Botolph House, Eastcheap, E.C.; or Kane & Co., 19, Rue Scribe, Paris.

Special "Round the World" rates by either of the above lines.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000060

مكتبة قطر الوطنية
Qatar National Library

THE MOST FASHIONABLE
AND
POPULAR HOTEL IN EUROPE.

HOTEL CECIL, LONDON.

SPLENDID SITUATION;
EVERY LUXURY and COMFORT;
UNEQUALLED CUISINE, and
MODERATE CHARGES.

THE
MAGNIFICENT BANQUETING HALLS,
CAPABLE OF SEATING 1500 GUESTS, ARE NOW OPEN FOR
PUBLIC AND REGIMENTAL DINNERS, BALLS, ENTERTAINMENTS, WEDDING RECEPTIONS, Etc., Etc.

Full Particulars on Application to
G. P. BERTINI, Manager.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

HÔTEL MÉTROPOLE, LONDON,

NORTHUMBERLAND AVENUE, TRAFALGAR SQUARE.

The Hôtel Métropole, London, offers unequalled accommodation for real comfort and luxury in every detail.

Numerous single and double Bedrooms, also Bedrooms, with private Bathroom and Lavatory attached; all most comfortably and beautifully furnished.

Suites of Private Apartments varying in accommodation from Bedroom and Sitting-room, with or without private Bath and Dressing-room, to the princely suites comprising Dining, Drawing, and Reception Rooms, with Bedrooms, Dressing-rooms, and Bathrooms.

The Restaurant, well known for its high standard of excellence, is also available for guests not staying in the Hotel. Table d'Hôte Breakfast, Luncheon, and Dinner. Also *à la carte* Service at moderate prices.

THE GORDON HOTELS ARE—

Grand Hotel, London.
Hôtel Métropole, and Whitehall Rooms, } London.
Hôtel Victoria, London.
First Avenue Hotel, London.
Hôtel Métropole, and Clarence Rooms, } Brighton.

Burlington Hotel, Eastbourne.
Royal Pier Hotel, Ryde, I. of W.
Cliftonville Hotel, Margate.
Hôtel Métropole, Monte Carlo.
Hôtel Métropole, Cannes.

Proprietors—THE GORDON HOTELS, LIMITED.

London, Edinburgh & Glasgow Assurance Company, Ld.

"ACCIDENT TONTINE BONUS FUND FOR NON-CLAIMANTS."

EXAMPLE OF EIGHTH DIVISION—1896.

ACCIDENT POLICY ISSUED 1881.

Original Annual Premium		£4	8 0
Less Ordinary Bonus, 12½% ..	11/-		
,, Temperance ,, 7½% ..	6/3		
,, Tontine ,, 18¾% ..	16/5	£1	13 8
Net Premium for 1895		£2	14 4

Applications for Agencies invited.

YOU CAN HAVE
£1,000 at Death by Accident of any kind
£1,000 if permanently disabled; or £500 if partially disabled; or £7 a week during temporary total disablement, or £1 15s. per week during temporary partial disablement, for a Premium of £4 3s. 4d.

FOR PARTICULARS WRITE TO
THOS. NEILL, General Manager.

Head Office—Insurance Buildings, Farringdon Street, London, E.C.

TOTAL CLAIMS PAID EXCEED .. .. £950,000.

MINERVA PRINTING OFFICE.



ESTAB. 1790.

DARLING & SON, LIMITED

(Printers to H.M. Stationery Office),
1, 2, 3 & 5, GREAT ST. THOMAS APOSTLE
(Mansion House Station),
AND
31, EASTCHEAP, LONDON, E.C.

PRINTERS OF BOOKS OF TRAVEL, NEWSPAPERS, MAGAZINES, PERIODICALS, &c.
ENGRAVERS OF BONDS & BANK NOTES.
ACCOUNT BOOK MANUFACTURERS & LITHOGRAPHERS.

ESTIMATES FREE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

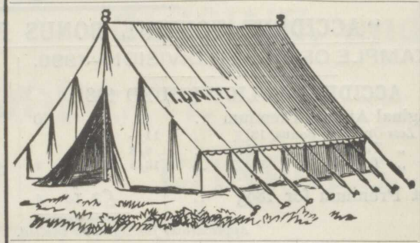
Don't Cough - use
They at once check the Cough and remove the cause.
The Unrivalled
One Lozenge alone relieves.
Sold everywhere, Tins 13½d. each.
Keating's Lozenges

WOOD'S LANTERNS & SLIDES
ON SALE OR HIRE.
Geography, Biography, Travel, Literature, Natural History, Agriculture, Botany, Electricity, Magnetism, Light, Heat, Physiology, Surgical Aid, Hygiene, Geology, History, Politics, Astronomy, Architecture, Art Engineering, Chemistry, Manufactures, Sacred History, etc.
Printed Lectures for all the Sets.
Plain Slides, 12s. doz.; Coloured Slides, 30s. doz.
New List of Lanterns and Slides, post free, three stamps.
74, CHEAPSIDE, LONDON.

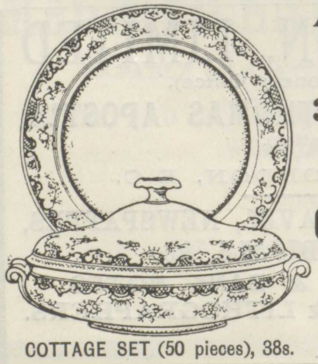
DRESS SHIRTS,
Unequalled for quality and accuracy of fit.
POPE & PLANTE,
HOSIERS by Appointment to the Queen,
MANUFACTURERS OF
Surgical Elastic Stockings,
136, REGENT ST., LONDON, W.
(ESTABLISHED 1750.)

Established nearly a Century.
HILL & SON,
4, HAYMARKET, LONDON,
Manufacturers of
Sporting, Table, Toilet, & Pocket Cutlery,
ALPINE ICE-AXES, SKATES,
AND FINE STEEL WORK GENERALLY.
Practical Dodgy Utilities for Home Requirements and Travellers' Use.
☞ Reliable English-made Goods at Moderate Prices.

The Practical Scientific Cabinet Makers.
J. T. CROCKETT & SON,
(ESTABLISHED 1847),
Makers of every Description of Cabinets, Cases, Store Boxes, Apparatus and Appliances,
And Dealers in all kinds of Specimens for Entomologists, Botanists, Ornithologists, Geologists, Mineralogists, Numismatists, Conchologists, etc., and for the use of Lecturers, Science Teachers, Colleges, Students, etc.
MUSEUMS FITTED AND ARRANGED.
Birds, Animals, Fish, etc., Preserved and Mounted in Glass Shades, Medallion and Cases (with their most natural surroundings).
ALL BEST WORK. ESTIMATES GIVEN.
☞ All goods at Store Prices. Great Advantages in dealing direct with Makers.
Send for full detailed Price List before ordering elsewhere.
7a, Princes St., Cavendish Square, LONDON, W.
Factories: 34, Riding House Street and Ogle Street, W.

I. UNITE, 291 & 293, Edgware Rd., LONDON, W.
ESTD. 1748.


Tents, Waterproof Garments, Tarpaulins, Cordage, Flags, Camp Equipments, etc.
Telegrams:—"UNITENT," LONDON. Price lists on application

THE CHINESE DINNER SET, 38s.

COTTAGE SET (50 pieces), 38s.
ALFRED B. PEARCE,
CHINA & GLASS MANUFACTURER,
39, LUDGATE HILL, LONDON.
(ESTABLISHED 1760.)
CHINA, GLASS, AND EARTHENWARE
FOR HOME AND COLONIAL USE.
First-class Quality. Superior Taste. Moderate Prices.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000034

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

DISINTEGRATING
AND
SCREENING MACHINERY
FOR ALL KINDS OF MATERIAL.

THE "DEVIL" DISINTEGRATOR is the best for moderately fine and coarse grinding.

THE "MULTIPLE" GRINDER is the best for very fine and impalpable grinding.

THE MAGNETIC SEPARATOR is the most Perfect Machine for Separating Iron and Steel from any other material.

THE VIBROMOTOR provides a New Mechanical Motion by which Oscillating, Shaking, and Gyrating Machinery can be worked **without the usual objectionable and harmful vibration of the whole fabric and buildings connected with such machinery,** and is the best method of working Coal Screens, Separators, Concentrators, and all Screening Machinery.

THE HARDY PATENT PICK CO., LD.,
SHEFFIELD, ENGLAND.

The Military Equipment Stores & "Tortoise" Tents Co., Ltd.,
OFFICES & SHOWROOMS: 7, WATERLOO PLACE, S.W.
BRANCH: 61, PALL MALL, LONDON, S.W.
Telegraphic Address: "Wagonage, London."

POLAR EXPEDITIONS COMPLETELY FITTED OUT AND PROVISIONED.

☞ If Suitable Notice is given, Arrangements can be made for the Purchase or Hire of a Scotch, Norwegian or American Whaler; also for the Hire for a Summer Sporting Cruise of a completely fitted-out Walrus Sloop, with Crew comprising competent Ice Pilot and Officers.

Siberian Dogs.
Russian Ponies.
Reindeer.
Reindeer Dried Meat.
Russian Log Huts.
Sledges (Dog, Hand, or Reindeer).
Ski.
Finmarken Ski.
Telmarken Ski.
Extra long flat Ski as used by Nansen for smooth ice.
Sails and Masts in bamboo for Sledges.
Fur Malitzas.
Fur Sovike.
Loupthu.
Pimmies.
Reindeer-skin Toboc.
White Blanket Toboganing Suits.

Fur Dog-skin Gloves (leather-lined).
Watertight Sealskin Boots with leather feet.
Fur-lined Sea Boots.
Reindeer Sleeping Bags.
Sheep-skin Caps for crew.
Cat-skin Stockings.
Loose Tan Reindeer Skins.
Black Swedish Skin Jackets lined with red flannel for crew.
Brown ditto for officers.
Reindeer-skin Finskoo.
Elk-skin Winter Boots.
Lapp Pesks with hood and glove attached.
Young and Old Reindeer Stockings.
Black Leather Ski Boots for Ski-running.

Ice Spikes with straps.
Finn Bindings for Ski.
Ice Sledge Boats.
Walrus or Whale Boats.
Aluminium Boats.
Berthon Boats.
James or Sayce Collapsible Boats.
Arctic Collapsible Huts.
Walrus and Whale Harpoons.
Lines and Lances.
Bottle-nose Whale Lances.
Grindacrooken.
Alpine Rope.
Masts, Sails, and Oars for Ice and Walrus Boats.
Bamboos with flags attached for marking positions in the ice.

All descriptions of Flags, Sledge Covers, Valises, Special Tents, Jackson's Aluminium Stoves, Canteens, Forks, Spoons, &c., &c.
Special Condensed Food for Sledging and Arctic work.
All requirements of Provisions to keep preserved & sweet for a number of years.
Jaeger Vests and Drawers, Ice Axes, Alpen Stocks, Plane Tables, Compasses, Barometers for Altitude, small Registering Thermometers, Wet and Dry Bulbs, and other Instruments.
Guns, Rifles, Harpoon Guns, Revolvers, Ammunition, &c., &c.
Medicine Chests and complete Medical Stores.
Military Equipment Co. Compressed Coffee, Tea, Cocoa, Sugar, Salt, &c., in Tablets.

MILITARY, EXPLORING AND SPORTING EXPEDITIONS COMPLETELY FITTED OUT, AND PROVISIONED TO ALL PARTS OF THE WORLD.

All Applications for Advertisements to be made to—
WALTER JUDD, LTD., 5, QUEEN VICTORIA STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000024

مكتبة قطر الوطنية
Qatar National Library

DECEMBER, 1897.

VOL. X. NO. 6.

The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

SUMMARY OF CONTENTS.

(For Details, see over.)

	PAGE
The President's Opening Address, November 8, 1897	565
Recent Journeys in Persia. By Captain P. MOLESWORTH SYKES	568
A Journey to Siwa in September and October, 1896. By WILFRED JENNINGS-BRAMLY	597
Ancient Trading Centres of the Persian Gulf. By Captain ARTHUR W. STIFFE, R.I.M.	608
Potamology as a Branch of Physical Geography. By Professor ALBRECHT PENCK, PH.D.	619
The Topographical Work of the Geological Survey of Canada. By J. BURR TYRRELL, M.A., B.Sc, F.G.S.	623
History and Literature of the Klondike Region	631
The Monthly Record	632
Obituary	642
Geographical Literature of the Month	646
New Maps	657
Maps and Illustrations.	

TITLE-PAGE, CONTENTS, INDEX, ETC., TO VOL. X.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.

PUBLISHED MONTHLY.] [To Non-Fellows, Price 2s.

For Notices as to the Society's Meetings and other important matters, see p. iv.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

TRADE MARK

'Tabloid' BRAND Medicine

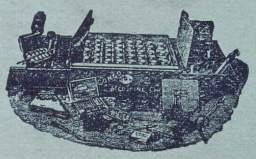
Cases and Chests.

TABLOID

TABLOID

TABLOID

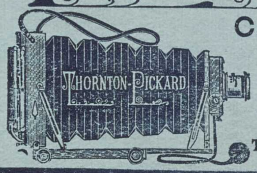
TRAVELLERS, explorers and missionaries are enabled to carry the most effective medicines in the smallest possible space by using 'Tabloid' Medicine Cases as supplied to Stanley and to all leading expeditions. 'Tabloid' medicines contain absolutely accurate doses of the purest drugs, require neither weighing nor measuring, and retain their activity after exposure to the most trying climates. 'Tabloid' outfits vary in size from pocket cases to caravan chests.



Burroughs Wellcome & Co., Snow Hill Buildings, LONDON.

THORNTON-PICKARD

Illustrated Catalogue Free.



CAMERAS AND SHUTTERS

Are the outcome of practical experience and high-class workmanship.

"AMBER" CAMERA, No. 1, Complete Outfit, £5 3s. 6d.
"RUBY" CAMERA, No.1, Complete Outfit, ½-plate, £11 4s.
TIME & INSTANTANEOUS SHUTTER, from 18s. 6d.

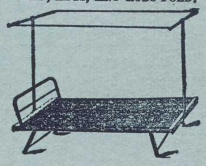


THORNTON-PICKARD MANUFACTURING CO., Ltd., ALTRINCHAM.

ISAAC CHORLTON & CO.'S PATENT SPRING BEDSTEADS.

17, Blackfriars St., MANCHESTER. Also 149, Queen Victoria St., LONDON.

HEAD, LEGS, AND RODS FOLD.



FOR ALL CLIMATES.

PACKS IN PARTS.



As supplied to the Admiralty, War Office, India Office, etc., and to Members of the Royal Geographical Society.

Supplied by all Furnishers and Shippers.



FOLDS IN CENTRE.

ALL CHORLTON'S GOODS BEAR THIS TRADE MARK.

None other are Genuine.



GREAT VARIETY.

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

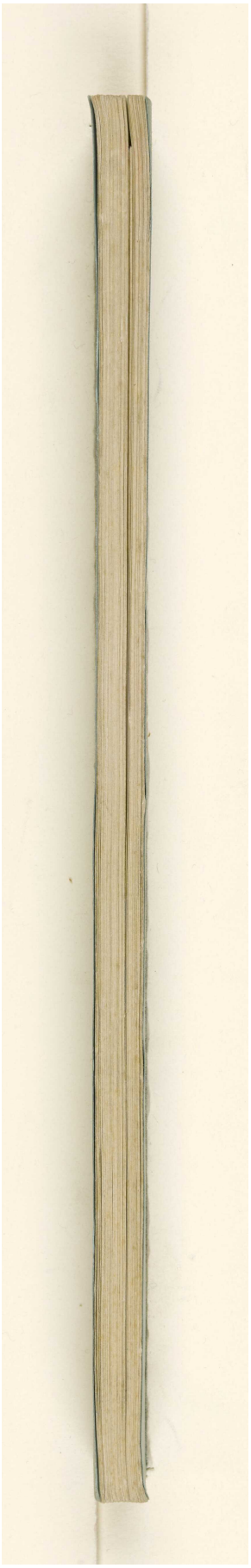
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c0

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000080

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004b

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000081

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000b

مكتبة قطر الوطنية
Qatar National Library

THE GEOGRAPHICAL JOURNAL. To Advertisers.—All communications respecting Advertisements and Bills to be sent to the Advertisement Manager, Mr. Walter Judd, 5, Queen Victoria Street, Mansion House, E.C.

H. SOTHERAN & CO.,
Booksellers, Bookbinders & Publishers.
GENERAL AGENTS FOR PRIVATE BOOKBUYERS & PUBLIC INSTITUTIONS
In India, the Colonies, America, and foreign parts.
A MONTHLY CATALOGUE of SECOND-HAND BOOKS: Specimen No. post free.
LIBRARIES PURCHASED OR VALUED FOR PROBATE.
Telegraphic Address: Bookmen, London. Code in Use: Unicode.
140, STRAND, W.C., & 37, PICCADILLY, W.

BENJAMIN EDGINGTON'S
Tents and Outfits for Africa and the Tropics.
DOUBLE-ROOF RIDGE TENT
As supplied to the Fellows of the Royal Geographical Society.



Made from a Special Canvas, treated by the Copper Rot-Proof Process.

"*December* 3, 1895.

"Dear Sir,

"After four years in East Central Africa, I have no hesitation in saying that, as far as my experience and observation go, your tents are the best that can be procured.

"I have seen other tents, when almost new, torn to pieces after a tropic storm, or giving way after one rainy season, while one of your double-roof tents which I used constantly for two years in Central Africa, is still as strong and sound as ever.

"Yours faithfully,
"R. U. MOFFAT, M.B.,
"Medical Officer, Uganda Protectorate."

H.M. Commissioner H. H. JOHNSTONE writes:—"Nothing could be more serviceable or thoroughly good than those last supplied by yourself, August 16, 1893." (Order for Tents.)

Surgeon-Major PARKE wrote, March 28, 1893:—"I lived under canvas almost continually from 1887 until we emerged from Africa with Emin Pasha in December, 1889. *Unquestionably* yours *are the best Tents made.*"

W. GORDON STABLES, M.D., R.N., says:—"Mr. Edgington's Tents and Cots are the best in the world for comfort in camping out."

For Price Lists and Particulars address—
BENJAMIN EDGINGTON, Ltd., 2, Duke Street (Foot of London Bridge), S.E.

DR. E. D. MOORE'S
Original Preparations
OF CHOCOLATE,
COCOA, AND COFFEE,
WITH CONDENSED MILK.
ESTABLISHED 1840.

Used for many years in the Army and Navy, in the Crimean War and Arctic Expeditions. Will keep good for years in any climate. Most suitable for Travellers, Tourists, Colonists, etc. *Sold in 1 lb. and ½ lb. Tins.*

Works: Littleworth, Newport (Salop).

SYMINGTON'S
HIGH PRESSURE STEAM PREPARED PEA FLOUR.
EASILY DIGESTED.
FOR SOUPS, GRAVIES, &c.
Sold in Tins and Packets by Grocers.

EGYPTIAN FOOD. For Invalids and Infants.
Sold in Tins 1s. per lb.

W. SYMINGTON & CO.,
Bowden Steam Mills, Market Harboro'.
Export Agent: J. T. MORTON, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000062

مكتبة قطر الوطنية
Qatar National Library

For List of Council and Officers, Conditions of Admission to the Fellowship of the Society, and Society Notices, see pages ii. and iv.

The Geographical Journal.

Authors are alone responsible for their respective statements. In MS. communications all new or unfamiliar geographical names should be written in imitation of Roman type.

CONTENTS.—DECEMBER.

PAGE

The President's Opening Address, November 8, 1897 565
Recent Journeys in Persia. By Captain P. Molesworth Sykes 568
A Journey to Siwa in September and October, 1896. By Wilfred Jennings-Bramly . 597
Ancient Trading Centres of the Persian Gulf. By Captain Arthur W. Stiffe, R.I.M. . 608
Potamology as a Branch of Physical Geography. By Professor Albrecht Penck, Ph.D. 619
The Topographical Work of the Geological Survey of Canada. By J. Burr Tyrrell, M.A., B.Sc., F.G.S. 623
History and Literature of the Klondike Region 631
The Monthly Record 632

EUROPE
Oceanographical Researches in Loch Fyne
The Development of the Peninsula of the Apennines
The Rainfall of Western Europe
Mode of Formation of the Dunes of Gascony
ASIA
Bogdanovitch's Exploration of the Stanovoi Mountains, Eastern Siberia
AFRICA
The New Franco-German Boundary in West Africa
German-Portuguese Boundary in East Africa
Explorations in the Congo Basin
Explorations in the Cameroons
The Uchungwe Mountains, German East Africa

AFRICA—*continued.*
Antidote to African Arrow-poison
AMERICA
The Jessup Expedition to the North Pacific Coast
The Geology of the Bermuda Islands
American Expedition to Patagonia
AUSTRALASIA AND POLYNESIA
Successful Boring at Funafuti
POLAR REGIONS
Norwegian Andrée Search Expedition
Swedish Polar Expedition determined on
The Belgian Antarctic Expedition
GENERAL
Geographical Reading for Teachers
Portuguese Celebration of the Discovery of the Sea-route to India
Death of A. von Mojsisovics
New Geographical Society at Southampton

Obituary—Sir Rutherford Alcock, K.C.B., D.C.L. Dr. Don Agustin Aspiazu . . . 642
Geographical Literature of the Month 646
New Maps 657

MAPS AND ILLUSTRATIONS.

The Farman Farma's Garden at Mahun 571
The Taftan Range, Sarhad . . 573
The Governor of Magas and Family . 576
The Fort at Bam 579
Kubeh-i-Subs or "Green Dome" at Kerman 581
Pass of the "Old Woman" between Shiraz and Bushire 583
Tombs of the Kaianian Maliks at Jalk 587
The Lajji Valley on the Beluch-Kalat Frontier 589
The Water-Mills of Shuster . . 591
Map of Siwa 601
Date-drying Yard, Siwa . . . 605
Maskat, from the Anchorage outside the Forts 610
Maskat, from Makallah Bay, the Anchorage for Small Vessels . . 611
Inscription over Gateway in Fort Merani 612
Inscribed over a Window in Fort Merani 613
Fort of Felej 614
Sketch-Map of the New Franco-German Boundary in West Africa . 636
Sir Rutherford Alcock, K.C.B., D.C.L. 644
Sketch-Map of Persia, Afghanistan, and Beluchistan 660
Maskat and Matrah in Oman, Arabia 660

SOLD BY

PARIS: Barrère.
VIENNA: Artaria & Co.
HAMBURG: L. Friederichsen & Co.
ST. PETERSBURG: Watkins & Co.
MANCHESTER: John Heywood.
EDINBURGH: Douglas & Foulis.
DUBLIN: Hodges, Foster & Co.
BERLIN: D. Reimer.
LEIPZIG: F. A. Brockhaus.
NEW YORK: International News Co.
MELBOURNE: E. A. Petherick & Co.

STREETER & CO., LTD.,
JEWELLERS, PRECIOUS STONE AND GEM MERCHANTS, LAPIDARIES.

GEMS UNSURPASSED. *PEARLS PRE-EMINENT.*

At the Renowned Store of Streeter & Co. can be seen the Latest Novelties in Jewellery and Perfection in Gems.

STREETER & CO., Ltd., the recognized Authorities on all Precious Stones,
18, NEW BOND STREET, LONDON, W.

a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000046

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., &c., &c.

Honorary-Presidents.

HIS ROYAL HIGHNESS THE DUKE OF SAXE-COBURG-GOTHA, K.G., K.T., G.C.S.I., &c., &c.
HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL.

(ELECTED 17TH MAY, 1897.)

President—Sir CLEMENTS MARKHAM, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Right Hon. GEORGE N. CURZON, M.P.
Sir GEORGE D. TAUBMAN GOLDIE, K.C.M.G.
Sir RAWSON W. RAWSON, K.C.M.G., C.B.
General Sir R. STRACHEY, R.E., G.C.S.I., F.R.S.
Rear-Admiral Sir W. J. L. WHARTON, K.C.B., F.R.S.
General Sir CHAS. W. WILSON, R.E., K.C.B., K.C.M.G.

Treasurer—EDWARD L. SOMERS COCKS.

Trustees—Right Hon. Sir JOHN LUBBOCK, Bart., F.R.S., M.P.; CUTHBERT E. PEEK, F.S.A.

Honorary Secretaries—Major LEONARD DARWIN, R.E.; JAMES F. HUGHES.

Foreign Secretary—Sir JOHN KIRK, K.C.B., G.C.M.G., F.R.S.

Members of Council.

W. MORRIS BEAUFORT.
Lord BELHAVEN AND STENTON.
W. T. BLANFORD, LL.D., F.R.S.
Hon. G. C. BRODRICK.
Colonel GEORGE EARL CHURCH.
Colonel WILLIAM EVERETT, C.M.G.
Colonel J. FARQUHARSON, C.B., R.E.
Admiral Sir ANTHONY H. HOSKINS, G.C.B.
Right Hon. Lord LOCH, G.C.B., G.C.M.G., etc.
Rear-Admiral ALBERT HASTINGS MARKHAM.
ALFRED P. MAUDSLAY.
JOHN MURRAY, LL.D., F.R.S.
General Sir HENRY W. NORMAN, G.C.B., G.C.M.G.
Surg.-Major Sir GEORGE S. ROBERTSON, K.C.S.I.
EARL OF SCARBROUGH.
P. L. SCLATER, F.R.S.
Lord STANMORE, G.C.M.G.
Major the Hon. M. G. TALBOT, R.E.
Colonel Sir HENRY R. THUILLIER, R.E., K.C.I.E.
Admiral the Hon. W. J. WARD.

Secretary and Editor of Publications—J. SCOTT KELTIE, LL.D.

Librarian—H. R. MILL, D.Sc.

Map Curator.
JOHN COLES, F.R.A.S.

Chief Clerk.
S. J. EVIS.

Bankers—Messrs. COCKS, BIDDULPH, and Co., 43, Charing Cross.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that,

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his admission fee, and "£2 as his first annual subscription, or he may compound, either at his entrance by one payment of "£35, or at any subsequent period on the following basis:—

Fellows of 20 years' standing and over	...	...	...	£12 10s.
„ 15 „ „	and under 20	...	...	£16
„ 10 „ „	„	15	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the Society so long as "he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's Periodical Publications.

Copies of the Regulations and Candidates' Certificates may be had on application at the Society's Office, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

GABARDINE COMBINATION SPORTING OUTFITS

OUTSIDE GABARDINE, INSIDE RAIN-PROOFED TWEEDS (Burberry's Patent).

PROOF AGAINST WAIT-A-BIT THORNS AND SPEAR-GRASS. RAIN, SLEET, OR SNOW. HOT AND COLD WINDS. ANTS AND TROPICAL INSECTS.

(The latter points are of special importance for India and Africa.)

Yet perfectly VENTILATING, very DURABLE, and as COMFORTABLE as ordinary Tweed Garments.

"For lightness combined with strength, nothing has been found to equal the material known as GABARDINE, manufactured by Burberry, of Basingstoke. This substance deserves special recommendation, as one suit will generally outlast three or four made of other and perhaps more expensive cloth."—*The Sportsman in South Africa.*



Write to **T. BURBERRY & SONS,** 30, Haymarket, LONDON, and BASINGSTOKE,

Stating climate required for, and Estimates, Information, and suitable Patterns will be sent free.

"HYGIENIC"

Woollen Under-Wear

For Ladies, Gentlemen & Children.

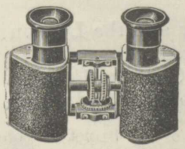
Genuine High Class Under-Wear of Unsurpassed Softness.
Practically Unshrinkable
Unequalled for Wear.

HYGIENIC TRADE MARK. No 72442.

SAMPLES & ILLUSTRATED PRICE CATALOGUE POST FREE ON REQUEST.

FORSYTH RENFIELD St., GLASGOW.

SCRIVEN.





Gold Medals and Highest Awards at all Great Exhibitions

Established 1830. **ROSS.** *Catalogues post-free.*

PHOTOGRAPHIC LENSES AND COMPLETE OUTFITS.
Every requisite supplied. Developing and Printing executed promptly.
TELESCOPES & FIELD GLASSES OF FINEST QUALITY.
New Prismatic Binocular Glasses.
ANEROID BAROMETERS, COMPASSES, THERMOMETERS, ETC.
Special Sets for Travellers, very Light and Portable.
SURVEYING INSTRUMENTS, SPECTACLES AND EYE-GLASSES, MICROSCOPES AND MAGNIFIERS, ETC., ETC.

ROSS & CO., 111, New Bond Street, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000a

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

NOTICES.*

Hints to Travellers.—The Seventh, revised, Edition, edited, under a Committee of the Council, by Capt. W. J. L. Wharton, R.N., F.R.S. (Hydrographer to the Admiralty), and Mr. Douglas W. Freshfield, Sec. R.G.S.
Price Eight Shillings; to Fellows at the Office of the Society, Five Shillings.

Instructions for Intending Travellers, under the authority of the Council of the Royal Geographical Society.—Arrangements have been made for the instruction of intending Travellers in the following subjects:—1. Surveying and Mapping. 2. Geology, including practical training in the field. 3. Botany. 4. Zoology. 5. Anthropological Measurements. 6. Photography. 7. What and How to Observe in the Field.
For details apply to the Secretary, 1, Savile Row, W.

Extra Publications.—'The Pamirs and the Source of the Oxus.' By the Right Hon. George N. Curzon, M.P. 83 pp., royal 8vo, with many Illustrations and large new Map of the Pamirs. Price, bound in half-calf, to non-Fellows, 6*s.* nett; to Fellows, 3*s.*—'Map of Persia, with a Memorandum and Index.' By the Right Hon. George N. Curzon, M.P. 8vo. 76 pp., with Maps and Plans. Price, to non-Fellows, 7*s.* 6*d.*; to Fellows, 5*s.* 8*d.*—'The Topography of the Battle of Platæa.' By G. B. Grundy, B.A. Price, bound in half-calf, to non-Fellows, 5*s.*; to Fellows, 2*s.* 6*d.*—'Notes on the Kuril Islands.' By Captain H. J. Snow. 8vo. 88 pp., with two large Charts, revised by Captain Snow. Price, in boards, to non-Fellows, 4*s.* nett; to Fellows, 2*s.*—'Eastern Persian Irak.' By General A. Houtum-Schindler. 8vo. 132 pp., with Map. Price, to Fellows, in boards, 2*s.*; bound in half-calf, 3*s.* 6*d.*; to non-Fellows, in boards, 3*s.* 6*d.*; in half-calf, 5*s.* nett.—'A Journey on the Upper Mekong, Siam.' By H. Warington Smyth. Sixty illustrations and three maps. Price, bound in half-calf, to Fellows, 4*s.*; to non-Fellows, 7*s.* 6*d.* 'British New Guinea: Country and People.' By Sir William Macgregor, K.C.M.G., C.B. Map and Illustrations. 100 pp., 8vo. Price, in boards, to non-Fellows, 4*s.* nett.; to Fellows, 2*s.*

Evening Meeting.—Papers to be read at the Evening Meeting in December:—**Monday, December 6.** Lieutenant Peary's Arctic Explorations. By Lieutenant R. E. Peary.—Last Summer's Voyages and Researches in the region from Spitsbergen to Novaya Zemlya. By Colonel H. W. Feilden, Mr. F. G. Jackson, and Mr. Arnold Pike.

Lectures to Young People.—On Friday, January 7, and Monday, January 10, at 4 p.m., Dr. H. R. Mill will give two Lectures to Young People, in the Hall of the Alpine Club, Savile Row, by kind permission of the Committee. Subject: "A Geographical Holiday, through Forest, Prairie, and Mountain," with numerous Lantern Illustrations. Tickets to be obtained at 1, Savile Row; price for the two lectures 3*s.* 6*d.* to Fellows, 5*s.* to non-Fellows.

Educational Lectures.—Under the joint auspices of the Society and the London University Extension, Mr. H. J. Mackinder, M.A., is giving a course of twenty-five lectures on the Geography of Britain and the British Seas, at Gresham College, Basinghall Street, on Mondays at 6 p.m. To these lectures Fellows are admitted free on showing their tickets.

Any Fellow resident in this country, desiring to have notice of the subjects of papers to be read at the Society's Meetings forwarded to him, can receive such notices by post on payment in advance to the Chief Clerk, at 1, Savile Row, of 2*s.* per session.

The Society's House will remain open for the Convenience of Fellows on the evenings of the Society's ordinary meetings till 8.15.

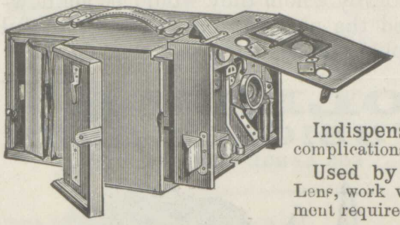
* See also pp. vi. and viii.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

THE
"N. & G." CAMERAS
FOR HAND & TRIPOD.

SEVEN DISTINCT PATTERNS—For Pictures 4¼ × 3¼ in., 9 × 12 centimetres, 5 × 4, 6½ × 4¼, 6½ × 4¾ in., and Stereoscopic, on any Plates or Films.



THE "N. & G." CAMERAS
stand years of constant work in the most trying climate, and never need repairs.
Hundreds in use throughout the World.
Indispensable to Beginners, because free from mechanical complications and extremely simple to work.
Used by the Leading Experts, because they take any Lens, work with any Plates or Films, and provide every adjustment required in Photography.

COMPLETE CATALOGUE, 1s. 3d. Post-free.
Abridged Catalogue, free on application.

NEWMAN & GUARDIA, LTD.,
92, SHAFTESBURY AVENUE, LONDON, W.

(THE ORIGINAL FIRM ESTABLISHED 1810.)
MAPPIN BROTHERS.
Only London Showrooms: { 220, REGENT STREET, W. / 66, CHEAPSIDE, E.C. (Next Sir John Bennett's.)
Manufactory: THE "QUEEN'S" WORKS, SHEFFIELD.
Manufacturers of "QUEEN'S" PLATE AND CUTLERY, SOLID SILVER PLATE, DRESSING BAGS, ETC.
ILLUSTRATED CATALOGUE POST-FREE TO ANY PART OF THE WORLD.
Goods forwarded to the country on approval.



JEWSBURY & BROWN'S
Oriental Tooth Paste.
White, Sound Teeth, Healthy Gums, and Pleasant Breath to Old Age.
CAUTION:—
The only Genuine is JEWSBURY & BROWN'S.
Price 1/6 and 2/6. All Chemists.
Over 70 Years in Use.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008e

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

PHOTOGRAPHS.

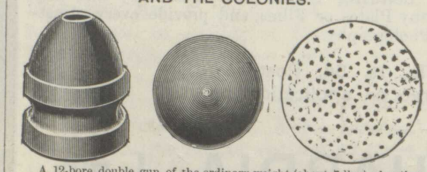
ROYAL GEOGRAPHICAL SOCIETY.

It would greatly add to the value of the Collection of Photographs which has been established in the Map Room of the Royal Geographical Society, if all the Fellows who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they would be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

J. & W. TOLLEY'S

"UBIQUE" Ball and Shot Gun.

AN INVALUABLE WEAPON FOR INDIA AND THE COLONIES.



A 12-bore double gun of the ordinary weight (about 7 lbs.), shooting from both barrels shot with the pattern and penetration of a first-class shot-gun, and conical bullets up to 150 yards, with the accuracy of an Express rifle.

PRICE FROM 20 GUINEAS.

Col. PARKER-GILMORE (the eminent author and explorer) writes: "The 'Ubique' is a weapon I should advise all visitors to India or Africa to become possessed of."

From Lieut. H. M. BIDDULPH, Rifle Brigade, Srinagar, Kashmir, India, June 10, 1893: "I must write to thank you for the magnificent gun you made for me. I mean the 'Ubique' 12-bore. I consider it a marvellous weapon, and fully equal to, if not a great deal better than, the various similar weapons in the market. What astonished me is that you do not advertise it to shoot well up to 150 yards. I have made two bulls out of three shots with it at that distance, and on two or three occasions have killed running animals with it at 160 to 180 yards. In a year's shooting trip I have killed more than half my total bag with it. *The shooting at small game was most satisfactory. I brought down two mallard with it at 45 yards. Geese, duck, ramchikor, chikor, sand-grouse, pigeons, snipe, and hares were shot with it. I give you a complete analysis of its doings.*"

From O. J. MORRIS, Esq., Fort Victoria, Mashonaland, S. Africa, May 28, 1893: "Both the weapons ('Ubique' and '577 'Magnum' express rifle) are most satisfactory. J—— shot a fine lioness with the 'Ubique' one early morning. It has demolished various big buck, and one of the biggest Koodoo Bulls I ever saw was killed by J—— with it, and with shot it has kept the camp well supplied with birds. *Game is getting rather scarce about here, and some other waggons travelling with us depend entirely on us for meat.*"

"UBIQUE" GUNS

FOR LARGE GAME SHOOTING.



MADE IN 10 AND 8 BORES.

10-bore firing 8 drs., and 8-bore firing 10 drs., powder.

Giving greater penetration than a rifle. Light and handy as a gun.

EXPRESS RIFLES,

·400, ·450, ·500, ·577 BORES. (Semi-smooth bore, non-fouling rifling.)

·303 SPORTING RIFLE,

Firing Split, Nickel-covered, or Solid Bullet and Smokeless Powder.

SINGLE AND DOUBLE

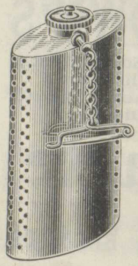
BIG GAME RIFLES.

10, 8, and 4 BORES.

J. & W. TOLLEY, Gun and Rifle Manufacturers,

59, NEW BOND STREET, LONDON, W.

SAFE & CLEANLY.



Weighs only 3½ ounces. Gives a steady heat for three to four hours without recharging.

THE INSTRA.

PATENTED THROUGHOUT THE WORLD.

"WARMTH IS LIFE."

THE INSTRA is imperceptible in a pocket.
THE INSTRA prevents and cures Chills.
THE INSTRA alleviates Rheumatism, Lumbago, Sciatica, etc.
THE INSTRA is extremely useful to Travellers.

Price 7*s.* 6*d.* German Silver, 3*s.* 6*d.* Tin. Refills (each lasting three to four hours), 50 for 1*s.* 6*d.*, or packed in hermetically sealed tins, 50 for 3*s.* 6*d.* Holders for carrying refills, 3*d.* Postage in United Kingdom, 3*d.*; extra postage to Continent, 1*s.* 6*d.*; Australia, 1*s.* 6*d.*; Canada, 1*s.* 2*d.*; Hong Kong, 1*s.* 4*d.*; India, 1*s.* 8*d.*; Cape Colony, 1*s.* 6*d.*; Malta, 1*s.*; United States, 1*s.*

For full particulars, including remarkable list of unsolicited testimonials, apply

D. BLAIR & CO., 47, Cannon Street, LONDON, E.C.

Telegraphic address: "INSTRATIFY, LONDON."

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000041

مكتبة قطر الوطنية
Qatar National Library

The Sportsman's and Explorer's Camera

IS THE

Stereoscopic Company's BINOCULAR,

Because when ready to take 30 Pictures it weighs 19 Ounces only.



It is used like a Field Glass. Takes instantaneous and time exposures. Gives Pictures 7 in. by 5 in. when used with the simple printing and enlarging apparatus. Price **£5 5s.** only. Complete with enlarging apparatus, **£10 10s.**

FREE Lessons to Purchasers.

THE LONDON
STEREOSCOPIC Co.,
106 & 108, Regent St., W.;
and 54, CHEAPSIDE, E.C.



THE
International Fur Store
(JAY'S LTD.)

GENTLEMEN'S
FUR-LINED OVERCOATS
FROM £10.

"The superior cut, style, and finish of the Coats supplied at these establishments are well known. The stocks are the largest in the kingdom, and the collars and cuffs being trimmed with a variety of Furs, the individual taste of each customer can be at once gratified."—*VANITY FAIR.*

163 and 198, REGENT STREET,
LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000030

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

The "PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY," new series, consists of 14 volumes, extending from 1879 to 1892.

Each volume covers on an average 840 pages, the selling price being 18s. per volume.

These volumes not only contain full reports of the papers read at the Royal Geographical Society, by all the great travellers and geographers of the period, but constitute a record of exploration and geographical work in all parts of the world.

Each volume contains numerous maps, all of them original, embodying the results of exploration, and executed in the best style. In the 14 volumes there are some 350 maps, besides numerous illustrations of characteristic scenery in the least-known parts of the world.

It is believed that a complete set of the *Proceedings* would be a valuable addition to public libraries and other institutions, while many private individuals might wish to have the volumes. As it is desired to reduce the stock in hand, the series is now offered, bound in cloth, at £6 per set. Application to be made to the Chief Clerk, Royal Geographical Society, 1, Savile Row, London, W.

In addition to the *Proceedings*, the Society has issued four volumes of "Supplementary Papers," containing a large number of Memoirs and Narratives of considerable length, besides several valuable Bibliographies. These will be sold for half price, £2 for the four volumes. These contain over 30 Maps and numerous Illustrations.

The India Rubber, Gutta Percha, and Telegraph Works Company, Ltd.,

100-106, CANNON STREET, LONDON, E.C.

ELECTRICAL ENGINEERS.

CABLES.

DYNAMOS.

WORKS: { SILVERTOWN, LONDON, E.
PERSAN-BEAUMONT, FRANCE.

Telegraphic Address: Works—"GRAYSILVER, LONDON."

BRANCHES.

MELBOURNE.—274, Flinders Street.
SYDNEY.—283, George Street.
CALCUTTA.—1/1, Fairlie Place.
BUENOS AIRES.—Calle Reconquista, 394 al 396.

THE MANUFACTURING

GOLDSMITHS' & SILVERSMITHS' COMPANY,

Show Rooms: 112, REGENT STREET, LONDON, W.

INVITE INSPECTION OF THEIR LARGE AND CHOICE STOCK OF

Diamond Ornaments, High-Class Jewellery, Silver Plate, and Dressing Bags.

ILLUSTRATED CATALOGUE POST FREE. GOODS FORWARDED ON APPROVAL.

The Goldsmiths' Alliance, Ld. (A. S. Savory & Sons), late of Cornhill, E.C., is transferred to this Company.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000018

مكتبة قطر الوطنية
Qatar National Library

TRAVELLERS, EXPEDITIONS, AND ARMIES ALL THE WORLD OVER CARRY

LIEBIG

COMPANY'S EXTRACT

A perfect tonic; it braces up the system to resist the effect of climate, it keeps the healthy well, and strengthens invalids. It also provides in a portable form the essential features of good cookery—appetising flavour, nourishment and digestibility.



Note this Signature in BLUE on every Jar.

J. Liebig

AVOID INFERIOR SUBSTITUTES.

BY ROYAL WARRANT OF APPOINTMENT TO THE QUEEN AND H.R.H. THE PRINCE OF WALES.

Exclusively supplied to Sandown Park Club, Kempton Park, Gatwick, and Alexandra Park, and all the Leading Hotels, Clubs, and Restaurants throughout the World.

Schweppe's

SODA WATER, Etc.

IMPORTANT NOTICE.

In consequence of the continued imitations of SCHWEPPE'S Labels, it is found necessary to adopt a distinctive mark, and, therefore, in future the Labels will bear a large Red Seal with Fountain Trade Mark.

ASK FOR

WHISKY (OR BRANDY)

AND "SCHWEPPE."

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007a

مكتبة قطر الوطنية
Qatar National Library

PUBLISHERS' ANNOUNCEMENTS.

The attention of Fellows of the Society is called to the following new books of Travel, etc.

SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE.

HISTORICAL CHURCH ATLAS.

Illustrating the History of Eastern and Western Christendom until the Reformation, and that of the Anglican Communion until the present day. By EDMUND MCCLURE, M.A. Containing 18 Coloured Maps, and some 50 Sketch-Maps in the Text. Demy 4to, cloth boards, leather back, 16*s*.

This Atlas is intended to indicate some of the stages of the Church's expansion, and at the same time to show briefly the interdependence of ecclesiastical and secular history. The information given on the maps has been necessarily limited by their size and number, but the main features of the spread of the Christian faith have been, it is hoped, broadly traced, and the allied changes in political geography sufficiently depicted.

THE ANCIENT HEBREW TRADITION AS ILLUSTRATED BY THE MONUMENTS. A Protest against the Modern School of Old Testament Criticism. By Dr. FRITZ HOMMEL, Professor of the Semitic Languages in the University of Munich. Translated from the German by EDMUND MCCLURE, M.A., and LEONARD CROSSLÉ. With Map. Large post 8vo, buckram boards, 5*s*.

"Under the weight of Dr. Hommel's cumulative evidence, the latest fortress of the 'Higher Criticism' will have to be promptly evacuated or surrendered at discretion. The book has been admirably translated by Mr. McClure and his coadjutor."—*Daily Chronicle.*

"We are profoundly grateful to Dr. Hommel for work whose results will do much to reassure many a timid and distressed believer."—*Record.*

"We can recommend Dr. Hommel's well-argued and deeply interesting book to the careful consideration of all Biblical students."—*Oxford Review.*

THE STRUGGLE OF THE NATIONS: EGYPT, SYRIA, AND ASSYRIA. By Professor MASPERO. Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With Maps, Three Coloured Plates, and over 400 Illustrations. Demy 4to (approximately), cloth, bevelled boards, 25*s*.; half-morocco (bound by Riviere), 50*s*.

This is a companion volume to "The Dawn of Civilization," and contains the history of the ancient peoples of the East from the XIVth Egyptian Dynasty to the end of the Ramesside period. This interval covers the sojourn of the Israelites in Egypt and their Exodus therefrom. The recent discovery of an Egyptian stele mentioning the Israelites gives special interest to this volume, where the matter is discussed with his usual acumen by the author.

"The translation by M. L. McClure is in both cases excellent. Professor Maspero's presentation of the new learning is at once eminently popular and attractive."—*Times.*

"The author has throughout attempted to reproduce for us the daily life of the various peoples of whom he treats, and in this he has succeeded admirably."—*Academy.*

THE DAWN OF CIVILIZATION (EGYPT AND CHALDÆA). New and Revised Edition. By Professor MASPERO. Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With Map and over 470 Illustrations, including Three Coloured Plates. Demy 4to (approximately), cloth, bevelled boards, 24*s*.; half-morocco (bound by Riviere), 48*s*.

*** Professor Maspero, by using the result of the most recent researches in Egypt and Mesopotamia, has brought this new Edition up to the latest date.

STAR ATLAS. Gives all the Stars from 1 to 6·5 magnitude between the North Pole and 34° South Declination, and all Nebulæ and Star Clusters which are visible in telescopes of moderate powers. Translated and adapted from the German of Dr. KLEIN, by the Rev. E. MCCLURE, M.A. Imperial 4to, with 18 Charts and 80 pages Illustrative Letterpress. Cloth boards, 7*s*. 6*d*.

EVENINGS AT THE MICROSCOPE; OR, RESEARCHES AMONG THE MINUTER ORGANS AND FORMS OF ANIMAL LIFE. By the late P. H. GOSSE, F.R.S. A New Edition, Revised by A. JEFFREY BELL, M.A., Secretary R.M.S., Professor of Comparative Anatomy and Zoology in King's College, London. Profusely Illustrated. Crown 8vo, cloth boards, 5*s*.

THE ROMANCE OF SCIENCE: The Machinery of the Universe. Mechanical Conceptions of Physical Phenomena. By A. E. DOLBEAR, A.B., A.M., M.E., Ph.D., Professor of Physics and Astronomy, Tuft's College, Mass. Small post 8vo, with several Diagrams, cloth boards, 2*s*.

PATRIARCHAL PALESTINE. By the Rev. A. H. SAYCE, Professor of Assyriology, Oxford. Crown 8vo, with Map, buckram boards, 4*s*.

This book is the first to apply the Tel-el-Amarna tablets, both published and unpublished, towards elucidating the condition of Syria at this period. It also contains a recent and important revision of the Egyptian Geographical Lists bearing on Palestine.

THE "HIGHER CRITICISM" AND THE VERDICT OF THE MONUMENTS. By the Rev. Professor SAYCE, Queen's College, Oxford. Fifth Edition. Demy 8vo, buckram, bevelled boards, 7*s*. 6*d*.

"A really valuable and important work; perhaps the best which Professor Sayce has yet written."—*Academy.*

ANCIENT HISTORY FROM THE MONUMENTS—THE HISTORY OF BABYLONIA. By the late GEORGE SMITH. Edited and brought up to date by the Rev. Professor A. H. SAYCE. Fcap. 8vo, cloth boards, 2*s*.

BIBLE PLACES; OR, THE TOPOGRAPHY OF THE HOLY LAND. A Succinct Account of all Places, Rivers, and Mountains of the Land of Israel mentioned in the Bible, so far as they have been Identified; together with their Modern Names and Historical References. By the Rev. Canon H. B. TRISTRAM, D.D., LL.D., F.R.S. New Edition, brought up to Date. With Map. Crown 8vo, half bound, 5*s*.

LONDON: NORTHUMBERLAND AVENUE, W.C.; 43, QUEEN VICTORIA STREET, E.C.
BRIGHTON: 129, NORTH STREET.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009b

مكتبة قطر الوطنية
Qatar National Library

MESSRS. METHUEN'S LIST.

TO BE PUBLISHED SHORTLY.

FROM TONKIN TO INDIA. By Prince Henri of Orleans. Translated by Hamley Bent, M.A. With 80 Illustrations and Map. Crown 4to, 25*s.*

The travels of Prince Henri in 1895 from China to the valley of the Bramaputra covered a distance of 2100 miles, of which 1600 was through absolutely unexplored country. No fewer than seventeen ranges of mountains were crossed at altitudes of from 11,000 to 13,000 feet. The journey was made memorable by the discovery of the sources of the Irrawaddy.

THREE YEARS IN SAVAGE AFRICA. By Lionel Decle. With an Introduction by H. M. Stanley, M.P. With 100 Illustrations and 5 Maps. Demy 8vo, 21*s.*

Few Europeans have had the same opportunity of studying the barbarous parts of Africa as Mr. Decle. Starting from the Cape, he visited in succession Bechuanaland, the Zambesi, Matabeleland, and Mashonaland, the Portuguese settlement on the Zambesi, Nyasaland, Ujiji, the head-quarters of the Arabs, German East Africa, Uganda, and British East Africa.

ADVENTURE AND EXPLORATION IN AFRICA. By Captain A. St. H. Gibbons, F.R.G.S. With Illustrations by C. Whymper, Photographs, and Maps. Demy 8vo, 21*s.*

This is an account of travel and adventure among the Marotse and contiguous tribes. There is a map by the author of the hitherto unexplored regions lying between the Zambesi and Kafukwi rivers and from 18° to 15° S. lat.

BRITISH CENTRAL AFRICA. By Sir H. H. Johnston, K.C.B. With 220 Illustrations and 6 Maps. Crown 4to, 30*s.* net.

"A fascinating book written with equal skill and charm—the work at once of a literary artist and of a man of action, who is singularly wise, brave, and experienced."—*Westminster Gazette.*

"This book takes front rank as a standard work by the one man competent to write it."—*Daily Chronicle.*

THE HILL OF THE GRACES: or, The Great Stone Temples of Tripoli. By H. S. Cowper, F.S.A. With Maps, Plans, and 75 Illustrations. Demy 8vo, 10*s.* 6*d.*

A record of two journeys through Tripoli in 1895 and 1896. The book treats of a remarkable series of megalithic temples which have hitherto been uninvestigated, and contains a large amount of new geographical and archæological matter.

THE BENIN MASSACRE. By Captain Boisragon. With Map and Portrait. (Second edition.) Crown 8vo, 3*s.* 6*d.*

This book is written by one of the two survivors of the massacre.

"The most impressive and moving narrative of African adventure and of British bravery that we have read for many months."—*Daily Mail.*

"Realistic and terrible."—*Morning Post.*

MESSRS. METHUEN'S NEW CATALOGUE and BOOK GAZETTE sent to any address.

METHUEN & CO., 36, Essex Street, W.C.

SAMPSON LOW, MARSTON & COMPANY'S NEW BOOKS OF TRAVEL AND ADVENTURE.

THE PIONEERS OF THE KLONDYKE: BEING AN ACCOUNT of two years' police service on the Yukon. Narrated by M. H. E. Hayne, of the North-West Mounted Police, and recorded by H. West Taylor. Illustrated by photographs taken on the spot by the narrator. Crown 8vo, cloth, 3*s.* 6*d.*

ROUGHING IT IN SIBERIA. With some account of the Trans-Siberian Railway and the Gold-Mining Industry of Asiatic Russia. By Robert Louis Jefferson, Author of "Awheel to Moscow," etc. With Map and numerous Illustrations. Crown 3vo, cloth, 5*s.*

THE FARÖE ISLANDS. By J. Russell-Jeaffreson, F.R.G.S., Author of "The Most Northerly Hospital in the World," "Sport in Iceland and Spitzbergen," etc. With Map and Illustrations. Crown 8vo, cloth, 7*s.* 6*d.*

The author records his personal experiences during a summer tour in the Farões, and gives an historical account of the Islands, together with a detailed description of the whaling and other industries. Sport, both with rod and gun, forms a prominent feature of the volume, and there is no stint of anecdote, incident, and adventure.

NEW AND CHEAPER EDITION OF MR. H. M. STANLEY'S GREAT WORK.

Carefully Revised throughout by the Author, with a New Preface, and somewhat Abridged by the omission of matter no longer of interest.

IN DARKEST AFRICA: OR, THE QUEST, RESCUE, AND retreat of Emin Pasha, Governor of Equatoria. By H. M. Stanley, M.P., D.C.L., etc. Crown 8vo, with Map and all the Original Illustrations, cloth, 5*s.*; gilt edges, specially suitable for schools prize book or Christmas gift. 6*s.*

JOURNAL OF A TOUR IN CANADA, THE UNITED STATES, and Mexico. By Winefred, Lady Howard of Glossop. With 32 Illustrations. Crown 8vo, cloth, 7*s.* 6*d.*

JOURNEYS AMONG THE GENTLE JAPS IN THE SUMMER of 1895. By the Rev. J. Ll. Thomas, M.A., F.R.G.S. With a Special Chapter on the Religions of Japan, a Map and Portrait. Crown 8vo, cloth, 7*s.* 6*d.*

"A very pleasant and readable account of certain phases of Japanese life. . . . Mr. Thomas has used excellent powers of perception to no small advantage."—*World.*

SIAM: ON THE MEINAM FROM THE GULF OF AYUTHIA. By Maxwell Sommerville, Professor of Pennsylvania University. Together with Three Romances illustrative of Siamese Life and Customs. With 50 Illustrations. Demy 8vo, cloth, 14*s.*

London: SAMPSON LOW, MARSTON & COMPANY, Limited, St. Dunstan's House, Fetter Lane, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003c

مكتبة قطر الوطنية
Qatar National Library

HUNGARY AND ITS PEOPLE.

By LOUIS FELBERMANN.

SECOND EDITION IN PREPARATION.

This work is fully illustrated, and deals with the origin, history, customs, and manners of the Hungarian people. It is approved by His Imperial and Royal Majesty the Emperor King of Austria and Hungary, Her Majesty the Queen of Belgium, His Excellency the Prime Minister of Hungary, His Excellency the Hungarian Minister of Education, the Royal Hungarian Geographical Society, and the Hungarian Ethnographical Society.

Copies have been graciously accepted by Her Majesty the Queen, His Royal Highness the Prince of Wales, Her Royal Highness the Duchess of York, Her Royal Highness the Princess Henry of Battenburg, His Majesty the King of Belgium, His Highness the Duke of Teck, etc.

Crown Volume, Bound in Cloth, Price 10*s.* 6*d.*

To be obtained at "LIFE" OFFICE, 55 & 56, Chancery Lane, LONDON, W.C.

POTTER'S BOOK CATALOGUE.

"SPORT AND TRAVEL A SPECIALITY." Issued monthly, and sent post free.

SPORTING WORKS PURCHASED.

WILLIAM POTTER, 30, Exchange Street East, LIVERPOOL.

THE PRESS CUTTING AGENCY.

T. B. BROWNE, LTD., 163, QUEEN VICTORIA ST., LONDON.

Cuttings are supplied from the World's Press upon all Political, Commercial, Religious, Scientific, Technical, and general subjects.

ADMIRALTY CHARTS.

The Latest Editions of Charts, Plans, and Sailing Directions, Published by the Admiralty,

CAN BE OBTAINED FROM

J. D. POTTER,

SOLE AGENT for the Sale of the Admiralty Charts, by appointment of the Lords Commissioners of the Admiralty, and

Publisher of Nautical Books,

31, Poultry, E.C., and 11, King Street, Tower Hill, E., LONDON.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.

THE IMPERIAL INSURANCE COMPANY, LIMITED, FIRE.

1, OLD BROAD STREET, 22, PALL MALL, and 47, CHANCERY LANE, LONDON.

ESTABLISHED 1803.

Subscribed Capital, £1,200,000. **Paid-up, £300,000.** **Total Invested Funds, over £1,500,000.**

THE DISTINGUISHING CHARACTERISTICS OF THIS COMPANY ARE:—

Moderate Rates; Undoubted Security; Prompt and Liberal Settlement of Claims.

Every Information and Forms of Proposal can be obtained from the Offices of the Company, or at any of its Agencies at home or abroad.

E. COZENS-SMITH, GENERAL MANAGER.

EDWARD WELLER,

GEOGRAPHICAL AND GENERAL DRAUGHTSMAN,

ENGRAVER, LITHOGRAPHER, & COPPER PLATE PRINTER.

Chromo and Color Printing of every description.

DENMARK WORKS, 42, Denmark Hill, London, S.E.

City Office:—17, FARRINGDON STREET, E.C.

MAP ENGRAVER TO THE ROYAL GEOGRAPHICAL SOCIETY, ADMIRALTY, ETC.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000045

مكتبة قطر الوطنية
Qatar National Library

Books of Travel.

Travellers requiring first-class ILLUSTRATIONS should consult

The Swan Electric Engraving Co.

NORTHUMBRIA HOUSE,
116 CHARING CROSS ROAD, LONDON.

(ENGRAVERS TO THE ROYAL GEOGRAPHICAL SOCIETY.)

Mr. DOUGLAS FRESHFIELD writes:—"Signor Sella and I came to the conclusion that your Photogravures were equal to the best Continental work, a conclusion borne out by those you prepared for my book on the Caucasus. . . . . Should I ever require work of the the same kind done again, I shall come to your firm."

IMPROVED KEY CAMERA.

Simplest and Best Hand Camera Made. Measures only 8 × 4¾ × 4 ins.
PRICE, QUARTER PLATE, £7 7s. SIZE, 5 × 4 INCHES, £10 10s.
Used by the best Scientific and Artistic Photographers, including
CAPTAIN ABNEY, G. DAVISON, F. HOLLYER, R. KEENE, &c., &c.
Our **FINDER**, *which is the only one that can be used in bright sunshine, can be supplied, if desired, price* **7s. 6d.**

USE PLATINOTYPE

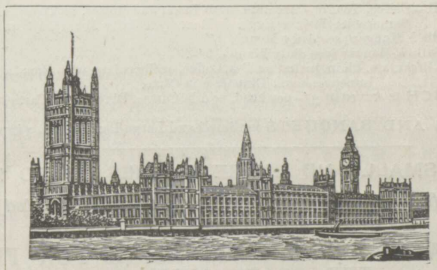
If you wish to gain Medals—If you wish for Permanent Results—If you wish for Artistic Effects—If you seek the Simplest Process.
PRICE LISTS AND FULL INSTRUCTIONS UPON APPLICATION.
THE PLATINOTYPE COMPANY, 22, Bloomsbury St., New Oxford St., London, W.C.

JAMES BUCHANAN & CO.,

SCOTCH WHISKY MERCHANTS,

GLASGOW, LEITH, AND LONDON.

PURVEYORS TO THE



HOUSES OF PARLIAMENT.

HEAD OFFICES:

20, BUCKLERSBURY, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000021

مكتبة قطر الوطنية
Qatar National Library

SPRATT'S PATENT LTD.

PURVEYORS OF

SHIP BISCUITS,

Flour, and Hunter's Scotch Oat Meal

FOR MEMBERS OF

JACKSON-HARMSWORTH

POLAR EXPEDITION.

ALSO

DOG CAKES

FOR

SLEDGE DOGS.

SPRATT'S PATENT Limited, Bermondsey, LONDON, S.E.

The Hotel Cecil,

VICTORIA EMBANKMENT AND STRAND, LONDON.

THE MOST POPULAR HOTEL IN LONDON.

TARIFF.

BEDROOMS for one person from 6/-; or two persons from 10/6 per day (no charge for light or attendance).
APARTMENTS.—Suites of Apartments from 30/-. Visitors' Servant's board, 6/- per day.

SALLE À MANGER.

PLAIN BREAKFAST.—Coffee, Tea, or Chocolate, with Bread and Butter, or Toast, 2/-.
Same, with Fish or Eggs, or Meats (see daily Menu), 2/6 and 3/6.
LUNCH served in the Salle à Manger (see daily Menu), 3/6.
DINNER served in the Salle à Manger (see daily Menu), 6/-.
IN APARTMENTS.—Breakfast, Plain, including Tea, Coffee, or Chocolate, with Bread and Butter, and Toast, 2/6.
Luncheons and Dinners à la Carte.
RESTAURANT LUNCH is served at 5/- per head, or à la Carte; Dinner à la Carte; Supper, chaud ou froid, from 5/-, or à la Carte.
PRIVATE DINNERS AND BANQUETS for Small and Large Parties from 7/6 per head by arrangement.

DINING-ROOMS FOR SMALL AND LARGE PARTIES UP TO 1000 PERSONS.

Private Dining-Rooms (for parties of 6 to 50 persons) specially adapted for Receptions, At Homes, and Recherche Dinners.

MASONIC TEMPLE WITH APPROPRIATE ROOMS FOR FUNCTIONS OF THE CRAFT ONLY.

THE HOTEL CECIL RESTAURANT. *The Most Delicate Cuisine in Europe.*

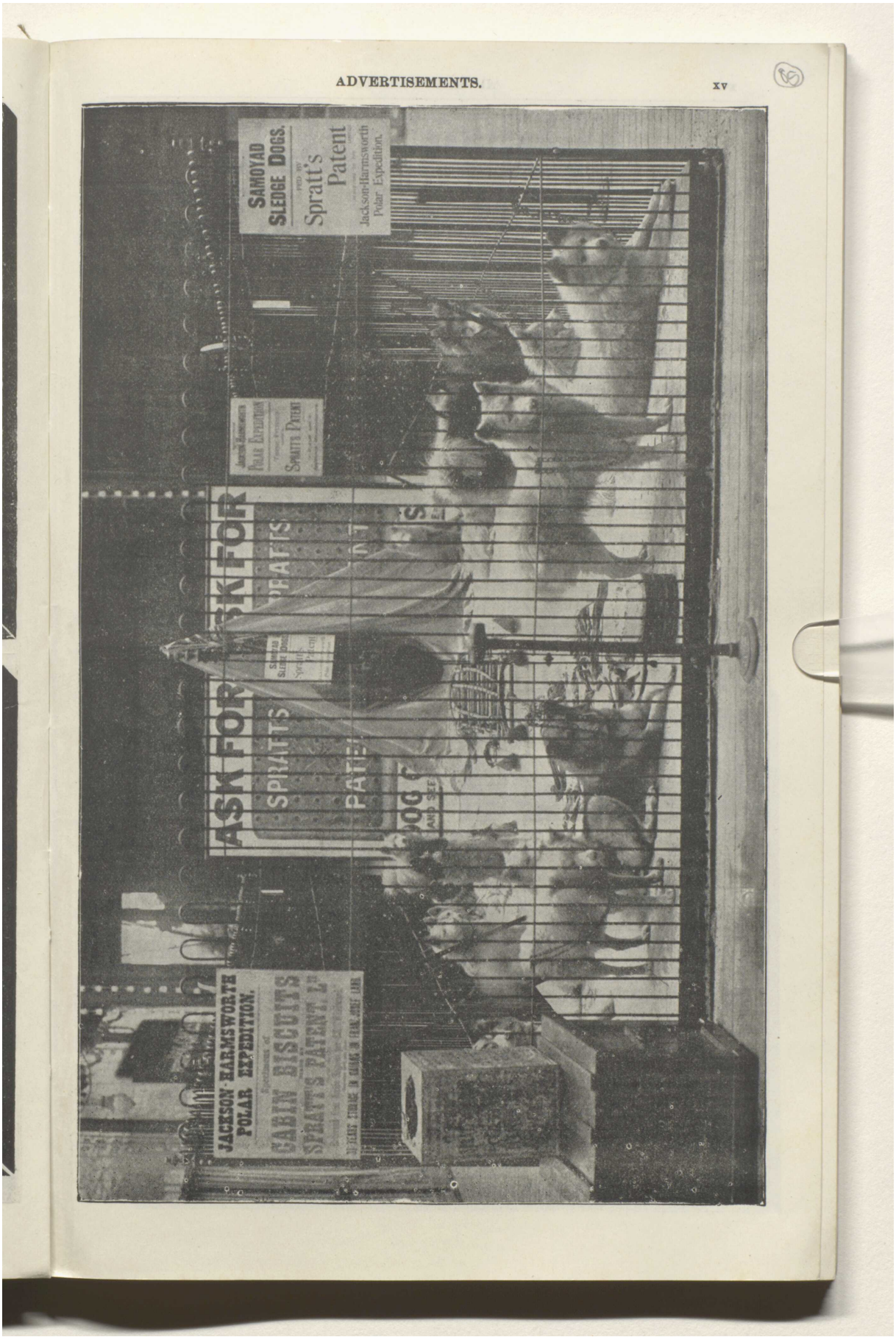
THE RENDEZVOUS OF THE CONNOISSEUR.

Magnificent Suites of Rooms for Private and Public Banquets.

G. P. BERTINI, Manager.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000ba

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001f

مكتبة قطر الوطنية
Qatar National Library

CLOTHED WITH AIR

CELLULAR UNDERWEAR AND SHIRTS.

THE HEALTHIEST AND MOST ECONOMICAL FOR TRAVELLERS.

Extract from C.T.C. HANDBOOK AND GUIDE, 1896-97, p. 52.

"From the peculiar manner in which CELLULAR CLOTH is woven (forming a network of minute air-cells next the skin), it allows, even more fully than wool, the free evaporation of perspiration on the side next the skin. . . . It is less bulky, and is lighter to carry; it dries much more quickly; it is more easily washed, and its prime cost is much smaller. Last, but not least, it is quite free from that bane of all woollen goods, the liability to shrinkage."

BEST FOR ALL SEASONS AND CLIMATES.

ESTIMATES FOR OUTFITS SUPPLIED ON APPLICATION.

To be obtained in all the principal cities and towns in the United Kingdom, the Colonies, and India.

Illustrated Price List of full range of Cellular goods for Men, Women, and Children, sent Post Free on application.

Full assortment of goods at the following retail houses :—

ROBERT SCOTT, Ltd., 14 and 15, Poultry, London, E.C.
OLIVER BROS., Ltd., 33, New Bond Street, London, W.
" " " 417, Oxford Street, London, W.

WHOLESALE ONLY—

THE CELLULAR CLOTHING CO., Ld.,
72 & 73, FORE STREET, E.C.

DR. J. COLLIS BROWNE'S CHLORODYNE

ONLY GENUINE



ORIGINAL AND

IS THE GREAT SPECIFIC FOR CHOLERA,

COUGHS, COLDS, ASTHMA, BRONCHITIS.

DIARRHŒA, DYSENTERY.

We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best, and also from a sense of duty we owe to the profession and the public as we are of opinion that the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.—We are, Sir, faithfully yours, SYMES & CO., *Members of the Pharmaceutical Society of Great Britain, His Excellency the Viceroy's Chemists.*

DR. J. COLLIS BROWNE'S CHLORODYNE. — Dr. J. C. BROWNE (late Army Medical Staff) DISCOVERED a REMEDY to denote which he coined the word CHLORODYNE. Dr. Browne is the SOLE INVENTOR, and, as the composition of Chlorodyne cannot possibly be discovered by Analysis (organic substances defying elimination), and since the formula has never been published, it is evident that any statement to the effect that a compound is identical with Dr. Browne's Chlorodyne *must be false.*

This Caution is necessary, as many persons deceive purchasers by false representations.

GENERAL BOARD of HEALTH, London, REPORT that it ACTS as a CHARM, one dose generally sufficient.

Dr. GIBBON, Army Medical Staff, Calcutta, states: "2 DOSES COMPLETELY CURED ME of DIARRHŒA."

From SYMES & Co., Pharmaceutical Chemists, Simla. *Jan.* 5, 1880.

To J. T. DAVENPORT, London.

DEAR SIR, — We congratulate you upon the widespread reputation this justly-esteemed medicine has earned for itself all over the East. As a remedy of general utility, we much question whether a better is imported, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances *ad infinitum* of the extraordinary efficacy of DR. COLLIS BROWNE'S CHLORODYNE in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Vice-Chancellor Sir W. PAGE WOOD stated publicly in Court that Dr. J. COLLIS BROWNE was UNDOUBTEDLY the INVENTOR of CHLORODYNE, that the whole story of the defendant Freeman was deliberately untrue, and he regretted to say it had been sworn to."—See *The Times*, July 13th, 1864.

DR. J. COLLIS BROWNE'S CHLORODYNE is the TRUE PALLIATIVE in NEURALGIA, GOUT, CANCER, TOOTHACHE, RHEUMATISM.

DR. J. COLLIS BROWNE'S CHLORODYNE is a liquid medicine which assuages PAIN of EVERY KIND, affords a calm refreshing sleep WITHOUT HEADACHE, and INVIGORATES the nervous system when exhausted.

DR. J. COLLIS BROWNE'S CHLORODYNE rapidly cuts short all attacks of EPILEPSY, SPASMS, COLIC, PALPITATION, HYSTERIA.

IMPORTANT CAUTION.

The IMMENSE SALE of this REMEDY has given rise to many UNSCRUPULOUS IMITATIONS. Be careful to observe Trade Mark. Of all Chemists, 1s. 1½d., 2s. 9d., and 4s. 6d.

SOLE MANUFACTURER,
J. T. DAVENPORT, 33, Gt. Russell St., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000007

مكتبة قطر الوطنية
Qatar National Library

INDEX TO ADVERTISEMENTS.

Where no folio is given, Advertisement does not appear this month.

Admiralty Charts. PAGE
Potter, J. D. 12
Assurance.
Standard Life Assurance Co. .....
Booksellers.
Potter, William..... 12
Sotheran & Co. .....*Cover* 2
Camp Beds.
Chorlton, I., & Co. .....*Cover* 4
Contractors' Tools, etc.
Hardy Patent Pick Co., Ltd..... 26
Cutlery.
Hill & Son..... 22
Cycles.
Beeston Engineering Co. 22
Beeston Machinists Co. 21
Birmingham Cycle & Eng. Co.... 22
New Mac Gregor Cycle & Eng. Co., Ltd..... 21
Petrel Cycle Co. 21
Robin Hood Cycle Co., Ltd..... 21
Decorative Iron Work.
Hart, Son, Peard & Co., Ltd.....
Disintegrating Machinery.
Hardy Patent Pick Co., Ltd. 26
Dog Soap.
Spratt's Patent, Ltd. 14, 15
Draughtsman.
Weller, Edw. 12
Electrical Engineer.
India Rubber, Gutta Percha, & Telegraph Works Co., Ltd. ... 8
Engravers.
Swan Electric Engraving Co. ... 13
Weller, Edw. 12
Field Glasses.
Steward, J. H.....
Foods for Travellers.
Bovril, Ltd. 18
Liebig & Co..... 9
Maconochie Bros. 19
Moore, Dr. E. D. .....*Cover* 2
Spratt's Ship Biscuits 14, 15
Symington, W., & Co. .....*Cover* 2

Guns & Rifles. PAGE
Greener, W. W. .....
Tolley, J. & W. 6
Hat Manufacturers.
Lincoln, Bennett & Co. 19
Hotels & Restaurants.
Hôtel Cecil 14, 24
Hôtel Métropole 25
Instruments for Travellers.
Cary's..... 20
Casella, L..... 20
Insurance.
Imperial Insurance Co., Ltd. ... 12
Jewellers.
Goldsmiths' & Silversmiths' Co. 8
Mappin Bros. 5
Streeter & Co., Ltd. 1
Medicines & Medicine Cases.
Browne, Dr. Collis 16
Burroughs, Wellcome & Co. *Cover* 4
Jewsbury & Brown..... 5
Keating 22
Mineral Waters.
Jewsbury & Brown..... 5
Schweppe's 8
Outfitters.
Cellular Clothing Co., Ltd. 14
Forsyth 3
Jaeger's Woollen Co.....
Thresher & Glenny.....
Pens.
Jewel Pen Co. 26
Photographic Outfits.
Dollond & Co. .....
London Stereoscopic Co. 7
Newman & Guardia 5
Platinotype Co..... 13
Ross & Co..... 3
Thornton-Pickard Manufacturing Co., Ltd. .....*Cover* 4
Press Cuttings.
Browne, T. B., Ltd. 12
Printers & Account Book Manufacturers.
Brown & Rowley 26
Darling & Son, Ltd. 26

Publishers. PAGE
Felbermann, Louis..... 12
Low Sampson, Marston & Co., Ltd..... 11
Methuen & Co..... 10
Society for Promoting Christian Knowledge..... 10
Ship Owners.
British India Steam Navigation Co. 23
Huddart, J., & Co..... 23
North German Lloyd Co. 23
Sporting Outfits.
Burberry & Sons 3
Stationers, etc.
Brown & Rowley..... 26
Stores for Expeditions, &c.
Military Equipment .....*Cover* 3
Stoves.
Barnard, Bishop & Barnards, Ltd. .....*Cover* 3
Tea Importers.
Higgs, W. A., & Co. 15
Tents.
Edgington, B., Ltd. .....*Cover* 2
Edgington, J., & Co. .. ..
Piggott Bros. & Co..... 18
Willesden Paper & Canvas Works 25
Tobacco Manufacturers.
Richmond Cavendish Co., Ltd. 19
Wood & Son .....
Tours.
Orient Co..... 22
Travelling Bags.
Hosking, N. 22
Warming Apparatus.
Blair, D., & Co. 6
Watch & Clock Makers.
Blockley, H. 20
Waterproof Clothing.
Abbotts' 19
Waterproof Roofing.
Willesden Paper & Canvas Works 25
Whisky Merchants.
Buchanan, J., & Co..... 13

OOPONG

(REGISTERED).

A Blend of Choicest India and Ceylon Teas,

PER 2/- LB.

The best value in Tea ever offered to the Public. Six Pounds and upwards forwarded the same day as ordered, carriage paid, to any part of the United Kingdom.

This Tea is supplied in hermetically sealed air-tight cases to Travellers, Yachtsmen, and Expeditions.

W. A. HIGGS & CO., Limited, TEA IMPORTERS,

39, HIGH STREET, ISLINGTON, LONDON, N.

AND BRANCHES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000037

مكتبة قطر الوطنية
Qatar National Library



TENTS

FOR THE

TRAVELLER

AND

EXPLORER.

Write for our "Red Bound Catalogue" of Tents and Camp Equipment, post free.

THE MOST PERFECT TENT is PIGGOTT BROS. & CO.'S "PROSPECTING TENT." Made double. The inner roof being suspended 12 inches below the ridge, allows of a free circulation of air between the outer and inner roofs. The inner roof has ventilators, protected by mosquito net. *Made from Green Waterproof and Rot-Proof Canvas.*

PIGGOTT BROS. & CO., MANUFACTURERS,
57, 58, 59, Bishopsgate Street Without, LONDON.

EXPLORERS AND TRAVELLERS

Should always include in their food stores a supply of

BOVRIL

Which contains in an easily digestible form the entire nourishment of Prime Ox Beef, obtained from selected cattle reared in Australia and South America.

In Nansen's "Farthest North" a Photograph taken by Dr. Nansen of the "Fram" embedded in the Ice shows packages branded BOVRIL containing our food preparations taken by the gallant explorer.

BOVRIL (British, Foreign, and Colonial) LTD., LONDON,

FOOD SPECIALISTS AND CONTRACTORS TO H.M.'S GOVERNMENT.

Chairman—The Right Hon. LORD PLAYFAIR, G.C.B., LL.D.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The
Geographical Journal.

No. 6. DECEMBER, 1897. Vol. X.

THE PRESIDENT'S OPENING ADDRESS, NOVEMBER 8, 1897.

During the recess geographers and explorers have not been idle. Progress has been made and good work has been done in several directions, to which it becomes my duty to allude in opening the present session. The most important step taken by the Council has been the resolution to grant diplomas to students who had gone through a complete course under Mr. Coles. This measure has already had an excellent effect on our system of instruction, and I have no doubt that the diploma will be very highly valued, and sought for by increasing numbers of candidates. Its possessor will, if his ambition leads him either to active work in the field or to the equally useful labours connected with literature and education, find that our diploma will often serve him in good stead. Our graduates will be included in the list of referees.

The gigantic task of making a classified catalogue of our library is at length so far completed that the tickets are all arranged in continents, Asia is arranged in countries and has been used by Fellows, and Europe is quite completed, and has been much used for reference. Cards for all works and periodicals of the last five years are kept complete and ready for the use of readers. The whole number of title-cards is 71,735. The execution of such a vast undertaking involves much thought, as well as hard work, and reflects great credit on Dr. Mill, our librarian, and on Mr. Heawood, his assistant in this task.

Before passing on to the work of our explorers, I must dwell on the loss we have sustained by the death of Sir Rutherford Alcock. I was his colleague on the Council for a period of twenty years, and had good reason to know how anxious he always was to further the best interests of our Society. Judicious, patient, and courteous, he was esteemed by us all, and his able advice helped us out of many a difficulty. The

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000015

مكتبة قطر الوطنية
Qatar National Library

period of his presidency will always be remembered for the energy with which he advocated African exploration, the results of his efforts being represented by the memorable expeditions of Joseph Thomson.

The recess has been signalized by the publication of two important geographical works: the admirable monograph on British Central Africa, by Sir Harry Johnston, with its fascinating chapters on the scenery and the physical aspects of that region; and the 'First Crossing of Spitsbergen,' by Sir Martin Conway; while we have ourselves brought out Sir William Macgregor's interesting paper on British New Guinea in the form of a small volume.

There has also been much activity in the field, the fruits of which you will, I trust, gather and enjoy during the coming session. In Africa, Mr. Cavendish, who only completed his twenty-first year last May, has made a very remarkable journey from Berbera, across the Somali country, to the river Jub, and then inland to Lake Rudolf. He shares with the late Captain Bòttego the honour of being the first to explore the western shores of that lake; he has collected important information respecting the region between the basin of Lake Rudolf and the White Nile, has helped to solve the problem of the Omo river, and has returned to the coast at Mombasa. With regard to Siam, we may expect another communication from Mr. H. Warington Smyth, whose two previous papers give us the assurance that it will be a valuable contribution to our knowledge, as well as a source of pleasure to those who listen to it. In Central Asia the labours of Dr. Sven Hedin, which have been continuous during several years, are of great geographical importance. Among other achievements, he has ascended Mustagata to a height of 20,000 feet, and mapped its glaciers; he has, at the utmost peril of his life, crossed the desert of moving sandhills between the Yarkand and Khotan rivers; he has traversed a previously unknown route along the northern rim of the great Tibetan plateau; and he has solved the geographical problem relating to Lob Nor. We hope to have Dr. Sven Hedin with us on the 22nd, when we shall listen to a paper of the deepest interest, read by a young but most accomplished and enthusiastic geographer. Dr. Sven Hedin has devoted himself to the study of geography since he was a boy at school, is a splendid linguist, and is well versed in all those collateral studies which are required by those who wish to become real adepts in our science.

Not less important and quite as interesting are the explorations now being carried on in the Afridi country by our gallant associate, Sir William Lockhart. We must all feel enthusiastic on reading of the skill and ability with which my old friend is conducting a most difficult campaign, and of the brilliant dash and devotion of the Gordon Highlanders and other troops who are serving under him. As Fellows of this Society, we rejoice that the success of our arms also entails successes for the cause of geography.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Our friend and associate, Mr. Fitzgerald, is also returning from his arduous examination of Aconcagua, which is believed to be the loftiest peak in the Chilian Andes. Personally I have taken a great interest in this last enterprise of the gallant young explorer, because I have known the mountain of Aconcagua by sight better than any other in the world, gazing at it daily during many months that I was at Valparaiso, and once having had a nearer view of it, from a shoulder of the Campana de Quillota. That Mr. Fitzgerald will give us an exceedingly valuable account of his labours in the Andes we, who know his powers of description, can have no doubt. I may add that there is no region in the world less known than, and which offers so many geographical problems for solution as, portions of the Chilian Andes to the south of Aconcagua.

There will, so far as I am aware, be no new work from the antarctic regions during the ensuing season, unless, as I hope, the Belgian Expedition, commanded by M. de Gerlache, should be able to send news of any discovery before the close of the session. But the efforts of our Council to procure the despatch of a British Antarctic Expedition have never ceased. Last June we had a conference, and subsequent correspondence with the Australasian premiers and agents-general on the subject; and an appeal has since been made to Lord Salisbury. Meanwhile Sir George Newnes has supplied funds for an enterprise, to be conducted by Mr. Borchgrevink, who, it will be remembered, visited Victoria Land in 1895, on board the whaler *Antarctic*, commanded by Captain Kristensen. I understand that his plan is to sail from England next July, land at Cape Adare in Victoria Land, winter there, and attempt to make a journey into the interior in the spring. We wish Mr. Borchgrevink all possible success in his undertaking.

In the arctic regions there has been much activity this summer, and it is reported that it was the most open season that has been known for many years. We hear this from Mr. Jackson; from Mr. Pike, who sailed round Wyche's Land to the east of Spitsbergen; and from Colonel Feilden, who has been in the Kara sea and along the east side of Novaya Zemlya. We look forward to an account of his second visit to Spitsbergen from Sir Martin Conway; and to interesting papers from Colonel Feilden and Mr. Arnold Pike, who will describe to us the very remarkable absence of ice this season in two distant parts of the northern seas.

In my report on our existing knowledge of the arctic regions, which was printed in our *Proceedings* for September, 1877, just twenty years ago, I pointed out that there were four important portions which needed exploration: First, the regions north and west of the Parry islands, to be reached by way of Jones sound; second, the north side of Greenland; third, the North-East Passage; and fourth, the exploration

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000087

مكتبة قطر الوطنية
Qatar National Library

of the archipelago known as Franz Josef Land. The first has not yet been attempted. With regard to the second, we hear of two contemplated undertakings. Mr. Peary intends to adopt the plan of taking Eskimo families up Smith sound, and, with their aid, to discover the most northern land to the north of Greenland. Captain Sverdrup, Nansen's companion, is fitting out the *Fram*, also with the intention of proceeding up Smith sound and exploring the unknown part of the north coast of Greenland. I greatly fear that neither Peary nor Sverdrup have any adequate conception either of the difficulty of navigating the channels beyond Smith sound, or of travelling over such ice as is met with beyond Robeson strait. This was not the route I recommended for completing the discovery of the Greenland coast, an achievement second to none in geographical interest. The third enterprise enumerated by me in 1877, namely, the North-East Passage, was achieved by Baron Nordenskjöld three years afterwards. It was reserved for the Jackson-Harmsworth expedition to achieve the fourth—the exploration of Franz Josef Land.

We now have to welcome Mr. Jackson, Mr. Armitage, and the other members of the expedition on their safe return, and to congratulate Mr. Harmsworth on the valuable results of his patriotic munificence. Our explorers have passed three consecutive winters in the arctic regions close to the 80th parallel. They have maintained themselves in excellent health throughout that long and trying period; they have diligently registered observations, and have completed exhaustive researches in the zoology, botany, and geology of a new region. This alone is a great work; but it is only a small part of what has been done under Mr. Jackson's command. That explorer, always, I believe, accompanied by Mr. Armitage, has made daring sledge-journeys and boat-voyages, and by these means he has given us a completely new idea of Franz Josef Land. In this present year, by the examination, under exceptionally trying and difficult circumstances, of the land mass to the westward, I think he has surpassed all he had done before, and it will now be our privilege to hear, from Mr. Jackson's own lips, the interesting story of his expedition and its work.*

RECENT JOURNEYS IN PERSIA.†

By Captain P. MOLESWORTH SYKES.

THE ancient kingdom of Persia, to which I would draw your attention this evening, is perhaps one of the most attractive countries in the world, as not only is it rich in remains of a hoary antiquity, which

* Mr. Jackson's paper will appear in a future number of the *Journal*.

† Paper read at the Royal Geographical Society, June 28, 1897. Map, p. 660.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

have been the constant theme of historians for more than two thousand years, but to-day it presents so great a variety of interesting problems, and has so faithfully preserved its ancient immutable civilization, that every traveller who has once crossed its great plateau is fired with the desire to return again and again. Before approaching the subject of my three journeys, I would give a brief description of the country upon which we are about to enter.

The kingdom of His Imperial Majesty the Shah stretches, roughly speaking, for 1000 miles from east to west, and for 800 miles from north to south—an area rather larger than that of the countries composing the Triple Alliance. In the provinces which border the Caspian sea the rainfall is very heavy, but, with that small exception, the most noticeable feature is the dryness of Persia, and this is the main cause of its delightful climate. I have mentioned this before anything else, as it appears to me that sufficient attention has not been paid to the enormous effect that deforestation has had, not only on Persia, but on Central Asia generally. It is this fact, and this alone, I would urge, that explains how great armies were able to march across countries the sterility of which would, at the present time, bar the progress of anything beyond a very moderate force; and, conversely, it is upon the successful solution of this problem that the future of these desiccated regions (I use the term advisedly) depends.

To continue, both on the north and south, the great Iran plateau is held up by mighty ranges, which are traversed by mule-tracks, and it is owing to the rugged nature of these passes that the isolation of Persia from the rest of the world is partly due. The plateau once reached, the traveller finds himself on a series of broad plains with mountain ranges on each side of him, which trend to the north-west with amazing regularity. For instance, when travelling to my district of Kerman, a distance of 600 miles from Tehran, I traversed the same great plain throughout, and never lost sight of the two parallel ranges at any portion of my journey. These mountains, which rise to great elevations, are, as my previous remarks would show, entirely bare of timber, while the whole country consists of desert with rare oases, dependent for their existence upon "kanats." By this term, underground channels which tap distant springs in the hills are signified, and it may be imagined how costly and laborious a system this is, the water being frequently carried a distance of over 30 miles to the village it supplies.

There are no navigable rivers in Persia, with the exception of the Karun, and it is extraordinary that between the Indus and this river, a distance of 1500 miles, no considerable body of water reaches the sea. To the north, owing to the heavier rainfall, it is different, and there are two or three rivers of moderate volume flowing into the Caspian sea.

This summary would not be complete without a reference to the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000086

مكتبة قطر الوطنية
Qatar National Library

appalling wastes known respectively as the Dasht-i-Kavir and the Dasht-i-Lut. These two great deserts stretch right across Eastern and Central Persia, with the result that there is much less communication between neighbouring provinces of the Persian Empire than their juxtaposition would lead one to expect, the wastes of salt-swamp and sand dividing the districts more completely than any range of mountains, however difficult its passes might be.

It was at the beginning of 1893 that I obtained permission to rejoin the "Bays," at that time stationed in the Punjab, *viâ* Persia, and I first of all travelled to Odessa, where Colonel C. E. Stewart, Her Majesty's consul-general, and a prominent Fellow of this Society, not only gave me much valuable advice, but also furnished me with letters of introduction. In consequence, I did not enter Persia by the usual route, but crossed from Baku to Uzun-Ada, the starting-point of the Transcaspian railway, and thence steamed down the eastern coast of the Caspian to its south-east corner. At Ashurada, we lay to off the Russian naval station for a few hours, and soon after reached the end of the "Murdab," or lagoon, where we rowed through myriads of duck and every sort of aquatic bird, to the rickety pier of Bunder Gez, after traversing which, we found ourselves nearly up to the knees in mud. There being no hotel, and tents being out of the question, we were only too glad to find quarters at the telegraph office, where a room was placed at our disposal.

After two days' delay, we started for Astrabad in wet weather, and enjoyed a very full experience of what muddy roads can be. The mules were not so badly off, their loads being high up on their backs; but the ponies, which carried my servant and myself, must have been very weary, as we could hardly ever keep our feet out of the mud, so deep was it. Five hours' marching through the mire only brought us 7 miles on our way, but, as we were told that the road upon the morrow was much better, we decided to halt for the night, and found quarters in the village of Kurd Mahalla, in the house of its headman. Our host professed himself a profound theological student, and, after introducing the subject generally by stating that all Europeans worshipped machines, was anxious to know whether we English worshipped a steamer or a locomotive.

On the following morning the country, which had hitherto been a melancholy tangle of low thorns and bushes, became quite park-like, and, as it cleared up, matters looked more cheerful. On passing through the village, which covers a large area, we saw wheat being thrashed by means of a see-saw—a girl sitting on one end of the plank, and pulling herself up and down by a rope suspended above her. It was nearly sunset when, amid a deafening chorus of jackals, we entered the city of Astrabad, through a dilapidated gate. Inside not a soul was to be seen, and we rode on for a considerable distance before we pounced upon a

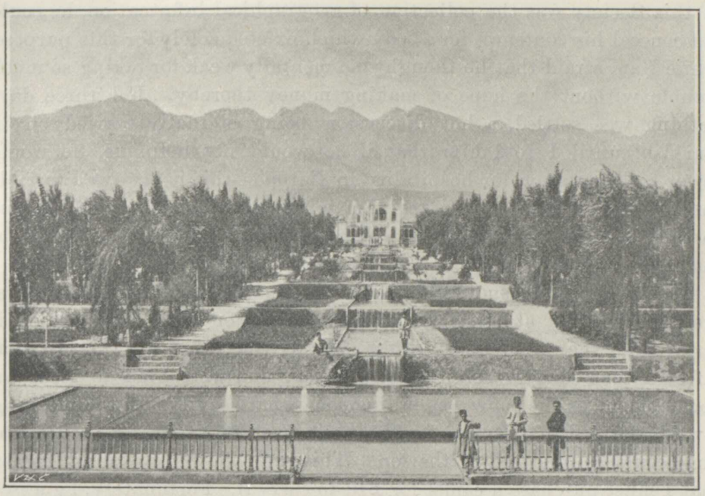
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000095

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

stray citizen, whom we induced to guide us to the house of the British agent. My first inquiries were as to the possibility of travelling up the river Atrek to Bujnurd, but my host told me that the country was so disturbed, that the Persian Government would insist on sending a large escort with me, which would have effectually prevented my mixing with the Turkomans, and so I determined not to seek any aid from the authorities.

For about a week I made constant shooting-trips into the Elburz range, during the course of which I bagged a few wild boar, but saw no sign of the magnificent stags that roam the forests. Meanwhile my



THE FARMAN FARMA'S GARDEN AT MAHUN.

preparations were being made, and upon their completion, I marched off due north across a rich alluvial plain, until we sighted Ak-Kala, a fort that commands the bridge over the Gurgan, and the home of the Kajar tribe, whose chief is now Shah of Persia. We then turned due east, and followed up the river, until we reached the encampment of Moussa Khan, the chief of the Ak Ata Bai, the most powerful tribe of Yomut Turkomans. The camp consisted of about thirty "alachuk," and as I lived in these superior nomad dwellings for nearly a month, it might be as well to describe them.

We must first of all imagine a huge beehive framework of wood, some 16 feet in diameter; over this thick black felt is stretched, and we have an ideal movable house, which, in cold weather, is infinitely superior to any tent. Inside are the "lares and penates," packed up in big trunks, while the rifles of the owners hang within easy reach.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000014

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Strips of carpet are stretched round wherever there are joinings in the felt, and altogether, when the fire is lit on the hearth, one enjoys a feeling of real comfort.

I had a letter of introduction from Colonel Stewart for my host, and in it my plan of travelling up the Atrek was mentioned. Moussa at first, however, utterly declined to help me, averring that I was sure to be robbed, if not killed, in which case he would be held responsible by the Persian Government. He was also at a loss to know the object of my journey, and, as Colonel Stewart had not mentioned that I was an officer travelling on leave, I told him that I was a Fellow of the Royal Geographical Society. When he found out that the object of this Society was the collection of geographical information, he could not conceal his contempt for a body which existed solely for this purpose, while I am afraid that he thought me mentally weak for taking so much trouble without the hope of making money thereby. For three days nothing was settled, a hot discussion being eternally carried on in Turkish, until I told him that if he would not help me, he would lower his reputation for hospitality in Europe—this is always a terrible threat—and, as I also presented him with a revolver, he finally agreed to send me on to the Atrek, where further arrangements would be made.

It was across the snowy steppe that we marched, after bidding farewell to our host at the ford of the Gurgan, or Wolf river, which is apparently the same as Hyrcania, the Greek name for this district. After a long day we sighted the Atrek, and were glad to reach an encampment, as the snow was falling somewhat heavily. In the morning I was informed that forage for the next five stages must be bought, as none could be procured further on. This was followed by an intimation that I must purchase a camel for £40 to carry it. Fortunately, I guessed that the desire to sell me a camel at five times its value was the reason for the alleged scarcity of barley, so I declined to do anything but move on. This was not so easy, as the Yomut Turkomans are very loth to speed the parting guest without first fleecing him, so that it was noon before the march was resumed, more or less parallel to the yellow-coloured Atrek, to which river, as to the Tiber, the epithet of "flavus" is most appropriate. Our way lay across what should be a fertile country, but the treeless, snow-covered steppe looked extremely dreary, and, to add to our discomfort, no meat was procurable, as all the sheep were dying of some disease, and we had, consequently, to depend upon shooting a few pigeons, which were hard to approach.

For two or three days we were accompanied by a "mollah," or priest, and, under his guidance, we steadily ascended the left bank of the Atrek, as far as a point opposite Chat, where we forded the river, and followed up the right bank through a mass of low hills. Our escort consisted of three or four Turkomans, who, whenever they met another

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

party, took the most warlike precautions, until they discovered whether those approaching were friends or foes. About 20 miles above Chat our priestly guide intimated that he was going no further, so, before continuing our march the next morning, I sent him a silver watch and a present of money. However, he returned them without thanks, and intimated that he would like my telescopic-sighted rifle, which he had greatly admired. At the same time the muleteers came in weeping, and said that the Turkomans were going to take their mules and also rob me. I tried to quiet them, and sent my servant into the "alachuk" to harangue the heads of the tribe, while I got the mules loaded



THE TAFTAN RANGE, SARHAD.

up. For an hour we waited, hearing only a stormy flow of Turkish from the council-room, so, when the mules were ready, I thought that I had better see what was going on. I found Joseph dancing about in an agitated state, and upon my entrance he told me that they plainly spoke of robbery, and would not let us leave. He advised the rather foolish expedient of attacking them; but, instead, I told him to say how I loved the mollah, and I patted that scoundrel so violently on the back to show my affection, that he could not go on speaking.

The Turkomans thought it very funny, and when I ran the mollah outside, they brought his horse, and he came along with us just as if everything had been arranged to his satisfaction. I forgot to mention

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

that, before the acute stage was reached, I was asked to give a letter for him to show in case of complaints. In it, I wrote that I expected to be robbed, and only hoped that any future traveller would have him punished, had he the chance. Before saying good-bye to our friend, who only accompanied us for a couple of miles, I offered to give him a second note. This he felt sure would not be as laudatory as he imagined the first to be, so he said that the former one would suffice, and I am confident that he considers it to be couched in the most complimentary terms. That night we were not asked into the village near which we halted; so, surmising from this pointed lack of hospitality that treachery was intended, we kept watch. At about 2 a.m. some six or seven Turkomans sneaked quietly out with their rifles, and approached the tent. Finding, however, that we were awake, they appeared to be surprised, and, after talking together, went quietly back to bed.

As we were close to the country of the Goklans, I decided to change my tactics, and on the following morning abused the Turkomans for their violation of hospitality, and threatened them with the vengeance of the Governor of Bujnurd, who was, I said, a great friend of the British Government. This bluff, which, I am sure, lost nothing when interpreted into Turkish, had its effect, and our guides, finding the game up, rode away, and, after firing a few shots at us from about half a mile off, to which we made no reply, left us in peace.

The Goklan Turkomans received us in quite a different manner, and said that Huck Nafass, our mollah, was not only "wanted" by the Persian Government for several acts of robbery, but that any Goklan would shoot him on sight, had he an opportunity. I was consequently delighted to feel that I had escaped from his clutches without harm, and can only put it down to the fact that, although I was without an escort, he imagined that I held some very strong cards up my sleeve. We were soon joined by Mustapha Kuli, who had been Captain Napier's guide in 1877, and it is, I think, thanks to him that I was so well treated.*

* Note on the Yomut and Goklan Turkomans.

(*a*) *Jafar Bai.*—This tribe inhabits the district near the mouth of the Atrek, and, as regards wealth, may be considered the most important division. They possess fisheries, and also cultivate more extensively; in addition to this, they engage in commerce.

The Jafar Bai have two divisions of Yarali and Norali, and number 2000 families to the south of the Atrek, and 1000 families to the north. They are generally on bad terms with the Ata Bai, their neighbours to the east.

(*b*) *Ata Bai.*—The Ata Bai include 2000 families to the south of the Atrek, and 1000 to the north. Although not as rich as the Jafar Bai, the Ata Bai have more power, as many of the smaller divisions are under their protection.

There is a subdivision called Ak Ata Bai. Ak = white.

(*c*) Friendly to, or perhaps under the protection of, the Ata Bai are the following divisions:—

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

We were told that the road to Bujnurd lay across the Hanaki pass to the south, and that we were to quit the Atrek, up which we had been marching hitherto. The cold was intense, although it was the middle of February, but once over the pass we descended rapidly, until, at Semalgan, two marches further on, we found the heat quite oppressive.

Before reaching the town of Bujnurd, we had to cross another range of hills, where the fresh snow was so deep that it took us

---

Ganyokmaz	400 families.
Bolgai	300 „
Daz	1000 „
Dovoji	1000 „
Badragh	200 „

These divisions are generally on terms of feud with—

Amir	100 families.
Kuchik	300 „
Tatar	100 „
Salak	100 „
Kujuk	1000 „

To summarize, of the Yomut tribe there are 8500 families in Persian territory, and 2000 in Russian territory to the north of the Atrek.

Perhaps 20 per cent. of the tribes on either side cross the Atrek in order to change their pastures; but this custom is on the decline, as a tax is charged on all the tribesmen who graze their flocks on the northern bank. All the Yomuts profess to be at feud with the Goklans, who are now a much weaker and quieter tribe than formerly.

Goklan Turkomans.

The following divisions inhabit Russian territory to the north of the Atrek, on the road between Kizil Arvat and Bujnurd.

Sorali	1500 families.
Toktamash	
Kek	
Kal Guzl	
Ak Kal	

The following subdivisions inhabit Persian territory:—

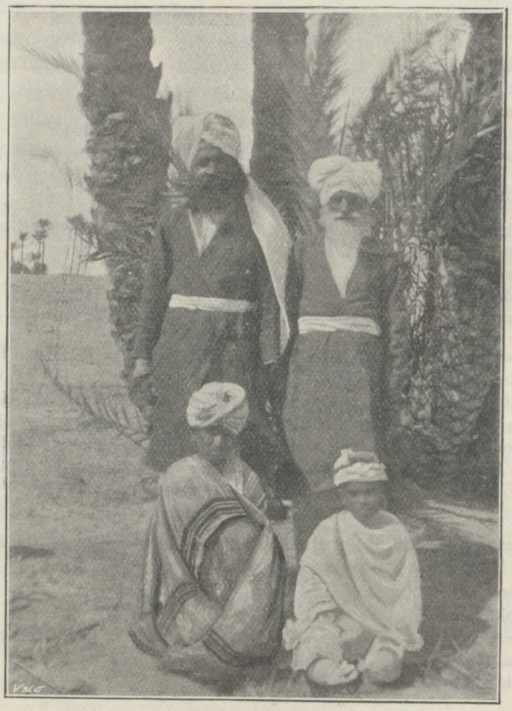
Kal Guzl	2500 families.
Toktamash	
Kai	
Tamak	
Eilyangi	
Ark Kali	
Karnas	
Dadi	
Kar Abali Khan	
Jan Ghur Balghy	

In former times the Goklan country was famous for its breed of horses, but, owing to its proximity to the powerful chief of Bujnurd, the tribe is now very quiet and weak, while its horses have shared in the general decline.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000080

مكتبة قطر الوطنية
Qatar National Library

hours to accomplish even a few miles. Upon reaching the plain, whereon lies the city, I had my first experience of an "istakbal," or reception, a troop of Persian cavalry escorting us to the town, where we were lodged in one of the governor's houses. When we went to pay our respects, we were conducted up the winding staircase of a tower into the presence of the Sani-i-Dowleh, the redoubtable warden of the marches, who, for fifty years, has been warring against the



THE GOVERNOR OF MAGAS AND FAMILY.

Turkomans. His Excellency told me, that when he was a young man it was almost impossible to till the fields, and that at Bujnurd there were generally some hundreds of Turkoman prisoners, waiting to be ransomed or exchanged for captive Kurds. Nowadays there is comparative peace, cattle-lifting on a small scale having taken the place of the wholesale raids of the good old times.

My experiences among the Turkomans will show that they are still a somewhat wild and lawless race, but, from a reference to the pages of the great traveller, Vambéry, one can see how much Russia has

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

benefited Central Asia generally, and Persia in particular, by suppressing the Turkoman terror. These freebooters raided North-East and Central Persia down to the Dasht-i-Lut, while every man, woman, and child that was captured would be sold into lifelong slavery, and also endure religious persecution at the hands of their Sunni masters. Prof. Vambéry has told me that he observed such innumerable cases of cruelty towards Persian captives that, although he personally was well treated, he regards the Turkomans with abhorrence. I should have mentioned that both Bujnurd and Kuchan are peopled by Kurds, whom Shah Abbas (the contemporary of Queen Elizabeth) transported from his north-west to his northern frontiers, in order to form a buffer between Persia and the Turkomans. The experiment may be considered to have been a success, as the Kurds are splendid fighters, and have never been greatly worsted by the Turkomans.

The town of Bujnurd, which is situated on a fair-sized and well-watered plain at an elevation of 3800 feet, contains perhaps 20,000 inhabitants, and is increasing at a rapid rate. The bazaars are extensive and well stocked with Russian and English goods, sugar, hardware, and crockery coming from Russia, while the calico and muslin bore Manchester or Bombay labels.

From Bujnurd to Kuchan there was a choice of routes, so I selected that one which followed up the course of Atrek, as it had not been travelled over by either Captain Napier or Sir Charles Macgregor, both of whom had pursued the road which keeps further south. Shirwan, which we reached on the second day, is under Kuchan, and is nearly as large as Bujnurd, while the valley of the Atrek, which is here open and undulating, forms one of the most fertile districts of Persia. At Kuchan the walls were in the most dilapidated condition, owing to previous earthquakes, while within a very short time this terrible calamity was again destined to destroy thousands of lives, and then be repeated, to annihilate the remnant that had escaped. At the time of my visit there was a great deal of commercial activity owing to the opening of the road that has brought Meshed within easy reach of the Transcaspian railway at Askabad, while my eyes were gladdened by the sight of lines of waggons, which gave quite a civilized look to the place.

For the remaining 90 miles I hired a waggon, its owner agreeing to reach Meshed on the third day; and we started off with the pleasant feeling that this section of the journey was practically an accomplished fact. Unfortunately, at about 5 miles from Kuchan, one of the horses had a violent attack of colic; so we had to halt for the night, as the poor beast was quite unfit to proceed, and it was not until February 28 that I drew up at the consulate-general at Meshed, where I was warmly welcomed by Mr. Ney Elias, whose untimely death this Society is now deploring. In his obituary notice, mention was made of the kindness he showed to all his juniors, and of this I have received innumerable

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001c

مكتبة قطر الوطنية
Qatar National Library

proofs during the five years that have elapsed since I was first his guest.

Meshed, as is well known, contains the famous shrine of the holy Reza, the last of the twelve Imams, and is the religious centre of Persia. The mosque is of great magnificence, but has been so fully described by Mr. Curzon, that I would refer to his work in connection with this subject. I was much tempted to linger in the society of my fellow-countrymen; but, as every week's delay meant more heat in the Dasht-i-Lut, I had to hurry through with my preparations, and after a week's stay continued my southward journey. As far as Turbat I was on a well-known road, which had been travelled over by Dr. Bellew in the seventies; but between Turbat and Jumain I found that several villages shown on the map were in ruins or unknown, while the river, termed the Kal Salah, which is shown as flowing east, actually trends to the west, and is lost in the swamps to the north of Bajistan.

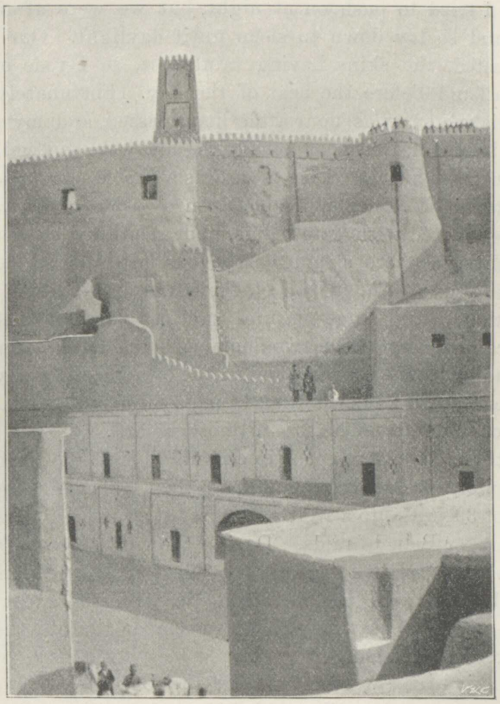
At Tun, I was on the northern edge of the great Dasht-i-Lut, which lay between us and Kerman, and which had not been traversed, in this particular portion, since the illustrious Marco Polo crossed it, in the opposite direction, when travelling from Kerman to "Tonocain" *viâ* Cobinan. As the great Venetian was not only a most accurate observer, but also wielded a graphic pen, I feel sure that I cannot do better than give his words, when describing the Dasht-i-Lut, which signifies the "Naked desert"—a most appropriate name. He says, "When you depart from this city of Cobinan, you find yourself in a desert of surpassing aridity. There are neither fruits nor trees to be seen, and what water there is is bitter and bad, so that you have to carry both food and water. The cattle must needs drink the bad water, will they nill they, because of their great thirst." Friar Odoricus, in the succeeding century, who was apparently struck by another phase of the desert, describes it in the following lines. He says, "Now, that sea is a wondrous thing, and right perilous. For it is all of dry sand, without any moisture, and it shifteth, as the sea doth when in storm, now hither, now thither; and as it shifteth, it maketh waves, so that countless people travelling thereon have been overwhelmed and drowned, and buried in those sands."

Our chief preparation consisted in engaging a few donkeys to carry forage for our mules, and, as there were said to be tanks with water on the way, we expected very little trouble. We soon left the Tun oasis behind, and entered the silent desert, where not even a crow is to be seen. At the fourth mile was a tank of sweet water, where I insisted upon filling up my private water-skin, and at night we halted near the well of Khushab, which means "sweet water." It was much too salt for me in spite of its name, so I was very glad that I had taken the precaution to fill my "mussuck." On the following morning, after drinking tea, only a pint remained; but we were promised excellent water

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

at the evening's stage of Chahar Gunbaz, and so commenced the march in hope. Throughout the day we approached a snow-clad range, which appears on no map, and, as we were at the end of March, I estimated its height at 7000 or 8000 feet. The heat and thirst were very trying and, to add to our discomfort, the water at the stage was simply green with salt. I attempted to drink it with lime-juice tablets dissolved in it, but in vain, and so I could only envy the others, who were able to swallow it with apparently no ill results.



THE FORT AT BAM.

We were only about 15 miles from Duhuk, which lay under the range referred to; so, after a sleepless night, we pressed on as soon as it was light, and by 10 a.m. we were able to enjoy beautiful water running down from the hills. The villagers were anxious to see the first European that had passed that way, and, considering their isolation, knew a good deal about what was going on in the world. We had to halt a day, as every one experienced such bad effects from the water of the day before, that I was most thankful not to have touched it.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000068

مكتبة قطر الوطنية
Qatar National Library

Duhuk is built in a gap half a mile wide, which separates the Tabas Kuh—the general name for the chain of mountains between Tabas and Duhuk—from the Mur Kuh, which latter range runs south-south-east towards Naiband.

The onward journey lay through Arababad and Zenagun, where we saw palm trees for the first time. Another waterless stretch separated us from Naiband, so, warned by experience, we hired three donkeys to carry water, and marched to Ab-i-garm, where there are extensive salt marshes and groves of tamarisk. As we had still many miles to accomplish, I tried to push on at night, but we were afraid of losing the track, and so lay down to sleep until daylight. Our water was again exhausted, the skins having tainted it, so I rode on, in order to reach Naiband before the heat of the day. Fortunately the track was fairly distinct, but as hour after hour passed, and my pony began to be dead beat, I feared that I had lost my way, especially as there were two or three places where there was a choice of routes. Finally, however, I turned a corner and came upon a vision of fairyland. The hillside was covered with date palms, underneath which were glimpses of the bright green crops, and at the summit was an old fort in a state of picturesque ruin. Upon entering the grove, I saw streams in every direction, while huge natural grottoes completed the picture. My first care was to send off two donkeys laden with water, in charge of a man who knew the country, and in the evening the caravan crawled in, the water having reached them some 5 miles out, when they were all feeling too much exhausted to go another yard.

Two or three days were spent in climbing about the Naiband range, while the mules were recovering, and we then traversed another waterless stretch of 39 miles, to a well with forty steps, which was said to be a favourite spot for Beluchi raids. During the next stage to Darband, we passed ruins that I believe to be those of Marco Polo's "Cobinan," as the modern Kuhbenan does not at all fit in with the great traveller's description, and it is just as well to remember that in the East the caravan routes seldom change.*

We now skirted the western edge of the Dasht-i-Lut, and followed the main caravan road until at Ab-Bid we kept away to the east of the main road in order to explore the district of Kuhpayeh, which was then a blank on the map. We approached Kerman from the east, and I little thought that within so short a time it was to be my home. The city lies at the end of a low limestone range, and was once impregnable, to judge by the huge old forts that are still imposing in their decay. Its position on the confines of the great desert, and at the confluence of four important routes, has always rendered it of

* This question is dealt with more fully in a paper which I read before the Society of Arts on May 20.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

importance, but, being on the frontier of Afghanistan, it has suffered terribly at each invasion from that quarter, as well as in the great fight for power that took place at the end of last century. Situated at an altitude of 5500 feet, its climate is extremely pleasant, while its inhabitants are particularly friendly to Europeans. At the present day, it is on account of its carpets that Kerman is justly renowned, although very few of the finer qualities are exported to London. These exquisite fabrics, woven in silk and wool, reproduce designs dating from many



KUBEH-I-SUBS OR "GREEN DOME" AT KERMAN.

centuries back, while the harmonious and lovely colours throw all other carpets into the shade. Among the buildings of interest now extant is the Kubeh-i-Subs, or "Green Dome," which contains the following inscription:—"The work of Ustad Khojeh Shukr Ullah and Ustad Inayet Ullah, son of Ustad Nizam-i-Din, architect of Isfahan." The date is 640 Anno Hejrah, or 1242 Anno Domini. Our interest is considerably augmented by the fact that we know that Marco Polo was at Kerman shortly after this date. In the illustration it will be

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000055

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

noticed that there is but half of the building still standing; this is not the result of an earthquake, but is the handiwork of a former governor, who had heard a rumour that treasure existed under the great dome.

During my stay of a week I met several of the merchants of the place, both Mohammedan and Parsi, and I was particularly struck by their polished manners, which are, I afterwards heard, renowned throughout Persia.

About the middle of April, after a few days' rest, I determined to take a straight line to "Pasargardæ" *viâ* Pariz and Baonat, as thereby I could fill in several blanks on the map, while, owing to the altitude being fairly high throughout, I hoped not to suffer from the heat. When some five marches to the west of Kerman, I received a most cordial invitation to visit H.R.H. the Farman Farma, who was the Governor-General of Kerman and Persian Baluchistan, and, upon accepting it, was so hospitably entertained that I accompanied my new friend to Bahramabad. Among many other experiences, I was introduced to the sport of shooting gazelle off horseback, which consisted in the riders spreading across a plain with intervals of 500 or 600 yards between each, and driving the quarry off its feeding-ground. In time the gazelle break back, when the sportsmen gallop to cut them off, and shoot them with slugs, propelled by a heavy charge of powder. The Farman Farma, who is a great sportsman, on more than one occasion shot a right and a left at full gallop. I have also seen hyenas, lynxes, foxes, and hares bagged in the same way.

When, after being entertained right royally for about a fortnight, I resumed my journey, I had had an agreeable experience of Persian life, enjoyed by very few travellers, coupled with a warm invitation to return during the following winter. Upon entering the unexplored district of Baonat, we were followed by a band of seven nomads, who were evidently on the look-out to attack us. However, we took all precautions, and maintained a bold front, and, although both my rifle and gun were broken, we carried them in a very conspicuous manner. This band kept parallel to our march for three days, but they fortunately did not otherwise molest us. It is a remarkable coincidence that Captain Stotherd, of the Hyderabad Contingent, was set upon less than a month later, about 30 miles to the south of where I passed, and, although he had only a single orderly with him, he accounted for four of the brigands, killing their chief. It is more than probable that he was attacked by the same gentlemen who took so keen an interest in my movements, and it is satisfactory to feel that Captain Stotherd made so good an impression on them.

Upon arrival at Shiraz, after a visit to the world-renowned ruins at Persepolis, I was most kindly received by Dr. Scully, who told me that I had come at an interesting crisis, as there was war to the death

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000045

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

between the townspeople and the nomads. The very next morning we were awakened by hearing volleys inside the town, and, climbing up to the roof of the telegraph garden, which is about half a mile from the walls, we saw a regular fight taking place at the gate nearest to us. Fortunately, we were at right angles to the line of fire, and so could look on without much risk, until the nomads, who were greatly outnumbered, finally retreated. During these very stormy times, it was wonderful to see with what utter contempt for danger the English telegraph officials behaved, and it was mainly owing to the confidence felt in their reports at Tehran, that the necessary steps were taken to patch up a peace.

It was now the end of May, so it was necessary to travel by night



PASS OF THE "OLD WOMAN" BETWEEN SHIRAZ AND BUSHIRE.

down the famous passes of the "Old Woman" and of her "Daughter," which have been so vividly described in Mr. Curzon's monumental work; and, after turning night into day for nearly a week, I was only too pleased to find myself on board the British India steamer at Bushire, where white bread and a whisky peg appeared to be delicious beyond expression.

Karachi was reached early in June, and the rest of the summer was spent in compiling my work and planning fresh journeys, until, in October, 1893, accompanied by Surgeon-Major Brazier Creagh and Lance Duffadar Sultan Sukhru, of the 3rd Punjab Cavalry, I landed at Chahbar, in Persian Baluchistan. This port was chosen, as since

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Grant's journey, some ninety years ago, no European had travelled to Bampur by Geh.

Before entering Persian Baluchistan, however, a few words as to its character would perhaps not be out of place. The whole of the coast-line from Bashikird nearly to Karachi is spoken of as Makran, the district extending inland as far as the first important range of hills, thus including a strip of land from 60 to 70 miles wide. For some 20 to 40 miles from the coast there is a sand desert, with small hamlets, which draw their supply of water from shallow wells. Behind this is another belt of about the same size, consisting of low hills composed of mud or slate. Proceeding further inland, it will be noticed that there are continuous ranges of mountains running from east to west parallel to the sea, and so regular is this formation, that all attempts at opening up communications in these parts must be done either to the east or west, as any road direct to the coast will lead across range after range of rugged hills.

Thanks to the kindness of Mr. Possman, the director-general of the Persian Gulf telegraphs, we found camels awaiting us (at Chahbar), and, owing to the exertions of Mr. Lovell, in charge of the telegraph office, we were able to get twenty-seven of these uncouth beasts of burden loaded up the day after landing. The quarrels as to the partition of loads, and the interest taken by so many people in the camels, revealed to us the fact that several of these animals were divided into legs, each of which had a separate owner. The usual plan, we were informed, was for the driver to have one leg's interest in each camel, which was allowed in lieu of wages and rations.

Our first march brought us to Tez, the famous Arab port in mediæval times, but now no signs of departed greatness exist, except the innumerable tombs of deceased worthies, and we had to drink filthy water out of a shallow hole, and be thankful that there was enough for all our party. Although marching by day was terribly trying for man and beast alike, the Baluchis spent so long in wrangling over the loads, and in tying them on, that it was 10 a.m. before the last of our camels started off for the second march, and, as the heat was terrible, our horses very soon began to give in. We therefore halted for several hours in the shade, near some water-holes, riding on to camp in the evening. We there found only about half of our caravan, the other portion having halted 2 or 3 miles back, in a rage at being compelled to march some 12 miles, as they said that 7 miles is the limit of a march in Baluchistan. Travellers in this country should be provided with an inexhaustible fund of patience, as the only part that the Baluchi camel-driver plays is to try and prevent any load whatever being put on his camel, while, if at all discontented, he will decamp without giving any notice.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In order to attempt an earlier start, we halted for a day, and then pushed on at sunrise the following morning. However, the march was long, and by the time we reached Pesh Mant our horses had to be led, so utterly prostrate were they. Many of the party also suffered from sun fever, mainly because they got slightly chilled before the sun rose, and so felt the sudden change acutely. After four trying marches, we struck the Geh river, where we decided to make another halt. Just before reaching camp, I saw a couple of wolves, which fact is interesting, as they are not known to exist so near the coast. In the bed of the "kaur," the Baluchi term for river, we found isolated pools of doubtful water at this point; but a march higher up, we came upon a bright flowing stream, bordered by palm groves.

Geh is a large village, built in the fork between two branches of the river, and, with its palm groves, forms a delightful picture. As so many of our party had suffered from fever, we determined to leave the invalids and make a rapid march in light order to Fanoch, returning to Geh by a different route. This we did with great success, finding at Mokht, a village near our route, a remarkable kind of glass bangle, of which I have given specimens to the British Museum.

The pass below Fanoch must be a unique road. For 7 or 8 miles one has to scramble over boulders of the most varied hues, every colour of the rainbow being there, which gives an effect of great beauty. In the case of being overtaken by a "seelab," or spate, in this pass, the loss of the entire caravan would ensue, as the sides are precipitous almost throughout. The morning after our arrival, we set forth to climb the Kuh-i-Fanoch, also termed the Kuh-i-Sufeed, or "White mountain," the summit of which is reached at 4735 feet. After four hot hours spent in climbing, we stood on the top, and were able to look across to the unknown districts lying to the west, while to the north we could clearly descry the shapely Basman peak.

Upon returning to Geh, we retraced our steps down the pass, and then kept further north, striking the Sirha river at Ichan, called "Hochan" by Captain Grant. Both when going to and returning from Fanoch, we crossed the Maluran river,* which is shown as draining

---

* The following is the list of villages on the Maluran river:—

Matkun, right bank.	Shernani, right bank.
Kuchink, „	Yark, „
Abgah, „	Murdosmah, „
Nasperan, „	Maluran, left bank.
Ladgoju, left bank.	Chah Ali, „
Aband, right bank.	Wajbis, „
Margan, „	Korandab, „

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

into the Geh river, whereas it is really a tributary of the Kaur-i-Binth.* Along its banks, as well as those of the Sirha river, there are almost continuous lines of date groves. The Sirha pass, which lay between us and Bampur, beggars description, and I am still surprised that we got safely over it, as I should never have believed that laden camels could climb up the cliffs they did without accident. My companion's mare indeed fell, but luckily there was a deep pool below, so no harm was done.

At Bampur we found that Pahra—the Pura of Arrian—was now the seat of government, and so pushed on there, where we were received by the Assad-i-Dowleh, who is a fitting ruler for such a wild race. He was civil enough, thanks to the Farman Farma; but when we informed him of our intention of touring in Sarhad, he tried to discourage us by every means in his power. Having engaged camels with extreme difficulty, we marched due east to Magas, where the kindest inquiries were made after the late Sir Oliver St. John. We then turned north into unexplored country, and, at the end of December, reached Khwash, the capital of Sarhad. This word has been written and spelt in so many different ways, that I would mention that it is the Sarhaddi method of pronouncing "khosh," meaning "sweet."

We were now close to the giant range whose highest peak is the great volcano of Taftan, or the "boiling," locally known as Chehel Tan, or the "Mountain of the Forty Beings," and as we were afraid that snow might hinder our ascent, we marched up its valley, where

---

The following is the list of villages on the river Sirha from Ichan downwards:—

Kondel Mant, right bank.	Geladun, left bank.
Abaud, left bank (opposite Deh Mullah).	Washkosh, right bank.
	Bandan, ,,
Deh Mullah, right bank.	Pothan (opposite Bandan), left bank.
Khushk, left bank.	Mokht, right bank.
Gurani, right bank.	Afzilabad, left bank.
Mirabad, left bank.	Hudian, ,,
Shah Karpad, left bank.	

Thence 4 miles to Naokinja, where I halted between Chahbar and Geh.

I crossed both of these streams at two places, some miles apart, so that I have reason to believe in the accuracy of the above list.

* There are five streams which make up the Kaur-i-Binth, as the Fanoch river is called below the pass. Beginning from the west—

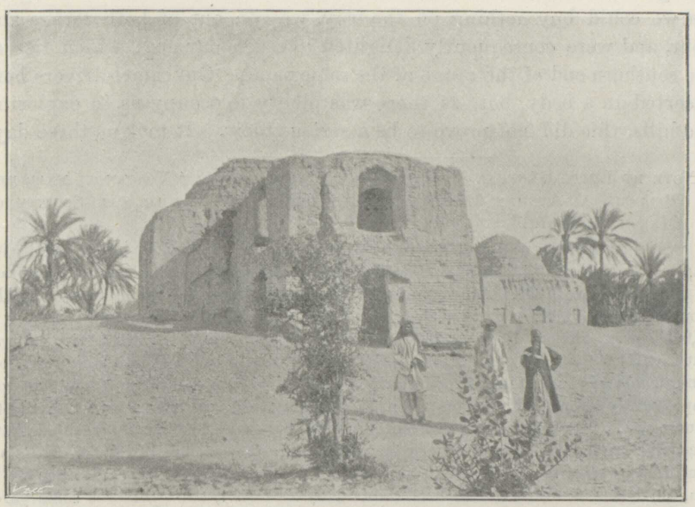
1. The main stream, up which runs the road to Ramishk. Mirabad is the only village of importance that we could see.
2. Kaur-i-Kantekon. This stream flows almost due north to south.
3. Kam Kaur, with village of Kam just above Fanoch, and Haimini on an easterly branch.
4. Kaur-i-Magen, with two hamlets, Magen and Band-i-Bengi, on its banks.
5. Kaur Espate. This stream flows in just below Fanoch, the hamlet of Espate being some few miles up it.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000033

مكتبة قطر الوطنية
Qatar National Library

we camped at an altitude of 6550 feet, near a large cave, which protected our horses from the intense cold. My companion was unfortunately ill, so, as the weather looked very threatening, I decided not to wait, but to make the attempt on the following morning.

For 7 miles the track led up the valley, which then terminated in an extraordinary fissure, termed the Band-i-Gelu. Creeping up this, we found ourselves in a valley, which smelt strongly of sulphur, but the going was easy enough until we began to climb the actual peak. First of all, we had to scramble over boulders, but these at 11,000 feet were replaced by soft lava ash, so that it was 2 p.m., after eight hours' incessant climbing, when we reached the summit at 12,850



TOMBS OF THE KAIANIAN MALIKS AT JAIK.

feet. We here found a plateau about 400 yards square, the northern portion of which is termed the Kuh-i-Ziarat, or "Sacrifice hill," while separated by a slight depression lay the Mader Kuh, or "Mother hill," which is still the actual object of worship for most Sarhaddis, although nominally they are Mohammedans. The volcano, which was belching out blinding clouds of sulphurous smoke, consists of two apertures, each some 3 yards in circumference, which apparently united a few feet below the surface, as there was only a yard or so of ground between them. With considerable difficulty, we extricated specimens of the sulphur and sal ammoniac, and then turned our attention to plane-tabling. At the elevation we were at, we could see Sistan and the lake of Zirreh, mentioned in Matthew Arnold's great poem, while to the north-west

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002f

مكتبة قطر الوطنية
Qatar National Library

the boundless Dasht-i-Lut stretched for hundreds of miles. The descent was easy, in comparison, and by 9 p.m. we were safely back again in camp.*

The whole of this valley is full of ruined villages, and opposite them are oval-shaped caves hewn out of the rock. These were some 8 feet in length, 6 feet in width, and 5 feet in height. No marks of smoke were visible, and, as they were very difficult of access, I would hazard the theory that they were humble imitations of the rock tombs at Pasargardæ.

After stopping long enough to allow my companion to scale the great volcano, on New Year's Day, 1894, we started forth to find the village of Basman, the whereabouts of which was uncertain to a degree. As we could buy nothing on the way, we ran out of both forage and flour, and were consequently delighted to reach our goal, which lies at the southern end of the range of the same name. Our camel-drivers here deserted in a body, but, as there was plenty to occupy us in exploring the hills, this did not prove to be a serious blow. It took us three days

* Note by Lieut.-General McMahon in a Paper on the "Volcanoes near the Beluchistan-Afghan Frontier," read before the Geological Society on March 24, 1897.

"Since this paper was read the authors have been in personal communication with Captain P. Molesworth Sykes, now in England on leave, who ascended the mountain on Christmas Eve, 1893. After gradually ascending ravines in the hills around the mountain, the exploring party arrived at the foot of the actual cone at an elevation of 10,000 feet. Thence up to 11,000 feet the ground traversed consisted of boulders; but from 11,000 feet upwards it was covered with fine volcanic ash, into which the foot sank deeply at every step. From this point up to the top the smell of sulphur was unpleasantly strong. The summit consists of a plateau covering an area of about 400 square yards. On its northern and southern sides the ground is slightly elevated above a central depression. The northern elevation forms the sacrifice hill, where goats are sacrificed by pilgrims; whilst the southern portion is called *Mader Kuh* ('Mother hill'). On the latter were, at the time of Captain Sykes's visit, two apertures some yards apart, each apparently 3 or 4 yards wide, which appeared to be connected with each other. From both of these, dense white sulphurous smoke and some flames were issuing. So strongly sulphurous and suffocating was the smoke, that these apertures could only be approached from the windward side; and, owing to the heat and smoke issuing from them, they were approached with difficulty even from that side. Sulphur and sal ammoniac were extracted from the edge of one of the apertures.

"Captain Sykes has paid several visits to the burning petroleum springs at Báku, on the western shore of the Caspian sea, and he is satisfied that the heat, smoke, and flames on the summit of the Koh-i-Taftán were not due to petroleum. There was no smell of petroleum, and the smoke was not dark and carbonaceous.

"Captain Sykes brought home a specimen of the rock found *in situ* on the Koh-i-Taftán, and this proved, on examination, to be a vesicular, andesitic lava. As the summit of the Koh-i-Taftán is still deeply covered with fine ash, this volcano must have been active during a comparatively recent geological period; but, as no fresh lava-streams were observed by Captain Sykes on his way up the mountain, it is not probable that the volcano has been active during the lifetime of the present generation.

"The authors infer, from Captain Sykes's observations, that the volcano is now in the solfatara stage of its existence. The flames seen by Captain Sykes are probably due to the emission of hydrogen sulphide (H_2S), a very common product of solfatara action."

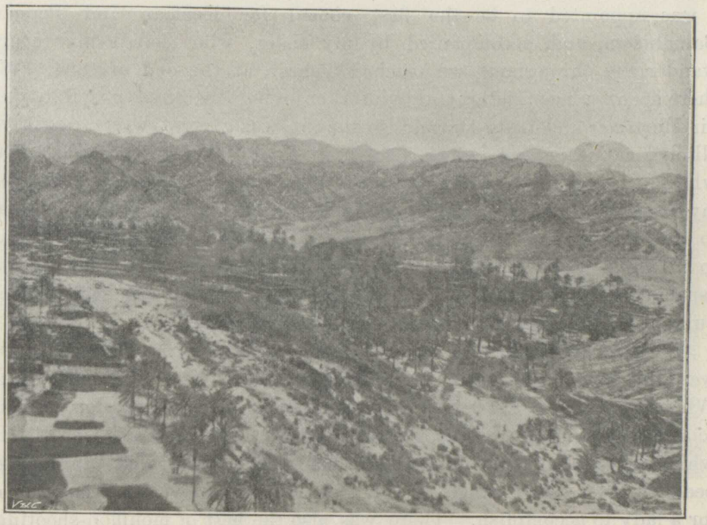
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to scale the great peak, from our camp at Basman village, but at last we arrived at the summit, and set up the plane-table at an altitude of 11,210 feet above the sea. We were on what is generally supposed to be an extinct volcano, and it is interesting to note that even here there is a legend of a saint called Kedr, who still lives in the mountain, just as in Greek mythology a giant is imprisoned beneath Etna. The mountain is locally termed Kuh-i-Zendeh, or the "Mountain of the Living Man."

Upon returning to Basman, we enjoyed excellent moufflon-shooting, until the Farman Farma sent some of his transport for our use, and we rejoined him at Bampur. In his company, we travelled along the



THE LAJJI VALLEY ON THE BELUCH-KALAT FRONTIER.

unexplored tract of country where the Bampur river and the Halil Rud mingle their waters in the Jaz Morian. Additional interest was felt by us, knowing it to have been the road that Alexander the Great used in his march from India.

Upon arrival in Rudbar, we turned northwards and left the Farman Farma, in order to explore the site of Marco Polo's "Camadi," where the china exhibited, together with the seals and other curios, were found. We came upon a huge area littered with yellow bricks 8 inches square, while not even a broken wall is left to mark the site of what was formerly a great city, under the name of the Shehr-i-Jiruft.

It was now late in March, so we were only too glad to traverse the Jabal Bariz range and gain the elevated plateau of Iran, and, just a year

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000a

مكتبة قطر الوطنية
Qatar National Library

after my first journey, I again entered Kerman. Here our party broke up, Surgeon-Major Brazier Creagh returning to India by Bunder Abbas, while I continued my journey towards Tehran. At Yezd I was most hospitably entertained by the manager of the Imperial Bank of Persia, and at Tehran, Mr. Coningham Greene, Her Majesty's *chargé d'affaires*, not only made me free of the Legation, but also presented me to H.I.M. the late Shah, who was interested at hearing about so remote a corner of his empire. I travelled to England in rather over a fortnight by the newly opened line from Petrovsk, on the Caspian sea, taking the faithful Sultan Sukhru with me as a reward for his excellent work, and reaching London late in June.

After four months at home, spent in compiling my second journey, I was appointed to be the first consul for Kerman and Persian Baluchistan, and, accompanied by my sister, who shared my future wanderings throughout, we reached Tehran at the end of 1894. We there spent a most delightful winter, enjoying the kind hospitality of Sir Mortimer and Lady Durand, so that it was a great wrench to leave all civilization behind and start forth on the long journey of 600 miles, which lay between us and my district. As far as Kashan, we followed my route of 1894, but for the onward march to Yezd I kept a good deal to the east, passing through Natunz and Kuhpa. Thereby I was able to fill in a large blank that has existed on the map quite close to Ispahan, while, as so often happens in Persia, I found the district to be quite as populous as the one bordering the main road.

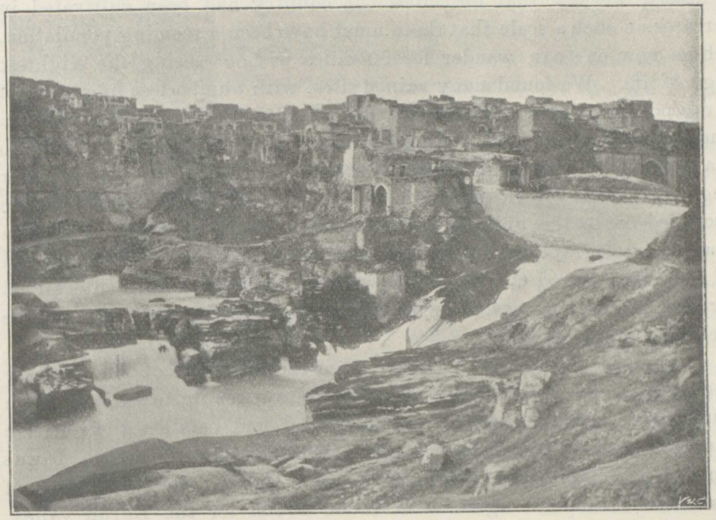
Kerman was reached at the end of March, and for some months we were busy enough, what with consular work and settling down. When, however, it grew hot in June, I determined to explore Sardu, so as to trace out Marco Polo's route, and we had a most delightful trip while occupied with this task, during which we scaled the highest peak of the Lalazar range, 13,700 feet above sea-level—no mean feat for a lady to accomplish. There was also the best of moufflon-shooting, and we picked up several carpets woven by the nomads, while the climate at an altitude of over 8000 feet was perfection. However, we were forced to return home by quick marches to meet H.R.H. the Farman Farma, who was once again appointed governor of the province, and the autumn was spent at Kerman, as we found interesting occupation in trying to unravel the ancient history of that city. I cannot say we were unsuccessful, as our offers of a reward for old stones and curios produced a number of reflet tiles, and I am proud to state that we captured a wasp unknown to science, when collecting insects for a friend.

In January, 1896, telegraphic orders came for me to join Colonel, now Sir Hungerford, Holdich on the Perso-Beluch frontier, which instructions I should have been quite unable to obey, without considerable delay, had not my kind friend, the Farman Farma, lent me his own transport.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001a

مكتبة قطر الوطنية
Qatar National Library

Thanks to this, we started off on the third day, leaving our household gods to look after themselves, and within a week we had reached Bam, until recently the frontier fortress of Persia. Everywhere I was shown the greatest courtesy, so that forage and supplies, which usually are impossible to collect, were ready at each stage, and from Regan, with only a day's halt, we were able to load up fifteen extra camels with all supplies, before crossing that portion of the Dasht-i-Lut which lay between us and Pahra. There my old acquaintance, the Assad-i-Dowleh, treated us well, and it only took two days to engage thirty spare camels and to load up supplies for twenty days, as the villages



THE WATER-MILLS OF SHUSTER.

to the east were too small to be counted upon to any great extent. As far as Magas, we followed the route that we had taken in 1893, after which we continued nearly due east, reaching the British camp at Kohuk on February 24, having accomplished the march of 600 miles, mainly across desert, in forty days.

Sir Hungerford Holdich * has already read an interesting paper about the geographical side of the frontier commission, during which we marched with our headquarters as far as Jalk, while excursions were made to the various points of interest along the frontier. Both at Jalk and Kohuk we found numerous tombs which were built by the Kaianian maliks, and which appear among the illustrations. On one

* *Geographical Journal*, vol. ix. p. 416.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of them I found a brick bearing the date of 1027 Anno Hejra, or 1617 of our era. This confederacy of chieftains appears to have ruled in Sistan and Baluchistan during the prosperity of the Sefavi dynasty, and, as far as we know, they were crushed by Nadir Shah about 150 years ago, although Pottinger mentions that they still owned villages early in this century.

We accompanied the British Commission on its long march to Quetta, so that my sister may claim to be the first lady who has ridden from the Caspian sea to India, a distance of nearly 2000 miles. While travelling up the valley of the Rakshan, through what is now a desert, we saw that for miles the country had been cultivated in terraces on such a scale that there must have been a teeming population, where now one can wander for 50 miles without seeing the slightest sign of life. We found many ruined sites, with numberless fragments of Arab pottery, beads, and bracelets, and felt that it was only deforestation that could have changed the country from a smiling plain of plenty to "a barren and dry land, where no water is." Daily, the thermometer registered over 90° in our tents, so it was with light hearts that we ascended on to the uplands of Baluchistan, until, at Kalat, we again reached a telegraph wire—that pioneer of civilization—and at the end of April we entered Quetta, where we were all most kindly entertained by the late Sir James Browne, whose name will live long on the Beluch country side.

We were on the way to Simla, when the sad news of His Majesty the Shah's death reached us, and it was quite touching to see how much our Persian servants felt the calamity that had befallen their native country. Nearly a month was spent in Simla, during which I was enabled to compile my work up to date, and at the beginning of June we were once again at Karachi, bound for the Karun valley. We were caught by the beginning of the "monsoon," and, as we were on board the worst roller that the British India Company possesses, we were very glad to reach the shelter of the Persian Gulf. For the first time, I visited Bahrein, when we rode on donkeys to the famous wells, and also saw the extraordinary phenomenon of a spring of fresh water bubbling up in the sea, which is very shallow indeed all round the islands. The pearl fisheries were in full swing, and it was a most picturesque sight to see the fleet of little vessels all busily engaged in fishing for oysters. The weather was too hot and our stay too short for a visit to the site of Sir E. Durand's and the late Mr. Theodore Bent's excavations; but there are few places so accessible that would, in my humble opinion, yield a richer harvest than this ancient home of the Phœnicians, where Erythras, the "Red King," lies buried.

Off Bushire we again experienced rough weather, but when once we entered the lovely Shat-el-Arab, the moist heat was overpowering, and as, at Mohamerah, we found that the fortnightly boat was not due to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

start up the Karun for another week, we continued our journey to Busreh, where Captain Whyte, Her Majesty's consul, received us most hospitably.

Before entering the valley of the Karun, I would mention that that river was opened to the commerce of the world in 1888, and that ever since Messrs. Lynch Brothers have maintained a fortnightly service, in spite of much hostile intrigue on the part of some of the inhabitants of this district, who did their best to thwart the Shah's policy. However, the extraordinary tact of Messrs. Lynch's agents has overcome much obstruction, and every one is now alive to the advantages that they have conferred upon the district, so that we may soon hope to see this system of mutual benefit placed on a thoroughly sound and solid basis.

It is but 117 miles from Mohamerah to Ahwaz, but this occupied the best part of two days to accomplish, as we anchored at night. At Ahwaz, where a few years ago there were but wretched huts, warehouses and caravanserais of imposing appearance now line the bank, while great activity is everywhere visible. After spending a few days with Messrs. Lynch's agent, Mr. Parry, in his company I proceeded up to Shuster on the s.s. *Shushan*, the larger boat, the s.s. *Mal Amir*, not being able to surmount the natural barrage that crosses the river in five separate reefs. This is the crux of the Karun question, as, if the ancient dam were repaired, there would be water enough to fertilize millions of acres which now lie idle and useless. At Shuster, one of the dirtiest, hottest, and most fanatical towns in the world, we lived in cellars for the greater part of the day, as at 8 a.m. the thermometer regularly registered 108° Fahr., while at noon 129° was the average reading. As may be supposed, we were only too glad to return to the comparatively cool climate of Ahwaz, where I had left my sister, and here July was spent. In August, I was so weak from fever and pleurisy that I had to seek medical advice at Busreh, and again enjoyed every comfort at the consulate, for which I shall ever be grateful. The moist heat was so trying that the doctor ordered a sea voyage, so that early in September we returned to Tehran by the roundabout way of Bombay, Aden, Brindisi, and Constantinople.

I was very anxious to have the Ahwaz-Ispahan road properly mapped as far as its junction with the Shuster route, as, until quite recently, Ahwaz barely existed, and so there was no road running to it shown on the map. Here the great value of my faithful plane-tabler came in, as I was able to send him in charge of my caravan through the Bakhtiari country and feel quite confident that when we met again at Tehran, he would have an excellent route report to give in, in which hope I was not disappointed.

The winter was again spent under the same hospitable roof at Tehran, where I saw H.I.M. Muzzufur-i-din Shah more than once, who evinced

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000019

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

much interest in the photographs that I had taken on the Baluch frontier. Moreover, I had the opportunity of making the acquaintance of the leading Persian statesmen, one of whom, His Excellency the Nasir-ul-Mulk, is here to-night, having paid us the compliment of returning to England the moment his official duties on the continent were finished.

In conclusion, I would mention that, after travelling for many thousand miles in Persia, I still wish to travel there again, and, although perhaps the free open-air life and the glorious climate have something to do with this, I cannot but feel that it is also owing to the Persians themselves being so hospitable and friendly a race.

Before the reading of the paper, the PRESIDENT said: We have to welcome here this evening an officer who has seen a good deal of a very interesting part of Persia, and from whom we have received several letters of great interest, though I believe we have not before had the pleasure of listening to him in this room. I will now call upon Captain Sykes to read his paper.

After the reading of the paper, the following discussion took place:—

The PRESIDENT: I would now ask his Excellency, Nasir-ul-Mulk, to open the discussion by some observations.

His Excellency, the NASIR-UL-MULK: I am very pleased to have had the opportunity of being present at this meeting, and of listening to the very interesting lecture of Captain Sykes. As you have seen, Captain Sykes has shown himself a very active explorer, and has availed himself of the opportunities afforded him to give you new information about the outlying parts of Persia. I am afraid that all he said was about the outlying parts and the deserts, and that may give you the idea that all parts of Persia are the same. As you know, Central Persia is desert, but the borders are very beautiful and fertile places, and I am sure that Captain Sykes on another occasion will give you information about these parts also. I have to thank him for the kind allusion he has made to myself, and again to express the pleasure I have had in being present at this meeting.

Major-General Sir FREDERIC GOLDSMID: I am afraid that any remarks which I can make on the very interesting paper we have just heard would involve too distant a retrospect to warrant attentive consideration on your part. My knowledge of Persia goes back to so ancient a date, that anything I may now say on that country must be of comparatively little interest. About thirty-four or thirty-five years ago I had the honour of addressing this Society at a meeting presided over by Sir Roderick Murchison. I had then recently returned from the coast of Mekran, which I had been sent to explore under orders from Bombay. Although we, in Sind, were neighbours to Mekran, we knew very little of that province in those days. I was ordered to go along the coast as far as I could, and see whether the country was fitted for the setting up of our telegraph line, whether the people were fitted for protecting that line, and whether I could make any permanent arrangements for its protection. Accompanied by an escort of Sind horse, I reached Gwádar in about seven weeks, exploring and taking notes the whole way, and making my report to the Bombay government. From Gwádar I should have continued the exploration, but was directed to return, lest our little acquaintance with Western Mekran should lead us into political complications. Consequently, I put my camels and horses into boats, and returned to Karáchi. A few years later, I reached this very place, Gwádar, from the neighbouring port of Charbar,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

having travelled thither by a strictly "overland" route from the Caspian. Later again I reached Gwádar direct, coming from the same starting-point in Northern Persia. When the late Sir Henry Yule kindly measured my journeys, and put them down at 7000 miles in Persia and Baluchistan only, I confess to a feeling of gratification; but I could not then foresee the work that was to be accomplished by other travellers in Asia during the second half of this memorable period of sixty years which we are now celebrating.

The paper we have heard read is an admirable one in many respects. It is simple, truthful, we all understand it, and, more than that, it shows what we have to do. The points which the writer has touched upon are points of very great interest indeed, and I only hope that, by further study of these particular regions, we may soon have a more complete map than heretofore. I do not like taking up your time further, but, as relevant to the occasion, will ask your permission to quote a few words from a lecture which I delivered at the Royal United Service Institution in 1877, when Sir Rutherford Alcock was in the chair:—

"We require consuls both on the east and west of Persia: good, well-trained men who are likely to promote, by their personal character, the honour and credit of our country. Kerman or Yezd in the east, and Kermanshah and Shuster in the west, Meshed in the north, and Bunder-Abbas on the seaboard, would all be points worthy of consideration in any scheme for the extension of the Asiatic consular service. . . . Holders of these posts, like the late worthy consul, Keith Abbott of Tabriz, might, by judicious local exploration and inquiry, be scientifically, as politically, useful." In referring to Consul Keith Abbott of Tabriz, I would interpolate the name of Colonel Stewart, also of that city, whose presence here to-night at once recalls his travels and services.

Let me add that in three of the places named, consuls or vice-consuls have in late years been appointed. I think I am right in saying that General Maclean was appointed to Meshed, one or two officers were appointed at various times to Yezd, and Captain Sykes is, we know, at Kerman. One word more, if I may be allowed to say it—and it would be ungrateful and ungracious if I did not do so—that is, that I agree in every word that Captain Sykes has said in regard to Persian hospitality. I can, from my own experience, testify most heartily and honestly to this estimate of the native character.

Sir Mortimer Durand: There are many here so much better fitted than I am to continue the discussion of Captain Sykes's lecture from a geographical point of view, that it is inadvisable for me to take up your time very long. I would only like to say that I entirely concur with everything Sir Frederic Goldsmid says about the credit due to Captain Sykes for his remarkable journey, and I wish a great many more would follow his example. I have often been struck by the small number of English travellers who visit Persia. I am sure my distinguished friend, the Nasir-ul-Mulk—whom I take this opportunity of congratulating upon the high honour conferred on him by Her Majesty—will bear me out in saying that the Persians, as a nation, very thoroughly appreciate, in more ways than one, any sympathetic interest which Europeans show towards them. I think it is in every sense desirable that more Englishmen should travel through Persia to learn something of the country and people. It is a most interesting country and people. There is one aspect of the question which has not been touched on to-night, and about which I should like to say a few words—I mean the interest of the country from an artistic point of view. I think it would well repay any one of artistic tastes to spend some months or a year in Persia. He would see that it is a very beautiful country. We have heard a great deal of the arid nature of the mountains. There is a very great deal of barren and bare country about the capital, but

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

if you could see the exquisite colours which the barren hills take at sunset, and at other times, you would agree that Persia has its beautiful side. I remember when I left Tehran on February 14, I was particularly struck with this. It was a typical Persian day, the sky cloudless, the sun bright. To the north stretched a long range of mountains of dazzling purity, covered with snow from the summit to the foot, and far away to the east, rose the mighty cone of Demavend. To the south we saw the great plain stretching into the blue distance, and rising out of it, range after range of snow-clad hills, the more distant being considerably over 100 miles away, yet, in the exquisitely pure dry Persian air, the farthest range was perfectly clear. The whole was one of the most beautiful things I have ever seen. Now, that is merely one aspect of Persia, but it is worth dwelling upon. From every point of view, I wish I could see more English travellers in the country, but they must be travellers of the right stamp, like Captain Sykes and the charming and intrepid lady who accompanied him in his wanderings. I hope I may live to see more Englishmen following their example, and that greater interest in, and knowledge of, Persia may gradually result.

Colonel C. E. Stewart: It is some sixteen years since I read a paper before this Society on Persia, where I spent many years, and I am now glad to listen to a paper by Captain Sykes on that country. Captain Sykes told you that on his way to Persia he came to me at Adessa and asked me for letters of introduction. I gave him one to a friend of mine, a chief of the Yomut Turkomans whose friendship I had gained some years ago. I am sorry my friend did not treat Captain Sykes better; at all events, I had found him most kind. It surprised this chief very much, when I was with him, to hear that I possessed a portrait of him. This portrait had been done by my wife, who had met him on board a Caspian steamer when he was an officer in the Russian service. Sixteen years ago, a man was scalped in my presence in this part of the world; but on the present occasion we had a good dinner, with knives and forks. Whatever else the Turkomans have done, they have advanced much in civilization, which is due to Russian example. This chief, after holding a commission as major in the Russian service, had entered the Persian service as colonel of cavalry. I must say I found him a most pleasant, intelligent host, and in every way I enjoyed my time with him. I am sorry he was not more civil to Captian Sykes.

In another part of Persia described by Captain Sykes, I have been as far as Naiband. He describes Naiband as a sort of Paradise, but I suffered a good deal in crossing the desert to get there. My recollections go back more readily to the Turkomans than to the desert, because they live in a beautiful green country, where, if it were not for the mosquitoes, one could spend a happy time. I remember on two occasions I could not see the colour of my hands, they were so covered by mosquitoes.

Mrs. Bishop: My claim to be a Persian traveller is rather a slight one. I travelled in Persia for a year for about 1500 miles. The region in which I travelled was chiefly Western Persia, from Baghdad to Isfahan and in the Bakhtiari country, and the Karun region, from Dupulun to the source of the Karun, and then through what is sometimes called Persian Kurdistan to the Turkish frontier near Urumiah. I should like to ask Captain Sykes if in the desert, between Meshed and Kerman, he met with any traces of ancient irrigation, irrigation canals, ditches, or reservoirs, such as occur in immense numbers in some other parts of Persia now entirely desert. I should also like to know whether there was any desert vegetation, such plants as assafœtida, which is plentiful on the Upper Elam mountains, and also the colocynth gourd, which affects deserts. There is one more question: Has the road for which a concession was granted when I was in Persia, I mean from Ahwaz to Burujird, become an accomplished fact?

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Captain Sykes: In reply to Mrs. Bishop's three questions, I do not think that there was ever more irrigation or cultivation in the Dasht-i-lut than nowadays; in pre-historic times there is reason to believe that the desert formed an inland sea, in support of which theory, Sir Frederic Goldsmid mentions that at Yunasi or Yunsi, on its north-west edge, there is a tradition that the prophet Jonah, or Yunas, was cast up there and hid for three days under a gourd. As to the second question, I am afraid that I am not much of a botanist, but I have seen assafœtida growing in the hills near Kerman, but always at a higher elevation than any portion of the Dasht-i-lut, where, indeed, one only sees stunted camel-thorn bushes. Finally, I regret to state that the Ahwaz-Burujird road has not, as yet, been commenced.

The President: We have listened to a very interesting paper this evening, and as regards the journey from Khorassan to Kerman, I believe, from what Captain Sykes has told us, that we shall be able to make some not unimportant additions to the map of Persia which was brought out under Mr. Curzon's supervision a few years ago. I therefore think we may all look forward with great interest to the additions Captain Sykes will be able to give us. We have all noticed, I think, how very interesting it is for an accomplished traveller like Captain Sykes to travel over a country little known, but which has many geographical and many historical reminiscences connected with it, and I was particularly interested in hearing him refer to the routes of Alexander and to the identification of places mentioned by Marco Polo and Friar Odoric. It reminds me how very much we owe to our late associate, Sir Henry Yule, as regards this country and other parts of Asia. If it had not been for his elucidations of the great work of Marco Polo, and for his having first brought to the notice of Englishmen the very interesting narrative of Friar Odoric, we should not now be able to listen to the researches of those travellers who have benefited by what Sir Henry Yule has written. We have much to thank Captain Sykes for besides the paper he has read to us. We have all been extremely interested in looking at the very beautiful photographic sketches he has shown us on the screen, especially those buildings at Kerman, and the golden-domed mosques and tombs at Meshed. We also have to thank him for kindly bringing here, and placing in the next room for our inspection, a number of interesting products connected with the province of Kerman, also some tiles and other older remains. I feel confident, therefore, that you will all wish me to convey to Captain Sykes a very cordial vote of thanks for his communication this evening.

A JOURNEY TO SIWA IN SEPTEMBER AND OCTOBER, 1896.

By WILFRED JENNINGS-BRAMLY.

The famous oasis of Siwa, which lies about 300 miles west of Cairo, cannot be said to have fallen from its high estate, for it is probably much as it was when Herodotus, Strabo, Diodorus, Plutarch, and Pliny thought it worthy of mention; only it has stood still while the world went on. What it was in the days of its fame before the reign of Cheops it is still—the first halting-place on the great desert high-road to the west. Alexander the Great visited it, and it was well known in the Roman occupation of Egypt, but it was not until 1792 that its fame reached Western Europe through the visit of Alexander Browne. Mehemet Ali sent an expedition which gathered much knowledge of the place, and enabled him to fix the taxation

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008b

مكتبة قطر الوطنية
Qatar National Library

of the oasis at £2000. Several modern travellers have visited Siwa, including Dr. Rholfs, M. Bricchetti, and a journalist, Mr. Ward, who did not succeed, however, in gaining admission to the inner town. As circumstances favoured me in this respect, and as my return journey lay through new country, an account of my expedition may be of interest.

As the safest way of undertaking a risky expedition is to take so small a party that you excite neither attention nor alarm, I limited my equipment to the barest necessities, for the important thing is not to look worth robbing. One night, encamping at the Arej or el Bahrein—that hunting-ground *par excellence* of the robbers of the desert—a Beduin who joined us said he wondered I was not afraid of being murdered and robbed. "The laugh would be all on my side when I found you looking in my empty pockets," I said. The Beduin, after a moment's thought, remarked, "But you would be dead then;" upon which, suddenly impressed with the excellence of my joke, he laughed long and loud. My guide's sense of humour, which lay dormant on most occasions, was so thoroughly roused on this, that it never quite fell asleep again, and he was for ever reminding me I had said I would laugh after I was dead.

Besides this guide, my only companions were my servant Abdulla and three camels to carry us and our slender outfit—a sack of rice and of flour, three goatskins of water, tea, sugar, coffee, ten tins of desiccated soup, two of porridge, and a few apples and lemons. Two skins of water would with care last us five days, without allowing any for cooking or washing.

Mr. C. W. Ward has given so graphic a description of the road which he followed in his unfortunately fruitless attempt to enter Siwa, that I feel I have nothing new to say about the route, except that at Moghara I was fortunate enough to find some bones partly embedded in the sandstone, partly lying on the sand, which, on being examined at South Kensington, proved to belong to the precursor of the horse. Mr. Ward has described Ghara, that strange town built on the summit of a rock which rises some 40 feet out of a low damp plain surrounded by hills. It is supposed never to contain more than forty men at one time, but I fancy that I saw a good many more. When we arrived, every inhabitant was within the walls. At sunset the gates are shut, as in other towns, such as Siwa, and until sunrise none may either leave or enter. We shouted for food, and a basket full of dates was let down by a rope over the walls. Having to encamp in the low damp ground, we should have been bled as a preparation for the Siwa fever we should be exposed to, but the barber could not come out that night, and next morning he was too busy to attend to us. My guide was much disturbed, and the attack of fever I suffered from on the return journey was always attributed to this omission. Mosquitoes did their best to fulfil the barber's duties. They swarm in sufficient numbers to prove annoying even to the Arabs.

I was in a hurry to get on to Siwa, for the demands of the people for provisions were extortionate, and my resources small. We filled our goatskins, and pushed on. The water of the well of Ghara has a most abominable taste. It is, in fact, scarcely drinkable until it has been at least a day in the skins. Even then it is a wise precaution to hold your nose for some seconds after drinking.

Between Ghara and Siwa, old Dau, my guide, was terribly alarmed by our meeting a party of Uled Ali ("sons of Ali") Beduins. Their reputation as robbers is bad—but presumably they did not think us worth robbing, except in the friendly way of drinking up all our coffee, which Dau, in his relief at finding them friendly, obsequiously made and offered them.

I have until now been lucky enough to get on with the Beduins I have met.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000023

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Happily for me, the heat doesn't knock me up, and I can walk in the desert as long as in England. I heard that the Beduins gave me the name of the walking Englishman, and once or twice were kind enough to say that I was one of themselves. Trifles like these are important when dealing with men who have the minds of children. With them whether you are to live or die depends so often on a trifle that it is as well to have as many trifles as possible in your favour. I wore their dress in my trip to Siwa, not with the idea of taking any one in at close quarters, but of making myself unnoticeable at a distance. I generally walked some way in front of my men and camels. I did this because the incessant drone of the Arab songs became intolerable to me, and as I found Abdulla couldn't possibly get on without his eternal song, I used to put a mile between us when the track was clear.

Once or twice, on reaching the brow of a sandhill, I would find myself in sight of a string of camels. The first thing the Beduins would do was to load and hold their flint-locks at the ready. They meant no harm; it is the ordinary etiquette of the desert, at which no one dreams of taking offence. Then I would have to sit down to show I meant no mischief, and conversation would be carried on in shouts. I generally asked them for a bowl of camel's milk, which they always gave if they had it. On one occasion I came upon a solitary Beduin watching his herd of camels grazing. That man had probably not seen a human being for weeks. He was squatting on the ground. He neither moved nor turned his head. I asked him for milk, and he pointed to his camels and said, "Take it." As the art of milking camels never formed part of my school curriculum, this invitation was of little use to me. But I could not rouse that man to more active hospitality. He probably looked upon my appearance as an impertinent intrusion.

After a long tramp my Arab garments were in a disreputable condition, and as we drew near Siwa I saw little prospect of entering the town in any other character than that of a beggar. Little guessing what honours were in store for me, I put off my entry till dusk. On foot as usual, and some way in front of my men, I passed through the mile and half of gardens. The vegetation was magnificent. Each garden was surrounded by a mud wall, over which the foliage of the palms drooped most invitingly. But with the uncertainty of my reception before me, I do not pretend to say my mind was in a state fully to take in the peaceful beauties of the scene. At that hour not a soul was about, and I was not observed until I had crossed the bridge that spans the narrow canal running through the outer square, and was well into the middle of the further half of the square. Then the men assembled in the booths in front of me suddenly became aware of my presence, and came forward in a mass; I was soon surrounded. We exchanged greetings. Of course they soon heard that I was a stranger, though my shawl was so arranged that they could see nothing of my face but my left eye; but that is, unfortunately, blue. One man tried to pull my shawl aside—a liberty I resented, and he kept his distance; but things were becoming unpleasant. Dau hurried up just then, and told me not to lose a minute, but push through into the inner square by an open gateway I had not seen. This inner or Government square, as it is called, is reserved for the deliberations of the aristocracy of Siwa—the thirty-five or forty landowners. The rabble have no right to enter its precincts without leave, but the excitement of my arrival destroyed all rules of etiquette, and the noisy and unfriendly mob followed me in.

I looked round. There were tents in the middle of the square, and some dozen Egyptian police were strolling about—a comforting sight to me. On my left there was an out-jutting building, afterwards known to me as Government house. On a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000044

مكتبة قطر الوطنية
Qatar National Library

bench running along it I saw a grave assemblage of sheiks, sitting in conclave. In the centre sat a man in European clothes. This I knew must be Maha Bey. There was only one thing to do: I went up to him, and, speaking in English, addressed him by name, and asked if my presence was likely to increase his difficulties. Luckily for me, my rags and tatters, and my face burnt black, were not too much for his presence of mind. Hearing me speak English, he rose to receive me, and I believe his courteous reception saved me from much unpleasantness. Seeing the Mudir rise, the sheiks all stood up. My sudden appearance had silenced the mob. All eyes were turned on me. There was no time to explain, and with any one less quick at seizing the situation than Maha Bey, the danger I was in might have assumed alarming proportions. Speaking in the deliberate way in which Arabs exchange greetings, Maha Bey told me in English that if I would be guided by him, he fancied my arrival might be turned to some use. "I must talk with the sheiks for a minute," he said; "my orderly will take you to my tent, where I will follow you in a few minutes and tell you what to do."

Just then I remembered I had about me a passport. It was on parchment, and had an undeniably official look about it. With all the dignity I could assume, I produced the precious document and handed it to Maha Bey as my credentials. Not a ghost of a smile played on his face as he read it and returned it to me with a bow. He told me afterwards it had struck him then what to say about me. He soon followed me to his tent, and informed me I had become a colonel in the British army. The Government, he had told the sheiks, tired of waiting for the payment of the taxes, now three years overdue, had sent me to see what answer they were giving to his demands. I had hurried along alone, not wishing, unless absolutely forced to do so, to alarm Siwa by bringing my armed escort with me. As soon as I knew who and what I was, we returned to the sheiks, who in the mean time had been deliberating.

Maha Bey placed me at his right hand. I announced the fall of Dongola—an important piece of news to them, as the only help they could ever expect, if they meditated rebellion, must come from there. A change now came over them. From having absolutely refused to pay anything, they begged for a few days' respite before giving a final answer, and, before the assembly broke up, I received an invitation to attend that evening's feast in the inner town, given by Sheik Ekman Haboun, the leader of the Senoussi, or fanatical party. Maha Bey refused to accept until Ekman Haboun had promised to use his great influence towards having the taxes gathered. I was invited because Maha Bey took it for granted that I must be, as his guest, but I fancy my host thought it a bitter pill to have to consent to my entering the rock-hewn walls of the inner town at his invitation, for I believe I am the first Christian who has penetrated so far.

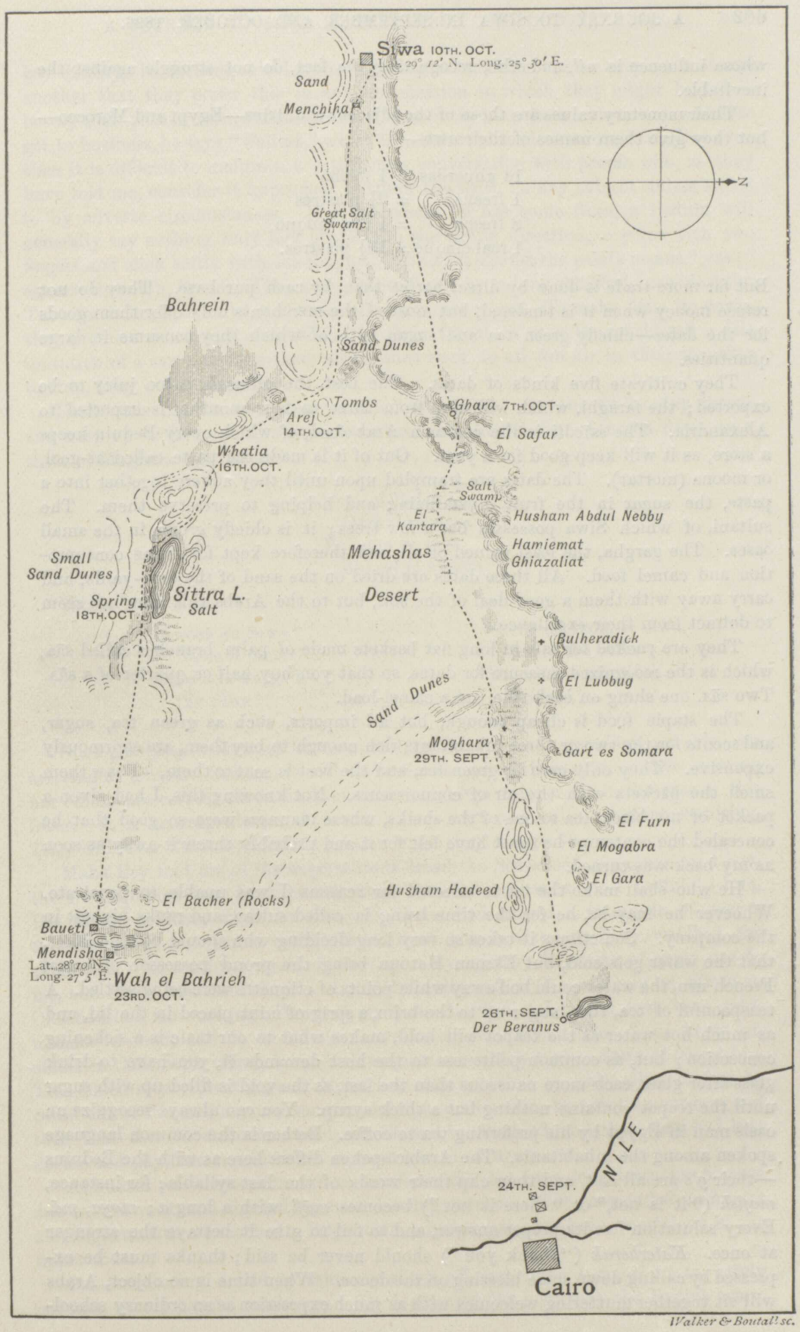
As we waited to go in, and afterwards as we sat in his tent, Maha Bey told me all he knew of the place. The people are in the habit of exchanging their dates for tea and sugar, and sometimes other small luxuries they can afford. No money ever passes. It is needless to say they are shamefully cheated, and, never receiving payment in money, they have none to give to the tax-gatherer. Maha Bey had interviewed the caravan of merchants just arrived, and informed them he had forbidden the Siwans to accept anything but money for their dates. As the merchants had brought everything but money, affairs were at a deadlock, and Maha Bey intended to stay in Siwa until money was forthcoming.

Mahomet Saïd leads the Government party. Not being such a fanatic as Hatoun, his attitude was naturally more friendly towards me. He and his party have the support of a Mahmoor and two policemen sent from Cairo—individuals

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



MAP OF SIWA.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

whose influence is *nil*, and who, recognizing the fact, do not struggle against the inevitable.

Their monetary values are those of the adjacent countries—Egypt and Morocco—but they give them names of their own—

14 ghuerdas = 1 freena
1 freena = $2\frac{1}{4}$ piastres
8 freena = 1 real cinquo
1 real cinquo = $19\frac{1}{4}$ piastres.

But far more trade is done by direct barter than by cash purchase. They do not refuse money when it is tendered, but most of the merchants only offer them goods for the dates—chiefly green tea and sugar, both of which they consume in large quantities.

They cultivate five kinds of dates. The best, the ghrasali, is too juicy to be exported; the faraghi, which will keep from three to four months, is exported to Alexandria. The saïedii is the common Arab food, of which every Beduin keeps a store, as it will keep good for a year. Out of it is made the paste called ar-gool, or moona (mortar). The dates are trampled upon until they adhere together into a paste, the sugar in the fruit crystallizing and helping to preserve them. The sultani, of which Siwa possesses but a few trees; it is chiefly grown in the small oases. The gargha, the least valued of all, and therefore kept for home consumption and camel food. All these dates are dried on the sand of the date-yards, and carry away with them a good deal of the soil, but to the Arabs this does not seem to detract from their excellence.

They are packed for sale in long flat baskets made of palm branches called sāa, which is the recognized measure for dates, so that you buy half or quarter of a sāa. Two sāa, one slung on each side, are a camel-load.

The staple food is cheap enough, but all imports, such as green tea, sugar, and scents for the two or three inhabitants rich enough to buy them, are enormously expensive. They only care for green tea, and the best is sent to them. I saw them smell the packets with the air of connoisseurs. Not knowing this, I had given a packet of my black tea to one of the sheiks, whose manners were so good that he concealed the contempt he must have felt for it and probably threw it away as soon as my back was turned.

He who shall make the tea is selected for reasons I was unable to penetrate. Whoever he may be, he for the time being is called sultan, and ranks highest in the company. Sometimes it takes so very long deciding who should be tea-maker, that the water gets cold, but Ekman Hatoun being the proud possessor of a real French urn, the water could boil away while points of etiquette were being settled. A teaspoonful of tea, then sugar up to the brim, a sprig of mint placed in the lid, and as much hot water as the teapot will hold, makes what to our taste is a sickening concoction; but, as common politeness to the host demands it, you have to drink glass after glass, each more nauseous than the last, as the void is filled up with sugar until the teapot contains nothing but a thick syrup. You can always recognize an oasis man in Egypt by his preferring tea to coffee. Berber is the common language spoken among the inhabitants. The Arabic spoken differs here as with the Beduins —their *g*'s are all soft, and they clip their words of the last syllable; for instance, *mafish* ("it is not," or "there is not") becomes *māfi*, with a long *a*; *moya*, *mā*. Every salutation has its proper answer, and to fail to give it betrays the stranger at once. *Katerherak* ("thank you") should never be said; thanks must be expressed by calling down some blessing on the donor. When time is no object, Arabs will sit together muttering welcomes with as much expression as an ordinary school-

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

boy displays in reciting his lessons. Strangers meeting are so suspicious of one another that they prefer this to any conversation in which they might be led to betray their past or future movements. If one or the other is in a hurry and wishes to get to business, he says "Salimt," which is understood to close salutations; but even then it is difficult to maintain a satisfactory conversation with people who, as they have told me, consider it imprudent to speak the truth on any subject unless forced to by adverse circumstances. If asked where he has come from, a Beduin will generally say nothing, only jerk his head in the wrong direction, or point with two fingers and click softly with his tongue. The click against the palate means "yes;" against the teeth, "no." They also express "no" by jerking the head back slightly. The camels are spoken to in a series of sounds, not words. To make them lie down, they produce much the same sound in their throat as may be considered a fair imitation of a saw; to urge them along, they suck up all the air in their mouths; to stop, they hiss a long *iisss*.

Each oasis has its own song "ramie," which the caravans on leaving intone and keep up for hours with a persistence perfectly distracting. I noted down two, those of Moghara and Siwa—

"Gour el Helab ou
Gart el Somara
Ya doun ya rase
Kaheel el andara."

While Siwa sings—

"Aween ya Siwa!
Yalla fi tamar
Oues zeit wagged,
Ya Siwa?"

"Where art thou, O Siwa,
Where the dates
And oil are plentiful,
O Siwa?"

Siwa possesses a fever of its own, and, as I have said, travellers are bled on arriving at Ghara. Onions are said to be an antidote. However, neither bleeding nor onions are certain cures, for they told me a large number die in the year of this fever. It is accompanied, as I found in my own case, with constant vomiting. They call fever humma, and use quinine when they can get it.

Maha Bey told me of the superstitious dread the Siwee had of cannon, and how the absurd report that he kept one under his bed had been most useful to him. His fifteen soldiers, when he reviewed them, had caused a stampede of over a thousand into the inner town, where from the battlements they watched the evolutions with a calmer sense of security. My military title was of great use to me, and Maha Bey assured me I should be quite safe if I could rely on my men. Of Abdulla I felt sure, and Dau was easily hoodwinked. I might have been commander-in-chief, and it would not have astonished him. The Kadi knew an officer in Cairo with whom I was well acquainted, which made a bond of friendship. This added to my prestige, and Maha Bey was not slow to make what capital he could out of the military romance he had wound around me by pointing out now and then that the Government would not leave him unaided, and that they had best decide and pay, and not force me to return with an army.

At sunset we were summoned to the feast, and led by a long tortuous passage cut in the rock and lighted by men bearing torches. The passage led up higher and higher, until we reached a large room, which must have been somewhere in the upper town.

Before entering I had to take my shoes off, and when I saw my toes barely covered by my ragged stockings, I felt I scarcely did justice to the British army.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000003

مكتبة قطر الوطنية
Qatar National Library

The manners of my host and his guests were, however, if not cordial, perfectly courteous.

There were several round tables placed down the middle of the room, candles burned in candlesticks, all of which had been imported from Cairo at a fabulous cost. Lamps of olive oil were also about the room. The food was more than abundant. A whole sheep stuffed with rice, raisins, and pistachio nuts; soup, chicken, vegetables, succeeded each other. Then came trays of delicious fruit—the trays made of woven date-fibre; the fruit, delicious black grapes, figs, a small variety of water-melon, sweet lemons, pomegranates, and mandarins. Our host did not sit down, but directed the servants, who were most likely slaves. There is still some traffic in slaves from Kura, the price of one of these being a small roll of blue and black cloth, such as the natives wear. I fancy most of the Siwans' dislike of admitting Christians to their town is the dread that their slave trade will be interfered with. There was no conversation during the meal, for any one to talk would have meant a disregard for the other more important function of eating.

After a long dinner we rose and washed our hands in brass basins, with water poured out of ewers. Then all sat on the divans round the room. A servant then walked round, showering rose-water over us so liberally that another had to follow with a towel and wipe us dry, and while he did this a third stifled us with incense. This unpleasant ceremony cost our host a large sum, for rose-water imported from Egypt becomes of fabulous value, and the servants were unpleasantly liberal in dispensing it. The conversation was carried on in Arabic when they addressed either Maha Bey or me, but in Berber—of which neither he nor I understood a word—when they spoke among themselves. We had English to fall back on when they were sufficiently engaged to leave us alone. My tent meanwhile had been pitched close to Maha Bey's, and I slept in all security, watched over by his sentinels. Next morning Maha Bey, kindly wishing to show me as much of the place as he could, found a reason to visit the tombs and the villages of Menchiha, some $1\frac{1}{2}$ mile from Siwa. As we crossed the canal beyond the first square, I caught some of the small fish. They positively swarm, even in the puddles on its side. Once a year the poor of Siwa have a grand fishing, and catch enormous quantities to feed on. Threading through the outskirts of the town, I saw a few poor houses. The children I saw, and one woman, who came out of a doorway and gave me water kindly enough, were all black, and I suspect these are slaves.

The Siwans themselves, though darker than Beduins, have nothing of the negro about them. They are of Berber race, and their faces are long and lean, cheek-bones very prominent, eyes dark. Their expression is forbidding; lank and wiry, they look as if they could endure any hardship.

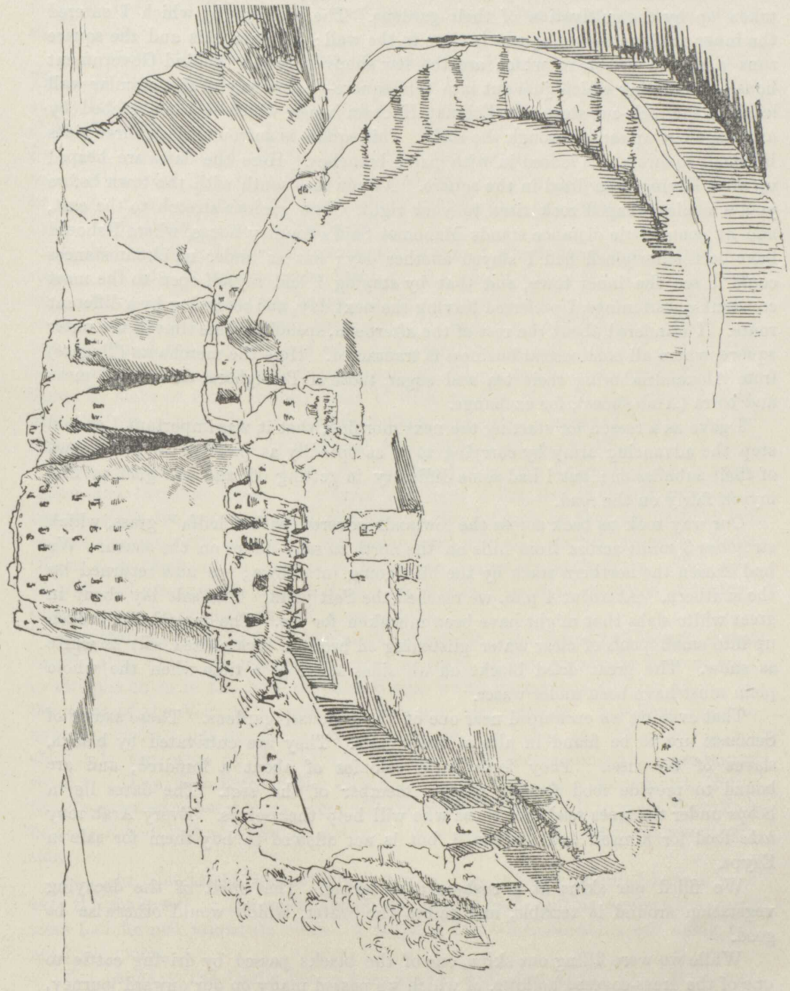
We reached the tombs first. They were hollows cut in the rock, said to be made by the Romans. They were quite empty, though a few bones could still be seen lying about. Maha Bey had found these tombs the resort of all that was disreputable in Siwa, and had had them emptied. From report, Siwan morals are of the lowest, even in native eyes; so we will hope that he did good work. We went on to the village Menchiha, a curious little town built high up on a rock some 50 feet high. As at Ghanhara and Siwa, at night the gates are shut and the inhabitants safe within the walls. Their gardens spread out all round in lovely vegetation. Five springs of different temperature flow from the rock and irrigate the gardens. This water is quite sweet, and the women come down and carry it up into the town above—an arduous task.

The sheiks received us most kindly, showed us their beautiful gardens—of which they were justly proud—and then gave us a luncheon of fruit, most delicious

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

and refreshing, and even lent us donkeys for our ride back to Siwa, which we reached in time to rest before the hour for the decisive meeting at Sheik Suleyman's tomb that evening. On very important occasions such as this, the sheiks assemble on the saint's tomb, and he is supposed to preside over and direct their counsels.



DATE-DRYING YARD, SIWA.

It all passed off satisfactorily. They decided the taxes should be paid if time were given them. In the mean time, no merchant might give goods in exchange for dates; everything had to be paid for in money, and the Government share deducted. Of the inner town I saw nothing but the room in which we dined. The women are

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000057

مكتبة قطر الوطنية
Qatar National Library

shut up within its walls, and all they see of the world is from slits at the top of the harem town walls. Rock and wall rise some 50 feet above the plain. The gates and passages leading up into it are cut in the rock. The women never come out, and after sunset every man has disappeared within.

At the foot of this wall—in the first square through which runs the canal—are the booths where the men spend most of their day, that is, such time as is not taken up by the cultivation of their gardens. The archway by which I entered the inner or Government square is close to the wall; between this and the square runs a narrow street, in which are the few shops of Siwa. Behind Government house—a building which juts out into this square—a doorway in the circular wall leads up the rock-cut steps into Eckman Haboom house, which is then reached by a passage cut upwards through the rock. This square is surrounded on three sides by small square yards fenced in with palm branches. Here the dates are heaped up after having been dried in the square. As you face south with the town before you, a conical-shaped rock rises to your right. The gardens stretch to the east, and at some little distance stands Mahomet Said's country house, where I should have been entertained had I stayed another day; but as under no circumstances could I see the inner town, and that by staying I laid myself open to the most constant questionings, I preferred leaving the next day, and returning by a different route. I wandered about the rest of the afternoon, spending some time in the outer square, where all commercial business is transacted. Here the merchants (Tugars) from Alexandria bring their tea and sugar, those of Banegharsi their dried meat and balra (Arab shoes), for exchange.

I gave as a reason for starting the next morning, that it was important I should stop the advancing army by carrying to it as speedily as possible the good news of their submission; but I had some difficulty in getting off, and was glad to find myself fairly on the road.

Our way took us back across the lowlands covered with "halfa" grass, which stretches 3 miles across from hills on the north to sand-dunes on the south. We had chosen the northern track by the hills going into Siwa; we now returned by the southern. At about 4 p.m. we reached the Salt plain. The salt lay about in great white slabs that might have been mistaken for ice. The ground was broken up into small pools of clear water glistening on beds of crystallized salt as white as snow. The great dried blocks on all sides spoke of a time when the whole plain must have been under water.

That evening we encamped near one of the Senoussi gardens. These sauya of Senoussi are to be found in almost every oasis. They are cultivated by blacks, slaves of Senoussi. They form little colonies of about a hundred, and are bound to provide food for any passing member of the sect. The dates lie in heaps under the trees ready for those who will help themselves. Every Arab may *take* food for himself and his camel, but is not allowed to buy them for sale in Egypt.

We filled our skins at a rush-covered spring. The smell of the decaying vegetation around is terrible, and taints the water, which would otherwise be good.

While we were filling our skins, one of the blacks passed by driving cattle to one of the grass-covered hollows, of which we passed many on our onward journey. He seemed astonished to see me, but said nothing. It was on this, our second day from Siwa, that Dau admitted his ignorance of the route for which I had engaged him as guide. He implored me to return the usual way, but it would have been awkward if the English colonel had reappeared on the scene, having missed his army; so I decided to push on, trusting to our being able to follow the track of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

seventeen donkeys, which shortly before had been driven from the Wah el Bahrieh, or small oasis, to Siwa.

We reached the sand-dunes before night, and followed the track by moonlight as long as we could, encamping at midnight. The next day we travelled across flat rock and dunes. Three conical hills, known to Dau as landmarks, happily kept us straight, for the track was difficult to follow on rock, though Abdulla found it here and there by a turned stone, which showed white on its newly exposed side.

We reached the Arej that evening, walking down a steep passage in the rock. The sand slips under your feet, and the camels had a bad time coming down. Once at the bottom, we found ourselves in a valley surrounded by almost perpendicular cliffs of limestone, some 140 feet high. We could see nothing beyond. The Bahrein ("two rivers") with its date-palm forest stretching as far as the eye could see, visible from the tableland above, had now entirely disappeared. Abdulla brought us in some excellent dates, which proved that the palms in the Arej are looked after, though common property.

In the morning I saw the tombs, thirty-six of which have been opened and robbed. A row of squares gape black on the side of the rock. I climbed into many, but found nothing but bodies lightly covered with sand, and some mummy cloth. The walls in some were decorated: one had the hooded snake, others had been scribbled over by Romans with rude scratchings, and Arabs of a still later date had in some cases added their names. These tombs were evidently once closed by slabs of rock carefully built in with smaller bits, till the whole looked uniform. In places the rock sounds hollow, and other unopened tombs may be there; yet it is difficult to believe that Arab robbers left any unrifled.

The mosquitoes of the Arej were terrible, as they are wherever there is vegetation, and therefore water. We dared not light a fire, lest it should serve as a beacon to the robbers that infest the place. We suffered so that we decided not to pass another night in misery, and at sundown next day started onwards. Some Ghara men came up an hour or so before we started, to fetch dates. The Arej bears so bad a reputation that strangers are looked upon with suspicion; but these turned out to be friendly and harmless enough.

Our road was easy to find; landmarks known to Dau seemed to abound. From the Whatia, which we reached the next morning at ten, an abrupt descent took us straight down to the level of Lake Sittra, which we reached the day after. In the trees of the Whatia I noticed some small night-herons. I believe them to be a new variety, but unfortunately I missed the one I shot at. Their cry is not absolutely the same as that of the ordinary night-heron, and they are much smaller. They flew back in the direction of the Bahrein. There must, therefore, be some open water there; that of Lake Sittra is far too salt to make it possible fish can live in it, and I saw no living thing either in, or on, or near this southern side.

The lake is about 14 miles long and 3 wide. On the west, stunted bushes grow near the shallows; on the south—where we stood—sand drifting against the palm trees had formed miniature cliffs. A range of low white sandhills ran along the northern shores.

The palms on the banks bear a good deal of fruit, but it is of little use except as food for the camels. The road is too little used to make it worth while to tend the trees.

A spring of fresh water rises among the rushes at the east end of the lake. So difficult is it to see where salt ends and fresh water begins, that I hesitated before tasting it, when I found it far sweeter than that we had drunk in the Arej.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002c

مكتبة قطر الوطنية
Qatar National Library

The ground, as we left the lake to the east, was covered with bushes, and I saw quantities of the spoor of hares.

From here to the smaller oasis there are five days' travelling across the most desolate waste, destitute of water, and even of the usual desert vegetation, so the camels had to live on the dates we carried for them. On leaving the lake there is a long track of wackla, or swamp, encrusted with salt. The track has to be carefully kept by the camels, for it is easy for them to flounder into depths from which it would be impossible to extricate them.

The only difficulties of the road began now. Dau lost his way on the evening of the next day, and as we could only carry just enough water to take us to the oasis without any delays, things looked rather black. We were not cheered by stumbling upon a man, woman, and child, and their donkeys, all lying dead—evidently of thirst. They were not all together. The woman, her child in her arms, had died first; near her lay one donkey. The man had struggled on some little way, and lay on the sand face upwards, his clenched hand stiffened in a last convulsion. The poor wretches had tried to quench their thirst with lemons, the skins of which lay scattered on the ground.

We went on climbing sandhill after sandhill, always hoping for the sight of some Al-haman, or landmark. Dau became very melancholy. I tried to take a cheerful view of things, though I cannot say that I felt in high spirits; but my attempts were considered irreverent by Dau, who thought the Prophet would be more likely to help us if we acknowledged the straits we were in. We still had some water, but we dared not drink it. Not knowing in the least where we were, we could not judge what chance there was of getting to the oasis before it was exhausted. On the late afternoon of the third day we suddenly came upon the Bacher, a group of rocks which we knew to be near the small oasis. Our difficulties were then at an end, and that night saw us encamping with my old friend the Omdeh of Mindescha.

ANCIENT TRADING CENTRES OF THE PERSIAN GULF.

By Captain ARTHUR W. STIFFE, R.I.M.

IV. MASKAT.*

This place is still an important place of call, and of trade with India, the Red Sea, and Zanzibar, chiefly only transhipment. It is the capital of the Arab country of Omán, and the residence of the prince, now designated Sultan or Seyyid, but formerly called the Imám of Maskat.† The country has long been in an unsettled state, owing to civil wars and dissensions, and has declined in importance, especially since the separation of the Zanzibar dependencies. It is now under British influence, and a Political Agency is established there. The town lies in a cove, one of a series close together on the north-east point of Arabia, which are all surrounded by precipitous rocky hills rising to several hundred feet abruptly from the water's edge. At the inner end of each cove is a small sandy beach, at the mouth of the little valley, or wadi, which forms the inland continuation of the

* The accent should be on the first syllable. Map, p. 660.

† This title has a religious significance, and is not now assumed by the sovereign of Omán.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000033

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

cove. The rocks are dark-coloured serpentine, here and there showing foliation well marked,* and it is part of an area of depression, the coves being submerged valleys, which had been excavated by subaërial agencies before the submergence took place. The bed of the sea sinks rapidly to a depth of upwards of 2000 fathoms at a distance of 10 or 12 miles from the coast.

The appearance of the coast from the sea is extremely picturesque, the rugged dark hills rising one range above another, until apparently joining the great back range, elevated about 6000 feet. Although from seaward the country appears utterly barren and desert, without any sign of vegetation, the valleys lying among the hills are more or less fertile where irrigated, which is done by means of wells, with so-called Persian water-wheels, and kanáts, or subterranean aqueducts. It produces fruits and vegetables, and many date-palms are grown. The coves abound with fish of excellent quality. The small cattle of the country are noted, and flocks of sheep or goats are numerous.

The map of the group of coves is from a survey by the author. Each one has a village or town at the head, built on the sandy beach close to the water's edge, so that the sea even washes the base of the houses, which extend back as far as the rugged ground will permit. They all may be considered suburbs of Maskat. The intervening hills are so rugged that, although there are some passes over them, much of the intercourse is carried on by water in large canoes. The houses fronting the water are mostly of two or three stories, and coated with white cement. The hills and passes are all crowned by small towers or forts for defence, with walls and gates across the passes. Maskat itself and Matrah, the place next in importance, are enclosed on the land side by walls, with towers at intervals. From Matrah only is there any pass into the interior of the country.

There are two large forts, built by the Portuguese, one on each side of the cove, on the summits of the hills overlooking the town, and two outer and less important, called Sírah, on the next projecting points of the cove; they are all in a very ruinous condition. The east side of Maskat cove is formed by three detached masses of rock; the outer, commonly called Maskat island, rises 350 feet above the sea, and can only be climbed with difficulty at a few points; it is much the largest, being 1400 yards in length, and is separated by a shallow strait, only a foot or two deep, from the second and smaller hill, and this again by a still shallower passage from the third, which is crowned by one of the great forts (Jaláli), and has a low sandy isthmus between it and the rocks surrounding the town, on which isthmus now stands the British Residency.

Outside the wall of Maskat there is a large suburb, occupying all the available ground in the valley, and consisting of huts of the usual material of Arab villages, viz. matting made of the stems and leaves of palm fronds.† Here there is a bazar, which is a busy scene in the morning. A curious kind of auction goes on constantly. Men walk about calling out the last bid made for some article they carry for sale, which seems to go on until some offer is made which they will accept.

Of the two principal forts, the eastern, Jaláli, already mentioned, occupies the whole of the top of the rock on which it stands. Its front is a long curtain wall with two tiers of embrasures, with a round tower with flagstaff at each end, the only access being by a flight of steps cut in the rock on the harbour side. This

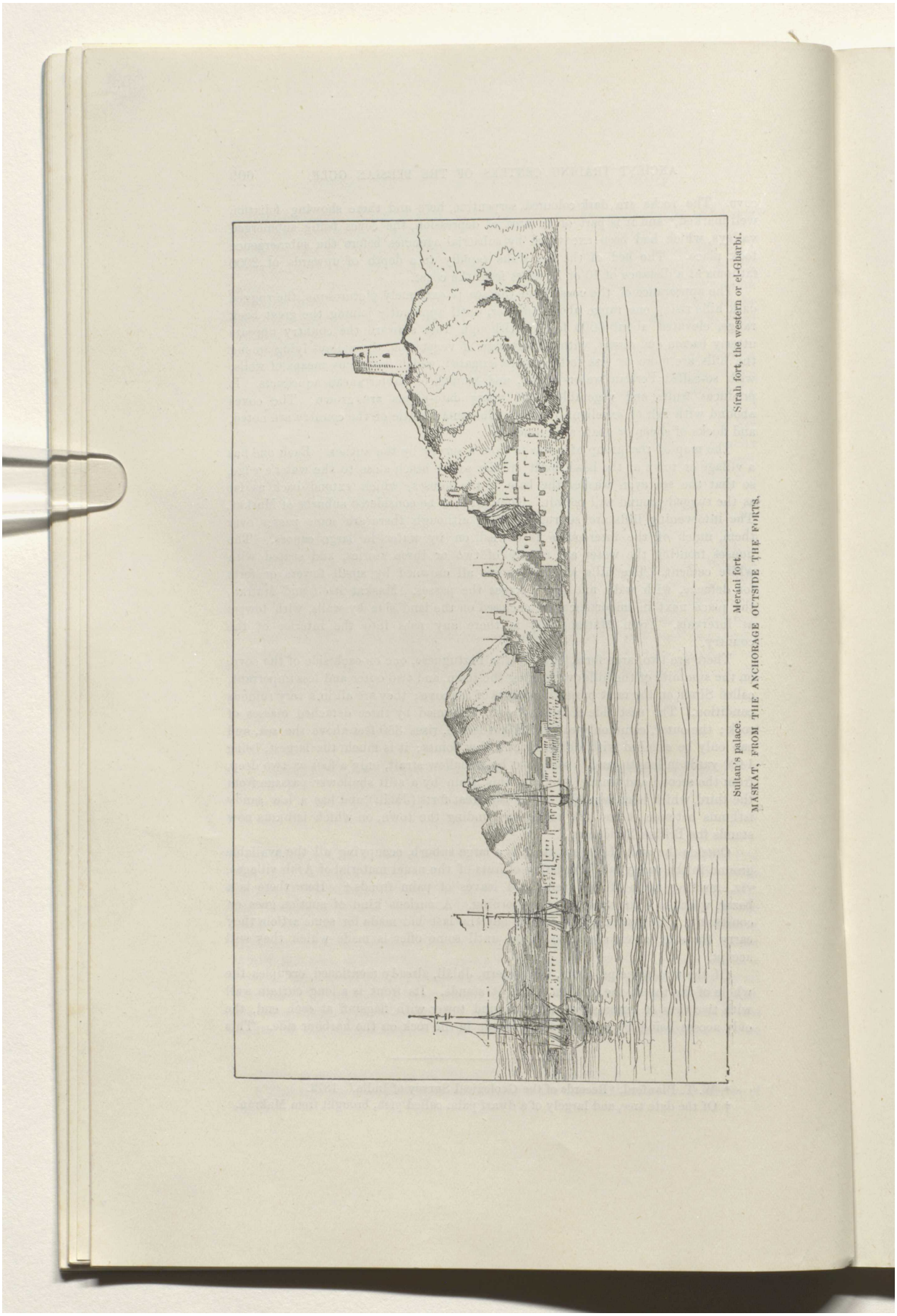
---

* W. T. Blanford, 'Records of the Geological Survey of India.' 1872.

† Of the date tree, and largely of a dwarf palm called písh, brought from Makrán.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002c

مكتبة قطر الوطنية
Qatar National Library

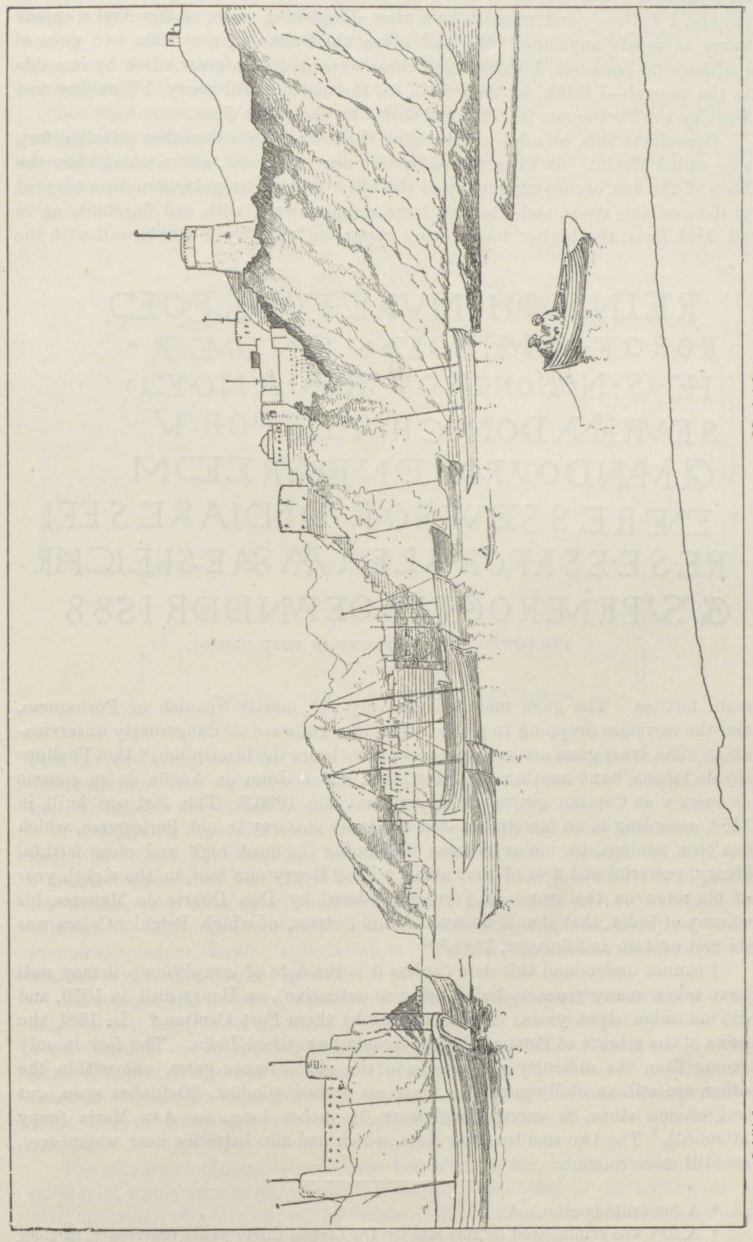


MASKAT, FROM THE ANCHORAGE OUTSIDE THE PORTS.
Sultan's palace. Merani fort. Sirah fort, the western or el-Gharbi.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



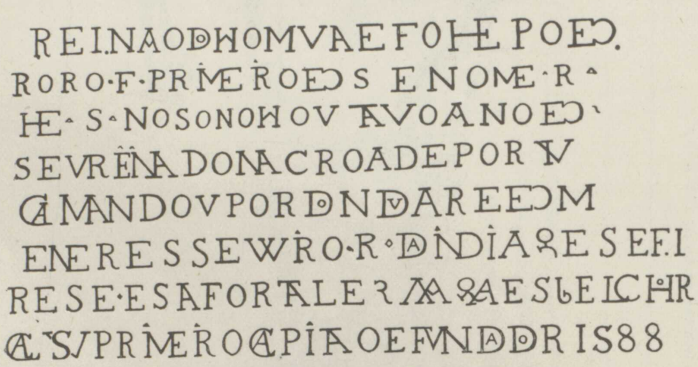
MASKAT, FROM MAKALLAH BAY, THE ANCHORAGE FOR SMALL VESSELS.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000034

مكتبة قطر الوطنية
Qatar National Library

fort was much damaged by artillery fire during a civil war some years since (about twenty, I believe), and remains in a most dilapidated state, as the Arabs appear never to repair anything. We had given the Sultan of that time two guns of position—24-pounders, I think—and these were used with great effect by one side in the quarrel—I think, by the rebels, *i.e.* the unsuccessful party. This fort was built by the Portuguese in 1587, and called by them San Joao.

Opposite to this, on a hill overhanging the town, stands the other principal fort, now called Meráni. It has a ruined battery near the water, above which rises the body of the fort, occupying the top of the hill. It is an irregular structure adapted to the available space, and has two large round towers, with tall flagstaffs, as in all Arab forts, the higher tower being connected only by a double wall with the



INSCRIPTION OVER GATEWAY IN FORT MERANI.

main fortress. The guns mounted are very old, mostly Spanish or Portuguese, and the carriages dropping to pieces. The iron guns are all dangerously unserviceable. The brass guns are in better order; one bears the inscription, "Don Phelippe rey de Ispaña," and another the inscription, "Don Juan de Acuña de su conseio de cuera y su Capitan general de la artilleria año 1606." This fort was built in 1588, according to an inscription over the inner gateway in old Portuguese, which has been rendered for me as follows: "Reigning the most high and most faithful Henry, powerful and first of that name. King Henry our lord, in the eighth year of his reign on the crown of Portugal, ordered by Don Duarte de Menezes, his viceroy of India, that should be erected this fortress, of which Belchior Caleça was its first captain and founder, 1588." *

I cannot understand this date (unless it is the date of *completion*; it may well have taken many years to build, being so extensive), as Henry died in 1579, and did not reign eight years. It was named by them Fort Capitan.† In 1581 the news of the seizure of Portugal by the Spaniards reached India. The fort is only strong from the difficulty of access, and the old entrance gates, one within the other, are still carefully guarded. Over an arched window, 30 inches span, cut out of one stone, is carved, in letters 3½ inches long, an Ave Maria (copy attached). The two smaller outer forts, which had also batteries near water-level, are still more ruinous.

* A facsimile is attached.

† A fort was commenced on this site by Da Lisboa thirty years previously, in 1552.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000029

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Sultan's residence is a large three-storied building near the centre of the town, a quite plain, rectangular block. It is a relic of the Portuguese occupation, having comprised the governor's residence, factory, chapel, warehouses, and barracks. The Arabs call it El Jereza, a corruption of Igrezia (church). On an old wooden gate of the custom-house is cut "Anno 1624."

The wadi extends up behind the town for a mile or more, and is cultivated in patches, with vegetables and a few date trees. The wells, worked by bullocks, are about half a mile from the town wall, and are defended by a square tower or fort, loopholed for musketry. A small cemented aqueduct, generally out of repair, has



INSCRIBED OVER A WINDOW IN FORT MERANI.

been made to bring the water down to the landing-place for shipment. The water-course draining this valley passes through a culvert under the town wall into the sea. It is quite dry except after rain.

From Matrah there is a track or way winding through the hills into the interior, and, after following it about half a mile, you come on a plain among the hills with a small village, called El-Felej, where there is a castellated country residence of the sultan, very dilapidated, with a grove of date and other trees, and some cultivation. The water is brought from the upper part of the valley by an underground channel, or *kanát*. This is the only approach by land to Matrah, whence Maskat is generally reached by water.

As regards the actual productions of the place, they are unimportant; it being chiefly a port for transfer of trade. The speciality is the manufacture of *halwah*, a sweetmeat much in request, and of which large quantities are exported. It is made chiefly of the gluten of maize. Large quantities of dates brought from the coast of Bátinah are exported. It is a port of call for the Gulf mail steamers, and some English merchants are established here, also many Hindus (Banians), all traders.

The climate of Maskat is extremely hot, even in the winter, and there is but little rain, which falls in the winter. It is out of the track of the cooling south-west monsoon, which is cut off by Ras-el-Hadd; but in that season light south-

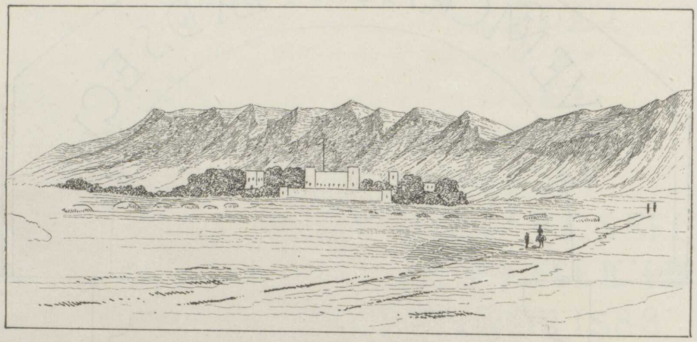
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000026

مكتبة قطر الوطنية
Qatar National Library

easterly airs at times temper the heat. Abd-er-razzak,* 1442, says that in May "the heat of the sun was so intense that the sword in its scabbard melted like wax," etc. I can almost pardon him his exaggeration.

History.—Turning to the history of the place, it is only speculation to inquire whether the Moscha and Omana mentioned in the Periplus † are the Maskat and Omán of the present day. Dean Vincent argues that they are not, but it is possible they may be intended for these places, and misplaced in the itinerary, some confusion in the application of names having arisen. The description given of the places seems more applicable to Maskat, than any other part.

We have a brief glimpse of the place ‡ in the ninth century, indicating it as the last port of call for the Arab vessels proceeding to India, which is all I have been able to trace of its earliest history.



FORT OF FELEJ.

Colonel Taylor, formerly political agent in Turkish Arabia, and, I believe, a great Arabic scholar, gives a short account of the history § of Omán "from authentic sources of Arabian tradition," but does not specify any authorities. He says nothing about the period between the eighth and seventeenth centuries, and does not mention the long Portuguese occupation. His account says that the first native Arabian who entered Omán was one Malik bin Fakham of Nejd, four centuries before the Christian era, ‖ who, with some hundred followers of the Hinávi tribe, settled at Jaalan or Bahla, two towns in the interior some 70 miles to south-westward of Maskat; and fortified Rastag, an ancient city in the mountainous district of Omán, 30 miles westward of Maskat. Successive additions to the numbers of these Arabs enabled them, after obstinate resistance, entirely to expel the Persians from the province. His successors continued in power until the mission of Mohammed.

* Hakluyt Society, vol. 22, 'India in the Fifteenth Century.'
† 'Periplus of the Erythrean Sea.' W. Vincent, D.D. 1800.
‡ *Geographical Journal*, vol. vi. No. 2, August, 1895, p. 169.
§ 'Bombay Government Records,' No. 24, New Series, 1856.
‖ Colonel Ross says the probability is that Malik bin Fahm entered Omán in the early part of the second century A.D., and that the part he played is probably exaggerated. The country up to his time was under the Persians, the date of whose conquest is not known.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In 571 A.D. a powerful prince of the dynasty, named Jalanda, equipped a fleet and seized Hormúz island, which was established as a rendezvous of a piratical fleet. They were converted to Islam in 621 A.D. by invitation of the Prophet.

Dr. Badger (Hakluyt Society, vol. 44, 1871) gives a translation of an Arab history of Omán, containing the period between 661 and 1856, by Salih-ibn Razik.

I propose here, however, to touch chiefly on the Portuguese occupation of the seaboard of Omán. The above Arab author gives only a short space to the period 1154 to 1557, and does not mention the Portuguese conquests; nor is there any record of the overlordship of Hormúz, which existed at the time of the appearance of the Christians. He admits a hiatus in the annals from 1154 to 1429, and these are also said to be obscure up to 1560.* His account of the recapture of the places from the Portuguese will be referred to later on.

Marco Polo (1260–95) does not mention Maskat *by name*, Kalatu † (Kalhát) is mentioned as frequented by numerous ships from India, and as "subject to Hormos." "Many good horses are exported to India; the number from this and the other cities is something astonishing." The probable reference to Maskat is that "the Melic of Hormos has a castle which is still stronger than this city (Kalhát), and has a better command of the entrance of the gulf." Abulfeda (1273–1331) also does not mention Maskat by name. Ibn ‡ Batuta (1324–25) went by sea to Omán, and arrived at the city of Kalhát, "which is situated at the foot of a mountain. The inhabitants are Arabs and schismatics, which they keep secret, because they are subjects to the king of Hormúz, who is of the Súnni sect." He mentions the markets and a fine mosque, "whose walls are covered with coloured tiles."

Edrisi (1153) mentions in Omán, first Kalhat and Súr, and then Sohár, which he says is one of the most ancient cities of Omán, and of the richest. Maskat is mentioned as a populous town.

We may, I think, gather from all this, that in the thirteenth and fourteenth centuries Maskat was a less important place than Kalhát.

The first appearance of the Portuguese on the coast of Omán was that of D'Alboquerque,§ who with six ships left Socotra on August 10, 1507, and sailed up the coast of Arabia. He anchored, says the chronicle, at Calayate (Kalhát), an anchorage on the coast, about 25 miles to north-westward of Ras-al-Hadd, and there got some supplies. It was badly populated, with many old edifices, the sea beating against it; on the land side was a wall, about the height of a lance, reaching to the sea, not a single tree, and all supplies came from the interior. It was under Hormúz,‖ and they fished as far as Ras-al-Hadd, and it was the seat of the

* In Colonel Sir E. C. Ross's 'Annals of Omán' (translation of Kishf-al-Ghummeh. Calcutta: 1874), there is a similar hiatus from 1153-1406. Nor is there any mention of the Portuguese conquests, or of Hormúz.

† Colonel Yule's 'Marco Polo,' vol. ii. p. 448.

‡ 'Voyage d' Ibn Batouteh. Trad. de C. Depémery et B. R. Sanguinetti.' Paris: 1895. The translation of Rev. Sam Lee (1829) appears less accurate.

§ The Commentaries of the great Afonso D'Alboquerque, translated from the Portuguese edition of 1874 (Hakluyt Society, 1875–84), from which I abstract largely.

‖ Confirmed by Marco Polo, 1271–94 (see *ante*). Colonel S. B. Miles says the supremacy existed since 1270. Colonel Miles was Political Agent in Maskat, and wrote a valuable report on the Portuguese in Eastern Arabia in the Administration report for 1884–85, printed in No. cevii., 'Selections from the Records of the Government of India, Foreign Department' (Calcutta: 1885). He does not always quote the authorities he has consulted. I have quoted in one or two places from this report.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002f

مكتبة قطر الوطنية
Qatar National Library

chief governor from Hormúz. They next anchored off Curiate (Karyát), stormed and took it, and put all to the sword who tried to escape, including women and children *; they plundered and burnt it, "so that not a house was left standing, not even the mosque, one of the most beautiful ever seen." They cut off the noses and ears of the prisoners, and sent them to Hormúz. Thirty-eight ships, great and small, were burned. It was a large town, and contained about 5000 to 6000 men, an entrepôt of ships which came to collect dates.

Thence the squadron went to Maskat, where the people submitted to be vassals of the King of Portugal, being aware of the destruction of Curiate, and agreed to pay tribute and furnish supplies. A "captain" having arrived with 10,000 men from the interior, hostilities ensued, and the town was taken after a stout resistance. D'Alboquerque put men, women, and children to the sword, sacked the town, and burnt it to the ground, including the large and beautiful mosque, and thirty-four "ships" in all. Some men and women who had been taken alive had their ears and noses cut off, and were then released. "It is," says the account, "a large and populous city, supplied from the interior with much wheat, maize, barley, and dates for lading ships. It is part of the kingdom of Ormus."

The unhappy "Moors" returned when the Portuguese embarked, to try and put out the flames. "The Moors call the interior the *island* of Arabia.† It is a very small land (!) governed by a king called the Benjabar"—this is the name of a tribe in the vicinity (Beni-jábar).

At Maskat the Portuguese got "Moorish" pilots, and, passing six desert islands—the Daimániyah group—came to Soor,‡ where they were at first defied by the "Alcaide;" but who, on the Portuguese preparing to attack, submitted to be vassals of the King of Portugal. They took possession of the fort, hoisted the Portuguese flag on it, and left the "Alcaide" in charge. The fort was of a square shape, with six towers round it, and two very large towers over the gate. There were about six thousand inhabitants and one hundred "cavaliers," the greater part "armed with steel armour: plates arranged after the manner of a roof tiled with slates. The fore quarters of the horses were similarly defended."

The last place in Omán they visited was Orfacão (Khor-Fakán), which was attacked and taken with the usual mutilation of captives and merciless slaughter, after which the place was burnt. It was a large town, with a wall on the land side, and lies at the foot of a very high mountain. Now it is a small fishing-village, and I saw no remains of the old town; it lies in a small cove at the northern end of the Bátinah district.

So much for the first visit of a Christian power to this country. The invaders thence sailed to Hormúz.

In August, 1508, Alboquerque returned to the coast *en route* to Hormúz, "intending to attack Calayate," which had been spared the previous year. It was taken after some fighting, and the town sacked and burnt, including the mosque, "which the Moors took much to heart, for it was a very large building with seven naves, all lined with tiles, and containing much porcelain hung upon the walls." It was burnt to the ground; twenty-seven ships, large and small,

---

* I must express my horror at the barbarous cruelty of the "great" commander, both here and throughout this cruise, towards people whose only offence seems to have been that they were of a different race and religion. The details are stated in the Commentaries in a matter-of-fact manner.

† As they do now, Jezíret-el-'Arab.

‡ Sahár, still the principal town on that part of the Omán littoral, called Bátinah.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

were also burnt; and then Alboquerque ordered them to cut off the noses and ears of all the Moors whom they had captured, and left them on the shore and returned on board, "*giving many thanks to our Lord.*" They then apparently proceeded to Maskat. Faria y Souza * says Calayate was burned "to be revenged for some injuries done to some Portuguese." Alboquerque also touched at Maskat, on his way to Hormúz, in 1815.

In 1522 † a concerted rising took place simultaneously at Hormúz, Bahrain, Maskat, Karyát, and Sahár. Many Portuguese were killed; the number is given as one hundred and twenty. It was, however, suppressed, and Sahár destroyed with "fire and sword" by Dom Luis de Menezes, who was sent from Maskat with two ships to relieve Hormúz, then closely besieged. In 1526, Lope Vaz de Sampayo, on his way to Hormúz with five ships, reduced the "towns of Calayate and Muscate, which had revolted;" but no particulars are given. In 1550–51 "the great Turk," being offended at the proceedings of the Portuguese, fitted out a naval expedition ‡ consisting of sixteen thousand men, in "strong galleys" and other vessels, under the command of Pirbec (Pir Beg), who is described by our author as an "old pirate," but who was apparently the Turkish admiral, who attacked and took Maskat after a siege of a month; and, having failed in his siege of Hormúz fort, was beheaded after his return. He did not attempt to hold Maskat permanently, but sacked the place and removed all the ordnance. The garrison were made to work in the galleys, but were mostly released at Hormúz.

In 1581 § another Turkish expedition under Alibec (Ali Beg), "a Turk used to robbing," consisting of three galleys, was fitted out at Mocha, and surprised Maskat. He landed his main force at Siabo,‖ while "the galleys entered the port with those that remained, and began to 'play' their cannon furiously, so that he might come in on their backs; which succeeded, and he entered and plundered the town." His land force advanced through the narrow pass from Sudáb to Maskat, "so narrow that two men cannot pass it abreast; no one imagining he would attempt it." The Portuguese fled to Matero (Matrah), a town a league distant, and, not thinking themselves safe there, went to Bruxel,¶ a fort 4 leagues inland. They returned to Maskat after the departure of the Turks.

It was in 1588, according to the old inscription referred to already, that the fortress now called Meráni was completed, which strengthened the hold of the Portuguese on the place and country. Sahár, which had been taken and burnt by the Portuguese in 1522 (see *ante*), appears to have revived, for in 1616 its trade "much lessened the customs of Ormus and Mascate;" and an expedition was despatched from Maskat, which, with the aid of twelve hundred Arab auxiliaries, took and plundered the place, and left a garrison in the fort. It was retaken by the Imám in 1643.

After the loss of Hormúz in 1622, Maskat became the most important place held by the Portuguese, and was the headquarters of their fleet.

---

* 'The Portugues Asia.' Translated by Captain Jno. Stevens. In 3 vols. London: Printed for C. Brown, 1695, at the Sign of the Gun, at the west end of St. Paul's.

† 'Manuel de Faria y Souza,' *ante*.

‡ This expedition came from Egypt. Colonel Miles (*op. cit.*) calls him Pir Pasha, and says he was Capudan of Egypt, and that the expedition consisted of thirty sail.

§ Faria y Souza, *op. cit.*

‖ This must be Sudáb, which answers to the description in the chronicle.

¶ This may be Bosher, a place visited by the author in December, 1859 (*Trans. Bombay Geog. Soc.*, vol. xv.).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

In 1640, the garrison of Maskat, which had been much reduced, repulsed an attack on the place by the Imám's * forces. In 1648 Maskat was again besieged, and the Portuguese had to accept humiliating terms, being confined to Maskat, and giving up their other possessions in the country. Finally, in 1650, after another siege, Maskat also was surrendered, and the Portuguese finally expelled from Omán.

In the account given by Dr. Badger's author (already quoted), a detailed account is given, showing that the loss of the place was due, in part at least, to treachery on the part of a Hindu trader, "a worshipper of the cow," † whose daughter had attracted the attention of the Portuguese commandant. In a note to Colonel Ross's book (*op. cit.*), he says, "One story current is that the Arabs entered Maskat in the guise of peaceful peasants, hiding their arms in bundles of firewood, and that they took the opportunity of the Portuguese garrison being assembled without arms at chapel to attack and massacre them."

Captain Hamilton,‡ in his 'New Account,' gives a long and circumstantial account of the final scene, which he had "from a very old renegade who was at the tragedy, being then a soldier, who reckoned himself about a hundred years old, and by his aspect could not be much less." This story gives as the cause of the final hostilities a gratuitous insult offered by the commandant to the "king of that province." He says only those of the garrison were spared at the final surrender who "consented to embrace" Mohammedanism.§

During the reign of Nadir Shah, between 1736 and 1741, the Persians occupied Omán,‖ having, in the first-named year, gained a footing under the pretence of assisting one of two rival claimants to the Imámate, but they appear to have been finally driven out in the latter year.

The subsequent history of the country is not of sufficient general interest to relate at length. The fortunes of the country culminated under the great ruler Seyyid Said-bin-Sultan, 1804–56,¶ since whose death it has rapidly declined, owing to intestine wars and the loss of the African dominions (Zanzibar, etc.), which fell to another son, and has since remained a separate state.

About 1800 the French attempted to gain over the Imám in furtherance of their designs on India, but this was frustrated by the British. Seyyid Said continued throughout his reign our loyal ally, and co-operated with our forces in the expedition against the independent piratical ports in 1819, and in the disastrous Benu-bu-'Ali affair in 1820.

---

* Nassir bin Murshid, who appears also to have recovered Karyát, and all Omán except Maskat and Matrah, and was one of the strongest rulers Omán ever had.

† Colonel Miles (*op. cit.*) says that one of the several objections to this romantic story is that the Banians have never brought their wives to Arabia, much less their unmarried daughters.

‡ 'Pinkerton's Voyages,' vol. viii.

§ Wellsted gives the date of the final capture of Maskat as 1658, which is incorrect. He was not an accurate observer. The date has been the subject of controversy, but is now fixed by Mr. Danvers from Portuguese records ('The Portuguese in India,' by F. C. Danvers. 1894).

‖ As well as Bahrain and other islands in the gulf.

¶ Dr. Badger's author. Colonel Hamerton says 1807, and is more likely to be correct ('Bombay Government Records,' No. 24, New Series, 1856).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000085

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

POTAMOLOGY AS A BRANCH OF PHYSICAL GEOGRAPHY.*

By Professor ALBRECHT PENCK, Ph.D.

Of the different departments of physical geography treating of the hydrosphere, none has advanced more slowly than the science of rivers. Oceanography has developed in a wonderful way. The limnology advocated by Forel at the London Congress of 1895 has become a separate flourishing branch; only the hydrology of running water is still in a very unsatisfactory state. The fact that it has not a name of its own corresponding to oceanography or to limnology, indicates its neglected position, but there can be no doubt that it must gain equal rank and follow the same evolution as the two other above-named branches of hydrology.

The science of rivers, which may be called potamology, must be treated under five different heads—

1. The physics of running water.
2. The volume of water and its fluctuations.
3. The action of water on its bed.
4. The distribution of running water on the Earth.
5. Rivers as a scene of organic life.

As to the physics of running water, hydrotechnologists have recognized the dependence of velocity on the declivity of the water surface and depth. But all formulas based on these elements alone are not satisfactory. Thus neither the old formula of Chézy, the newer of Bazin and Darcourt, nor the complicated one of Ganguillet and Kutter can be accepted. The problem is, in fact, more complex than has been generally supposed. If we have a body of moving water, its motion will depend—

(i.) Upon its own mobility, changing with its temperature.
(ii.) Upon the forces of gravity and rotation acting upon it.
(iii.) On the resistance caused by the form of its bed and by its surface.

The mean velocity of a river may vary—

(*a*) With its temperature.
(*b*) With its volume, height of the fall, and geographical latitude.
(*c*) The width and declivity of the river bottom and the area of the river surface.

Some physicists have commenced to treat the question in a theoretical way, and have shown how complicated the movement of each water-particle is—how it moves in very intricate spirals. But a more empiric way can be followed also, by establishing relations between the factors just named and the results of stream-measurements. We must not forget that the only way of determining the mean velocity of a stream is by measuring the volume of water which passes through a given channel in a given time.

In treating of the volume of water, potamology comes into intimate relation with climatology. All river water (with the very inconsiderable exception of the water which comes from volcanic vents) is derived from the sea. No part of the water which is evaporated from the sea and has fallen as precipitation on the land is fixed there, for we see no general sinking of the sea-level, which should happen if any measurable part of the rainfall were permanently held by the soil. The quantity of river water is therefore equal to the quantity of sea water which is carried as moisture in the air to the land. The first rough estimation of the quantity of river water pouring into the sea by Dr. Murray shows that it is

* Paper read in Section E (Geography) at the Toronto Meeting of the British Association, August, 1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000097

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

considerably (four or five tenths) less than the amount of precipitation. We must assume, therefore, that only a part of the rainfall on the land is derived directly from the sea. The other comes from the evaporation of rain-water already fallen on the land. The proportion between the total rainfall of the region and the quantity of river water escaping from it shows how many times the water of oceanic origin has been precipitated and reprecipitated in that region. Taking, for example, Bohemia, where the yearly rainfall is 17·3 inches, and the height of run-off is 4·8 inches, we must assume that 4·8 inches of water have been brought during the year from elsewhere to Bohemia, and have fallen there three and a half times as precipitation. Therefore high scientific interest is attached to the knowledge of this proportion. On the other hand, the proportion between river water and the rainfall of a region has high practical value. It allows one to determine the quantity of river water from the precipitation.

Hydrotechnologists have laid much stress on this proportion, the so-called "coefficient of run-off," and it is generally thought that this might be a constant factor for a distinct river. This is not correct. Recent investigations by Mr. Newell, of the Geological Survey of the United States, and by myself have shown that the coefficient of run-off varies not only from river to river, but also from year to year for the same river. It varies with precipitation: the higher the rainfall is, the higher also the coefficient of run-off.

In Central Europe the height of run-off is zero up to a certain height of precipitation. That corresponds to the well-proved fact that many dry countries have no rivers. Over that height (nearly 17 inches), the height of the run-off grows with that of the rest of precipitation, and is nearly three-quarters of the latter. This rule holds good for different kinds of rivers, for those coming from impermeable soil (Moldau in Bohemia, Enns), as well as for rivers from permeable regions (Traun, upper Elbe in Bohemia). It is correct for rivers coming from woodlands (upper March) and for rivers coming from steppes (lower March); the quantity of run-off seems thus to be independent of the soil and of the covering of a land with vegetation. This is contrary to the ruling opinions, and the quantity of river-water of a certain region seems only to be dependent on its climate, and especially on its rainfall.

This rule has been established only for a very limited part of the land surface. Our knowledge of the quantity of water running in the rivers is restricted to the smaller rivers in Central Europe and North America and to the Mississippi. The huge volume of water in the St. Lawrence has, so far as I know, never been exactly measured. We know nothing about the water masses in the Amazons and Congo. It would be very desirable if geographical investigations were extended in this direction, and if river-gaugings were made at the mouths of the larger watercourses. This will not only be of scientific interest. The bulk of water in a river multiplied by its fall-height gives a measure of its energy. The more electricity will be used, the more the watercourses will gain value as motive powers, and every measurement of their volume will help to determine a force of nature.

The fact that the quantity of river-water changes with the climate is very well known. Prof. Woeikof has worked out a valuable classification of the rivers based on the dependence of their high water on rainfall and the melting of the snow. This classification is mainly based on facts taken from European and Asiatic rivers, and it would be very desirable if data on the annual rise and fall of the rivers of other continents would be gathered. Prof. Brückner has shown how the mean annual height of rivers changes in a cycle of thirty-five years. Indeed, the height of a river may be taken as corresponding to its volume, but it is also influenced by the condition of its bed. Climatic changes will be shown more clearly by the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

variations of the quantity of water than by variation of the heights of a river. Not all rivers are constantly flowing; a great many of them dry up in dry seasons or dry years. It is very hard to separate those two types on maps, in order to gain true conceptions of the water-supply of different countries. Those rivers which are covered with ice during the winter, as all great rivers of higher latitudes are, deserve special interest. Mr. Rykatscheff has arrived at important conclusions as to climatology based on the time of the closing of rivers by ice, and it needs no words to say how great are the practical advantages of an exact knowledge of the length of time during which our great waterways are ice-bound. Dr. Forster has shown, in his discussion on river-temperatures, how one can get a forecast of ice-formation by an observation of the river-temperatures, and he thus proved the necessity of measuring the river-temperatures, which, as we have already seen, play an important part in the movement of the water. Numerous rivers lose their water in limestone districts showing Karst phenomena. They have for several years attracted interest, especially in Austria. Other rivers lose their water in their own gravels, and the number of such blind-ending rivers is rather great.

Dealing with the action of water on its bed, potamology comes in close contact with geology and geomorphology. It is now a nearly generally accepted theory that valleys have been dug out by rivers, and may be regarded as widened river-courses. Prof. W. M. Davis has worked out the general system of evolution of river-basins, but the action of rivers on their beds cannot yet be traced out in all directions. There seems to be a correlation between the quantity of water, the width and depth of a river, but which is the normal relation between the two quantities is not determined, and there has been established no delimitation between deep and shallow rivers, the former deepening their courses, the latter shifting from side to side. The conditions under which the river begins to wind, forming meanders, are not cleared up. Even the way it pushes its detritus forward is not sufficiently known. Very flat mountain rivers permit us sometimes to recognize how small stones are transported. They are rolled and pushed forward considerably slower than the water itself runs; with increasing velocity, the whole bottom of such a river begins to move, and this is also the case with larger rivers. When they are in flood, then all the bottom gravel is moving; whilst in general every pebble goes separately on its way from one gravel bank to the next. Thus the gravel banks move downward. The changes of the river-bed produced in this way can only be stated by comparing exact maps of the river bottom made at different times. Maps of the rivers, in a very large scale, with indications of the depth, are as necessary as bathymetrical maps of lakes. The maps of some river-mouths made for nautical purposes, and the excellent maps of the rivers of Holland made by the Water-statt, may be regarded as very good examples. It must be hoped that they will be imitated elsewhere. The fine river descriptions which have been published in Germany show in general a want of maps of the river-beds.

No less attention than to the bottom material of the rivers must be attached to the suspended material they contain. It is the waste of land carried into the sea. It affords the means, as Dr. J. Croll and Sir Archibald Geikie have shown, for determining the duration of geological time, and considerable scientific interest must therefore be attached to its evaluation. The river Nile shows how great the practical value of river mud is; Egypt owes its existence to the regular inundations and refreshing of the soil by the Nile. Careful determinations of the quantities of river mud have been undertaken here and there merely for economical purposes. Finally, the materials dissolved in the river water require attention and examination. Rivers coming from old gneissic and granitic rocks have everywhere a dark colour, owing to dissolved humic alkaline salts. These are the black rivers

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000018

مكتبة قطر الوطنية
Qatar National Library

whose colours contrast sharply with those of the milky or white rivers full of suspended material.

The distribution of running water on the Earth's surface has been the chief object of mere geographical research. The river courses have been mapped; their basins are clearly shown on our maps. The general state of the cartography of a land represents, in general, the state of our knowledge of the distribution, length, and width of its rivers. Each evaluation of these quantities can be made on the special maps of most of the states of Europe and North America, but it must be said that many of the data given us in our handbooks are not sufficiently accurate. They are often of very old dates, and differ very much from one another. It is very necessary, therefore, to determine them anew. Attempts in this direction show the cause of many of the discrepancies. The lengths of many rivers and the areas of their basins depend very much upon the assumption that is made on the site of their mouth. Take, for example, the St. Lawrence river. If you assume the mouth at Quebec, or at Grosse Isle where the waters become marine, you will get different values of its length and catchment basin. It will be necessary, therefore, for exact data, to indicate the point which is taken as the river's mouth. As to the river-lengths, it must also not be forgotten that their measurement gives very different results on maps of different scales; and as to river-basins, every one who has tried to follow their boundary in nature knows very well how difficult it is to trace them. Sharp watersheds are very rare. In general they are very indistinct, and areas of considerable extent near the water-parting have subterranean drainage. The exact determination of the lengths and areas of the basins of the rivers, even of well-mapped countries, seems to be, therefore, a pure geographical task of potamology which, to a great extent, remains still to be done. As to the other rivers, it must be borne in mind that every new exploration will influence our knowledge of their length and catchment basin, and that we, therefore, can only gain approximate values for them. Many of the Asiatic, African, and Australian rivers, being more or less temporary, will vary with climatic changes, and their lengths and basins evaluated in wet periods will be far greater than in dry periods. For those rivers it will be of value to give upper and lower limits for the above-named quantities.

Considering rivers as a scene of life, potamology comes into an intimate connection with biology; the river water has its inhabitants, which are confined to it. Every river-basin is in this way a distinct zoogeographical or phytogeographical province. By establishing the relations of fauna and flora of different rivers, geographical changes on the Earth's surface may be detected; *e.g.* by the affinities between the fishes of the Danube and the Caspian sea, it can be shown that the Black sea between them is of comparatively recent origin. Rivers are also the most common agents of geographical distribution. They carry with them the seeds of the plants of their borders and their basins, on natural rafts they transport land animals, and thus in a wider sense river-basins become geographical provinces; while the rivers are for their own inhabitants the means of voluntary migrations, of involuntary for the non-human inhabitants of their shores. Their function for man varies with his evolution. In times of a very primitive culture, they may cause involuntary migrations, carrying the savage along on a floating tree. They may check those great migrations of peoples which are confined to the land, and they become ways of communication between different lands and nations, when man has attained such a degree of civilization that he masters the forces of nature.

In this state of civilization men attach special attention to rivers, in order to make use of them or to prevent the damage they do. Thus in the last few years, several States created hydrographic departments with the special purpose of practical investigations on rivers. The Dominion of Canada and the United States have

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

their hydrographic bureaus for the study of irrigation; Germany, Austria, and Hungary have their hydrographic bureaus for studying river-floods. But if much is already done as to investigation for practical purposes, more still remains to do in order to develop potamology to a well-founded branch of physical geography.

THE TOPOGRAPHICAL WORK OF THE GEOLOGICAL SURVEY OF CANADA.*

By J. BURR TYRRELL, M.A., B.Sc., F.G.S.

Most of the difficulties encountered in making a geological survey of Canada have arisen from the want of good topographical maps. In the absence of an ordnance or similar survey, the Geological Survey, as the only organization charged with the mapping of the Dominion as a whole, has had to undertake, concurrently with the geological work, extensive topographical surveys from its very inception to the present time. The surveys in Canada that are available for topographical maps are, in general, Dominion Lands and Crown Lands surveys. The former is based on an accurate system, but applies only to Manitoba, the North-West Territories, and a narrow belt along the Canadian Pacific railway in British Columbia; and its operations have, thus far, been confined to a portion of the railway belt, and to the country south of the North Saskachewan and lying between the Rocky mountains on the west and the boundary between Ontario and Manitoba on the east.

The Crown Lands Departments of Ontario and Quebec have made cadastral surveys in the southern portions of their respective provinces from time to time, to meet the requirements of advancing settlements. As these townships are surveyed independently, and sometimes not very correctly, extensive surveys have to be made to check and correct them, and to add roads, railways, etc., that have been constructed since they were surveyed. The other provinces have made no surveys available for mapping purposes except in isolated areas.

Again, the Geological Survey, as the pioneer preceding the lumberman, the miner, and the settler, has frequently to make explorations and surveys in districts that are subsequently cadastrally surveyed by the Dominion Lands or Crown Lands. The maps issued by the survey may conveniently be divided into—

(1) Preliminary maps on scales varying from 8 to 25 miles to 1 inch. These are usually the results of reconnaissance and exploratory surveys in the great areas of Northern Canada.

(2) Detailed maps on scales of 1, 4, and 8 miles to 1 inch. These maps are published in sheets of standard size and on standard scales, and their publication must obviously proceed more slowly than those of the first class.

As the topographical work of the survey is for mapping purposes only, it is necessary to strive after no greater accuracy and no greater detail than is required for the scale of the map in view. The methods of survey used are therefore of an elastic nature, varying with varying circumstances, and are usually a combination of two or more of the following:—

(1) Transit or compass and chain surveys or triangulation.
(2) Micrometer or, if on roads, odometer surveys.
(3) Paced surveys.

---

* Paper read before Section E (Geography) at the Toronto meeting of the British Association, August, 1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000057

مكتبة قطر الوطنية
Qatar National Library

(4) Track or time surveys checked by sextant latitudes, and sometimes by longitude observations.

The order of description is by provinces, commencing with Quebec and Ontario, the two provinces of Canada till confederation in 1867, and then the others in succession from east to west. While the work on the standard sheets is not less important, and does not require less ability or diligence on the part of those engaged in it than the exploratory surveys of the north and west, yet, as a description would be largely a recital of the number of miles of roads, lakes, and streams surveyed in each year, it has been abbreviated, and the sheets in each province dealt with *en bloc*.

Quebec.—In 1844 and 1845 Messrs. Logan and Murray made a triangulation of the peaks in the hills that form the watershed of Gaspé peninsula. They also made micrometer surveys of portions of the Chatte, Great Cascapedia, Bonaventure, Matane, St. Anne, and St. John's rivers, in all 299 miles. In 1857 and 1858 the work in this district was continued by Mr. Richardson, who surveyed the Magdalen, Restigouche, Patapedia, and Great Metis rivers, and several tributary streams and lakes, in all about 200 miles. In 1862 Mr. Bell surveyed portions of the Dartmouth, York, Malbaie, and Grand rivers, for an aggregate distance of 106 miles. In addition, about 100 miles of traverse-lines were measured with the micrometer. In 1858 Sir W. E. Logan surveyed the upper part of the River Rouge and thirty-two tributary lakes. Dr. Ells in 1881 to 1883, and Mr. Low in 1882 and 1883, completed the information required for the mapping of Gaspé peninsula, 15,100 square miles, on the 4-mile scale. Dr. Ells made a chained survey of the shore-line road from Little Pabos, on the bay of Chaleurs, to Grand Metis, on the St. Lawrence, and micrometer surveys of the Salmon branch of the Cascapedia, Grand Pabos, and upper portion of the Bonaventure. Other roads and the coast-line were measured by pacing; Mr. Low triangulated the peaks in the Shickshock mountains, and made micrometed traverses of the south branch of the Ste Anne, Little Cascapedia, and west branch of the Magdalen rivers.

In 1858 Sir W. E. Logan surveyed the upper portion of the river Rouge and thirty-two tributary lakes in the Grenville district. These surveys, with the subsequent measurements, in the same district, by himself and Mr. J. Lowe, amount to about 2600 miles, and form the basis of the so-called Grenville map, covering an area of 1200 square miles.

The work on what is known as the "Eastern Townships" map-area was commenced by Sir W. E. Logan in 1848, and continued by himself, at varying intervals, up to 1871; by Mr. Richardson in 1850 to 1852, 1854, 1855, and 1863 to 1868; and by Mr. Webster from 1870 to 1876. The paced measurements of roads and exploration lines by Messrs. Logan, Richardson, and Webster amount to about 17,000 miles, and cover an area of 26,380 square miles. The publication of the three sheets thus far issued was delayed by the uncertainty as to the exact horizon of some of the members of the Quebec group, so called. The additional surveys, to bring them up to date, necessitated by this delay, were made by Messrs. Ells in 1886 to 1890; Garoux in 1886 to 1894; Adams, 1886 and 1887; A. R. Low in 1889 and 1891; and McConnell and Ord in 1880; in all about 8600 miles.

In 1857 Lieut. Ashe determined, telegraphically, the longitude, as compared with Cambridge, of Quebec, Three Rivers, Montreal, Ottawa, Kingston, Toronto, Collingwood, Windsor, and Chicago. So uncertain were the longitudes at that time, that an important place like Chicago was placed by the two best authorities as in longitude 88° 23′ and 87° 28′ W. respectively, whereas Ashe's observations gave 87° 37′ 44″, a difference of 9′ 44″ in one case, and of 45′ 16″ in the other. Signals were interchanged with Cambridge which had been determined by the interchange of several hundred chronometers with Greenwich.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000031

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In 1870 Mr. Richardson made a micrometer survey of the canoe-route from the upper portion of the Ashuapmouchouan river, by Nikobau River Lake, Abatagamaw and Chibougamoo lakes, to Lake Mistassini, and of the shore-line of the latter for 30 miles. His provisions failing to reach him, he was forced to abandon the survey of Mistassini and return to Lake Nikobau, where they were stored. From Nikobau he carried his traverse by the Foam-fall and Clearwater rivers to the St. Maurice, which had been surveyed previously by the Crown Lands Department. From Kirkendach, on the St. Maurice, a survey was made of the route by the Hair-cutting river and south-east branch of the Gatineau, and the Gatineau to the Desert. Of the surveys thus made, 274 miles were measured with the micrometer, and 300 miles were track survey.

In 1871 Mr. McOuat carried a micrometer-traverse in a north-westerly direction for 90 miles from the Mistassini river to the lake of the same name, and thence along the lake-shore to the end of Mr. Richardson's survey of the previous year. He also surveyed 150 miles of the coast-line of the lake to a point on the main north-west shore, about 70 miles from the extreme south-west point.

In 1885 Mr. A. P. Low commenced at the terminal point of Mr. McOuat's survey, carried his traverse up the west side to the north end, and down the east side to Big Narrows, where he connected with McOuat's survey 139 miles. He found the average length of the lake to be about 100 miles, and average width 12 miles. From the outlet of the lake he made a track survey of the Rupert river to Hudson bay, 300 miles.

In 1891 to 1894 Dr. Ells made about 3200 miles of odometer and 400 miles of paced surveys in the Grenville and Pembroke map-areas, 6900 square miles.

Labrador Peninsula.—In 1887 Mr. A. P. Low surveyed Agumska, Weston, and other islands in James bay. In the following year he made a track-survey of Big river from its mouth upwards for 160 miles, of the canoe-route by the headwaters of Bishop Roggan river to the south branch of Great Whale river, and of the latter to the main stream, and thence to Hudson bay, 350 miles. He also made a micrometer survey of the route from Richmond gulf to Clearwater lake, 63 miles. In 1892 Mr. Low made a micrometer traverse from Lake Mistassini by the Rupert, Kawashagami, and East Main rivers to Hudson bay, 326 miles, and of the East Main between the Kawashagami and Chegami branches. In 1893 and 1894 Mr. Low, with Mr. Eaton as topographical assistant, continued his explorations in the Labrador peninsula. The micrometer traverse was continued from the mouth of the Tshegami branch, where it connected with the surveys of the previous year, up the East Main river, 104 miles, to where the route to Nichieun leaves the main stream. From this point a track survey, checked by sextant latitudes, was made of the route by way of the headwaters of Big river, Nichieun, and Kaniapeskau lakes, and the Koksoak river to Fort Chimo, upwards of 600 miles. In February, 1894, having wintered at North-west River Post, a micrometer survey was carried from the post up the Hamilton river to Sand-girt lake, thence up the Attikonak branch to the Height of Land, down the Romaine river for 115 miles, thence by portage-route to the St. John river, 702 miles. From this point a track survey was made to the mouth, 72 miles. From Sand-girt lake micrometer surveys were made of the Ashuanipi river, Petitsikapow, and other lakes, 293 miles, and track surveys of the canoe-route to Lake Michikamau, and of the lake itself, 269 miles. Total in the two years, 1100 miles of micrometer, and 940 miles track surveys. In 1895 Messrs. Low and Eaton made a micrometer traverse from the head of Lake Mouchalagan by way of the headwaters of the Manicugan and Outardes rivers to the Height of Land, and thence by a chain of lakes to Naokokan lake, on Big river. In 1896 Mr. Low continued his micrometer survey of 1888 from the outlet of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000036

مكتبة قطر الوطنية
Qatar National Library

Clearwater lake, surveying Clearwater and Lower Seal lakes, and Larch and Koksoak rivers, to Mugava bay.

In 1887 Mr. Cochrane made a track survey of Twenty-mile bay of Grand lake, of a chain of lakes and streams to Shabogama lake, and of the Mekiskan river to Red Flower-hill portage.

In 1895 Dr. Bell made a micrometer survey of the Mekiskan from the end of Mr. Cochrane's survey to Mattagami lake, of Mattagami lake and Nottaway river, and of the shore-line of Rupert bay to Rupert House. A track-survey was made of Waswanipi lake and river between the Hudson's bay post and Lake Mattagami. In 1896 Dr. Bell, with Mr. Brock as assistant, made track surveys of the Mekiskan river between Shabogama lake and where the route to Waswanipi leaves it, and of the lower portions of its principal branches; of the route from Waswanipi post to Lake Nemiskan on the Rupert river, and of the route by way of Waswanipi river from the post of the same name to Wakanichi lake, where it connected with Mr. Richardson's traverse of 1870.

New Brunswick.—The topographical work in New Brunswick, commenced by Mr. Robb in 1868 and 1869, was continued by Dr. Ells in 1873–78, and by Mr. Broad in 1878–82 in the southern portion of the province. The north-eastern portion was surveyed by Dr. Ells and his assistants in 1879, 1880, and 1881, and the north-western and adjoining portions of Quebec by Mr. McInnes in 1884–89. It is difficult to give an estimate of the distances measured, but Dr. Ells in 1877 to 1880 surveyed 2950 miles with chain odometer and pacing, an average of nearly 750 miles a year. These surveys, with the topographical information available from other sources, furnished the material for mapping the province—27,200 square miles on a scale of 4 miles to 1 inch.

Nova Scotia.—Sir W. E. Logan in 1868, and Mr. Hartley in 1868 and 1869, made a survey of the Picton coalfield; in the Springhill coalfield, Mr. S. Barlow in 1871 to 1877, and Mr. McOuat in 1873 and 1874, made chained surveys aggregating over 1300 miles. The survey of the island of Cape Breton, commenced in 1872 by Mr. Robb, and continued by Mr. Fletcher after the death of the former in 1874, was completed in 1882. Since 1882 Messrs. Fletcher and Fairbault have extended these surveys westward on the mainland to Windsor on the Bay of Fundy and Halifax on the Atlantic coast. Thus, with the island of Cape Breton, 13,180 square miles have been surveyed in detail for mapping on a scale of 1 mile to 1 inch. Messrs. Fletcher and Fairbault estimate the measurements made by themselves and their assistants at 34,600 miles. In 1881 Mr. W. B. Dawson made a topographical survey of the Laurencetown, Montagu and Waverly goldfields, the coast being borne in equal proportions by the Survey and Provincial Government. In 1884 Messrs. Ells, A. E. Barlow, and Giroux made chain, micrometer, and paced surveys aggregating 1003 miles, to complete for publication the Cumberland coalfield map, begun by Mr. S. Barlow some years previous.

Ontario.—In 1845 Sir W. E. Logan made a micrometer survey of the Ottawa river from the Joachim rapids to the head of Lake Temiscaming, and of the Mattawa river from its mouth to the Lake Nipissing portage, in all 280 miles. The work in this district was continued in 1847 and 1853–56 by Mr. Murray. During these years he surveyed Lake Nipissing, the French, Sturgeon, Wahnapital, Spanish, Maganetawan, Muskoka, Petawawa, Bonnechere, and York rivers and numerous tributary streams and lakes. In 1857 and 1858 he surveyed the Thessalon, Missisanga, Goulais and numerous other streams and lakes between Blind river and Lake Superior. Mr. Murray's surveys in 1847 and 1853–58 amount in the aggregate to 2780 miles measured with the micrometer, besides between 300 and 400 miles by pacing. In 1846 Mr. Murray surveyed the Koministiguia for 40 miles; and in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000084

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

1852 a number of lakes and streams between Kingston and Balsam lake, 400 miles. In 1869, 1870, and 1871 Dr. Bell surveyed Nipigon and Long lakes, White, Black, Nie, English (East) and Kenogami rivers, the canoe-route from Lake Nipigon by way of Ombabika and Albany rivers to the confluence of the latter with the Kenogami, and numerous lakes and streams between the Nipigon and the Pie—total, 1865 miles of micrometer, 181 miles of paced, and 367 miles of track surveys.

In 1872 Messrs. Selwyn and Bell made a joint track survey of the canoe-route from Hawk lake by the English river (west) to Separation lake, where they separated, Dr. Selwyn continuing the survey down the English and Winnipeg rivers to Lake Winnipeg, 461 miles from Hawk lake; and Dr. Bell by Sandy portage and the Winnipeg river to Rat portage, 29 miles from Separation lake. In 1872 Mr. McOuat made a micrometer survey of Lake Abitibbi and of the river of the same name to the first fall. In 1877 Mr. Cochrane surveyed the river from the end of Mr. McOuat's survey to its confluence with Morse river.

Dr. Bell, in 1875, surveyed the upper portion of the Montreal (west), the Mattagami, Missinaibi, Michipreston, and lower portion of the Moose rivers; in 1885, Lakes Wabatongwashene, Oba, Esnagami, and other lakes and streams in the vicinity; and in 1885 Lake Seul, Lake Joseph, the Attawapishkat river from Lake Lansdowne to Hudson bay, the shore of Hudson bay between the mouths of the Attawapishkat and Albany, and the Albany, except the portion surveyed by himself in 1870. In 1887 Dr. Bell made a track survey of the canoe-route from the great bend of the Montreal (east) river to Raish-ko-chagami lake on the Frederick House river.

Messrs. Lawson and J. W. Tyrrell in 1883 and 1884, and Messrs. Lawson, A. E. Barlow, and Smith in 1885, made a detailed survey of the Lake of the Woods, Rainy lake, the Winnipeg river from Rat portage to the Dalles, and other lakes and streams in the vicinity, for publication on a scale of 2 miles to 1 inch. This work has been extended to the north and east over the Rainy lake, Hunter's island, Seine river, Shebandowan and Manitou sheets, by Dr. Dawson in 1886 and 1887, Mr. Smith 1888 to 1891, and Mr. McInnes 1890 to the present time. These sheets are published on the 4-mile scale, and cover an area of 19,230 square miles. They are full of lakes and connecting streams, the water-routes thus formed being the only means of communication through the greater part of the district. Of the larger lakes, the Lake of the Woods has an area of 1770 square miles, Rainy lake 345 square miles, Lac des Mille Lacs 105 square miles.

Messrs. Bell and A. E. Barlow in 1888 to 1891, to complete the information for the Sudbury and French river sheets, made micrometer surveys of the upper portion of Spanish river, Panach and Rogomasing lakes, and Veuve and Vermilion rivers, the shores and islands of Bay of Islands, and McGregor bay and peninsula. In 1892 Dr. Bell surveyed Key, Henvey, and Byng inlets. Mr. Barlow in 1887 made a micrometer survey of Lake Temagami, and in 1892 and 1893, with Mr. Johnston as assistant, surveyed the western portion of Lake Nipissing, Abashing and Keepawa lakes, canoe-route from Temagami to the mouth of Temagami river, and made paced surveys of the roads in the Nipissing and Temiscaming sheets—in all 1080 miles of micrometer, 170 miles of paced, and 45 miles of boat-log surveys.

In 1895 and 1896 surveys of roads, amounting in the aggregate to about 5100 miles, were made by Dr. Ells, Mr. Grioux, and Messrs. Adams and Barlow in the Pembroke, Cornwall, and Haliburton map-areas respectively. In the same years the writer made a traverse with transit and chain across the province from Georgian bay to Kingstown. In 1893 Mr. Dowling made log surveys of Red Trout and Gull-rock lakes, and track surveys of the connecting streams, of the Mattawa, and upper portion of Berens river.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001a

مكتبة قطر الوطنية
Qatar National Library

MANITOBA AND NORTH-WEST TERRITORIES.—In 1873 Dr. Selwyn made a track survey of the Saskachewan river from Rocky Mountain House on the North Branch to Cumberland House, 798 miles. In 1878 and 1879 Dr. Bell made track surveys of the shore of Lake Winnipeg between Dog Head and Drunken river; of the Nelson, Hayes, and Grass rivers; of the canoe-route from Split lake on the Nelson to the Churchill and lower portion of the Churchill, in all 1710 miles. In 1879 Mr. Cochrane, Dr. Bell's assistant, surveyed Gode and Inland lakes, the eastern portion of Oxford lake, and the connecting streams, 585 miles. In 1880 and 1881 Mr. Cochrane made track surveys of—

(1) Canoe-route from Cross lake by Pine, Moose, and Saskachewan rivers to Cumberland House, 242 miles.

(2) Canoe-route by Grassberry river to Thog portage, thence by Churchill and Deer rivers to Reindeer lake, and Reindeer lake, 763 miles.

(3) Route by Cochrane river, Hatchet lake, and Black river to Lake Athabasca, and north shore of the lake, 625 miles.

(4) Athabasca river from the mouth to its confluence with the Clearwater, thence by the Clearwater and Churchill rivers to Thog portage, 760 miles.

(5) Route from Pelican lake to Cumberland House.

Total measurements, 2390 miles.

In 1881 and 1882 Dr. Dawson, with Mr. McConnell as assistant, made 2315 miles of odometer, and 110 miles of paced and track surveys in the country between Medicine Hat and the Rocky mountains on the east and west, and the 49th parallel and the Red Deer river on the north and south respectively. Dr. Dawson, with Mr. Tyrrell as assistant in 1883, and with the writer as assistant in 1884, made a reconnaissance survey of that portion of the Rocky mountains lying between the parallel of 49° and 51° 30′. These surveys were continued northward to the North Saskatchewan by Messrs. McConnell and the writer in 1885, and by Messrs. McConnell and Russell in 1892.

In 1883 and 1884 Mr. McConnell, with Mr. Dowling as assistant in the latter year, made 1800 miles of odometer surveys of trails and exploration lines, and 250 miles of river traverse in the country between Medicine Hat and the eastern end of the Cypress hills on west and east and the 49th and 51st parallels. Mr. Tyrrell in 1885, and Messrs. Tyrrell and Dowling in 1886, made similar surveys and explorations in that portion of Alberta and the adjoining districts, lying between 110° W. and 115° W. and 51° 30′ N. and 54° N.

The above-mentioned surveys of Messrs. Dawson, McConnell, and Tyrrell have been published, on the scale of 8 miles to 1 inch, in the Bow and Belby, Cypress hills, and Northern Alberta maps, and cover an area of 100,000 square miles.

In 1882 Mr. Cochrane made track surveys of Berene, Big Black, and Poplar rivers, and of the headwaters of Severn and Pigeon rivers, 287 miles. In 1886 Mr. A. P. Low made a micrometer traverse from Lake Winnipeg to Hudson bay by way of the Buens river to Family lake, thence by the headwaters of Poplar river and the middle branch of the Severn to Severn lake, thence by the Fawn and Severn rivers to Fort Severn, 882 miles.

In 1887 to 1891 Messrs. Tyrrell and Dowling surveyed, with micrometer or boat-log, Winnipegosis, Dauphin, Red Deer, Waterhen, and other lakes and portions of Lake Winnipeg; also made track surveys of the Bad-throat and other rivers to the east of Lake Winnipeg, and odometer surveys of trails and exploration lines in North-Western Manitoba. In 1895 and 1896 Mr. Tyrrell continued the work in this district, and surveyed the Gunisao, Black, Pigeon, Blood, Pine, and Wolf rivers, the Playgreen lakes, the canoe-routes from Sipi-wesk lake to Nelson House, and from Paint lake to Sturgeon river.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In 1887 Mr. McConnell surveyed the Liard river, from the mouth of the Dease to the Mackenzie, and the lower portion of Hay river. In the winter of 1887–88 track surveys were made from Fort Providence northward to Fort Rae, and southward to Lake Bischo. In 1888, as Mr. Ogilvie had been instructed to make a micrometer survey of the Mackenzie river and Peel river portage, a sketch traverse of the river and mountain features only was made of this portion of the route. A detailed running survey was made of the Porcupine river from the mouth of Bell's river to the Yukon. In 1889 and 1890 Mr. McConnell made track surveys of the route between the Peace and Athabasca rivers by the Pelican, Loon, and Wabiskaw rivers, 400 miles; of the Red river from its mouth upward for 200 miles; of the trials to the Buffalo-head hills and Trout lakes, and of the tributaries of the Athabasca below Fort McMurray. In 1892 Messrs. Tyrrell and Dowling made traverses of the Beaver, Mudjatick, Cree, Black, Geikie, and Whitefish rivers, of Black and Reindeer lakes, and of the south shores of Athabasca and Wollaston lakes. Distances were estimated, except on lakes and quiet reaches, which were surveyed with boat-log. They also made micrometer surveys of Black and Deer rivers, and of the Churchill between the mouth of Deer river and Frog portage.

In 1893 and 1894 Mr. J. B. Tyrrell made exploratory surveys in the "Barren Lands." In 1893, with Mr. J. W. Tyrrell as topographer, he made a traverse from Lake Athabasca to Hudson Bay. A survey of the north shore of Lake Athabasca from Chipewyan to Fond du Lac was made with boat-log and solar compass. From Black lake the survey was carried by the Chipman and Dubaunt rivers to the head of Chesterfield inlet, 905 miles. Of this distance 290 miles were on rivers, where the distances were estimated, and 615 miles were through lakes, where the distances were measured with a boat-log, and bearings taken with solar or prismatic compass. As the tides prevented the use of the log with any degree of accuracy, the traverse of Chesterfield inlet and west coast of Hudson bay to lat. 61° 32′, where the severity of the weather compelled the abandonment of the survey, was a time survey. A similar survey was made of the 200 miles between Fort Churchill and York.

In 1894 Mr. J. B. Tyrrell carried another traverse from Du Brochet post on Reindeer lake by the Cochrane, Thlewiaza, and Kagan rivers to lat. 63° 7′, thence eastward by chain of lakes and the Ferguson river to Hudson bay, 815 miles. From the point at which he abandoned his survey the previous year, he continued it southward to Churchill. A time survey was made of the route between Churchill and Gull lake. Total distance surveyed in 1893 and 1894, 2900 miles, of which 1073 miles were log, 1312 track in canoes, and 515 part track survey on foot and part pacing. The distances thus obtained were checked by numerous observations for latitude.

British Columbia.—In 1871 Mr. Richardson made paced surveys of roads in the country between Yale and Quesnel, aggregating 428 miles. From 1872 to 1874 he was surveying stream trails and exploration lines in the Comox and Nanaimo coalfield. In 1875 Dr. Selwyn made a time survey of the trail from Quesnel to McLeod's lake, of the canoe-route from McLeod's lake by the Pack, Parsnip, and Peace rivers to Smoky river forks, and of Pine river from the "forks" to its mouth. During 1875 and 1876 Dr. Dawson surveyed trails, lakes, and streams in the country between the Fraser river and the coast range on the east and west, and Bella Coola valley and Francois lake on the south and north respectively. In 1878 Dr. Dawson surveyed the islands, channels, and inlets of the north and east coasts of the Queen Charlotte islands. In 1879 Dr. Dawson made a traverse from the Skeena river to Edmonton. From Hazelton the survey was carried by the trail from Hazelton to McLeod's lake, thence by the valley of the Parsnip and the Pine

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

river pass to the "lower forks" of Pine river, thence across country to Dunvegan. From this point side traverses were made through Grande Prairie and southward to Smoky river, and of the lower portions of the Wapiti and Smoky rivers. From Dunvegan an exploratory traverse was made to the Athabasca river, near the mouth of Marshhead creek; from this point the survey was carried down the Athabasca, with a side traverse of Lesser Slave lake and river, to Athabasca landing, and thence by trail to Edmonton. The trail from Smoky river "forks" to old Fort Assineboine was surveyed by Dr. Dawson's assistant, Mr. McConnell. In 1885 and 1886 Mr. Bowman triangulated the peaks in the Cariboo district, and measured 255 miles of roads and trails.

In 1887 Dr. Dawson, with Messrs. McConnell and McEvoy as assistants, made an exploratory survey of the region of the headwaters of the Yukon, Liard, and Stikine rivers. Mr. McConnell made a micrometer survey of the Stikine from the end of Hunter's survey to Telegraph creek. A carefully paced traverse was made from Telegraph creek to Dease lake by Mr. McEvoy. From Dease lake Dr. Dawson made a detailed track survey, following the lines of the Dease, Upper Liard, and Pilby rivers to the confluence of the latter with the Lewes, about 900 miles. He also carried it up the Lewes to enable him to add the mountain features and make some additions to the lakes as surveyed by Mr. Ogilvie. Numerous points were fixed in latitude by sextant observations, and a number of chronometer longitudes were obtained. In 1877 Dr. Dawson made a general reconnaissance of the southern interior of British Columbia. In 1882, 1883, and 1884 Mr. Bowman, the importance of the district having been increased by the completion of the Canadian Pacific railway, extended the work of 1877.

The geological intricacies of the region, however, necessitated the doubling of the scale of the original map, and, consequently, the re-delineation of the topography. Of the four new sheets which now cover the old map-area, the north-west or Kamloops sheet was re-surveyed in 1888 to 1890 by Dr. Dawson and his topographical assistant, Mr. McEvoy. A loose network of triangles, based on the Canadian Pacific railway and other surveyed lines, was carried out between points, each of which was occupied as a transit station and sketch-point, elevations being determined barometrically and by angles of elevation. Other details of topography were filled in from paced and track surveys checked by latitude observations. The north-east or Shuswap Sheet was surveyed in the same way by Mr. McEvoy in 1891, 1892, 1894, and 1895. This, with the Kamloops sheet, forms a contoured map of 12,800 square miles of rugged mountainous country on a scale of 4 miles to 1 inch. The topographical work for a similar sheet to the south-east of the Shuswap has been in progress since 1894. This, the so-called West Kootanie sheet, is under the direction of Mr. McConnell, who has been assisted in 1894 and 1895 by Mr. Russell, and in 1896 and at the present time by Mr. McEvoy. The latter has completed for publication a detailed plan of Trail creek mining district on a scale of 1 mile to 1 inch.

In 1889 Dr. Dawson made surveys with boat-log of the Upper and Lower Arrow lakes and northern portion of Kootanie lake, and track surveys of the intermediate portions of the Columbia and Kootanie rivers between Revelstoke and Nelson. In 1893 Mr. McConnell, assisted by Mr. Russell, made a track survey of the Finlay river from its confluence with the Parsnip to Lake Thutade, 220 miles; of the Omineca river from its mouth to the Omineca-Sitleka pass, 113 miles; and of the trail from Old Hogem to Tacta lake, 42 miles. In 1893 Mr. McEvoy surveyed 300 miles of the Nasse river and its tributaries, and made 230 miles of exploratory traverses on foot.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000030

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

HISTORY AND LITERATURE OF THE KLONDIKE REGION.

The literature of the upper Yukon, on a tributary of which the Klondike gold-fields are situated, is unfortunately still of a very meagre character. The adventurous agents of the Hudson's Bay Company, by whom the very existence of the great river within British territory was first made known hardly more than fifty years ago, appear to have been little given to writing accounts of their journeys, except in the form of reports to the Company, few of which have been made widely known. The actual discoverer of the upper Yukon was Mr. Robert Campbell, who, after exploring the region of the Liard river, pushed on to the Pelly, establishing on it the post known as Pelly Banks, and, at its confluence with the Lewis, that of Fort Selkirk (1840–52). The Porcupine, one of the principal tributaries of the Yukon, was also explored by him to its sources. Little notice seems to have been taken by geographers of these discoveries, to which no allusion is made in the publications of the Royal Geographical Society. A brief account of Mr. Campbell's journeys is to be found in Begg's 'History of British Columbia' (p. 131). The identity of the new river with that of which the mouth had been discovered by the Russian Glazunov in 1833 was not at once suspected, many maps of the period showing it as the upper course of the Colville, which empties itself into the Arctic ocean. Although the treaty between Russia and Great Britain in 1825 (Hertslet, vol. iii. p. 362) had fixed the 141st meridian as the boundary between their respective territories, Fort Yukon, in about 145° W., was founded by the Hudson's Bay officials in 1846. This post was reached in 1860 by the American naturalist, Mr. Robert Kennicott, travelling under the auspices of the Smithsonian Institution for the purpose of making natural history collections; he had journeyed by way of the Mackenzie, Peel's river, and the Porcupine. No detailed account of this journey appears to have been published, and brief notices only are to be found in the 'Reports' of the Institution (see especially that for 1862, p. 39). Although devoting their chief attention to the lower river, several more recent American expeditions have explored the part of the stream within British territory, the most important being those of Schwatka (1883) and Everett (1884). In 1885 the former published an account of his journey under the title 'Along Alaska's Great River.' But the most important explorations in the region of the upper Yukon and its tributaries were those of Dr. G. M. Dawson, of the Canadian Geological Survey, and his associates, who in 1887–88 traversed the whole region, and for the first time executed accurate surveys of its natural features. The Geological Survey published the reports of Dr. Dawson (1888) and Mr. McConnell (1889), whilst an account of Mr. Ogilvie's surveys was published at Ottawa in 1890. The last-named has since continued his surveys, and his latest report was issued during the current year. Mr. Warburton Pike's book, 'Through the Sub-Arctic Forest,' published in 1896, gives the account of a canoe-voyage down the Pelly and Yukon rivers to the Bering sea; whilst the geological results of an expedition under Mr. E. J. Spurr, sent down the Yukon in 1896 by the United States Geological Survey Department, have lately been given in outline in a report to the United States Senate (*Journal*, vol. ix. p. 667). The recent rush to the gold-diggings has already begun to swell the literature of the region, in the form of magazine articles and larger works. Articles have appeared in the September numbers of the *Fortnightly* and *Contemporary Reviews* and the *Nautical Magazine*; and quite recently an account of two years' police-service on the Yukon, by M. H. E. Hayne and H. West Taylor, has been published under the title 'The Pioneers of the Klondyke' (Sampson Low). A small hand-book entitled 'All about Klondyke,' edited by H. A. Belcher (Simpkin, Marshall),

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000056

مكتبة قطر الوطنية
Qatar National Library

may also be mentioned. For the general geography of the region, Reclus's *Géographie Universelle* (vol. xv.), and the lately issued volume of the new edition of Stanford's 'Compendium,' by Dr. S. E. Dawson, may be consulted. A good general map of the region, including the results of the latest surveys, seems still a desideratum, though it may be hoped that such may soon be published by the Canadian Survey Department. Sketch-maps are given in most of the books and papers above mentioned, and in particular Mr. McConnell's report is accompanied by a large scale-map in nine sheets. A general map of the north-west parts of the British territory on a large scale was also issued by the Canadian Ministry of the Interior in 1888, and this shows clearly the results of the surveys of Dr. Dawson's party. As one of the routes to the goldfields is by the lower Yukon, it may be of use to refer briefly to the literature dealing with that section of the river, which is far more voluminous. Mr. F. Whymper's 'Travel and Adventure in the Territory of Alaska' (1868) describes the journeys made by him as a member of the American Expedition in connection with the proposed Asiatic-American Telegraph. Mr. Dall, in his book 'Alaska and its Resources' (1870), gives both the results of his own travels and a summary of our knowledge of the country at that time. Mr. H. W. Elliott's work, 'An Arctic Province' (1886), has also a chapter on the Yukon region, the history of which is treated of in Bancroft's 'History of Alaska' (1886). With regard to the region of the passes leading to the upper Yukon, Mr. Seton Karr's paper published in the *R.G.S. Proceedings* (vol. xiii.), and Dr. Aurel Krause's work, 'Die Tlinkit-Indianer' (Jena, 1885), may be mentioned. Finally, it may be of interest to note that prospecting for gold was carried on by the Russians in the southern parts of the region during their occupancy of Alaska (cf. Erman's *Archiv für Wissenschaftliche Kunde von Russland*, vol. xxv. (1867), p. 229).

THE MONTHLY RECORD.

EUROPE.

Oceanographical Researches in Loch Fyne.—The results of Dr. Mill's further investigations on the circulation of the water in Loch Fyne have recently been published.* The observations were carried out on board the Fishery Board's cruiser *Garland*, on two occasions, the first from April 2 to 6, and the second from September 3 to 11, 1896. The results of his earlier observations, undertaken between 1886 and 1889, are fully discussed in his paper on the 'Clyde Sea Area,' published by the Royal Society of Edinburgh (see also the *Geographical Journal* for October, 1894, pp. 344–349). The general results of the work on Loch Fyne in 1896 are summarized as follows: The flood-tide brings in water from the upper and deeper layers of the Arran basin, which is thoroughly mixed in passing Otter spit before high water, and fills the Gortans basin with a nearly homothermic mass, which is passed on through Minard Narrows into the Upper basin, where it does not sink through the cold deep water in summer, but only mixes with the upper layers above 20 fathoms, becoming more superficial in its effects as the tide passes upwards. In the ebb there is, at the upper end of the loch, only a superficial movement, but at the platform between Furnace and Minard the rush of the surface current into the Gortans basin, while it is strongest at half-ebb, draws up the deep cold layers to a slight extent, causing a slight mixture with the warmer water. The homothermic mass pours out into the Arran basin, acting on the ebb probably in the same way

* Part III, 'Fifteenth Annual Report of the Fishery Board for Scotland,' pp. 262–279.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

as at Furnace on the flood. Thus there is always in progress a gentle mingling of the deep waters of the two deep basins through the intermediate shallow basin. The rapid surface current of the ebb carries out the excess of fresh water from the Arran basin, while the small underflow from the Arran basin passes in water of higher salinity with the flood. This circulation is liable to be accelerated or checked by the influence of wind.

The Development of the Peninsula of the Apennines.—In notes on this subject which Dr. Th. Fischer contributes to the August and September numbers of *Petermanns Mitteilungen*, he points out, among other things, that, while north of Campania transverse breaches in the mountains of the peninsula do not occur on a great scale, and scarcely affect the regions of the Apennines at all, south of that province they form a very marked feature. Straits, closed only in geologically recent times, connected the Campanian gulf with the Adriatic, and the Tyrrhenian sea with the Ionian, both at the isthmus of Catanzaro, and further south at the constriction immediately to the north of Aspromonte, while a marginal breach isolated the heights of Poro on the west, and a longitudinal channel severed Gargano and the Apulian tablelands from the Apennines; so that there existed here, probably in middle Pliocene times, six islands in place of the continuous stretch of land reaching to the straits of Messina. Extending his view to neighbouring countries, Dr. Fischer confirms, from his own observations, the accuracy of the view of Suess, that the Apennines are continued in the folded mountains on the north margin of "Little" Africa, and he describes the north-west basin of the Mediterranean as bordered on the east and south by a series of folded mountains stretching from Genoa, through Sicily, along North Africa to Melilla, and then back to Gibraltar and the south coast of Andalusia, on the inner side of which there is a vast area of sunken land, which he calls the Tyrrhenis, characterized almost everywhere on the marginal faults adjacent to the mountains by volcanic activity, and still represented by fragments rising above the surface of the water. Speaking of the terraces of Calabria and Sicily, he states that recent investigations have clearly established the fact that, at least in Calabria, a prolonged elevation, interrupted by periods of repose, and hence indicated by the formation of terraces, has taken place in quaternary times. This elevation apparently increased in intensity towards the straits, towards which part the elevation that may almost everywhere be shown to have taken place in Sicily also seems to have reached its greatest amount. From the south-west angle of the Sila to the straits, Cortese has demonstrated the existence of five terraces, all characteristic shore formations, increasing in height towards the south. In a special note on Gargano and Apulia, Dr. Fischer points out that recent geological observations tend to establish the intimate relationship of these tracts to the Apennines, notwithstanding the existence of the Pliocene channel above referred to. The hippuritic limestones of Gargano are exactly similar to those of the Apennines; and in the Neapolitan Apennines numerous more or less tabular masses of limestone, not unlike the tablelands of Apulia and Gargano, have been discovered. The result of the investigations hitherto made would seem to be that Gargano and Apulia are portions of the pre-Miocene Apennines less affected than the central parts of the system by the folds accompanying the elevation of those mountains, afterwards separated from the central mass by a series of faults, and behaving as a rigid mass during the last decisive post-Eocene movements of the Apennine system. Dr. Fischer makes light of the phytogeographical evidence in favour of a supposed recent land-connection bringing these parts of Italy into closer relation with the opposite coasts of the Balkan peninsula than with the Apennine peninsula. Some of the plants common to the Dalmatian coast and Gargano, but not met with in the rest

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003e

مكتبة قطر الوطنية
Qatar National Library

of Italy, might, he thinks, have been introduced by winds and currents; and as for the Valonia oak (*Quercus ægilops*), which occurs here and there in Apulia, but nowhere else in Italy, that might have been planted by man on account of its valuable acorn-cups.

The Rainfall of Western Europe.—In the first part of the newly issued volume of the *Annales du Bureau central Météorologique de France* (Année, 1895; Paris, 1897), Dr. Alfred Angot publishes a paper on this subject, which supplements that on the rainfall of the Iberian peninsula, which appeared in 1895. In both Dr. Angot calculated the mean annual and monthly rainfall for the thirty years 1861–90, and reduced the returns from stations which were not active during the whole period to the thirty years' means, by means of interpolations. In this way comparable results have been obtained, a matter of great importance in the case of rainfall which varies greatly from year to year, and we may regard this paper as the most important contribution to the climatology of Central, Western, and Southern Europe that has appeared since Dr. Hann's classical discussion of the mean pressure for the same region, also studied on a thirty-years mean, from 1851 to 1880 (*Pencks Geographische Abhandlungen*, ii.: Wien, 1887). Some general laws of rainfall distribution are beautifully illustrated in the maps which accompany Dr. Angot's paper, and tables of rainfall for 271 selected stations. At the first glance, the influence of mountains in deflecting the water-vapour upwards into regions of lower temperature, and so cooling and condensing it, is so apparent that one is inclined to say that relief and rain maps are congruent. But a closer study of the great mountain regions on the rainfall map shows that the central areas receive less rain than the periphery, and the windward slopes more than the leeward. An area of minimum rainfall is usually found not far from the foot of the lee side of the high ground; for instance, in the upper Rhine plain, the upper valley of the Loire, and in the east of our own islands. The winter rains are mainly cyclonic, and, owing to the low temperature, are rarely heavy, save in the extreme western mountains, and rapidly diminish towards the east, where even such lofty regions as the Alps receive comparatively little rain. In February least rain falls over Europe as a whole, even when due allowance is made for the shortness of the month. In spring the cyclone tracks are often directed to the Mediterranean region, which receives abundant moisture, while North-Western Europe has its minimum precipitation. As the summer advances, and the temperature increases and permits large supplies of water-vapour being formed in the lower regions, the mountainous districts, especially in the heart of Europe, have very heavy rains. But the whole Mediterranean region is exceedingly dry, and in July we have a most striking contrast between the wet Tyrol, where the rainfall is at its maximum, and the dry north of Italy, where it is at its minimum. The need for maps of mean monthly rainfall, and not merely seasonal ones, is clearly demonstrated in Northern Italy, where June is wet while July is very dry. Autumn is rainy everywhere, especially along the Mediterranean littoral. In October the *régime* of cyclonic rains begins, and the winter conditions become apparent, but the vertical temperature-gradient is slightest about this season, and so the atmosphere can hold much water-vapour, and the rains are heavier than in the corresponding spring months.

Mode of Formation of the Dunes of Gascony.—M. E. Durègne, who has been engaged for some years in careful investigations of the dunes which occur in the coast region of the south-west of France, outlines the chief results of his conclusions respecting their mode of origin in the *Comptes Rendus* (vol. 124, p. 1041). The dunes with which his remarks are more specially concerned are those of the Teste-de-Buch (Gironde) and of Messanges (the Landes), and his surveys have shown that these are incorrectly drawn on existing maps. Instead of forming

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000034

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

continuous *chains*, the dunes occur in the form of interlacing curves, usually taking the outline of a truncated parabola, and enclosing spaces comparatively level. The one branch of the parabola represented may have its curvature (which corresponds with the steepest slope) either towards the north or the south; but the apex, which is usually the highest point of the dune, is always at the east, the axis running always east and west. Dunes of this nature appear characteristic of the primary series, not being found among those of recent date. M. Durègne's conclusions are as follows: The mean direction of the winds to which the primary dunes were due was from west to east. Their present form seems to be due solely to atmospheric currents acting on undulations originally parallel to the meridian, and, from the time of their fixation in that form, they have been entirely uninfluenced by littoral deposits. They may thus be considered as *continental* dunes, a conclusion supported by their comparison with some of the interior dunes of the plateau of the Landes. M. Durègne holds that it is these primary dunes which have obstructed the courses of the streams of this region, and that the lakes thus formed have therefore existed without important alterations since the beginning of the historic epoch.

ASIA.

Bogdanovitch's Exploration of the Stanovoi Mountains, Eastern Siberia.—The *Geographische Zeitschrift* (1897, No. 11) gives a brief account of Bogdanovitch's expedition in Eastern Siberia, from a communication made by the traveller to the Russian Geographical Society (*Izvestia*, 1897, No. 1). Leaving the coast at Nikolaievsk at the end of 1895, the explorer and his party made their way by land into the valley of the Uda, the thermometer remaining for weeks at from 40° to 50° below zero Fahrenheit. The depth of the snow made progress extremely difficult. Chumukan, at the mouth of the Uda, was reached in February, 1896, and the journey was continued through the north-eastern part of the Stanovoi range (locally known as Jugjuru), important additions being made to our knowledge of these mountains, which are composed of three parallel chains, and are rich in gold-bearing rocks. Traces of gold are also seen in the watercourses. The programme of the expedition, which is to occupy three years, includes the meteorological and geological investigation of the whole of the borderlands of the sea of Okhotsk, including Western Kamchatka.

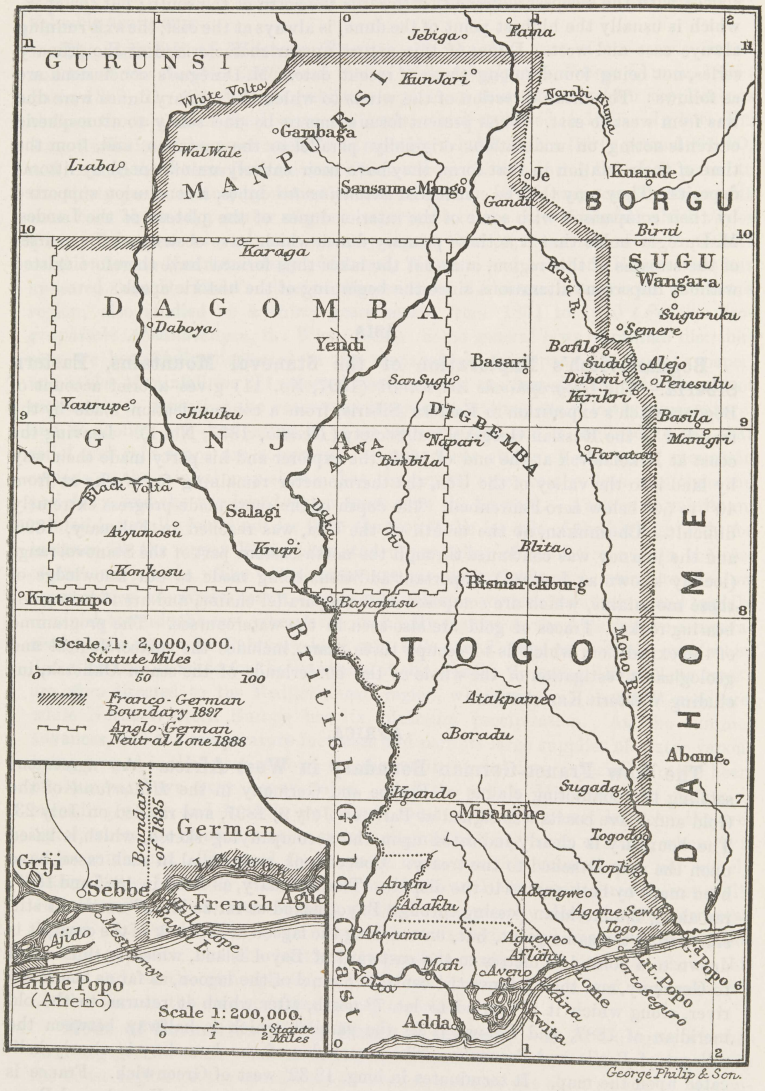
AFRICA.

The New Franco-German Boundary in West Africa.—An agreement settling the conflicting claims of France and Germany in the *Hinterland* of the Gold and Slave coasts was signed at Paris on July 9, 1897, and ratified on July 23. The boundary is clearly indicated upon the accompanying sketch, which is based upon the map attached to the treaty. Concessions, as is usual in such cases, have been made by both parties to the dispute. The boundary, as fixed in 1885 and 1887, ran along the meridian passing through Bayol island as far as lat. 9° north. It still starts from the same point, but, on reaching the lagoon at the back of the coast, it is drawn to a point 100 metres to the eastward of Bayol island, which is thus ceded to Germany, and then follows the central channel of the lagoon, as far as the Mono river, along which it is carried to lat. 7° north, after which it returns to the old meridian of 1887, and follows it to the parallel, which is halfway between the villages of Basila and Penesulu. The remainder of the boundary is clearly indicated upon the map. It terminates in long. 1° 32′ west of Greenwich. France is permitted, for four years, to make use of the routes connecting Kuande and Pama with Sansanne Mango, and the latter with Gambaga, for the despatch of troops and munitions of war. It will be understood that this agreement merely settles matters

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000076

مكتبة قطر الوطنية
Qatar National Library

at issue between the contracting governments, and that British claims have been ignored. At the back of the lagoon and to the west of the Mono river, France



surrenders 185 square miles, receiving in compensation 35 square miles to the east of that river. Further north, the French stations of Kirikri and Bafilo, which had at one time been occupied by Germany, were definitely surrendered, as were

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

also the French claims to Sansanne Mango and Gambaga. All the places mentioned lie outside the "Neutral territory" agreed upon between Great Britain and Germany, in 1888, and distinctly shown on our sketch-map. As to Gambaga and Sansanne Mango, it should be borne in mind that the British claims date back to 1894, if not to an earlier period, whilst the treaties producible in support of French and German claims are not older than 1895. Germany, on her side, surrendered, by implication if not explicitly, all claims to Borgu, Gurma, and Gando.

German-Portuguese Boundary in East Africa.—The third number of the *Mitteilungen aus den Deutschen Schutzgebieten* for the present year contains a map by Dr. F. Stuhlmann, showing the boundary between the German and Portuguese possessions in the neighbourhood of the lower Ruvuma, as laid down by the commission of 1895, together with the country on either side between Tungi bay and the Ruvuma (such, according to Dr. Stuhlmann, is the correct spelling of the name). The boundary leaves the coast at Ras Lipuu, about a mile north of Cape Delgado, running roughly parallel to the northern shore of the Cape Delgado peninsula until it strikes the parallel of 10° 40′ south. This it follows westwards to about 40° 17′ east, but before striking the Ruvuma diverges somewhat to the north, and on again reaching the parallel of 10° 40′ runs parallel to the Ruvuma as far as a point opposite the upper end of Nyenyere island, leaving to Germany a strip 1 kilometre wide on the south bank of the river. Dr. Stuhlmann gives some notes on the general nature of the country traversed by the boundary, which he divides into the coast belt, the plateau, and the Ruvuma valley. The coral reef which fringes the shore at low-water level, he considers to have once formed a raised shore-line, but to have been worn away to its present level by the waves. Dunes now fringe the shore at high-water mark. The plateau, which is mostly covered with impenetrable bush, is of no great elevation, but its well-marked escarpment towards the Ruvuma valley is due to the action of the river in wearing down its bed. Forests occur hardly anywhere but on the plateau-edge and along the banks of the Ruvuma. The Ruvuma plain, which has its principal extension south of the river, is covered with grass of moderate height.

Explorations in the Congo Basin.—Commandant Brasseur, whose explorations on the Lualaba and Luapula rivers have already been alluded to (*Journal*, vol. ix. p. 560), contributes an article on the countries of Urua and Katanga to the *Mouvement Géographique* (1897, Nos. 35–38), accompanied by a map, on which his various itineraries are laid down. In addition to the explorations already mentioned, the geographical work performed by M. Brasseur includes an examination of the whole country lying to the west of the upper Luapula (including the Kundelungu plateau), which he has covered with quite a network of routes. Several tributaries of the Luapula have for the first time been laid down with accuracy, one of them, however—the Lushipuka—having been mentioned by the "Pombeiros" as far back as 1806 (as "Lutipuca"). M. Brasseur's delineation of the southern end of Lake Mweru differs much from that of Mr. Alfred Sharpe and other previous travellers, the mouth of the Luapula being placed far to the south-east of Kilwa island, the shape of which also differs considerably from that given to it by Mr. Blair Watson. The Belgian traveller states that the lake is yearly diminishing in size. The Luapula, after leaving Mweru, seems to bend further to the west than has been previously supposed, the junction with the Lualaba being placed by M. Brasseur some distance to the south-west of the position assigned to it in Captain Hinde's map. Although holding to the view that the Lualaba is the true head-stream of the Congo, he allows that in point both of length of course and volume of water the Luapula has the advantage, and his opinion, based on geological grounds only, can hardly be considered satisfactory from a geographical point of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000023

مكتبة قطر الوطنية
Qatar National Library

view. M. Brasseur, who has twice extended his term of service in Katanga, having first reached that country in 1893, hopes, before returning to Europe, to complete the exploration of the Lubudi, the western tributary of the Lualaba. Minor explorations have also been carried out recently within the great bend of the Ubangi, and several tributaries of that stream in this neighbourhood have been laid down (*Mouvement Géographique*, No. 38, with map). The principal of these seems to be the Lua, which, rising, it is thought, in the neighbourhood of the station of Banzyville, on the upper Ubangi, and flowing across the region comprised within the bend of that river, may possibly supply a means of communication towards the upper posts. The chief tribes of this region, which is very populous, are the Bwaka, the Gobu, and the Banza. Finally, we may briefly note the journey lately made to the capital of the Muata Yanvo (*Mouvement Géographique*, No. 40) by Lieut. Michaux, the first European to visit the central portion of Lunda since Dr. Buchner (1878). The present ruler is the nephew of the chief visited by the German traveller, and his capital is situated on the Luele, a left-bank tributary of the Sankuru, in about 8° S. lat. It is an immense town of 30,000 inhabitants. Lieut. Michaux obtained an audience after some difficulty, and found the Muata Yanvo friendly disposed.

Explorations in the Cameroons.—The third part of the *Mittheilungen aus den Deutschen Schutzgebieten* for the current year contains an account by Lieut. Baron von Stein of the discovery of a small lake named Lungasi, or Ossa, lying to the north of the lower Sanaga, and connected with it by a narrow tortuous channel. The point of junction of this with the main river lies a few miles below the Edea falls, and the idea is entertained by the German officer that the lake may mark the position of a former course of the Sanaga towards the Cameroons estuary, which had on other grounds been supposed to have once existed. Proceeding along the connecting channel, which is deep, but varies in its flow according to the level of the Sanaga, the traveller, after about 3 miles in a direct line, emerged into the most open basin of the lake, which afforded a view of great beauty. The northern, western, and in part the eastern shores are remarkably indented, the tongues of land which project into the water rising steeply from its surface. Towards the south-east the shores are low, which, Baron von Stein thinks, may possibly point to a former connection with the Sanaga in this direction. The water-arms which run towards the north ended in swampy ground overgrown with vegetation, and had the appearance of having once extended further, but, at the present day at any rate, there is no open-water route from the Sanaga to the Cameroons in this direction. The shores of the lake are clothed with thick forest, abounding in elephants, wild pigs, antelopes, etc., while the surface is frequented with an unusual variety of water-birds. The geological formation appeared to be gneiss with a covering of laterite. Among recent journeys in the interior of the country, that by the Imperial governor to the Yaunde station and upper Sanaga deserves mention. An account of it appears in the *Deutsches Kolonialblatt* for June 15 last. The river was struck in the neighbourhood of the Nachtigal falls, and some advance towards the opening up of the route hence to southern Adamawa was made by the defeat of the powerful slave-raiding chief Ngila. A colony of Hausas settled at his town was, at their own request, brought to the Cameroons, where they were settled in a village of their own. The governor was anxious to explore the still unknown country further east, but was obliged to leave the task to Lieut. von Carnap, who was placed in charge of the Yaunde station. This officer is already known for the part he took in Dr. Grüner's expedition in the Togo Hinterland.

The Uchungwe Mountains, German East Africa.—A short description of the Uchungwe mountains, situated in Uhehe, to the east of the lesser Ruaha

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

river, is given by Herr von Bruchhausen, in the *Deutsches Kolonialblatt* for October 1, chiefly from the point of view of their suitability for colonization. The writer divides the country surrounding and including the mountains, which forms the part of Uhehe most suitable for settlement, into three zones, viz. (1) That of the grassy treeless plains, with a laterite soil and little humus; (2) that of transition between the grass and the bush; (3) the bush zone with a luxuriant vegetation. Both of these last have an excellent soil; the summits of the hills are chiefly cultivated by the natives, but good alluvial soil is also present in the valleys. The hills are unusually well watered, the numerous ravines and valleys all possessing springs and streams of excellent clear water. The climate is temperate and bracing, and fever is little to be feared. The rainy season proper lasts from November to May, but rain falls in the hills throughout the year. The grass-lands are pre-eminently suited for cattle-rearing, and herds have already been successfully sent down to the coast. With steamers on the Rufiji above and below the Pangani falls, communication with the coast would be easy.

Antidote to African Arrow-poison.—Major Ternan, who commanded the British forces during the late fighting in Uganda, has now arrived in England, and during the course of an interview has described the successful use of an injection of strychnine solution as an antidote to the native arrow-poison. It was tried by Dr. Macpherson during Major Ternan's operations against the Kamasia tribe on the Mau mountains, with the result that the wounded men so treated recovered in a couple of hours, whereas previously people wounded with the poisoned arrows had always died. Should this remedy prove generally successful, one of the chief risks of savage warfare in Africa will have been removed.

AMERICA.

The Jessup Expedition to the North Pacific Coast.—*Science* (October 8) contains a short account of the results of the work performed during the past season by the expedition despatched by Mr. M. K. Jessup for the investigation of the ethnology of the regions bordering on the North Pacific. The field chosen for work during the present year was British Columbia, whither Dr. F. Boas, Mr. L. Farrand, and Mr. H. T. Smith proceeded in May last; Messrs. Teit and Hunt joining the party later. The investigations included the examination of archæological remains—which, though dating from periods preceding the arrival of Europeans, mostly appeared capable of reference to the immediate ancestors of the present inhabitants—the study of the traditions and languages of the Bella Kula and other Indian tribes, and of the physical types of the tribes of British Columbia generally. One hundred casts were obtained, representing four distinct types.

The Geology of the Bermuda Islands.—The Bermudas are still vexed by discussions amongst geologists as to their structure. The latest contributor to the subject is Mr. Ralph S. Tarr, who publishes a paper in the *American Geologist*, reviewing a number of the older arguments in the light of some original observations. The history of the Bermudas, Mr. Tarr concludes, is somewhat as follows: A base rock was at first formed by the waves on the flat volcanic summit by the pounding up of shell fragments on the beach; the shell sand was then consolidated into a dense limestone, eroded in the air, and finally attacked by the waves. This stage would involve elevation and subsequent depression. Next follows the partial covering of this base rock by beach deposits of pebbles and shells: this must have occurred in comparatively recent times, so far as appears from fossils. Then came an uplift, during which land-shells lived on the beach deposits; but these were soon covered by blown sand, and through this sand accumulation the outline of the Bermuda hills was perfected. This action occurred when the land was certainly

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000097

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

40 or 50 feet higher than it is at present. The last stage has been one of depression, which has caused much land to disappear and made the outline of the area very irregular. The land has now been carried down very nearly to what it was when the beach was formed and before the sand-dunes were built, and the present excavation of sea-caves and other appearances show that the land is now undergoing little or no change of level. Mr. Tarr discusses the denudation of the base rock, and the unconformity between it and the overlying strata, with some care, and is of opinion that the history of the Bermudas is more complex than has been supposed, extending back into Pleistocene or even Tertiary times.

American Expedition to Patagonia.—The expedition despatched to Patagonia from Princeton University in February, 1896, returned in August last, having been successful in adding considerably to our knowledge, both of the geology and geography of the regions traversed (*Science*, October 8). The expedition landed at Port Gallegos on the east coast of Southern Patagonia, and its field of operations included both the coast region from Sandy point, in the Straits of Magellan, to Port Desire; the little-known interior lake region about the headwaters of the Santa Cruz river; and a quite unknown region of the Cordilleras further north. Many new glaciers and streams were discovered here. Botanical and geological collections and observations were also made in Tierra del Fuego and neighbouring islands.

AUSTRALASIA AND POLYNESIA.

Successful Boring at Funafuti.—The renewed attempt made this year by Prof. David, of Sydney, to carry out a deep boring in the atoll of Funafuti has met with complete success. Telegrams from Sydney early in October announced that a depth of 643 feet had then been obtained, and that the base of the coral rock had not yet been reached. It will be remembered that the object of the boring is to throw light on the vexed question of the origin of coral islands, and the result supplies a striking confirmation of Darwin's theory that such islands occur chiefly in areas of subsidence.

POLAR REGIONS.

Norwegian Andrée Search Expedition.—Owing to a report brought to Norway by shipwrecked sailors that cries of distress had been heard by them when off the Dammands isles, on the west coast of Spitsbergen, the Norwegian Government promptly decided on the despatch of an expedition to investigate the truth of the matter. The s.s. *Victoria* was at once chartered and equipped, and started for Spitsbergen on November 5, the arctic explorer, Paul Bjorvig, accompanying the expedition. The story of the Norwegian sailors, as telegraphed by the German vice-consul in Vardö, is as follows: On September 22 and 23 they were passing the Dammand isles at the mouth of Ice fjord, when they heard a cry for help, but the smallness of their boat and the high sea that was running made it impossible to do anything. Afterwards they proceeded further up the fjord, where they were taken up by the Tromso sloop *Malygen*. On repassing the same spot the cry was again heard, but the Tromso captain was unwilling to search, believing it to be the cry of a bird. The Vardö fishermen declare that on September 23 a driving reddish-brown object, which they took for a capsized ship, was seen, a mile from land, about 8 miles north of Dammands isles, and it is suggested that this may have been Andrée's balloon. Experts are, however, of the opinion that neither this nor the supposed cries of distress can have been in any way connected with Andrée's expedition. The expedition returned to Tromsö on November 20 without success, the examination of the coast of Spitsbergen having revealed no trace of the balloon or of the explorers.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000080

مكتبة قطر الوطنية
Qatar National Library

Swedish Polar Expedition determined on.—The persistent efforts of Dr. Nathorst to obtain the despatch of a Swedish polar expedition have now been successful, as sufficient funds have been provided by the king and several private persons to enable the idea to be carried out. Dr. Nathorst himself will be the leader of the expedition. The plans brought forward a year ago by Dr. Nathorst were briefly described in the January number of the *Journal* (vol. ix. p. 95), but it has not yet been stated whether these will be adhered to.

The Belgian Antarctic Expedition.—The *Belgica*, with the antarctic expedition under Commander de Gerlache on board, arrived at Rio de Janeiro on October 22. The explorers were there joined by Dr. Cook, a former companion of Lieut. Peary. The ship was shortly to proceed to Punta Arenas, where the serious work of the expedition may be said to begin. Scientific collections and observations have, however, been made during the voyage out by the scientific staff.

GENERAL.

Geographical Reading for Teachers.—Under the title of 'Hints to Teachers and Students on the Choice of Geographical Books for Reference and Reading, with Classified Lists' (Longmans), Dr. H. R. Mill, the Society's librarian, has compiled a little volume which ought to be of the greatest service in geographical education. Unless a teacher goes beyond his class text-book, his teaching is not likely to bear much fruit. Few teachers have the necessary time or knowledge to discover for themselves the best books to consult on any particular subject. So far as geography is concerned, Dr. Mill has done all that most students and teachers are likely to require. There are two introductory chapters on the Principles of Geography and on the Teaching of Geography, accompanied by a list of books on Methods of Teaching Geography. This is followed by short chapters on the Choice of Text-books, on Atlases and Means of Illustration, and on Works of Reference on Geography, with lists. Then come chapters on Mathematical Geography, Physical Geography, Bio-Geography, and Anthropogeography, followed by sections on the various divisions of the globe, each containing a select list of books. The concluding section is on General Travel and Biography. The hints given are all the result of extensive experience on the part of the author, while the selection of books recommended has evidently been carefully considered. Those interested in the improvement of geographical education will be grateful to Dr. Mill for the service he has rendered.

Portuguese Celebration of the Discovery of the Sea-route to India.—We have received a copy of the programme, drawn up in accordance with a ministerial decree of April 2 last, for the national celebration in Portugal of Vasco da Gama's voyage to India. The main features of the celebration will be those already sketched in the preliminary programme (*Journal*, vol. viii. p. 303), but the dates now fixed for the public rejoicings are the 17th to the 20th of May, 1898. At daybreak on the 17th, all the Portuguese fortresses and war-vessels will fly the national flag and usher in the festivities by a salvo of one hundred guns; the thanksgiving services in the cathedrals and churches will also be held at the same time. Among the varied items of the commemoration will be an exhibition, on the site of which a permanent "maritime and fluvial aquarium" will be built, and a grand naval review, in which both foreign governments and the principal steamship companies and commercial associations throughout the world will be asked to take part. The headquarters of the Central Executive Committee, and the place of meeting of the scientific congresses, etc., are at the new buildings of the Lisbon Geographical Society. The president of the committee is Captain F. J. Ferreira do Amaral, and the secretaries are Senhors L. Cordeiro and E. de Vasconcellos.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000054

مكتبة قطر الوطنية
Qatar National Library

Death of A. von Mojsisovics.—The announcement in our last number of the death of E. von Mojsisovics is due to an error on the part of the correspondent by whom the notice was sent to us. That geologist is, we are glad to say, still living and engaged in active work as Vice-Director of the Imperial Geological College in Vienna. The deceased is his brother, the geologist *August* Mojsisovics von Mojsvár, who held the posts of Military Director of the Crown Prince Establishment, Custodian of the Styrian State Museum, and Professor of Zoology at the Technical High School at Gratz.

New Geographical Society at Southampton.—By the exertions of Mr. T. G. Rooper and others, a new geographical society has been set on foot at Southampton, the growing commercial importance of which port renders such a society particularly desirable as a means of disseminating reliable information regarding the foreign countries with which this country has or might have trade relations. The new society will work in close harmony with the Chamber of Commerce, which, its promoters hope, will be able to supply it with much useful information, which otherwise might be lost to the general public. While, however, the commercial aspects of geography will receive particular attention, it is hoped that the society will do good work also in the furtherance of geographical education, a subject in which Mr. Rooper is well qualified to guide the way. It will especially aim at assisting those secondary schools, where any of the scholars are preparing for the Commercial Certificate of the Associated Chambers of Commerce. The formation of a library, especially devoted to the supply of information respecting the British empire, and a collection of lantern slides and maps for loan, will also form items in its programme. The formal inauguration took place on November 16, on which date Sir Clements Markham went to Southampton to deliver an opening address.

OBITUARY.

Sir Rutherford Alcock, K.C.B., D.C.L.

By the death of Sir Rutherford Alcock, at the advanced age of eighty-eight years, yet another name has disappeared from the now scanty list of former Presidents of the Royal Geographical Society, which thus loses one who, during the long period of service on its Council, contributed in no small degree, by his valued advice and co-operation, to the furtherance of the objects for which the Society is constituted. It was only quite recently that Sir Rutherford had been compelled to live in retirement, and had been unable actively to participate in its affairs; but while his health permitted, there were few members whose interest in its proceedings was more constantly maintained.

Born in 1809, Rutherford Alcock was trained for the medical profession at King's College, London, and gained his first experience of service abroad as surgeon in the British forces employed in Spain and Portugal during the stormy times of the Carlist and Miguelite wars, receiving medals and other decorations from the Spanish and Portuguese Governments in recognition of his services in the field. On the disbandment of the Spanish Legion, to which he had been attached as Deputy Inspector-General of Hospitals, he became commissioner for the adjustment of the claims of the British troops on the Governments in whose support they had fought

In 1844 Mr. Alcock was transferred to the East, which was destined to be the scene of the labours with which his name is principally associated. In that year he

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000085

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

received the appointment of Consul at Fu-chau, one of the ports then lately thrown open to foreign commerce by the treaty of Nan-king. After two years' service there, he was appointed to the same post at the still more important port of Shanghai. Here he remained eight years, the latter of which fell within the troublous times of the Taeping rebellion. A serious rising took place at Shanghai in 1853, and the European settlement was for some time in considerable danger. The energy displayed by Mr. Alcock, however, helped much towards the organization of an efficient defence, and, though the Chinese city fell into the hands of the rebels, no attack was made on the foreign quarter. During his service at Shanghai, he was instrumental both in founding the excellent municipal government of the foreign settlement, and also in establishing the commission for the collection of dues on foreign trade, which afterwards became known far and wide as the Imperial Maritime Customs. In 1854 he was transferred to Canton, where difficulties had already arisen between Sir John Bowring and the Chinese officials with regard to the opening of the city to Europeans, and where the events soon afterwards occurred which led to the second foreign war. In this, however, Mr. Alcock had no part, as he had returned home on leave before the outbreak of hostilities, being succeeded in the Canton Consulate by Mr., afterwards Sir Harry, Parkes.

This closed Mr. Alcock's first period of service in China, for in 1858, Lord Elgin having concluded a treaty of intercourse with the Empire of Japan, he was selected as the first British minister to that country. In this capacity perhaps his most important public services were performed, for Japan was in an unsettled state, and both tact and firmness were needed for the successful maintenance of British influence in the country. The bulk of the people were opposed to foreign intercourse, and the Government itself was anxious to draw back from the course of concession it had already entered upon. Murderous attacks on foreigners were frequent, and on at least two occasions an armed mob attacked the British Legation itself. The minister, however, was firm in his determination to maintain the treaties, and to let no outrage on British subjects go unpunished. It was in this spirit that he more than once took severe measures of retaliation against the perpetrators of such outrages, a course which laid him open to much criticism at home, though he was able ultimately to disarm it, and to secure the general approbation of his countrymen for his services. In 1862 he was made a K.C.B.

Apart from his political services, Sir Rutherford Alcock did much to extend our knowledge both of the country and people of Japan, and may be said to have led the way in the modern exploration of that empire. In the Society's *Journal* he has left valuable records of journeys in the interior of the country, made at a time when that interior was still almost a *terra incognita*. In the volume for 1861 he described one such journey, which included an ascent of the great mountain Fusiyama and a visit to the sulphur baths of Atami; and in the following volume we have the account of a journey from Nagasaki to Yeddo, with a description of the great commercial city of Osaka. Both of these papers contain many details on the natural features of the country, the conditions of life in it, the prospects of trade, and so forth. In his book entitled 'The Capital of the Tycoon,' published in 1863, Sir Rutherford entered more fully into these subjects, and showed clearly the sort of difficulties to be faced in opening up intercourse with the Japanese people. In 1878 he published a work on 'Art and Art Industries in Japan,' a subject in which he took a great interest. It was entirely through his exertions that Japanese arts and industries were represented at the International Exhibition of 1862, in which he was unable to induce either the Japanese Government or people to take part.

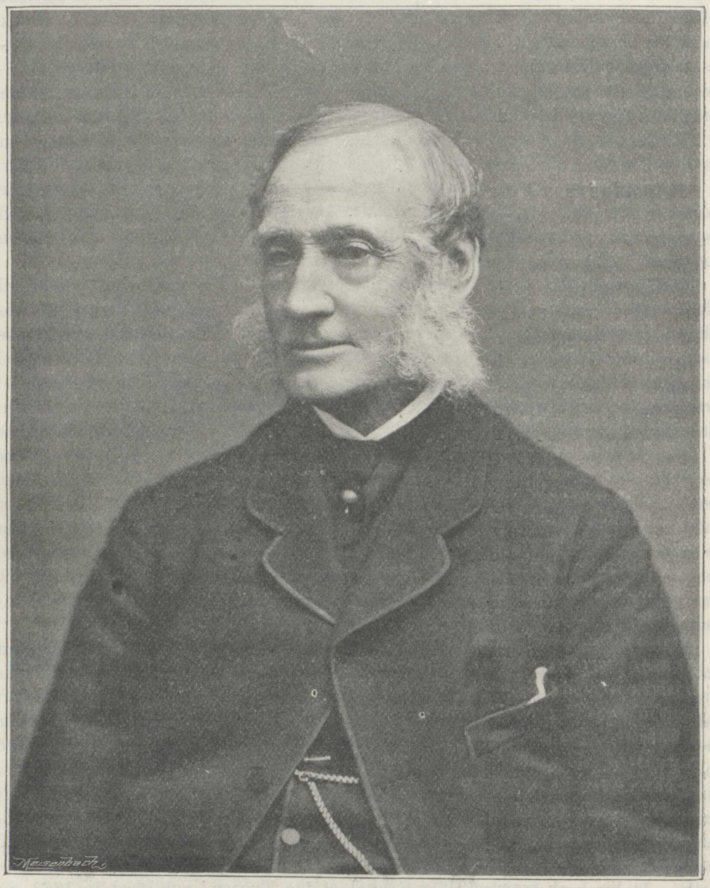
In 1865 Sir Rutherford was appointed British Minister at Peking, where his career was less eventful than it had been in Japan. He was for the most part

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

engaged in unostentatious work in the direction of improving the position of Europeans in China. He endeavoured to place the commercial relations of Great Britain with that country on a firmer basis by the negotiation of a new convention, but though such a convention was drawn up, the opposition of British merchants to some of its provisions led to its being withdrawn.

In 1871 Sir Rutherford retired on a pension, and took up his residence in



SIR RUTHERFORD ALCOCK, K.C.B., D.C.L.

London, where, however, he continued to take a deep interest in the affairs of the East, many articles from his pen appearing in reviews and newspapers on subjects connected with it. In particular, he contributed the concluding chapter to the journals of Augustus Margary, who first joined the consular service while Sir Rutherford was minister at Peking, and whose career he had followed throughout with much interest. In 1876 he became President of the Royal Geographical

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000051

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Society, of which he had been a Fellow since 1862, and during his two years' tenure of the office, as also subsequently as Vice-President, he gave the Society the benefit of his wide experience, frequently taking part in the discussions on papers read at the evening meetings. He was also Chairman of the African Exploration Fund, and thus took part in the labours which resulted in the despatch of Mr. Keith Johnston and Mr. Joseph Thomson to East Africa, and, by bringing the latter into notice, had such important results in the direction of the opening up of that part of the continent. Another important service rendered by him to the British enterprise abroad was that which he performed as first chairman of the British North Borneo Company, in the formation of which he had taken much interest. He remained on the Council of our Society until May, 1893.

Sir Rutherford Alcock was twice married. His first wife—daughter of Mr. Charles Bacon, of London—died during his consulate at Shanghai, and he subsequently, in 1862, married the widow of Mr. Lowder, formerly chaplain at Shanghai.

Dr. Don Agustin Aspiazu.

The recently formed Bolivian Geographical Society has to lament the loss of its distinguished President, Dr. Don Agustin Aspiazu, who died on March 18 last. In Bolivia a scholar, one who desires to acquire more than superficial knowledge, labours under almost insuperable difficulties, and must possess great energy and perseverance, as well as talent. With a fertile imagination and remarkable power of application, young Aspiazu very soon mastered all that could be taught in the university of his native country, and devoted himself to the study of sciences unknown in Bolivia. Except when occasionally occupying official posts, he devoted his whole time to study during fifty years. He also traversed the wildest parts of the Andes to take observations and make scientific investigations. Born in 1827, Dr. Aspiazu was one of the founders of the "Ateneo de Bolivar" when he was a young man only twenty-three years of age, and before many years he was Minister of Instruction and Chancellor of the University of San Andres, frequently representing the city of La Paz in congress. He wrote a course of physics (1852), a paper on the theory of earthquakes (1868), a work of considerable merit entitled "Conocimiento del Tiempo" (1880), almost amounting to a nautical almanac; and since 1889 various papers by Dr. Aspiazu have been communicated to the Geographical Society of La Paz. The most important of these are his memoirs on the plateaus of the Andes, on methods of determining longitude, and on the boundary-line between the Bolivian province of Caupolican and Peru. He left behind him some very useful papers on astronomical geography, with solutions of problems, which have been printed. Mr. Aspiazu was a man of whom his country may well be proud, and his loss will be much felt by the members of the La Paz Geographical Society, to whom, however, he has set an excellent example.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000025

مكتبة قطر الوطنية
Qatar National Library

GEOGRAPHICAL LITERATURE OF THE MONTH.

Additions to the Library.

By HUGH ROBERT MILL, D.Sc., *Librarian*, R.G.S.

THE following abbreviations of nouns and the adjectives derived from them are employed to indicate the source of articles from other publications. Geographical names are in each case written in full:—

A. = Academy, Academie, Akademie.
Ann. = Annals, Annales, Annalen.
B. = Bulletin, Bollettino, Boletim.
Com. = Commerce, Commercial.
C. Rd. = Comptes Rendus.
Erdk. = Erdkunde.
G. = Geography, Geographie, Geografia.
Ges. = Gesellschaft.
I. = Institute, Institution.
J. = Journal.
M. = Mitteilungen.
Mag. = Magazine.
P. = Proceedings.
R. = Royal.
Rev. = Review, Revue, Revista.
S. = Society, Société, Selskab.
Sitzb. = Sitzungsbericht.
T. = Transactions.
V. = Verein.
Verh. = Verhandlungen.
W. = Wissenschaft, and compounds.
Z. = Zeitschrift.

On account of the ambiguity of the words *octavo*, *quarto*, etc., the size of books in the list below is denoted by the length and breadth of the cover in inches to the nearest half-inch. The size of the *Journal* is 10 × 6½.

EUROPE.

Alps. **Mader.**

Die höchsten Teile der Seealpen und der Ligurischen Alpen in physiographischer Beziehung. Von Dr. Fritz Mader. Leipzig: G. Fock, 1897. Size 9½ × 6½, pp. 236. *Illustrations.*

Austria—Meteorology. **Frejlach.**

Věstnik Král České Společnosti Náuk. Třida mathematicko-přirodovědecká. 1897. IV. Přispěvek R. poznáni nefometrických poměrů zemi hercynsko-sudetských. Podává Dr. Josef Frejlach. v Praze, 1897. Size 10 × 6½, pp. 24. *Diagrams. Presented by the Author.*

On the cloudiness of the north-western mountain district of the Austrian monarchy.

Europe—Lithuania. *Globus* **71** (1897): 381–384. **Tetzner.**

Das litauische Sprachgebiet. Von Dr. F. Tetzner. *With Map.*

On the Lithuanian-speaking districts of Prussia and Russia.

France and Germany. **Birchall.**

P. Literary and Philosoph. S. Liverpool **50** (1896): 235–262.

Medieval Towns in France and Germany: their Origin and Municipal Development. By James Birchall. *With Map.*

On the economic reasons for the growth of free towns in medieval Europe.

France—Ardèche. *Mém. S. Spéléologie* **1** (10) (1897): 1–40. **Raymond.**

Les Rivières souterraines de la Dragonnière et de Midroï (Ardèche). Par M. le Dr. Paul Raymond. *With Plans and Illustrations.*

France—Capbreton. *Rev. Maritime* **134** (1897): 509–541. **Gabarra.**

L'ancien port de Capbreton. Par M. J.-B. Gabarra.

A history of the port of Capbreton, intimately associated with the geographical problem of the former mouth of the Adour and its relation to the remarkable submarine cañon known as the Capbreton Deep. The question of creating a harbour of refuge at Capbreton is also discussed. The paper, which is written by the curé of Capbreton, is throughout of remarkable interest.

France—Normandy. *C. Rd.* **125** (1897): 380–382. **Bigot.**

Sur les dépôts pléistocènes et actuels du littoral de la basse Normandie. Note de M. A. Bigot.

On the character and movements of the northern coast of France.

France—Provence. *A travers le Monde* (*Tour du Monde*) **3** (1897): 193–196. **Porcher.**

La Sainte-Baume et Saint-Maximin. Par Jacques Porcher. *With Illustrations.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004a

مكتبة قطر الوطنية
Qatar National Library

Germany. *Aus allen Weltteilen* **28** (1897): 601–606, 639–650, 671–684. **Detmer.**
Landschaftsformen des nordwestlichen Deutschlands. Von Dr. W. Detmer.

Germany—Eifel Lakes. *Petermanns M.* **43** (1897): 149–153. **Halbfass.**
Tiefen- und Temperaturverhältnisse der Eifel-maare. Von Dr. Wilhelm Halbfass. *With Map.*

A note on this paper was given in the October *Journal* (*ante*, p. 436).

Germany—Kiel. *Schriften Naturw. V. Schleswig-Holstein* **11** (1897): 187–194. **Weber.**
Die Temperaturschwankungen in Kiel. Von Professor Dr. L. Weber.

Germany—Kiel Bay. **Schück.**
Schriften Naturw. V. Schleswig-Holstein **11** (1897): 149–156.
Magnetische Beobachtungen an der Kieler Föhrde und Eckernförder Bucht, übertragen auf 1895, 5. Von A. Shück.

Germany—Meteorology. **Bezold.**
Bericht über die Thätigkeit des Königlich Preussischen Meteorologischen Instituts im Jahre 1896. Von Wilhelm von Bezold, Direktor. Berlin, 1897. Size 10 × 6½, pp. 30.

Germany—Meteorology. ———
Veröffentlichungen des Königlich Preussischen Meteorologischen Instituts. Herausgegeben durch dessen Direktor Wilhelm von Bezold. Ergebnisse der Beobachtungen an den Stationen II. und III. Ordnung im Jahre 1893 zugleich Deutsches Meteorologisches Jahrbuch für 1893. 1893. Heft III. Berlin: A. Asher & Co., 1897. Size 13½ × 10½, pp. xvi. and 99–291 [192]. *Map.*

Germany—Saxony. ———
Kalender und Statistisches Jahrbuch für das Königreich Sachsen nebst Marktverzeichnissen für Sachsen und die Nachbarstaaten auf das Jahr 1898. Dresden: C. Heinrich, 1897. Size 8 × 5½, pp. 88, x., and 222.

Greece. **Philippson.**
Thessalien und Epirus. Reisen und Forschungen im nördlichen Griechenland. Von Dr. Alfred Philippson. Herausgegeben von der Gesellschaft für Erdkunde zu Berlin. Berlin: W. H. Kühl, 1897. Size 9½ × 6½, pp. x. and 422. *Maps and Plates. Presented by the Gesellschaft für Erdkunde, Berlin.*

This will be further noticed.

Greece. **Sergeant.**
Greece in the Nineteenth Century. A Record of Hellenic Emancipation and Progress: 1821–1897. By Lewis Sergeant. London: T. Fisher Unwin, 1897. Size 9½ × 6, pp. x. and 400. *Map and Illustrations. Price* 10*s.* 6*d. Presented by the Publisher.*

"This volume," says the prefatory note, "is neither a history altogether nor exclusively a plea, but it combines the features of both. It is also an accretion, for it includes as much as seemed to be worth repeating of a volume on 'New Greece,' published in 1878 and republished in 1879." The book is illustrated, and contains a clear large-scale map of Greece.

Italy—Venetia. *Riv. G. Italiana* **4** (1897): 449–453. **Bertolini.**
I fiumi di resorgiva in relazione alle lagune ed al territorio veneto. Nota del Prof. G. L. Bertolini.

Norway—Botany. *G. Tidskrift* **14** (1897): 76–86. **Lange.**
Fra Smaarejser i Norge. Ved cand. mag. Jonathan Lange.

On the plant-life of Norway as observed in summer excursions.

Russia—Botany. *Globus* **72** (1897): 197–200. **Krause.**
Vegetationsskizze Mittelrusslands. Botanische Notizen von der Reise zum internationalen medicinischen Kongress in Moskau. August, 1897. Von Dr. Ernst H. L. Krause.

ASIA.

Arabia—Historical. **Rossi.**
G. B. Rossi. L'Iemen, avanti il profeta. Estratto dalla *Rassegna Nazionale* di Firenze fasc. del 16 Luglio 1897. Firenze, 1897. Size 9 × 6, pp. 14. *Presented by the Author.*

On Yemen before the Mohammedan era, as deduced from inscriptions recently discovered.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000097

مكتبة قطر الوطنية
Qatar National Library

Arabia—Makalla. *Globus* **72** (1897): 37–40. **Hirsch.**
Ein Aufenthalt in Makalla (Südarabien). Von Leo Hirsch. *With Illustrations.*

Central Asia. *Rev. Française* **22** (1897): 598–602. **Roborovski.**
Asie Centrale: L'exploration Roborovski. *With Map.*

Central Asia—Pamirs. *Verh. Ges. Erdk. Berlin* **24** (1897): 328-339. **Oluffsen.**
Herr Premier-Lieutenant O. Oluffsen: Ueber die dänische Pamir-Expedition im Jahr 1896. *With Map.*

Central Asia—Pamirs. *G. Tidskrift* **14** (1897): 51–76. **Olufsen.**
Den danske Pamir-Expedition. Ved Premier-løjtnant i Hœren O. Olufsen. *With Map.*
This expedition has been referred to in the *Journal* for November (*ante*, p. 536).

China—Railways. *Oester. Monats. Orient* **23** (1897): 61–72. **Feigl.**
Die Eisenbahnfrage in China. Von Hermann Feigl.

China—Historical. **Groeneveldt.**
Bijd. Taal-, Land- en Volkenk. Ned.-Indië **4** (1898): 1–598.
De Nederlanders in China. Door W. P. Groeneveldt.
This is the first part of a series of records of the early Dutch trade to China, and deals with the traffic to China and the Pescadores between 1601 and 1624.

China—Manchuria. *C. Rd.* **124** (1897): 1402–1404. **Venukoff.**
Sur les résultats d'observations météorologiques faites en Mandchourie et dans les pays limitrophes. Note de M. Michel Venukoff.

Chinese Empire—Tibet. *J. United Service I. India* **26** (1897): 177–198. **Wellby.**
From Leh to Peking across Tibet. By Captain M. S. Wellby. *With Map.*

India—Assam. ———
Report on the River-borne Trade of Assam for the Quarter ending the 31st of December, 1896. Size 13½ × 9, pp. 44.

India—Assam. **Stephen.**
Annual Sanitary Report of the Province of Assam for the year 1896. By Surgeon-Colonel A. Stephen, M.B. Shillong, 1897. Size 13 × 8½, pp. 44, xlviii., and 6. *Map.*

India—Assam, Tea Culture. ———
Report on Tea Culture in Assam for 1896. Shillong, 1897. Size 13½ × 8½, pp. 6 and iv. *Map.*
The output of tea in the province of Assam for 1896 was 109 million lbs., an increase of ten per cent. over the previous year.

India—Bengal. *Miss. Catholiques* **29** (1897): 368, 380, 391, 403, 418, 429, 439. **Gryse.**
Les premiers habitants du Bengale ou les Aborigènes du Chota-Nagpore, de l'Orissa et des Santal-Pergannas. Par le R. P. de Gryse. *With Illustrations.*

India—Burma. **Newland.**
A Practical Hand-book of the Language of the Lais as spoken by the Hakas and other allied tribes of the Chin Hills (commonly the Baungshè Dialect). By Surgeon-Major A. G. E. Newland. Rangoon, 1897. Size 9½ × 6, pp. 688. *Presented by the Author.*

India—Burmese War. *Indian Antiquary* **26** (1897): 40–47. ———
An Unpublished Document relating to the First Burmese War. Preface by Lieut.-Colonel R. C. Temple.
The document in question was a manuscript bound up with a copy of Wilson's "Documents of the Burmese War, 1827," which belonged to Colonel Hopkinson, who took part in the campaign, and was presumably written by him.

India—Hindu Customs. **Nevins.**
P. Literary and Philosoph. S. Liverpool **50** (1896): 263–291.
Hindu Domestic and Religious Customs. By J. Ernest Nevins, M.B.

India—Malabar. *Imp. and Asiatic Quarterly Rev.* (3) **4** (1897): 288–300. **Fawcett.**
The Moplas of Malabar. By F. Fawcett. *With Illustration.*

India—Mergui Archipelago. *Indian Antiquary* **26** (1897): 85–91, 119–126. **Temple.**
Extracts from Official Documents relating to the Selungs of the Mergui Archipelago. By R. C. Temple.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000040

مكتبة قطر الوطنية
Qatar National Library

Indo-China. *B.S.G. y Estadistica Rep. Mexicana* (4) 3 (1895): 407–413. **Revilliod.**
Viaje de Saïgon á Bangkok, atravesando el Cambodge y el Siam. Discurso . . . por Mr. John T. Revilliod. Traducción del socio Carlos Roumagnac.

AFRICA.

Africa. *Imp. and Asiatic Quarterly Rev.* (3) 4 (1897): 312–324. **Cust.**
Africa in 1897. By Robert Needham Cust, LL.D.
A presentation of the dark side of African exploration.

Africa—Natives. *Koloniales Jahrb.* 10 (1897): 120–133. **Nachtigal.**
Die Eingeborenen Afrikas, die Kolonial-Regierung und die Mission. Von Missionsprediger A. Nachtigal.

Anthropology—Games. **Culin.**
Mancala, the National Game of Africa. By Stewart Culin.—Annual Report of the Board of Regents of the Smithsonian Institution . . . for the year ending June 30, 1894. Report of the U.S. National Museum, pp. 595–607. Washington, 1896. Size 9½ × 6. *Illustrations. Presented by the Smithsonian Institution.*

British South Africa. *Scottish G. Mag.* 13 (1897): 505–514. **Selous.**
The Economic Value of Rhodesia. By F. C. Selous. *With Map.*
This paper was read to Section E, Geography, of the British Association at the Toronto meeting, a fact which, by inadvertence, is not mentioned when reproducing it. The paper is illustrated by an excellent hypsometrical map of the region described.

Central Africa. **Blaikie.**
Central Africa since the Death of Livingstone. By the Rev. W. Garden Blaikie, D.D., etc. From the *North American Review*, September, 1897. Pp. 318–332. *Presented by the Author.*

Congo State. **Chapaux.**
Albert Chapaux. Le Congo, historique, diplomatique, physique, politique, économique, humanitaire, and colonial. Ouvrage contenant une grande carte en quatre feuilles, tirée en couleurs, 6 cartes, croquis et plans, intercalés dans le texte, 163 portraits, types d'indigènes, vues, etc. Bruxelles: C. Rozez, 1894. Size 11 × 7½, pp. x. and 888. *Price* 15*s.*

Congo State. *B.S.R. Belge G.* 21 (1897): 193–200. **Leclercq.**
Le Congo doit être notre Java. Par Jules Leclercq.

Congo States. *Globus* 72 (1897): 117–121. **Thonner.**
Das Gebiet des Mongalaflusses in Centralafrika (Kongostaat). Nach eigenen Forschungen von Franz Thonner. *With Illustrations.*
On the country bordering the Mongala, one of the northern tributaries of the Congo, and its people.

East Africa—Historical. **Benoit.**
B. Union G. Nord de la France 17 (1896): 97–124, 193–244.
La Côte Orientale d'Afrique au-delà de la Mer Rouge, dans l'antiquité. Par M. François Benoit. *With Maps.*

Egypt—Antinoë. *A travers le Monde, Tour du Monde (n.s.)* 3 (1897): 233–236. **Gayet.**
Les Fouilles d'Antinoë. Par M. A. Gayet. *With Illustrations.*

Egypt—The Sphinx. *Sitzb. K.P.A. W. Berlin* (1897): 752–760. **Borchardt.**
Ueber das Alter des Sphinx bei Giseh. Von Ludwig Borchardt. *With Illustration.*

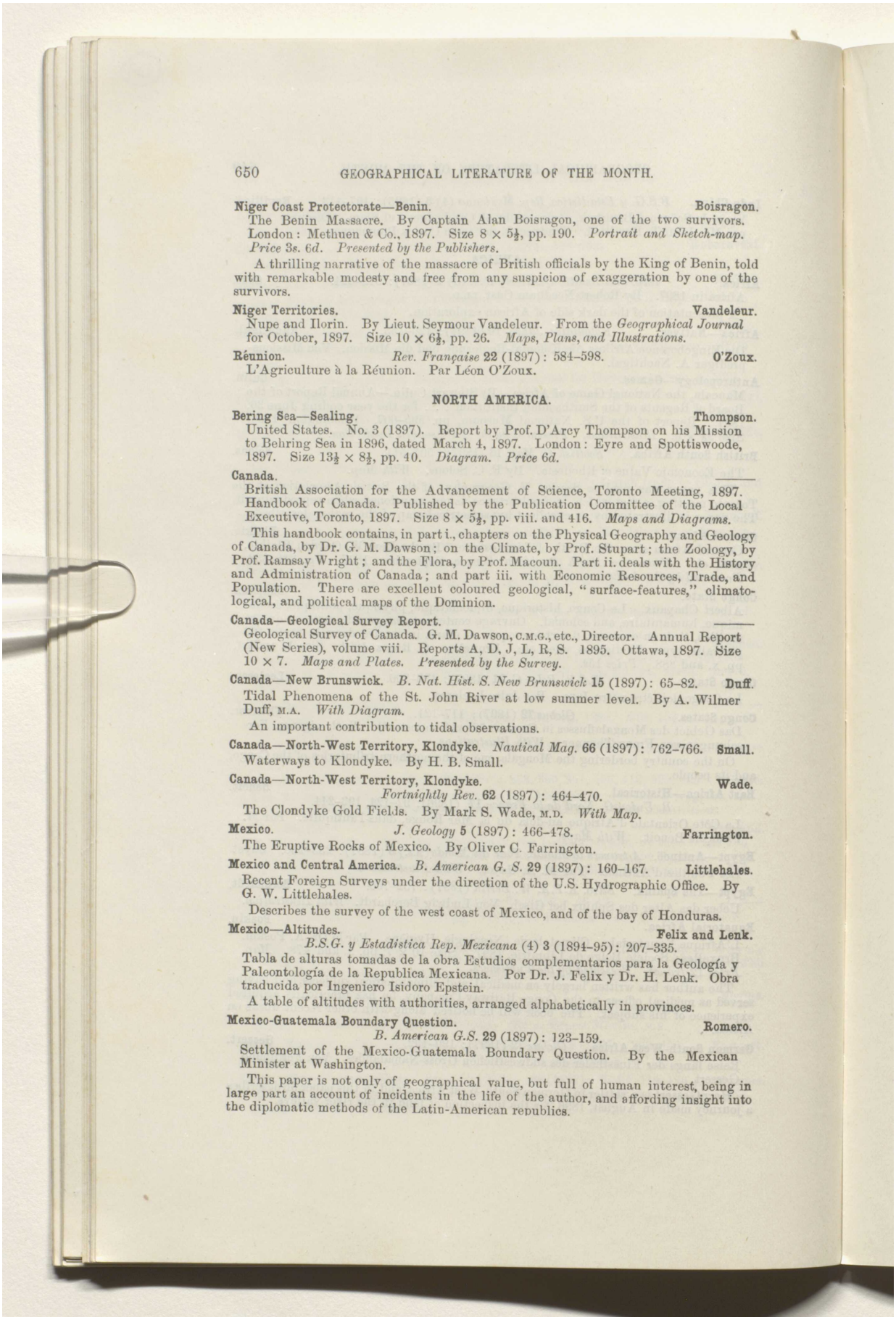
Equatorial Africa. **Poskin.**
L'Afrique Équatoriale. Climatologie, Nosologie, Hygiène. Par le Dr. A. Poskin. Bruxelles: Société Belge de Librairie, 1897. Size 10 × 7, pp. x. and 478. *Map. Price* 12 *francs. Presented by the Publishers.*
The author has written largely on medical and climatological subjects, and having served as medical officer to the Congo Railway Company, he has practically acquired experience of his subject. The book will be noticed along with other recent works on Africa.

German South-West Africa. *Globus* 72 (1897): 190–192. **Gessert.**
Reise längs der Flussthäler des südwestlichen Gross-Namalandes. Von Ferdinand Gessert.
Herr Gessert is a settler in German South-West Africa, and in this paper he describes a journey made in August, 1896, for the inspection of land in the river valleys.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Niger Coast Protectorate—Benin. **Boisragon.**
The Benin Massacre. By Captain Alan Boisragon, one of the two survivors. London: Methuen & Co., 1897. Size 8 × 5½, pp. 190. *Portrait and Sketch-map. Price 3s. 6d. Presented by the Publishers.*

A thrilling narrative of the massacre of British officials by the King of Benin, told with remarkable modesty and free from any suspicion of exaggeration by one of the survivors.

Niger Territories. **Vandeleur.**
Nupe and Ilorin. By Lieut. Seymour Vandeleur. From the *Geographical Journal* for October, 1897. Size 10 × 6½, pp. 26. *Maps, Plans, and Illustrations.*

Réunion. *Rev. Française* **22** (1897): 584–598. **O'Zoux.**
L'Agriculture à la Réunion. Par Léon O'Zoux.

NORTH AMERICA.

Bering Sea—Sealing. **Thompson.**
United States. No. 3 (1897). Report by Prof. D'Arcy Thompson on his Mission to Behring Sea in 1896, dated March 4, 1897. London: Eyre and Spottiswoode, 1897. Size 13½ × 8½, pp. 40. *Diagram. Price 6d.*

Canada.
British Association for the Advancement of Science, Toronto Meeting, 1897. Handbook of Canada. Published by the Publication Committee of the Local Executive, Toronto, 1897. Size 8 × 5½, pp. viii. and 416. *Maps and Diagrams.*

This handbook contains, in part i., chapters on the Physical Geography and Geology of Canada, by Dr. G. M. Dawson; on the Climate, by Prof. Stupart; the Zoology, by Prof. Ramsay Wright; and the Flora, by Prof. Macoun. Part ii. deals with the History and Administration of Canada; and part iii. with Economic Resources, Trade, and Population. There are excellent coloured geological, "surface-features," climatological, and political maps of the Dominion.

Canada—Geological Survey Report.
Geological Survey of Canada. G. M. Dawson, C.M.G., etc., Director. Annual Report (New Series), volume viii. Reports A, D, J, L, R, S. 1895. Ottawa, 1897. Size 10 × 7. *Maps and Plates. Presented by the Survey.*

Canada—New Brunswick. *B. Nat. Hist. S. New Brunswick* **15** (1897): 65–82. **Duff.**
Tidal Phenomena of the St. John River at low summer level. By A. Wilmer Duff, M.A. *With Diagram.*

An important contribution to tidal observations.

Canada—North-West Territory, Klondyke. *Nautical Mag.* **66** (1897): 762–766. **Small.**
Waterways to Klondyke. By H. B. Small.

Canada—North-West Territory, Klondyke. **Wade.**
Fortnightly Rev. **62** (1897): 464–470.
The Clondyke Gold Fields. By Mark S. Wade, M.D. *With Map.*

Mexico. *J. Geology* **5** (1897): 466–478. **Farrington.**
The Eruptive Rocks of Mexico. By Oliver C. Farrington.

Mexico and Central America. *B. American G. S.* **29** (1897): 160–167. **Littlehales.**
Recent Foreign Surveys under the direction of the U.S. Hydrographic Office. By G. W. Littlehales.

Describes the survey of the west coast of Mexico, and of the bay of Honduras.

Mexico—Altitudes. **Felix and Lenk.**
B.S.G. y Estadistica Rep. Mexicana (4) **3** (1894–95): 207–335.
Tabla de alturas tomadas de la obra Estudios complementarios para la Geología y Paleontología de la Republica Mexicana. Por Dr. J. Felix y Dr. H. Lenk. Obra traducida por Ingeniero Isidoro Epstein.

A table of altitudes with authorities, arranged alphabetically in provinces.

Mexico-Guatemala Boundary Question. **Romero.**
B. American G.S. **29** (1897): 123–159.
Settlement of the Mexico-Guatemala Boundary Question. By the Mexican Minister at Washington.

This paper is not only of geographical value, but full of human interest, being in large part an account of incidents in the life of the author, and affording insight into the diplomatic methods of the Latin-American republics.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

Mexico—Islands. *B.S.G. y Estadistica Rep. Mexicana* (4) 3 (1895): 336–357. **Rojas.**
El Archipiélago del Norte. Apéndice al dictamen de la Comisión respectiva, y Estudio juridico por el socio Lic. D. Isidro Rojas.

Mexico—Popocatepetl and Ixtaccihuatl. **Farrington.**
Field Columbian Museum. Publication 18. Geological Series. Vol. i. No. 2. Observations on Popocatepetl and Ixtaccihuatl, with a Review of the Geographic and Geologic Features of the Mountains. By Oliver C. Farrington, PH.D. Chicago, 1897. Size 10 × 6½, pp. 67–120. *Map and Illustrations.*

Mexico—Popocatepetl. *Appalachia* 8 (1897): 221–224. **Douglass.**
An Ascent of Popocatepetl. By A. E. Douglass. *With Illustrations.*

Mexico—Yucatan. *B.S.G. y Estadistica Rep. Mexicana* 3 (1894): 19–20. **Menéndez.**
La costa oriental de Yucatan. Rodolfo Menéndez.

Mexico—Yucatan. *Globus* 72 (1897): 200–206, 219–223. ——
Neuere Forschungen in Chichen-Itza. *With Plan and Illustrations.*

CENTRAL AND SOUTH AMERICA.

Amazon Valley. *J. School G.* 1 (1897): 193–200. **De Kalb.**
The Valley of the Amazon and its Development. By Courtenay De Kalb.

Argentine and Chile Rio Aisen. **Steffen.**
Informe preliminar sobre la espedicion esploradora del rio Aisen (Diciembre 1896—Abril 1897) presentado al señor Ministro de Relaciones Esteriores, Culto i Colonizacion. Por Dr. Juan Steffen. Santiago de Chile, 1897. Size 10 × 7, pp. 28.

Argentine Republic. *An. Museo Nacional Buenos Aires* 5 (1896–97): 333–347. **Aguirre.**
Notas geológicas sobre la Sierra de la Tinta. Por el Ingeniero Eduardo Aguirre. *With Map.*

Argentine Republic. *An. Museo Nacional Buenos Aires* 5 (1896–97): 25–32. **Valentin.**
Comunicaciones geológicas y mineras de las provincias de Salta y Jujuy. Por el Doctor Juan Valentin. *With Plans.*

Argentine Republic—Buenos Ayres. ——
Annuaire Statistique de la ville de Buenos-Ayres. VIme Année—1896. Buénos-Ayres, 1897. Size 10½ × 7½, pp. xcii. and 620.

Bolivia—Andes. *Globus* 72 (1897): 25–31. **Mosbach.**
Streifzüge in den bolivianischen Anden. Von Ingenieur E. Mosbach. II. *With Illustrations.*

Bolivia and Peru. **Armentia.**
Oficina Nacional de Inmigración, Estadistica y Propoganda Geográfica. Limites de Bolivia con el Perú por la parte de Caupolican. Por el P. Fr. Nicolas Armentia. La Paz, 1897. Size 8 × 6, pp. iv., 176, and 64.

Brazil. **Papstein.**
Führer für den Answanderer nach Brasilien. Von A. Papstein. Berlin: Deutscher Kolonialverlag (G. Meinecke) (1897). Size 7½ × 5, pp. 84. *Map.* *Price* 1 *mark.* *Presented by the Publisher.*

A guide for emigrants to Brazil prepared by the Brazilian correspondent of the *Deutsche Kolonialzeitung*. It consists of a concise description of Brazil and its resources, with special hints and warnings for settlers in Southern Brazil, and a transcript of the German emigration law.

Brazil—Amazons. **Grossi.**
Prof. Dott. Vincenzo Grossi. Nel paese delle Amazzoni. Roma, 1897. Size 7½ × 5, pp. 130. *Map.* *Presented by the Author.*

Brazil—People. *Globus* 72 (1897): 133–139. **Vierkandt.**
Die Indianerstämme Brasiliens und die allgemeinen Fragen der Anthropologie. Eine Besprechung von A. Vierkandt. *With Plates.*

Refers largely to Ehrenreich's 'Anthropologische Studien über die Urbewohner Brasiliens.'

Brazil—Trinidad. *Rev. Trim. I. G. Hist. Bahia* 4 (1897): 19–37. ——
A Ilha da Trindade (A Posse Official).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000048

مكتبة قطر الوطنية
Qatar National Library

British Guiana—Gold.

British Guiana. Report of the Council of the Institute of Mines and Forests, on the Gold and Forest Industries of British Guiana, for the year ending June 30, 1897. Demerara, 1897. Size 13 × 8, pp. 12.

The output of gold in British Guiana for 1896–97 was 128,333 ounces, showing a slight increase on the previous year, but still below the average for 1892–95.

British West Indies. *Timehri* **11** (1897): 64–72. **Burnley.**

Tobacco and Cotton Cultivation in the British West India Colonies. By William H. Burnley.

Central America—Canals. **Whiteley.**

The Diplomacy of the United States in regard to Central American Canals. By James Gustavus Whiteley. From the *North American Review*, September, 1897. Pp. 364–378.

AUSTRALASIA AND PACIFIC ISLANDS.

Australasia—Exploration. *Deutsche Rundschau G.* **19** (1897): 448–455. **Greffrath.**

Fortschritte der geographischen Forschungen und Reisen im Jahre 1896. I. Australien und die Südsee. Von Henry Greffrath.

Australia—Discovery. **Macdonald.**

Trans. R.G.S. Australasia (Victoria) **14** (1897): 20–28.

Notes on "The Discovery of the Eastern Coast of New Holland" (Australia), by Captain Cook. By A. C. Macdonald. *With Portrait and Chart.*

Ellice Group—Zoology. **Hedley.**

Australian Museum, Sydney. Memoir III. The Atoll of Funafuti, Ellice Group: its Zoology, Botany, Ethnology, and General Structure, based on collections made by Mr. Charles Hedley. Part 3. Sydney, 1897. Size 10 × 6½, pp. 163–226. *Plates. Presented by the Australian Museum.*

Fiji—Meteorology. **Vaughan.**

Fiji. Meteorological Observations taken at Suva during 1896. By J. D. W. Vaughan. Suva, 1897. Size 13½ × 8½, pp. 16.

The mean temperature of the year was 79°, that of January, February, March, and April (summer) each 83°, and of July, August, September, and October (winter), within a degree of 76°. The absolute minimum was 60° on July 20, the maximum 94° on April 5. Rain fell on 259 days, with a total of 79 inches for the year, February, October, and December being the wettest months, June and August the driest. The wind was east on 145 days, and north-east or south-east on 147. There was only one record of west wind.

New Guinea. *Ann. Hydrographie* **25** (1897): 321–323. **Krieg.**

Hydrographische Beobachtungen während der Rundreise S.M.S. "Falke," Kommandant Korv.-Kapt. Krieg, im Schutzgebiet Neu-Guineas und des Bismarck-Archipels und der Reise von Matupi nach Sydney. Januar-Februar, 1897.

New South Wales. *J. and P.R.S. New South Wales* **30**, 1896 (1897): 214–285. **Curran.**

On the Occurrence of Precious Stones in New South Wales, and the Deposits in which they are found. By Rev. J. Milne Curran. *With Plates.*

POLAR REGIONS.

Antarctic Islands. *Tour du Monde* **3** (1897): 367–408. **Mercié.**

Aux Terres de Kerguelen, îles de St.-Paul et d'Amsterdam. Par M. E. Mercié. *With Map and Illustrations.*

A visit to the islands of the Southern ocean by a French man-of-war in 1892–93.

Arctic Geology. *Nature* **56** (1897): 301–303, 351–352. **Gregory.**

Some Problems of Arctic Geology. I. The Polar Basin; II. Former Arctic Climates. By Dr. J. W. Gregory. *With Sketch-maps.*

Arctic—Glaciers. **Rabot.**

Commission Internationale des Glaciers. Les variations de longueur des Glaciers dans les Régions Arctiques et Boréales. Par M. Charles Rabot. Première partie. Extrait des *Archives des Sciences physiques et naturelles*, t. iii. pp. 163 et 301. Genève: H. Georg & Cie., 1897. Size 9½ × 6½, pp. 86. *Presented by the Author.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000051

مكتبة قطر الوطنية
Qatar National Library

Arctic—Ice-Limits. *Ann. Hydrographie* **25** (1897): 313–316.

Die Eisgrenze zwischen Grönland—Island—Spitzbergen. *With Diagrams.*

Three maps are given, showing the approximate boundaries of sea-ice in the North Atlantic for the respective months of May, June, and July.

Arctic—Nansen's Expedition. *Petermanns M.* **43** (1897): 128–132, 153–163. **Supan.**

Die norwegische Polarexpedition, 1893–96. Von A. Supan.

A detailed review of Dr. Nansen's book, including a critical comparison of some points of difference between the English and German editions.

MATHEMATICAL GEOGRAPHY.

Geodesy—Measures. *C. Rd.* **125** (1897): 199–203. **Wolf.**

Le Gnomon de l'Observatoire et les anciennes Toises; restitution de la Toise de Picard. Note de M. C. Wolf. [Also in *Rev. Scientifique* **8** (1897): 193–195.]

The discovery of a manuscript of J. Cassini, written in 1682, has enabled the hitherto unknown error of the toise of Picard to be determined. It proves to be about one-thousandth part shorter than the toise of Cassini; and thus the meridional arc-measurements of Picard may at last be accurately compared with modern results.

Photographic Surveying. **Rosenmund.**

Untersuchungen über die Anwendung des Photogrammetrischen Verfahrens für Topographische Aufnahmen. Bericht an das eidgenössische topographische Bureau von M. Rosenmund. Bern: Fritz Haller & Co., 1896. Size 9½ × 7, pp. 42. *Illustrations. Price 2s. 6d.*

PHYSICAL AND BIOLOGICAL GEOGRAPHY.

Botanical Maps. *Scottish G. Mag.* **13** (1897): 537–541. **Herbertson.**

The Mapping of Plant Associations. By Andrew J. Herbertson. Also separate copy. Size 10 × 6½, pp. [6]. *Presented by the Author.*

A study of the conditions on which botanical mapping depends, and on the methods of overcoming the difficulties in this kind of representation.

Earth-Pillars. **Kittler.**

Münchener geographische Studien. Herausgegeben von Siegmund Günther. Drittes Stück: Ueber die geographische Verbreitung und Natur der Erdpyramiden. Von Dr. Christian Kittler. München: T. Ackermann, 1897. Size 9½ × 6, pp. 56. *Illustrations.*

This will be referred to in a note.

Glacial Land-forms. *J. Geology* **5** (1897): 421–465. **Taylor.**

Moraines of Recession and their Significance in Glacial Theory. By Frank Bursley Taylor. *With Maps.*

Islands. *B.S.R. Belge G.* **21** (1897): 5-22, 113–132, 201–217. **De Windt.**

Recherches sur la constitution des îles. Par Dr. Jean de Windt.

Meteorology. **Duclaux.**

Smithsonian Contributions to Knowledge. 1034. Hodgkins Fund. Atmospheric Actinometry and the Actinic Constitution of the Atmosphere. By E. Duclaux. Washington: The Smithsonian Institution, 1896. Size 14 × 10, pp. 48.

Meteorology—Föhn. *Sitzb. K.A. W. Wien.* **105** (Abth. II. a.) (1896): 117–137. **Pernter.**

Die allgemeine Luftdruckvertheilung und die Gradienten bei Föhn. Von J. M. Pernter. *With Diagrams.*

On the general conditions of atmospheric pressure during Föhn winds, illustrated by the isobars of Europe for several typical instances.

Meteorology—Temperature. **Arrhenius.**

Bihang K. Svenska Vetens.-A. Handlingar **22** (1896): 1–102.

Ueber den Einfluss des atmosphärischen Kohlensäuregehalts auf die Temperatur der Erdoberfläche. Von Svante Arrhenius.

Oceanography—Currents. *Scottish G. Mag.* **13** (1897): 515–523. **Davis.**

Winds and Ocean Currents. By Prof. W. M. Davis.

This will be specially noticed.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Oceanography—Loch Fyne. **Mill.**

Report on Physical Observations bearing on the Circulation of the Water in Loch Fyne in April and September, 1896. By Hugh Robert Mill, D.Sc. [Part iii. Fifteenth Annual Report of the Fishery Board for Scotland. Pp. 262–279.] Size 10 × 6½. *Presented by the Author.*

The results of this research are summarized in a note.

Oceanography—North Atlantic. *B.S.G. Com. Bordeaux* **20** (1897): 2732–86. **Hautreux.**

Atlantique nord; vents, courants et glaces en 1895-1896. Par A. Hautreux. *With Chart.*

ANTHROPOGEOGRAPHY AND HISTORICAL GEOGRAPHY.

Ancient Symbols. **Wilson.**

The Swastika, the earliest known Symbol, and its Migrations; with Observations on the Migration of Certain Industries in Prehistoric Times. By Thomas Wilson. —Annual Report of the Board of Regents of the Smithsonian Institution . . . for the year ending June 30, 1894. Report of the U.S. National Museum. Pp. 757–1011. Washington, 1896. Size 9½ × 6. *Map and Illustrations.*

A study of the sign of the cross in all lands and at all periods from the prehistoric to the early Christian.

Anthropogeography. *Scottish G. Mag.* **13** (1897): 475–487. **Chisholm.**

On the Relativity of Geographical Advantages. By G. G. Chisholm, M.A., etc.

Colonization. *P. Literary and Philosoph. S. Liverpool* **50** (1896): 1–44. **Nevins.**

Systems of Colonization from Prehistoric Periods and their Results. By J. Birkbeck Nevins, M.D.

This paper passes in brief review the successive colonizations of prehistoric peoples, Phœnicians, Greeks, and Romans, the Teutonic colonization of England, and modern colonization by European nations.

Commercial Geography. *Deutsche Rundschau G.* **20** (1897): 33–34. ——

Begleitworte zur Colonial- und Weltverkehrskarte. *With Map.*

The map, on Mercator's projection with equatorial scale of 1 : 85,000,000, shows the colonial possessions of all European powers by different colours, the most important ocean-routes and telegraph cables, the great trans-continental railways, and the limits of navigation on great rivers.

Historical—Cabot. *B.S.G. Italiana* (3) **10** (1897): 224–235, 270–287. ——

Giovanni Caboto. Quarto centenario della scoperta del continente Nord-Americano. *With Portrait, Map, and Illustration.*

History of Geography. **Philip.**

P. Literary and Philosoph. S. Liverpool **50** (1896): 313–339.

The Enlargement of the Geographical Horizon, as illustrated in the History of Cartography, down to the end of the age of Discovery. By George Philip, Junr.

A concise summary of the history of geographical exploration.

Primitive Travel. **Mason.**

Primitive Travel and Transportation. By Otis Tufton Mason.—Annual Report of the Board of Regents of the Smithsonian Institution . . . for the year ending June 30, 1894. Report of the U.S. National Museum. Pp. 237–593. Washington, 1896. Size 9½ × 6. *Illustrations. Presented by the Smithsonian Institution.*

A remarkable account of the appliances for facilitating travel and transport employed by primitive races, illustrated from specimens in the Smithsonian Museum. The snow-goggles used by Eskimos are amongst the most curious.

Town-sites. *J. School G.* **1** (1897): 225–231. **Semple.**

Some Geographic Causes determining the Location of Cities. By Ellen C. Semple.

BIOGRAPHY.

Benincasa. *Riv. G. Italiana* **4** (1897): 443–448. **Bruzzo.**

Di Grazioso Benincasa e del suo Portolano (una lettera inedita). G. Bruzzo.

An account of Benincasa and his nautical work (1435–45), contained in a hitherto unpublished letter (dated 1770) from Bernadino Noja, vicar-general at Ancona, to the Cardinal Stefano Borgia.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000038

مكتبة قطر الوطنية
Qatar National Library

Cabot. *Deutsche Rundschau G.* **20** (1897): 36–40. **Wolkenhauer.**

Giovanni Caboto. Zur Erinnerung an die Entdeckung Nord-Amerikas durch denselben im Sommer 1497. Von Dr. W. Wolkenhauer. *With Portrait.*

Celtis. **Geiger.**

Münchener geographische Studien. Herausgegeben von Siegmund Günther. Zweites Stück: Conrad Celtis in seinen Beziehungen zur Geographie. Von Dr. Theodor Geiger. München: T. Ackermann, 1896. Size 9½ × 6, pp. 40.

Conrad Celtis was born near Würzburg in 1459, and died in 1508. He wrote on the topography of Germany amongst other subjects.

d'Anville. *Deutsche Rundschau G.* **19** (1897): 468–471. **Wolkenhauer.**

J. B. Bourgnignon d'Anville. Von Dr. W. Wolkenhauer. *With Portrait.*

Knox. **Ferguson.**

Captain Robert Knox: The Twenty Years' Captive in Ceylon, and Author of 'An Historical Relation of the Island Ceylon, in the East Indies' (London, 1681). Contributions towards a Biography. By Donald W. Ferguson. Colombo (Ceylon) and Croydon, 1896–97. Size 10 × 7½, pp. 72. *Presented by the Author.*

An interesting biography of a merchant-adventurer of the seventeenth century, whose memory the author believes is not done justice to in the Dictionary of National Biography.

Ralegh. **Hume.**

Sir Walter Ralegh. The British Dominion of the West. By Martin A. S. Hume. (Builders of Greater Britain. Edited by H. F. Wilson, M.A.) London: T. Fisher Unwin, 1897. Size 8 × 5½, pp. xviii. and 432. *Portrait and Maps. Price 5s. Presented by the Publisher.*

This is a notable biography from the geographical point of view, dealing as it does with a great personality engaged in the first colonizing ventures of England. The maps are mere sketches, and there is no attempt to enrich the text with facsimiles of contemporary documents, but the book is well printed and attractive; it should be valuable for reading in schools, combining as it does geography and history with biography.

Thomson. *Nautical Mag.* **66** (1897): 855–857. ——

The Editor's Album: Captain A. S. Thomson, C.B., R.N.R. *With Portrait.*

GENERAL.

Bibliography of Geography. ——

Bibliographie de 1896. 6e Bibliographie annuelle.—Annales de Géographie. No. 29—6e Année. 15 Septembre 1897. Paris: A. Colin et Cie. Size 10 × 6½, pp. 288.

This selected and annotated bibliography fully maintains the high character of the earlier volumes. In many cases the abstracts of the memoirs noted are so full as to make it unnecessary for any except the specialist student to refer to the originals.

British Empire. *Scottish G. Mag.* **13** (1897): 400–419. ——

Notes on Exploration within British Territory during the last Sixty Years.

A sketch of explorations carried out during the Queen's reign in British territory. The summary is classified according to continents.

Church Missionary Society. ——

Proceedings of the Church Missionary Society for Africa and the East. Ninety-eighth Year, 1896–97. London: Church Missionary House, 1897. Size 8½ × 6, pp. lxxx., 454, and (360). *Maps. Presented by the Church Missionary Society.*

Educational—Methods. *Scottish G. Mag.* **13** (1897): 523–530. **Dodge.**

School Geography in the United States. By Prof. Richard E. Dodge.

An excellent statement of the position of geography as a school-subject in the United States, with copious references to the literature of the subject.

Educational—Methods. ——

Education Department. Special Reports on Educational Subjects, 1896–97. London: Eyre & Spottiswoode, 1897. Size 10 × 6½, pp. iv. and 732. *Maps and Illustrations. Price 3s. 4d. Presented by the Education Department.*

The geographical features of this volume will be referred to in a special note.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000063

مكتبة قطر الوطنية
Qatar National Library

Educational—Textbook. **Redway.**

The Natural Geographies. Natural Elementary Geography. By Jacques W. Redway. New York, etc., American Book Co. [1897]. Size 10½ × 8½, pp. 144. *Maps and Illustrations. Presented by the Publishers.*

In a circular accompanying this volume, high claims are made for originality and utility. It is really a creditable example of an American text-book on the usual plan; the quarto size, excellent small-scale illustrations in the text, clear but somewhat crude coloured maps, also printed in the text, and effective diagrammatic relief maps are none of them new features. The neglect of countries outside the United States is also an established feature in American geographical books. Canada is called a "minor country of North America," and receives utterly inadequate notice even for the most elementary school. The style is often childish, and the points selected for notice are occasionally trivial.

Geographical Progress. *Scottish G. Mag.* **13** (1897): 449–466. **Keltie.**

Address to the Geographical Section of the British Association. [Toronto, 1897.] By J. Scott-Keltie, LL.D.

Geographical Year-book. **Wagner.**

Geographisches Jahrbuch. XX. Band, 1897 . . . herausgegeben von Hermann Wagner. Erste Hälfte. Gotha: Justus Perthes, 1897. Size 9 × 6, pp. 248. *Price 7s. 6d.*

This issue contains Reports on recent progress in Terrestial Magnetism, by Prof. Karl Schering, of Darmstadt; on the geognostic structure of the Earth's surface, by Prof. Franz Toula, of Vienna; on explorations of Africa, Australia, and America, by various writers; on the progress of Oceanography, by Prof. Krummel, of Kiel; and on the literature of the History of Geography since the Middle Ages, by Prof. Ruge, of Dresden. The second division completing the annual volume is announced for early publication.

German Colonial Literature. **Brose.**

Die Deutsche Kolonialliteratur von 1884–1895. Mit einem Anhang: Verzeichniss von Werken, die sich auf fremdländische Kolonien beziehen und in der Bibliothek der Deutschen Kolonialgesellschaft vorhanden sind. Herausgegeben von der Deutschen Kolonialgesellschaft bearbeitet von Maximilian Brose. Berlin, 1897. Size 9½ × 6½, pp. vi. and 158. *Presented by the Deutsche Kolonialgesellschaft.*

A classified catalogue which bears marks of careful compilation, and appears to be very complete.

Missionary Exploration. *B.S.G. Lyon* **14** (1897): 417–453. **Groffier.**

Explorations et travaux géographiques des Missionnaires Catholiques en 1896. Par M. Valérien Groffier.

The exploring journeys of Roman Catholic missionaries are here recounted for Oceania, America, Europe (Iceland), Africa, and Asia.

Mountains—Definition. *Deutsche Rundschau G.* **19** (1897): 347–356, 406–415. **Neuber.**

Was ist ein Gebirge? Von August Neuber.

Nautical Almanac Office. *Nautical Mag.* **66** (1897): 435–446. **Lord.**

The "Nautical Almanac" Office. By W. B. Lord.

A popular description of the Nautical Almanac Office and the routine of its work.

Navigation. **Cooper.**

A New Theory of the Stability of Ships (with Diagrams). By Alfred J. Cooper. London: J. D. Potter, 1897. Size 10 × 6½, pp. 30. *Price 2s.*

North Africa and Arabia. **Rossi.**

G. B. Rossi. Nei paesi d'Islam in Barberia—in Egitto—il Pellegrino d'Islam—el Yemen. Impressioni e Ricordi. Rocca S. Casciano, L. Cappelli, 1897. Size 9½ × 6½, pp. viii. and 240. *Illustrations and Map. Presented by the Author.*

Account of a journey from Tunis into Tripoli, thence to Egypt, followed by an account of the pilgrimage to Mecca, and a visit to Yemen.

Oriental Literature. **Müller.**

The Sacred Books of the East, translated by various Oriental Scholars, and edited by F. Max Müller. Vol. xxxviii. (pp. 508); vol. xlii. (pp. lxxiv. and 716); vol. xlv. (pp. xlii. and 456); vol. xlvi. (pp. x. and 500). Oxford: the Clarendon Press, 1895–97. Size 9 × 6. *Presented by the Secretary of State for India.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000080

مكتبة قطر الوطنية
Qatar National Library

Oriental Studies. **Schlagintweit.**

Die Berechnung der Lehre. Eine Streitschrift zur Berichtigung der buddhistischen Chronologie verfasst im Jahre 1591 von Sureçamatibhadra. Aus dem Tibetischen übersetzt von Emil Schlagintweit. Aus den Abhandlungen der k. bayer. Akademie der Wiss I. Cl. xx. Bd. iii. Abth. München, 1896. Size 11½ × 9, pp. 82. *Presented by D. W. Freshfield, Esq.*

Pacific Ocean.

Deutsche Seewarte. Segelhandbuch für den Stillen Ozean. Mit einem Atlas von 31 Karten herausgegeben von der Direktion. Hamburg: L. Friederichsen & Co., 1897. Size 11 × 8, pp. xii. and 916. *Diagrams. Presented by Dr. Neumayer.*

This large volume is the outcome of the researches of the German Naval Observatory at Hamburg, and embodies the experience of the masters of German merchant vessels cruising in the Pacific. Nearly half is a scientific treatise on the physical geography of the Pacific ocean, taking account of the oceanographical and meteorological researches of all countries; the other half consists of sailing directions for the principal routes frequented by merchant vessels.

NEW MAPS.

By J. COLES, *Map Curator*, R.G.S.

EUROPE.

England and Wales. **Ordnance Survey.**

Publications issued since October 8, 1897.

1-inch—General Maps (revised):—

ENGLAND AND WALES:—8, 14, 17, 24, 25, 37, 55, 340, 341, engraved in outline. 1*s.* each.

6-inch—County Maps (revised):—

ENGLAND AND WALES:—**Hampshire,** 48 N.E., S.E., 49 N.E., 50 N.W., 51 N.E., S.E., 54 N.W., 55 S.W., 56 S.W., S.E., 57 N.E., S.W., S.E., 58 N.W., S.W., S.E., 59 S.E., 60 N.W., S.W., 67 N.W., N.E. **Hertfordshire,** 41 S.E., 45 S.W., 44 S.E. **Middlesex,** 2 S.E., 5 S.E., 6 S.W., 7 N.E., 9 S.E., 14 N.E., S.E., 15 S.W., 19 N.E., 24 S.E., 25 N.W., 16 N.E. **Northumberland,** 77 N.W. **Wiltshire,** 76 N.W., 77 S.W. **London,** 6 N.E.

25-inch—Parish Maps (revised):—

ENGLAND AND WALES:—**Cheshire,** IV. 3, 4, 6; XXVIII. 12; XXIX. 2, 9, 10, 15; XXXVI. 15; XXXVII. 2, 13; XLIV. 1, 5, 9. **Durham,** III. 8, 12, 16; VI. 4; XLI. 12, 15; XLII. 10, 15, 16; XLIII. 13, 15; XLIV. 13, 15; XLV. 3; XLVI. 6, 8, 10, 11, 15, 16; XLVII. 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16; LII. 8; LIII. 1, 2, 3, 6. **Essex,** II. 15; III. 6; V. 12, 14, 15, 16; XII. 1, 5, 6, 9, 13; XIX. 6, 9, 16; XXVI. 1; XXVIII. 3, 4, 7, 11, 15, 16; XXIX. 1, 2, 3, 5, 6, 9, 10, 11, 14; XXXI. 15, 16; XXXVII. 1, 3, 4, 5, 6, 8, 9, 11, 12; XXXVIII. 1, 2, 3, 5, 6, 7, 8, 9, 10, 14, 15, 16; XL. 8, 11, 14; XLVI. 4, 12; XLVII. 5, 6, 7, 8, 9, 10, 11, 13; XLIX. 6, 10; LXXIII. 12, 16; LXXIV. 13; LXXVIII. 14; LXXXII. 2, 3; LXXXIII. 16. **Hampshire,** LXX. 13, 15, 16; LXXI. 11; LXXVI. 9, 10; LXXXVIII. 2, 6, 8, 10, 12; LXXIX. 3, 4, 9, 11, 12; LXXX. 1, 2, 5, 6, 8, 12; LXXXI. 5, 6, 7, 8, 9, 15, 16. **Kent,** II. 11, 14, 15; III. 10, 16; IIIA. 13; IX. 10; XI. 1, 5; XXI. 4, 11; XXII. 1, 3; XXXIII. 3, 4, 5, 6, 7, 8, 9, 12, 16; XLII. 7; XLIII. 1; LIV. 5, 15, 16; LIX. 6; LXIV. 3, 5, 10, 11, 12, 14, 15. **Northumberland,** XXI. 10, 11, 14, 15, 16; XXII. 9, 13, 15; XXIV. 7; XXV. 4, 6, 12, 16; XXVI. 1, 2, 4, 7, 8, 9, 12, 14; XXVII. 1, 2, 3, 5, 6, 7, 8; XXX. 14; XXXI. 3, 7, 10; XXXVIII. 8; XXXIX. 7; XLVI. 4; LXXXVIII. 9; LXXXIX. 15; XCVII. 6. **Surrey,** VI. 12; XIV. 12; XXXVI. 14; XLI. 9; XLII. 12 (XLIV. 16, and XLV. 13). **Sussex,** XIII. 1; XV. 13, 15; XXIV. 16; XXV. 1, 9, 10, 12, 13, 16; XXVI. 1, 2, 3, 6, 11, 12; XXXV. 16; XXXVI. 7, 13; XXXVII. 4; XLVIII. 2, 3, 4, 6, 7, 8, 10, 12, 16; XLIX. 13, 15, 16; L. 2, 10, 13, 15, 16; LI. 1, 4, 5, 10, 13, 16; LXII. 6. 3*s.* each.

(*E. Stanford, Agent.*)

England and Wales. **Bartholomew.**

New Reduced Ordnance Survey of North Northumberland. Scale 1 : 125,000 or 2 stat. miles to an inch. J. Bartholomew & Co., Edinburgh, 1897. *Price 2s. each, mounted on cloth. Presented by the Publishers.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

Greece. **Philip.**

Philip's Special Map of Greece, illustrating the Greco-Turkish War, and the Cretan Question, with inset maps of the seat of war (on an enlarged scale), the Balkan peninsula, and the Mediterranean sea. Scale 1 : 1,330,560 or 21 stat. miles to an inch. By G. Philip & Son, London, 1897. *Price* 1*s. each. Presented by the Publisher.*

Historical Geography. **Poole.**

Historical Atlas of Modern Europe from the Decline of the Roman Empire; comprising also maps of parts of Asia and of the New World, connected with European History. Edited by Reginald Lane Poole, M.A., PH.D. Lecturer in Diplomatic in the University of Oxford. Part xiii. Oxford: The Clarendon Press; London, Edinburgh and Glasgow: Henry Frowde, M.A.; Edinburgh: W. & A. K. Johnston. 1897. *Price* 3*s.* 6*d. Presented by the Clarendon Press.*

Part xiii. contains: No. 5, Europe at the time of Otto the Great, 962, by the editor; No. 35, Germany under the House of Höhenstaufen, 1138–1254, by the editor; No. 70, The House of Savoy in Italy, by Miss K. Dorothea Ewart. Each of the maps is accompanied by explanatory letterpress by the authors.

Switzerland. **Ravenstein.**

Karte der Schweizer Alpen. Gezeichnet von Hans Ravenstein. Scale 1 : 253,440 or 4 stat. miles to an inch. 2 sheets. L. Ravenstein, Frankfurt, 1897. *Price* 6 *marks.*

This may be regarded as a companion map to Ravenstein's "Karte der Ostalpen," the scale and style of work being precisely similar. It is orographically coloured in fourteen shades, at intervals of 250 metres. In addition to the above, it shows all means of communication, and is an excellent general map for the use of tourists and others.

ASIA.

Indian Government Surveys. **Surveyor-General's Office, Calcutta.**

Indian Atlas, 4 miles to an inch. Sheets: No. 68, districts Etah, Farukhabad, Mainpuri, Etawah, Cawnpore, etc.; No. 80, parts of districts Madura, Tanjore, and Ramnad (Madras Presidency), and Tondiman (Native State); No. 112, parts of districts Darbhanga, Muzaffarpur, Patna, Gaya, Hazaribagh, Monghyr, Bhagalpur, Sonthal Parganas, Dinajpur, Malda, Murshidabad, and Purnea (Bengal); No. 113, parts of districts Birbhum, Burdwan, Bhagalpur, etc. (Bengal). Quarter-Sheets: 3 S.E., part of district Karachi (Sind) and of Cutch State (Bombay Presidency); 3 N.W., part of district Karachi (Sind); 13 N.W., parts of districts Okhamandal, Halar, and Barda (Kathiawar, Bombay Presidency); 22 S.W., parts of Kathiawar, Jhalavad, and district Ahmedabad (Bombay Presidency); 2 N.E., parts of districts Karachi and Hyderabad (Sind, Bombay Presidency); 1*a* S.E., parts of districts Shikarpur and Upper Sind frontier (Sind, Bombay Presidency); 22 S.E., parts of districts Ahmedabad, Broach, Kaira, and Panch Mahals of Jhalawad (Kathiawar), and the Native States of Baroda, Cambay, Mahi Kanta, and Rewa Kanta (Bombay Presidency); 27*a* S.E., part of Baltishan or Little Tibet; 36 S.W., parts of districts Panch Mahals and Kaira, and Native States of Baroda, etc. (Bombay Presidency), Indore, Jhabua, Rajpur Ali, and Jobat (Central India Agency); 51 N.E., parts of Native States of Gwalior (Central India Agency), Kerowlee, and Dholpur (Rajputana Agency); 51 S.W., parts of Native States of Gwalior (Central India Agency), Boondee, Tonk, Jeypore, Kotah, and Jhallowar (Rajputana Agency); 53 N.E., parts of Gwalior (Sindhia) and Bhopal Native States; 69 N.E., parts of districts Hamirpur, Fatchpur, Unao, Jalaun, Banda, Etawah, Cawnpore, and Rae Bareli; 78 S.W., parts of districts Salem, North Arcot, and South Arcot (Madras Presidency), and of Kolar (Mysore); 126 N.W., parts of districts Dacca, Mymensingh, Tippera, Sylhet, and Hill Tippera; 127 N.E., parts of districts Noakhali, Chittagong, and South Lushai Hills (Bengal); 130 N.E., parts of districts Sibsagar and Naga Hills, and of Naga tribes (Assam); 131 S.W., portions of districts Cachar and North Lushai Hills, and of Manipur Native State (Assam).—Railway Map of India, railways brought up to March 31, 1897, 1 inch to 48 miles, 4 sheets.—India, showing railways, corrected up to March 31, 1897. Sheet No. 29 of Gujaret (2nd edit.), parts of the Kaira and Panch Mahals districts, of the Gáikwár's territory, and of the Rewa Kántha States, 1 inch to a mile, Season 1876–77.—Bombay Survey, 1 inch to a mile. No. 209, parts of district Ratnagiri and Savantvadi States, Season 1893-94; No. 246, district North Kanara, Season 1893-94; No. 337, parts of districts Dharwar (Bombay), Shimoga, and Chitaldroog (Mysore), Seasons 1882–88 and 1893–94; No. 391, district Mymensingh, portions of Tippera

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

and Sylhet (Assam), Seasons 1855-56 and 1860-62.—Madras Survey, 1 inch to a mile. No. 24 (2nd edit.), parts of districts Shimoga and Chitaldroog (Mysore) and Dharwar (Bombay), Seasons 1882-88 and 1893-94.—Lower Burma Survey, 1 inch to a mile. No. 184, districts Henzada and Bassein, Seasons 1882-85.—Upper Burma Survey, 1 inch to a mile. No. 126, district Minbu, Season 1891-92.—Indus Riverain Survey, 1 inch to a mile. Nos. 33, 18 and 35, 34, 35, 36 (skeletons), district Karachi, Season 1894-95; No. 51 (skeleton), districts Karachi and Hyderabad, Season 1894-95.—District Murshidabad, Lower Provinces, Bengal, 4 miles to an inch, with corrections to February, 1897.—District Garhwal, Seasons 1864-69 and 1872-75, 1 inch to 2 miles.—Punjab, 80 miles to an inch, additions to 1896.—Chota Nagpur Division, 1 inch to 8 miles, 1897.—The North-Western Provinces and Oudh, 16 miles to an inch, 1897.—District Gurdaspur, Punjab, 1 inch to 8 miles, 1897.—District Chanda, 1 inch to 16 miles, Central Provinces, 1897.—District Rawalpindi, Punjab, 1 inch to 8 miles, 1897.—District Gujranwala, Punjab, 1 inch to 8 miles, 1897.—District Darbhanga, Bengal, 1 inch to 8 miles.—District Jalpaiguri, Bengal, 1 inch to 8 miles, 1890.—District Rangpur, Bengal, 1 inch to 8 miles, 1891.—District Saugor, Central Provinces, 1897.—District Jhang, Punjab, 1 inch to 8 miles, 1897.—District Lohardaga, Bengal, 16 miles to an inch, 1894.—District Wardha, Central Provinces, 8 miles to an inch, 1897.—District Saran, Bengal, 8 miles to an inch, 1891.—District of Mandla, 1 inch to 8 miles, 1897.—District Sonthal Parganas, Bengal, 10 miles to an inch, 1891.—North-East Frontier, 4 miles to an inch, country round Myilkyiana (Upper Burma), parts of sheets No. 23 N.W. and N.E.—Map of Wazirstan, 4 miles to an inch, 1897.—Bajaur and adjacent countries, 4 miles to an inch, 1897.—Calcutta and surrounding country (2nd edit.), 1 mile to an inch, 1897.—Index to the Standard Sheets of the Central Provinces, with additions and corrections to 1897.—Index to the Standard Sheets of Bombay Presidency, with additions and corrections up to 1897.—Index to the Standard Sheets of Central India and Rajputana, sheets 1 and 2, with additions and corrections up to 1897.—Conventional signs to be used on topographical maps with additions and corrections to 1897. *Presented by H. M. Secretary of State for India, through the India Office.*

Manchuria. **Russian Ministry of Finance.**

Russian Map of Manchuria. Scale 1 : 3,360,000 or 53·1 stat. miles to an inch. Russian Ministry of Finance, St. Petersburg, 1897.

This map shows the various proposed routes for the extension of the Trans-Siberian railway towards the southern portion of Manchuria. The lettering is in Russian character.

North-West Frontier of India. **Philip.**

Philip's Large-Scale Map of the North-Western Frontier, with a map showing the Overland Routes to India, and a Military Map of the Indian Empire. Scale 1 : 4,000,000 or 63 stat. miles to an inch. G. Philip & Son, London, 1897. *Price* 1*s. each. Presented by the Publisher.*

Persia. **Stahl.**

Geologische-Karte des nördlichen Persien. Nach Originalaufnahmen von A. F. Stahl. Scale 1 : 840,000 or 14·7 stat. miles to an inch. *Petermanns Geographische Mitteilungen*, Ergänzungsheft, No. 122, Blatt 1, 2, 3, 4. Gotha : Justus Perthes, 1897. *Presented by the Publisher.*

AFRICA.

Africa. **Stanford.**

Large-scale map of the Nile from Dongola to Khartum, and of the Desert Route from Suakin to Berber. Scale 1 : 1,140,480 or 18 stat. miles to an inch. By E. Stanford. Stanford's Geographical Establishment, London, 1897. *Presented by the Publisher.*

Algeria. **Service Géographique de l'Armée, Paris.**

Carte d'Algerie. Scale 1 : 50,000 or 0·78 stat. mile to an inch. Sheets: 109, Sidi Madjour; 111, Souagui. Dressé, heliogravé et publié par le Service géographique de l'Armée, Paris. *Price* 1·50 *fr. each sheet.*

Egypt. **Philip.**

Philip's New Map of the Nile Valley and the Approaches to Khartum. Scale 1 : 5,677,056 or 89·6 stat. miles to an inch. G. Philip & Son, London, 1897. *Price* 1*s. each. Presented by the Publisher.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005e

مكتبة قطر الوطنية
Qatar National Library

Egypt. **Bartholomew.**

Bartholomew's Tourist's Map of Egypt and the Lower Nile. Scale 1 : 1,000,000 or 15·6 stat. miles to an inch. J. Bartholomew & Co., Edinburgh, 1897. *Price 3s. each, mounted on cloth. Presented by the Publishers.*

Transvaal. **Hatch.**

A Geological Map of the Southern Transvaal. By F. H. Hatch, PH.D., F.G.S. Scale 1 : 240,000 or 3·75 stat. miles to an inch. 1897. Edward Stanford, London. *Presented by the Publisher.*

This map is geologically coloured, and is furnished with copious explanatory notes of reference.

Transvaal. **Hatch.**

Map of the Transvaal, showing the physical features and political divisions. By F. H. Hatch, PH.D., F.G.S. Scale 1 : 1,570,000 or 24·7 stat. miles to an inch. 1897. Edward Stanford, London. *Presented by the Publisher.*

West Africa. **Spicq.**

Carte de la Boucle du Niger dressée par le Lieutenant Spicq, de l'infanterie de marine ayant pour base la Carte de M. le Gouverneur Binger et les travaux récents du Capitaine Marchand complétée et mise à jour. Scale 1 : 1,500,000 or 23·5 stat. miles to an inch. Service Géographique des Colonies. Paris, 1897. Maison Andriveau-Goujon. Henry Barrère, Editeur-Géographe.

This map includes all the country between the Niger and the West Coast, and is based on the most recent surveys. The routes followed by numerous explorers, as well as those reported by the natives, are shown. The boundaries up to the date of publication are clearly defined, but in some cases they already require revision. At the present time, owing to disputes as to what nation certain portions of the territory belong, this cannot fail to be an interesting map.

AMERICA.

British North America. **Stanford.**

Stanford's Map showing the position of the Yukon goldfields. Scale 1 : 5,094,144 or 80·4 stat. miles to an inch. E. Stanford, London, 1897. *Presented by the Publisher.*

Peru. **Viellerobe.**

Mapa del Peru. A. F. J. M. Viellerobe. Scale 1 : 2,908,224 or 45·9 stat. miles to an inch. Lima, 1896.

This map, which has been published under the authority of the Government, will be useful for purposes of general reference. All railways and lines of submarine telegraph cables are laid down, and the relative importance of towns is shown by symbols.

PHOTOGRAPHS.

Baluchistan. **Bremner.**

Six photographs of Quetta and surrounding country. Taken from the fort, by F. Bremner, Esq. *Presented by G. P. Tate, Esq.*

These photographs, which have been taken by Mr. F. Bremner, show views of Quetta and the scenery in its vicinity. Four of them form a connected series of views looking towards the east, the remaining two are consecutive pictures looking towards the west. The spot from which they were taken is a commanding position in the fort, and the time of year was the early part of the winter.

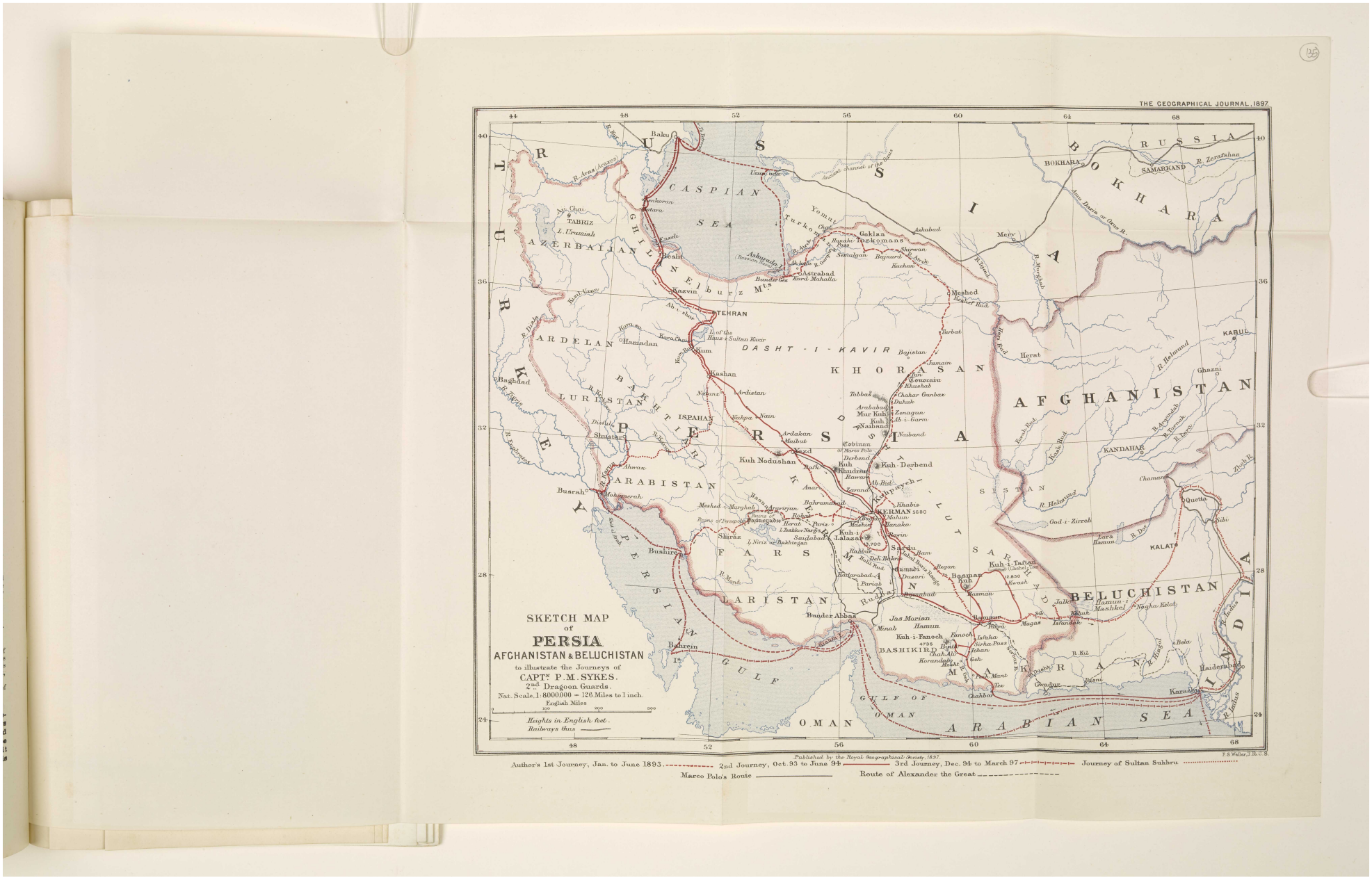
The photographs are remarkably good specimens, and convey a very clear idea of the station and its environment.

N.B.—It would greatly add to the value of the collection of Photographs which has been established in the Map Room, if all the Fellows of the Society who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they will be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

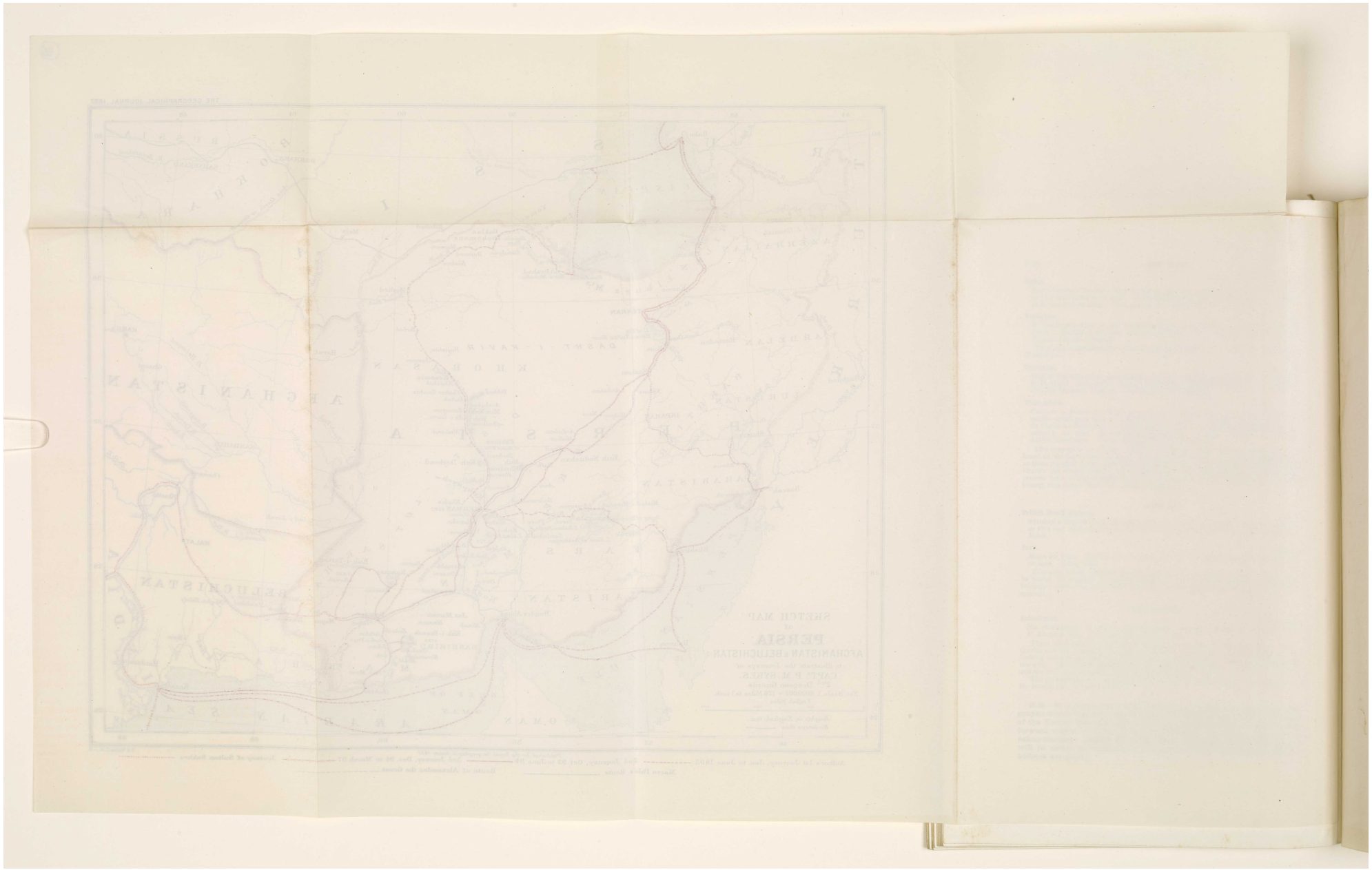
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000004

مكتبة قطر الوطنية
Qatar National Library

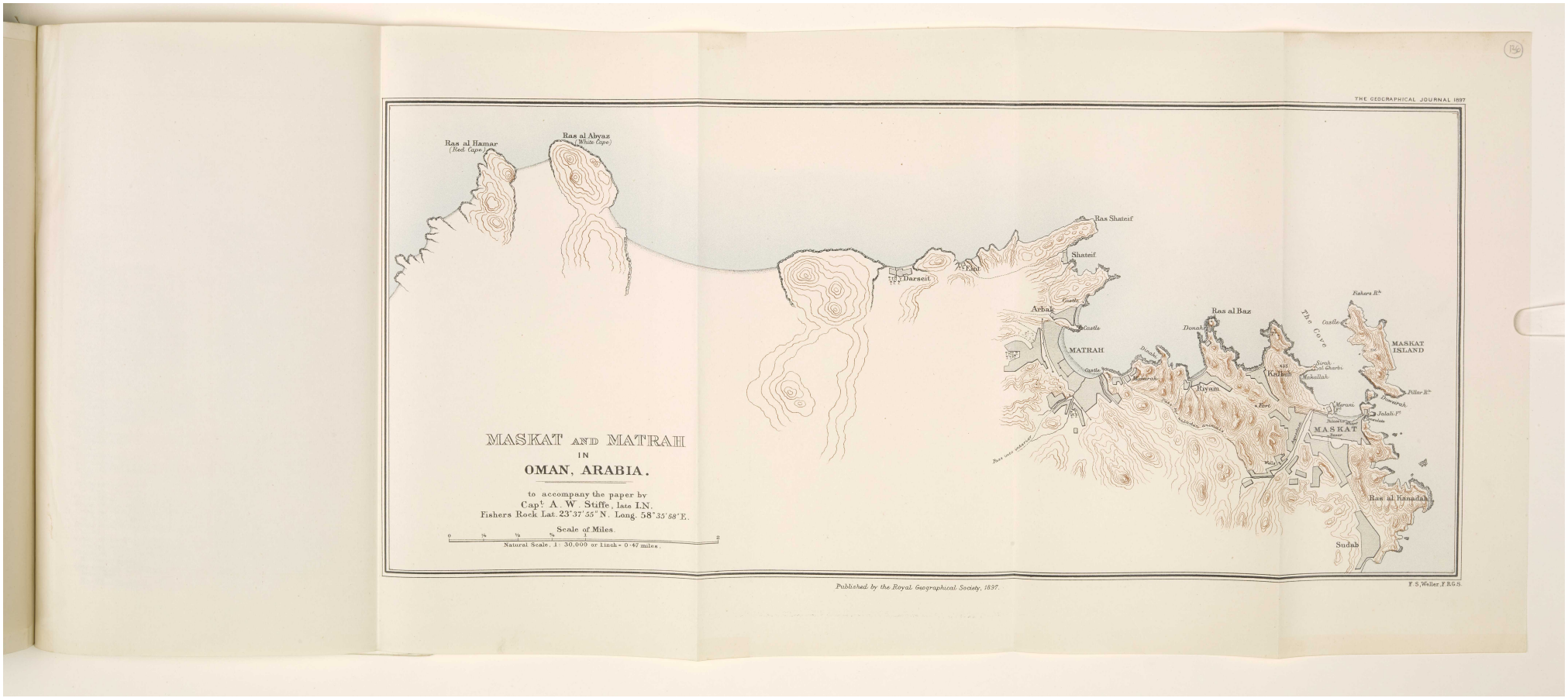
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000077

مكتبة قطر الوطنية
Qatar National Library

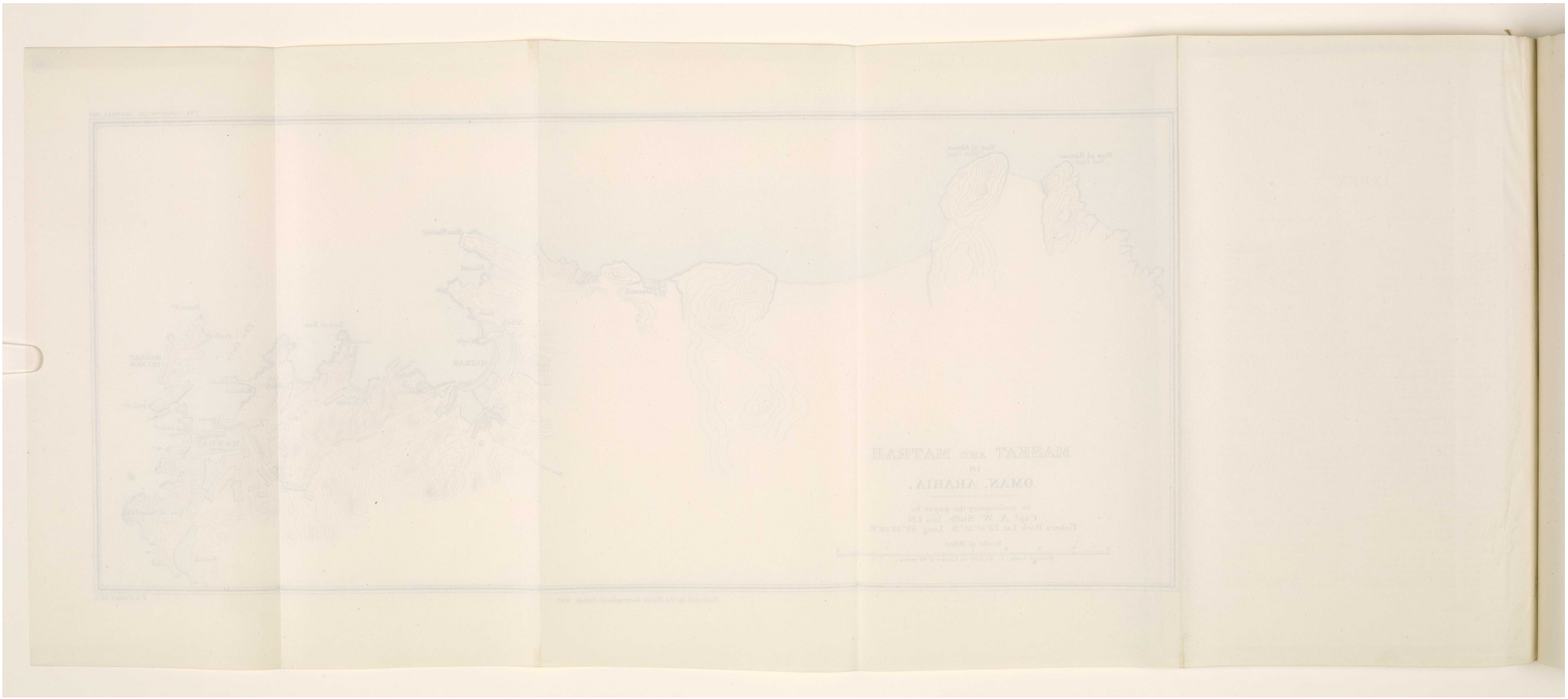
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

INDEX.

* Denotes Articles and Papers. † New Publications.

A.

Abbate Pacha, Dr. O., Dongola et la Nubie, 551 †
Abingdon, rise of, 526
Abyssinia—
L'Éthiopie, par Dr. Rouire, 551 †
Mission française en Abyssinie, par S. Vignéras, 456 †
Mon voyage en Abyssinie, par S. Kyrillos Macaire, 551 †
Voyages en Abyssinie, par V. Buchs, 456 †
Aconcagua, Mr. E. A. Fitzgerald's Expedition to, 97, 469, 567
Address to Her Majesty the Queen from the R.G.S., 91, 206; President's Opening, Nov. 8, 1897..565; to the Geographical Section of the British Association, by J. Scott Keltie, 656 †
Aden—Bombay and Zanzibar, cable interruptions, 274, 275
Admiralty Charts, 127, 462, 562
Admiralty list of oceanic depths, etc., 544
Adriatic—
Temperatura della superficie del Mare Adriatico, del Dr. A. Gavazzi, 554 †
Aero-physical Observatory, Equipment of an, by A. McAdie, 233 †
Afghanistan—
Southern Borderlands of, by Captain McMahon, 227 †
Africa(n)—
Acclimatization in, 315
Africa in 1897, by R. N. Cust, 649 †
Afrique Équatoriale, par Dr. A. Poskin, 649 †
Antropologia della Stirpe Camitica, by G. Sergi, 178, 552 †
Arrow-poison in, Antidote to, 639
British Central, Sir H. H. Johnston's book on, 339 †; note on, 410; trade of, Mr. Sharp's report, 441
British South, Trigonometrical Survey of, 441
Central Africa since the Death of Livingstone, by Rev. W. G. Blaikie, 649 †
Central, M. Foa's expedition in, 539; Review of his books, 177
Côte Orientale d'Afrique, par M. F. Benoit, 649 †
Consular Reports on, 440
Deutsch-Ost-Afrika, Eisenbahnprojekte in, von L. Bernhard, 229 †; Landesaufnahme von, von Maercker, 229 †
Deutsch Südwestafrika, Wissenschaftliche Aufgaben in, von Dr. K. Dove, 229 †; Vorläufigen Karte des Konzessions-Gebietes des, von Dr. Hartmann, 229 †
Dwarfs of: Sui cosidetti "popoli nani" dell' Africa, by O. Lenz, 228 †
East, Herr Kaiser's journey in, 540; cable interruptions on coast of, 274; German-Portuguese Boundary in, 637
Eingeborenen Afrikas, von A. Nachtigal, 649 †
Expeditions: M. Foa in Nyasa region, 212; Dr. Esser on Lower Kunene, 212; Dr. Passarge in Ngami region, 212; French, various, 213, 539; Expéditions Anglaises en Afrique, by Lieut.-Colonel Septans, 120 †
French explorations in, 213, 539
Future of, Lecture by Dr. C. Peters, 228 †
Geographical progress in, 314
Geographical exploration in, progress of, 566
Geographische Ortsbestimmungen, von Dr. L. Ambronn, 121 †
German East, Herr Lieder's journey in, 326; Herr Schillings' and Lieut. Werther's journeys in, 327; Lieut. Engelhardt's journey in, 328; map of, by Kiepert and Moisel, 347, 561
German South-West, Dr. Esser's exploration of, 212; Flussthälor des südwestlichen Gross-Namalandes, von F. Gessert, 649 †
Hamitic Race in, Review of Sergi's book on, 178
Literature, Recent, by E. Heawood, 172
Mancala, the National Game of, by S. Culin, 649 †
Maps: Marangu und Itawa, Neue Reiserouten in, von Dr. Hassenstein, 561; Deutsch Ost-Afrika von Kiepert und Moisel, 347, 561; Shire Highlands, by O. L. Beringer, 347
Mbampa-Bai am Nyassa-See, Reise von, von Herr Lieder, 121 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

Africa(n)—*continued.*
Mission Toutée, Résultats géographiques de la, 229 †
New Africa, The, by A. Schulz and A. Hammar, 175, 229 †
North-West, Documents pour servir à l'étude du Nord-Ouest Africain, par A. Bernard, 552 †
Nyasa and Tanganyika Districts of, Physiographical Features, by J. Moore, 289 *
Photographs of the Italian Possessions (Eritrea), by Dr. Schweinfurth, 348
South, Neues über Karl Mauchs Forschungen in Südostafrika, von Dr. Schlichter, 552 †; A Visit to, by Lieut. Levita, 552 †; En Afrique australe et à Madagascar, par H. Gindre, 552 †; Railways in, 328; Dr. Passarge's Expedition in, 212
Uchungwe Mountains in, Herr von Bruchhausen on, 638
West, boundary delimitation in, 237; Franco-German Boundary in, 635
Agnano, Lago, mineral springs, 434
Aguilar, Dr. R., on the discovery of the Manu river, Peru, 443
Aguirre, E., Notas geológicas sobre la Sierra de la Tinta, 651 †
Ahwaz-Burujird road, Persia, 593, 597
Aide-memoire to a Comparison of Certain Geographical Distances, Captain Cleeve on, 334
Aims and Practice of Teaching, by Fr. Spencer, 345 †
Ainu Words as illustrative of Customs, etc., by Rev. J. Batchelor, 455 †
Air and Life, by H. de Varigny, 232 †
Air of Towns, The, by Dr. J. B. Cohen, 232 †
Aire river, source of, 535
Aisen, River, Chili, Exploration of the, 329; expedicion esploradora del, por Dr. J. Steffen, 651 †
Ak Ata Bai tribe of Turkomans, 571, 575 *note*
Akpara, upper Niger, 352
Alaska—
Beringsstrasse, H. de Windts Reisen an der, 122 †
Geodetic Positions in, by C. A. Schott, 230 †
Gletscherbai in, von Dr. G. Greim, 122 †
Klondike Region, History and Literature of the, 631
Magnetic Declination in, by C.A. Schott, 230 †
Albania and Epirus—
Botanische Original-Karte von Mittelalbanien u. Epirus, von Dr. Baldacci, 323, 346 †
Alboquerque, A., voyages to coast of Omán, 615–617
Albuquerque, A edade de Affonso de, by J. J. de Brito Rebello, 234 †
Albuquerque, New Mexico, Prof. Libbey's expedition to, 214
Alburima or Chiriqui bay, 72
Alcock, Sir Rutherford, Death of, 565; Obituary of, 643
Alexandria, climate of, 306
Algeria—
L'extrême-Sud algérien et le Touat, par Jean Hess, 228 †
Maps: Carte de l'Algérie (Service géographique de l'armée), 659
Algeria and Morocco—
Documents pour servir à l'étude du Nord-Ouest Africain, par A. Bernard, 552 †
Zone frontière de l'Algérie et du Maroc, par M. Vidal de la Blache, 552 †
Alkallia, altitude, etc., of, 393, 397
Allen, P. R., The Periyar Tunnel, 339 †
Allum Pot, Yorkshire, 509
Alps—
Glaciers des, par Profs. Forel et Du Pasquier. 546 †
Höchsten Teile der Seealpen, etc., von Dr. F. Mader, 646 †
Hydrographie souterraine . . . du Dévoluy, par M. Martel, 225 †
Amazon—
Cable Laying on the, by A. Siemens, 122 †, 542
Navigabilité de, par M. Carbajal, 341 †
Nel paese delle Amazzoni, by Prof. V. Grossi, 651 †
Valleys of the, etc., by C. De Kalb, 651 †
Amábile, V. M., Carte générale de l'Île de Cuba, 126
Ambaka, Chemin de Fer d', 229 †
Ambon in 1647, door J. E. Heeres, 550 †
Ambronn, Dr., Geographische Ortsbestimmungen in Ostafrika, 121 †
Amdrup, Lieut., expedition to Greenland, 218
America—
Canals, Central America, Diplomacy of the United States, by J. G. Whiteley, 652 †
Central: cable-interruptions on west coast of, 263; east coast, 267; Nordliche Mittel-Amerika, etc., von Dr. C. Sapper, 230 †; Regenfall im Mittelamerika, von Dr. K. Sapper, 214, 457 †; map, 347
Discovery of, by John Cabot, etc., by S. E. Dawson, 456 †
Expedition to Patagonia, 640
Fishes of, by D. S. Jordan and B. W. Evermann, 121 †
Geographical progress in, 316, 317
Limnological investigations in, 322
Name of, earliest use, 328
North, Scientific Expeditions in, 214
South: orography of, 402; Ansichten aus Südamerika, von J. Habel, 122 †, 543; America austral, Cartas escriptas, por A. L. Mendes, 122 †
Tropical, Economic Development in, Mr. Nicholas on, 122 †, 542
Amur Geographical Society, The, "Memoirs" of, 211

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000016

مكتبة قطر الوطنية
Qatar National Library

Ancient Trading Centres of the Persian Gulf, by Captain A. W. Stiffe, 608 *
Anderson, O. P., Sectional Map of Washington, 126
Anderson, Sir J., on cable fractures, 275
Andes, Mr. Fitzgerald's Explorations in the, 96; Jean Habel's book on the, note on, 543
Streifzüge in den bolivianischen Anden, von E. Mosbach, 651 †
Andrée, Herr, Balloon voyage, 218; Andreé Search Expedition, Norwegian, 640
Andrée, R., Das zweiherrige Dorf Woltorf 547 †
Anglo-Australasian Antarctic Conference, 374
Anglo-Chinese agreement of June, 1897.. 208
Anglo-French Boundary Commission in Niger Regions, 238
Angot, Dr., on the rainfall of Western Europe, 634
Anniversary Meeting of the R.G.S., 1897..107 *
Antarctic—
Anglo-Australasian Conference, 374
Antarctica, by H. O. Forbes, 125 †
Arctic and Antarctic, by A. Trevor-Battye, 232 †
Aufgabe und Stand der Südpolarforschung, von R. Mewes, 123 †
Belgian Expedition under Lieut. de Gerlache, 331, 641
Geographischen Erforschung der Südpolarregion, von M. Lindeman, 123 †, 231 †
Géologie des régions antarctiques, par H. Arçtowski, 231 †, 341 †
Promotion of Further Discovery in the Arctic and, by Sir C. R. Markham, 124 †
Research, progress of, 319, 567
Südpol, Der, von Dr. G. Wegener, 342 †
Treibeis in Süden, etc., von L. Dinklage, 342 †
Anthills of Cape York Peninsula, by R. L. Jack, 231 †
Anthropogeography—
Éducation des indigènes, par P. Vidal de la Blache, 234 †
Geographische Methode in der Ethnographie, von Fr. Ratzel, 234 †
Influence of Geographic Environment, by Cosmos Mindeleff, 234 †
Of the Upper Nile Region, M. Martonne on, 95
Anthropology of Brittany, by P. Topinard, 546 †
Anticosti, par M. Le Vasseur, 552 †
Antincë, Les Fouilles d', par A. Gayet, 649 †
Apennines—
Development of the Peninsula of the, Dr. Th. Fischer on, 633
Divisione tra l'Appennino Settentrionale e il Centrale, del Prof. Roggero, 451 †
Apulia—
L'orografia delle Puglie, etc., del Prof. de Giorgi, 451 †
Araber, Die ältere geographische Litteratur der, von P. Schwarz, 234 †
Arabia, Southern, Herr Hirsch's book on, note on, 438
Arch cave or Waterfall cave, Ireland, 504
Archiagnano group of volcanoes, 416, 425, 426
Arco di Meridiano, Sulle misure di, dell O. Zanotti-Bianco, 459 †
Arco Felice, Lake Avernus, 420, 421
Arctic—
Arctic and Antarctic, by A. Trevor-Battye, 232 †
Arctic and Antarctic Regions, Promotion of Further Discovery in, by Sir C. R. Markham, 124 †
Durch das Polargebiet, von Dr. Nansen, 458 †
Eisgrenze zwischen Grönland-Island, Spitzbergen, 653 †
Expeditions: Andrée's, 218; Conway's, 219; Jackson's, 445; Peary's, 218, 445, 544
Exploration, progress of, 567, 568
Geographical progress in, 319
Glaciers dans les Régions Arctiques et Boréales, par Ch. Rabot, 652 †
Light and Plant-growth in the, Prof. Wiesner's researches on, 331
Maps: Arctic Regions, comprising recent explorations of Peary, Nansen, and Jackson, by A. Heilprin, 125
Nansen, Le voyage de, par M. Zimmerman, 232 †
Norwegian Arctic Expedition, Some Results of the, by Dr. F. Nansen, 123 †, 342 †
Norwegische Polarexpedition, von A. Supan, 653 †
Ocean, Warm Undercurrent in the, Note on, by B. Leigh Smith, 554 †
Problems of Nature, by G. Jaeger, translated by H. G. Schlichter, 123 †
Seas, Mr. Pike's cruise in the, 543
Simon, Henry, Occasional Letter, Special Nansen Number, 232 †
Some Problems of Arctic Geology, by Dr. J. W. Geogery, 652 †
Swedish Expedition to the, under Dr. Nathorst, 641
Arçtowski, H., Bibliografii . . . Polskich, 226 †; Genealogy of the Sciences, 344 †; Intérêt qu'offre poux la géologie l'exploration des régions antarctiques, 231 †, 341 †
Ardaillon, E., Répartition des chrétiens et des musulmans dans l'île Crète, 225 †
Arej, tombs at the, 607
Argentine Andes, Jean Habel's book on the, note on, 543
Argentine boundaries, 215
Argyll, Duke of, remarks at the Antarctic Conference, 377

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000098

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Arica-Mollendo, cable interruptions, 265, 266
Arkö, borings for fresh water at, 468
Armentia, F. N., Limites de Bolivia con el Perú, 651 †
Arning, W., Die Wahehe, 121 †
Arrhenius, S., Einfluss des atmosphärischen Kohlensäuregehalts, 653 †
Arrow-poison of Africa, Antidote to, 639
Artesian beds, 144
Aschaffenburg, Ueber ein typisches Lössprofil bei, von G. Klemm, 338 †
Ashe, Lieut., observations for longitude in Canada, 624
Asia—
Asia Centrale, l'exploration Roborovski, 648 †
Expéditions Anglaises en Asie, by Lieut.-Colonel Septans, 119 †
Geographical progress in, 312, 313, 566
Hedin, Dr. Sven, journeys in, 92, 209; Rückkehr von seiner Forschungsreise, von R. Palleske, 339 †
Histoire de l'Asie, Turcs et Mongols, etc., par L. Cahun, 548 †
Routes traversed by European and Asiatic Explorers, etc., Sketch-map, 461
South-east coasts, cable interruptions, 276
Western, A Ride through, by C. Bigham, 228 †
Asia Minor rediscovered, 339 †
Aspiazu, Dr. Don Agustin, obituary of, 642
Assam—
River-borne trade of, Report, 228 †, 648 †
Sanitary Report, by Colonel A. Stephen, 648 †
Tea Culture in, Report, 648 †
Astrabad, Persia, 570
Astrakhan, population of, 199
Astroni, cone and crater of, 425; Astroni-Cigliano ridge, 427
Astronomy—
Tables used in the Nautical Almanac Office, etc., 232 †
Athabasca Lake and Churchill River, Report on Country between, by J. Burr Tyrrell and D. B. Dowling, 121 †
Atlantic Currents, charts of, note on, 100
Atlantic Ocean—
Atlantique Nord; vents, etc., by A. Hautreux, 654 †
Cable fractures in the, 261
Current Charts of the, 128
Pilot Charts of the, 128, 464, 563
Atlases—
Atlas à échelle uniforme proposé, par Guyon et Reclus, 459 †
Atlas Universel de Géographie, par MM. de Saint-Martin et Schrader, 126
Historical Atlas of Modern Europe, by R. L. Poole, 126, 235, 559, 658
Our Empire Atlas, by W. & A. K. Johnston, 235
Atmosphärischen Kohlensäuregehalts auf die Temperatur, von S. Arrhenius, 653 †
Atmosphere in Relation to Human Life and Health, by F. A. R. Russell, 232 †
Atmospheric Actinometry, etc., by E. Duclaux, 233 †, 653 †
Atrek river, Persia, 572, 577
Atteridge, Captain A. H., The Dongola Expedition of 1896..340 †
Auerbach, M., Le régime de l'Oder, 451 †
Australasia—
Geographischen Forschungen und Reisen, von H. Greffrath, 652 †
Geological Society of, Inaugural Address by Jas. Stirling, 231 †
Im australischen Busch und an den Küsten des Korallenmeeres, von R. Semon, 122 †, 217
Seven Colonies of, by T. A. Coghlan, 341 †
Australia(n)—
Alps or Snowy Mountains, by R. Helms, 231 †
Australie, L', par H. Bircher, 553 †
Calvert Expedition, funeral of the lost members of the, 444
Colonies, Growth and Progress, by W. Harper, 231 †
Discovery of the Eastern Coast of New Holland, Notes on, by A. C. Macdonald, 652 †
Expeditions: Mr. Fletcher's, 216; Mr. Harslett's, 216; Mr. Hübbe's, 216
Geographical progress in, 318
Horn Expedition to, 51
Market Fishes, etc., of, By W. Saville-Kent, 341 †
Types of Australian Weather, by H. A. Hunt, 123 †
Year-Book for 1897, by Hon. El. Greville, 341 †
Austria—
Věstnik Král České Společnosti Náuk, by Dr. J. Frejlach, 646 †
Austrian Alps—
Niederen Tauern, Orometrisches aus den, von F. Schönberger, 546 †
Wiener Schneeberg, Bahn auf den, von F. Umlauft, 546 †
Avernus group of mountains, 416, 419; Lake, 420, 433
Aymara Indians, 82
Aymonier, E., Le Cambodge et ses monuments, 549 †

B.

Baasch, Dr. E., Die Anfänge des modernen Verkehrs Hamburgs mit Vorderindien u. Ostasien, 234 †
Bacoli, Italy, 417
Baddeley, M. J. B., Thorough Guide Series, Yorkshire, 453 †; Ireland, 454 †
Baden-Powell, B. H., A Study of the Dakhan Villages, 119 †
Baden-Powell, Colonel, The Matabele Campaign, 1896..340 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009f

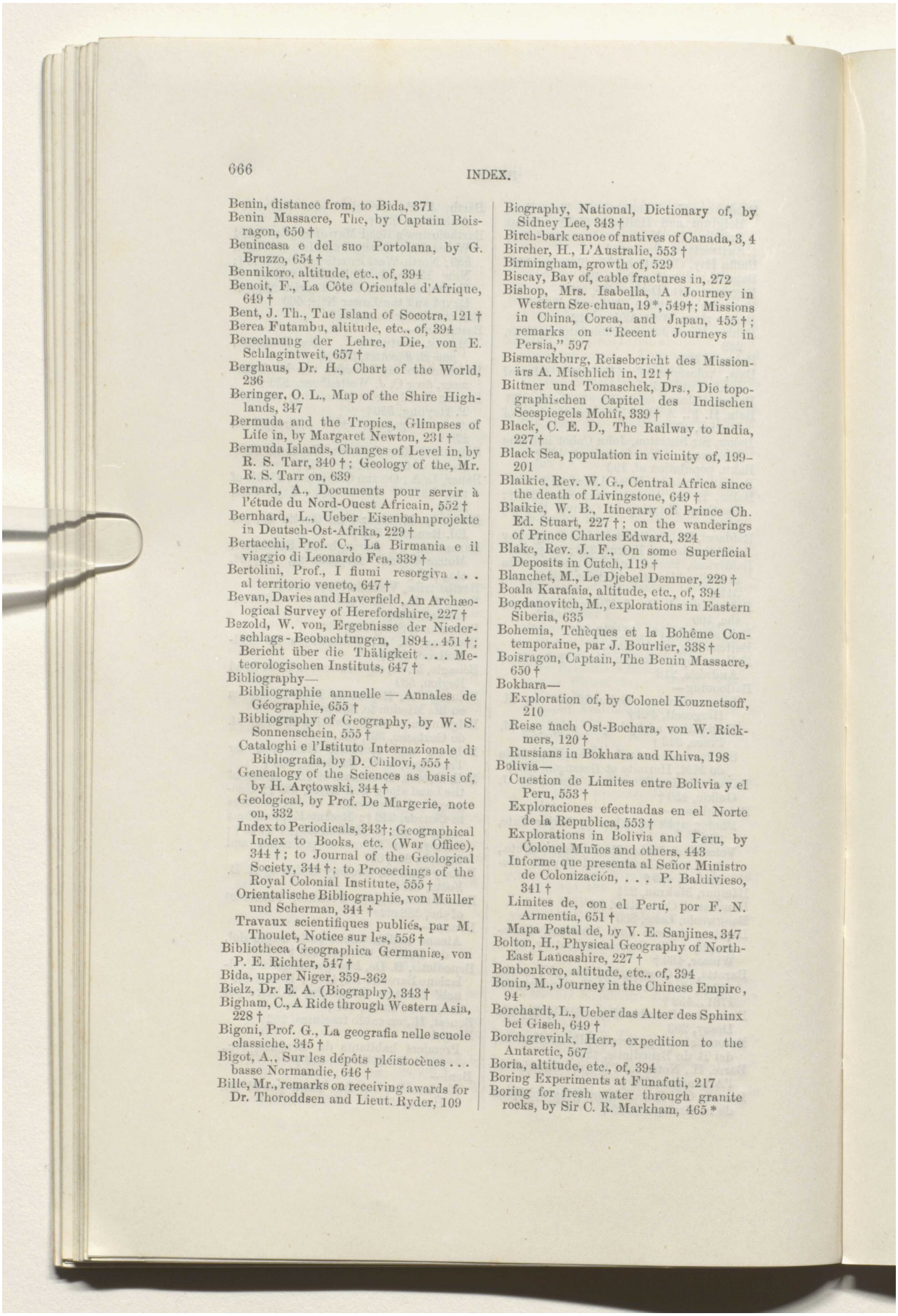
مكتبة قطر الوطنية
Qatar National Library

Baedeker, K., Handbook for Travellers, Belgium and Holland, 338 †; Great Britain, 454; Northern Germany, 118 †; Switzerland, etc., 453 †
Baffin Bay, Climate in, Mr. Tarr on, 442
Bagnoli, mineral springs, 434
Bagshaw cave, Derbyshire, 508
Baguales mountains, Patagonia, 405
Bagwe river, West Africa, 242
Bahia—Rio de Janeiro, cable interruptions, 268
Bahrein, 592
Baia, volcanoes of, 415, 419; mineral springs at, 433
Bailey, Colonel, on forestry in India, 473
Bain, H. F., A Sketch of the Geology of Mexico, 456 †
Baker, Sir Sherston, John Cabot and the Discovery of Newfoundland, 460 †
Baku, population of, 199
Ba Kubabe tribe, West Africa, 212
Balch, E. S., Ascents near Saas, 226 †; Ice-Cave Hunting in Central Europe, 546 †
Baldacci, Dr., On the Botanical Geography of Albania and Epirus, 323; map, 346
Baldivieso, Pastor, Informe que presenta al Señor Ministro de Colonización, etc., 341 †
Balfour shoal, Dr. J. Murray's paper on the, 100
Bali, altitude, etc., of, 393, 397
Ballena bay, Costa Rica, 61
Balloon voyage to the North Pole, Herr Andrée's, 218
Ballooning—
Internationalen Ballonfahrt, von H. Hergesell, 343 †
Navigation aérhydrique, etc., par M. Pesce, 343 †
Sur les trois ascensions françaises. Note de MM. Hermite et Besançon, 343 †
Baltic Glacier, The Last Great, by J. Geikie, 450 †
Baluchistan—
Photographs of, taken by Major Yate, 236
Volcanic and other Rocks, Notes on, etc., by Lieut.-General and Captain McMahon, 455 †
Bámpur, Makrán, 221
Bananas of Costa Rica, 80
Bangweolo, Lake, 300
Baptista Agnese and American Cartography in the Sixteenth Century, by J. Winsor, 460 †
Baratta, M., Osservazioni fatte al Vesuvio, 453 †; Sui terremoti della Romagna del 1781..452 †
Barometer, Portable Mercurial, by Captain Deasy, 203
Barometrica, I progressi della livellazione, del B. de Benedictis, 459 †
Barré, H., Notes sur l'Empire Colonial de l'Allemagne, 556 †
Barrois, Ch., Des divisions géographiques de la Bretagne, 225 †
Barth, J. P., Overzicht der Afdeeling Soekadana, 550 †
Bartholomew's Road Map of England and Wales, 558; Donegal and Isle of Wight, 559; North-West Frontier of India, 559; New Reduced Ordnance Survey of Northumberland, 657; Tourist Map of Egypt and the Lower Nile, 660
Basman, Beluchistan, 589
Basutoland—
Mœurs, coutumes . . . des Ba-Souto, par E. Jacottet, 340 †
Bataklanden ten Noorden van het Tobameer, door C. J. Westenberg, 550 †
Batang-Natal, Groot-Mandeling en, door T. Heyting, 550 †
Batavia-Singapore, cable interruptions, 276
Batchelor, Rev. J., Ainu Words as illustrative of Customs, etc., 455 †
Bauer, L. A., On the Component Fields of the Earth's Permanent Magnetism, 234 †
Baume-les-Messieurs, La Grotte de, par Ed. Renauld, 547 †
Baxendell, J., Borough of Southport, Meteorological Department, Report, etc., 227 †
Baziba tribe, Victoria Nyanza, 96
Bear, W. E., The Food Supply of Manchester, 454 †
Bedouins of Siwa, 598, 603
Beekman, A. A., Waterwegen in Oud-Holland, 547 †
Behagle, M. de, explorations in Lake Chad Region, 539
Behring Sea, Report by Prof. Thompson on his Mission to, 650 †
Belgian Antarctic Expedition under Lieut. de Gerlache, 331, 641
Belgium and Holland, Handbook for Travellers, by K. Baedeker, 338 †
Bell, Robert, Evidences of . . . rising of the Land along Bell River, 230 †; Geographical Distribution of Forest Trees in Canada, 340 †; Recent Explorations to the South of Hudson Bay, 1*, 553 †; Surveys in Labrador peninsula and Ontario, 626, 627
Bellary District, Geology of the, by R. B. Foote, 120 †
Beluchistan-Afghan Frontier, Volcanoes of the, 588 *note*
Benaco—
Alcune notizie fisiche sulle acque del, del Dott. A. Garbini, 451 †
Benedictis, B. De, I progressi della livellazione Barometrica, 459 †; Lavori . . . nell' Instituto Geografico Militare per la Carta d'Italia, 451 †
Benest, H., on cable fractures, 262
Bengal—
Premiers habitants du Bengala, etc., par R. P. de Gryse, 648 †
Beni—
Exploracion del Rio Beni, por el Dr. Heath, 230 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Benin, distance from, to Bida, 371
Benin Massacre, The, by Captain Boisragon, 650 †
Benincasa e del suo Portolana, by G. Bruzzo, 654 †
Bennikoro, altitude, etc., of, 394
Benoit, F., La Côte Orientale d'Afrique, 649 †
Bent, J. Th., Tae Island of Socotra, 121 †
Berea Futambu, altitude, etc., of, 394
Berechnung der Lehre, Die, von E. Schlagintweit, 657 †
Berghaus, Dr. H., Chart of the World, 236
Beringer, O. L., Map of the Shire Highlands, 347
Bermuda and the Tropics, Glimpses of Life in, by Margaret Newton, 231 †
Bermuda Islands, Changes of Level in, by R. S. Tarr, 340 †; Geology of the, Mr. R. S. Tarr on, 639
Bernard, A., Documents pour servir à l'étude du Nord-Ouest Africain, 552 †
Bernhard, L., Ueber Eisenbahnprojekte in Deutsch-Ost-Afrika, 229 †
Bertacchi, Prof. C., La Birmania e il viaggio di Leonardo Fea, 339 †
Bertolini, Prof., I fiumi resorgiva . . . al territorio veneto, 647 †
Bevan, Davies and Haverfield, An Archæological Survey of Herefordshire, 227 †
Bezold, W. von, Ergebnisse der Niederschlags-Beobachtungen, 1894..451 †; Bericht über die Thäligkeit . . . Meteorologischen Instituts, 647 †
Bibliography—
Bibliographie annuelle — Annales de Géographie, 655 †
Bibliography of Geography, by W. S. Sonnenschein, 555 †
Cataloghi e l'Istituto Internazionale di Bibliografia, by D. Chilovi, 555 †
Genealogy of the Sciences as basis of, by H. Arctowski, 344 †
Geological, by Prof. De Margerie, note on, 332
Index to Periodicals, 343†; Geographical Index to Books, etc. (War Office), 344 †; to Journal of the Geological Society, 344 †; to Proceedings of the Royal Colonial Institute, 555 †
Orientalische Bibliographie, von Müller und Scherman, 344 †
Travaux scientifiques publiés, par M. Thoulet, Notice sur les, 556 †
Bibliotheca Geographica Germaniæ, von P. E. Richter, 547 †
Bida, upper Niger, 359–362
Bielz, Dr. E. A. (Biography), 343 †
Bigham, C., A Ride through Western Asia, 228 †
Bigoni, Prof. G., La geografia nelle scuole classiche, 345 †
Bigot, A., Sur les dépôts pléistocènes . . . basse Normandie, 646 †
Bille, Mr., remarks on receiving awards for Dr. Thoroddsen and Lieut. Ryder, 109
Biography, National, Dictionary of, by Sidney Lee, 343 †
Birch-bark canoe of natives of Canada, 3, 4
Bircher, H., L'Australie, 553 †
Birmingham, growth of, 529
Biscay, Bay of, cable fractures in, 272
Bishop, Mrs. Isabella, A Journey in Western Sze-chuan, 19*, 549†; Missions in China, Corea, and Japan, 455 †; remarks on "Recent Journeys in Persia," 597
Bismarckburg, Reisebericht des Missionärs A. Mischlich in, 121 †
Bittner und Tomaschek, Drs., Die topographischen Capitel des Indischen Seespiegels Mohît, 339 †
Black, C. E. D., The Railway to India, 227 †
Black Sea, population in vicinity of, 199–201
Blaikie, Rev. W. G., Central Africa since the death of Livingstone, 649 †
Blaikie, W. B., Itinerary of Prince Ch. Ed. Stuart, 227 †; on the wanderings of Prince Charles Edward, 324
Blake, Rev. J. F., On some Superficial Deposits in Cutch, 119 †
Blanchet, M., Le Djebel Demmer, 229 †
Boala Karafaia, altitude, etc., of, 394
Bogdanovitch, M., explorations in Eastern Siberia, 635
Bohemia, Tchèques et la Bohême Contemporaine, par J. Bourlier, 338 †
Boisragon, Captain, The Benin Massacre, 650 †
Bokhara—
Exploration of, by Colonel Kouznetsoff, 210
Reise nach Ost-Bochara, von W. Rickmers, 120 †
Russians in Bokhara and Khiva, 198
Bolivia—
Cuestion de Limites entre Bolivia y el Peru, 553 †
Exploraciones efectuadas en el Norte de la Republica, 553 †
Explorations in Bolivia and Peru, by Colonel Muños and others, 443
Informe que presenta al Señor Ministro de Colonización, . . . P. Baldivieso, 341 †
Limites de, con el Perú, por F. N. Armentia, 651 †
Mapa Postal de, by V. E. Sanjines, 347
Bolton, H., Physical Geography of North-East Lancashire, 227 †
Bonbonkoro, altitude, etc., of, 394
Bonin, M., Journey in the Chinese Empire, 94
Borchardt, L., Ueber das Alter des Sphinx bei Gisch, 649 †
Borchgrevink, Herr, expedition to the Antarctic, 567
Boria, altitude, etc., of, 394
Boring Experiments at Funafuti, 217
Boring for fresh water through granite rocks, by Sir C. R. Markham, 465 *

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000031

مكتبة قطر الوطنية
Qatar National Library

Borneo—
Overzicht der Afdeeling Soekadana, door J. P. Barth, 550 †
Borodovski, L., Map of Manchuria, 126
Botanical Geography of Middle Albania and Epirus, Dr. Baldacci on, 323
Botletli river, South Africa, 213
Bòttego, Captain, Expedition in Somaliland, 326; Geographical Results of the, 439
Botto, A., Storia della Cartografia italiana, 452 †
Bougarone, Cap, Excursion dans la région forestière du, par E. Doutté, 456 †
Boulder-Clays of the Great Plains, are they marine? by G. M. Dawson, 121†
Boundary between Mexico and British Honduras, 541
Boundary delimitation in West Africa, 237
Franco-German, in West Africa, 635; German-Portuguese, in East Africa, 637
Bourlier, Jean, Les Tchèques et la Bohême Contemporaine, 338 †
Bourne, F. S. A., on the new rapid on the Yang-tse, 191 *
Bowen, Hon. Ch., remarks at the Antarctic Conference, 384
Brabourne Papers, The, 231 †
Bradyseismic action in oceans, 130, 131
Branodonum, Roman town of, 514
Brard, Pater, Der Victoria Nyanza, 96, 229 †
Brasseur, C., L'Urua, pays des Balubas, 340 †
Brasseur, M., Explorations in the Congo Basin, 637
Brazil—
Führer für den Auswanderer nach Brasilien, von A. Papstein, 651 †
Geologia e Mineralogia del Brasile, del Prof. V. Grossi, 341 †
Indianerstämme Brasiliens, etc., von A. Vierkandt, 651 †
Naturforscherfahrt nach dem Litoral, etc., von Dr. E. A. Goeldi, 341 †
Xingú paraense, par C. A. Philippin, 341 †
Bremen und Verden, Die Herzogtümer, von Dr. Oehlmann, 547 †
Bremner, F., Photographs of Quetta and surrounding country, 660
Brenier, M., journey in China, 439
Bretagne, Des divisions géographiques de la, par Ch. Barrois, 225 †
Brezze di Monte, Breve contributo allo studio delle, del O. Marinelli, 342 †
Brice, A. M., letter from, on Prof. Copeland's Revised Map of Franz Josef Land, 336
Brigham, A. P., Lakes: a Study for Teachers, 124 †
Brisbane and Suburbs, Map of, issued with 'Pugh's Almanac,' 462
Bristol, early port of, 524, 525; memorial tower to Cabot in, 213
British and Irish Ports, Tide-tables for the, by Captains Harris and Goalen, 548 †
British Association, Geography at the, Toronto, 1897..471; Address to the Geographical Section of the, by J. Scott Keltie, 656 †; Handbook of Canada, 650 †
British Caves and Speleology, by E. A. Martel, 500 *
British Central Africa: *see* Africa
British Columbia—
Map of the Kootenay District, by Fletcher, 561
Topographical surveys in, 629
British Expedition to the Jub, 211
British Guiana, Gold and Forest Industries of, Report, 652 †
British Honduras: Addresses of Welcome to Sir A. Moloney, 230 †; and Mexico, Boundary between, 541
British imports and exports in Africa, 440
British Islands, Volcanoes of the, by Sir A. Geikie, note on, 307
British New Guinea: *see* New Guinea
British Territory, Notes on Exploration within, 655 †
Brittany, Anthropology of, by Prof. P. Topinard, 546 †
Brive, Environs de, Les Grottes artificielles des, par P. Lalande, 546 †
Broadback river, Canada, 11
Brosch island, Franz Josef Land, 185
Brose, M., Deutsche Kolonialliteratur, von 1884–95..656 †
Brown, R., Origin of the Ancient Northern Constellation figures, 345 †
Bruchhausen, Herr von, on the Uchungwe Mountains, 638
Brückner, Prof., on height of rivers, 620
Brünn, Cape, Franz Josef Land, 186
Bruzzo, G., Di Grazioso Benincasa e del suo Portolano, 654 †
Bryce, Jas., on the Economic Geography of Rhodesia, 474
Buchs, V., Voyages en Abyssinie, 456 †
Buddha's Birth and Death, Tibetan Guide-books to the Lost Sites of the, by L. A. Waddell, 455 †
Buenos Ayres—
Agriculture, l'Elevage . . . dans la Province en 1895..553 †
Annuaire Statistique de, 651 †
Bujnurd, Persia, 576, 577
Bukhara: *see* Bokhara
Bülow, W. v., Die Dürre des Jahres 1896 auf der Insel Savaii, 123 †
Buluwayo, railways to, 328
Bumban, altitude, etc., of, 240, 393, 397
Buria, altitude, etc., of, 393, 397
Burma—
Birmania e il viaggio di Leonardo Fea, by Prof. C. Bertacchi, 339 †
Trade between, and Yunnan, 209
Burmese Frontier Districts, Reports on, by officers of the Intelligence branch, 325
Burmese War, Unpublished Document relating to the First, 648 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [140v] (133/186)

Burmo-Chinese Frontier, etc., by E. H. Parker, 228 †
Burnley, W. H., Tobacco and Cotton Cultivation in the British West India Colonies, 652 †

C.

Cable Dislocation per mile per Year, table of, 281
Cable fracture, Prof. John Milne on, 259 *et seq.*
Cable Laying on the Amazon River, by A. Siemens, 122 †, 542
Cabot—
Celebrations in Canada and Bristol, 213
Discovery of North America by John Cabot, etc., by H. Harrisse, 554 †
Entdeckung Nordamerikas durch Giovanni Caboto, von S. Ruge, 554 †
John Cabot : an Anniversary Story, 234 †
John Cabot and the discovery of Newfoundland, by Sir Sherston Baker, 460 †
Quarto centenario della scoperta del continente Nord-Americano, 654 †
Sébastien Cabot . . . considéré comme Cartographe, par H. Harrisse, 554 †
Zur Erinnerung an die Entdeckung Nord-Amerikas, von Dr. Wolkenhauer, 655 †
Cadell, H. M., A Visit to Mount Tarawera, 123 †
Cagayan Sulu, its Customs, etc., by E. F. Skertchly, 339 †, 537
Cahun, L., Introduction à l'Histoire de l'Asie, 548 †
Calabria, Sulla forma di alcune Coste della, dell E. Cortese, 451 †; terraces of, 633
Caldera—Antofagasta, cable interruptions, 265
California—
En färd till Baja California och Sonora, af G. Eisen, 456 †
Inyo Range, Post-Pleistocene Elevation of the, by Ch. D. Walcott, 456 †
Mountains of, by J. Muir, 341 †
Submerged Valleys of Coast of, by G. Davidson, 456 †
Callwell, Major, A Glimpse of the Late War, 453 †
Calvert Expedition, Funeral of the Lost Members of the, 444
Camadè or Camádin, 449
Camaldoli: Hills and valleys of, morphography of, 477; drainage area, and explanation of structure, 489; character of rocks, etc., 490; katabolic agents, 492; subaërial erosion, 493; vine-growing, 495; vegetation, 496; chestnut woods, 496; typical valley, 497; maps and diagrams, explanations of, 499; volcanoes, 416, 427
Cambodge et ses monuments, par E. Aymonier, 549 †
Camels of the Palæarctic Region, 88
Cameron gulf, Lake Tanganyika, 298
Cameroons, Lieut. Baron von Stein's explorations in the, 638
Campana, Cratere di, Italy, 423, 433, 480
Campbell, Robert, discovery of the Yukon river, 631
Campi Phlegræi, 414; Bibliography of, 435
Campiglione, crater wall of, 421, 423
Campos, R. T., La Geografía en 1895.. 556 †
Canada—
Anticosti, esquisse historique et géographique, par N. Le Vasseur, 552 †
Are the Boulder-Clays of the Great Plains Marine? by G. M. Dawson, 121 †
Athabasca Lake and Churchill River, Report on Country between, by J. Burr Tyrrell and D. B. Dowling, 121 †
Bell River, Differential rising of the Land along, by Robert Bell, 230 †
Cabot celebrations in, 213
Explorations, Recent, in, by Dawson, Tyrrell, and Low, 229 †
Forest trees in, by Dr. R. Bell, 340 †
Geographical progress in, 316
Geological . . . Map of the Lake of the Woods, 235
Geological Survey of, Report on Mineral Statistics, etc., by E. D. Ingall, 230 †; Annual Report, 121 †; Topographical Work of the, by J. Burr Tyrrell, 623 *; Annual Report, 650 †
Handbook of (British Association), 650 †
Labrador Peninsula, Report on Explorations in the, by A. P. Low, 121 †
Maps : Railways of, 462
Northern, Lecture on, by H. O'Sullivan, 552 †
St. John River, Tidal Phenomena of the, by A. W. Duff, 650 †
Tides and Currents in Canadian Waters, by W. Bell Dawson, 553 †
Western Canada, Before and Since Confederation, by Sir D. A. Smith, 121 †
Canadian Pacific Railway and the British Association, 476
Canals and Navigable Rivers of England, by L. E. Wells, 227 †
Canals, Central American, The Diplomacy of the United States in regard to, by J. G. Whiteley, 652 †
Canney, H. Leigh, The Winter Climate of Egypt, 551 †
Cantabrian mountains—
Die Picos de Europa, von A. Penck, 226 †
Capbreton, L'ancien port de, par M. J. Gabarra, 646 †
Cape Breton Island, topographical surveys in, 626
Cape Colony—
Coalfields of, by P. Johns, 551 †
Cape York meteorite, the, 445, 544
Carbajal, M., Navigabilité de l'Amazone, 341 †
Car-dyke, Roman navigable trench, 515

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000054

مكتبة قطر الوطنية
Qatar National Library

Carey and Tuck, Messrs., The Chin Hills, 211
Carey, Lieut., report on the jade-mines district, 325
Caribs of Costa Rica, 80
Carolina, South, Applied Physiography in, by L. C. Glenn, 457 †
Carranza, Dr. D. L., Memoria que el presidente de la Sociedad Geográfica de Lima presenta, etc., 556 †
Carrière, G., La Grotte de Dargilan, 547 †
Carter, Sir G. T., The Colony of Lagos, 456 †, 551 †
Cartes lithologiques sous-marines, par M. Thoulet, 554 †
Cartography—
Atlas à échelle uniforme proposé par Guyou et Reclus, 459 †
Baptista Agnese and American Cartography in the Sixteenth Century, by J. Winsor, 460 †
Cartes Marines, Notice sur les, par G. Lavieuville, 459 †
Development of Cartography of America, by Dr. S. Ruge, 460 †
Kartenerzeugung, Technik der, von A. von Hübl, 459 †
Photogrammetrie . . . der Militär-Mappierung, von A. Rummer, 459 †
Terraindarstellung mit Schiefer Beleuchtung, von C. R. von Steeb, 459 †
Casement, R., on the trade of Lourenço Marques, 440
Cassanello, G., Dei lavori idrografici e talassografici, 342 †
Castelluccio, Vallone, 482
Catalogues: *see* Bibliography
Catchment areas and their drainage channels, 479
Caucasia, population of, 198, 201
Caucasus—
Maps: Kharthwelische Sprachgebiet im Südweslichen Kaukasus, von Dr. H. Schuchardt, 346
Cavendish, Mr., expedition to Lake Rudolf, 538, 566
Caverns: *see* Speleology
Caves of Great Britain, 500–509
Cavone delle Noce, 484, 486
Ceara—Pernambuco, cable interruptions, 268
Celtis, Conrad, in seinen Beziehungen zur Geographie, von Dr. Th. Geiger, 655 †
Ceuleneer, A. de, L'île de Crète, 453 †
Ceylon—
Ceylon und seine Bewohner, von Dr. W. Geiger, 227 †
Kurunégala District, Ancient Cities in, by F. H. Modder, 455 †
Chad, Lake, region of, French explorations in, 539
Challenger Expedition Reports, Portraits of the Contributors, 344 †
Chamberlain, B. H., Contributions to a Bibliography of Luchu, 550 †
Chamberlin, T. C., Glacial Studies in Greenland, 124 †
Chambeyron, E., L'Isle de Crète, 548 †
Champagne, La falaise de, par E. Chantriot, 225 †
Channel Islands, Charts of Tidal Streams near the, by F. H. Collins, 125
Chantroit, E., La falaise de Champagne, etc., 225 †
Chapaux, A., Le Congo, historique, diplomatique, etc., 649 †
Chapman, A., Wild Norway, 225 †
Charles Edward, Prince, The Wanderings of, Mr. Blaikie on, 324
Charts—
Admiralty, 127, 462, 562
Cancelled, 128, 463, 562
Corrected, 128, 463, 563
United States Hydrographic, 128, 348, 464, 563
Charts of the Atlantic Currents, note on, 100
Chekel Tan, Beluchistan, 587
Cheng-tu plain, Sze-chuan, 24
Chenunda's, position and height of, 171, 172; people of, 158
Chester, Roman site at, 522
Chiaja crater, 429
Chicago, longitudes, 624
Chichen-Itza, Neuere Forschungen in, 651 †
Chili, Exploration of the Aisen River in, 329; survey of, Dr. P. Krüger on, 215
Chili and Argentine—
Chilenisch-Argentinischen Grenzregion im Feuerland, Karte der, 561
Boundary Question, Dr. Steffen on, 214
Chiloé—
Estudios geográficos . . . sobre, por R. Maldonado, 122 †
Chilovi, D., Cataloghi e l'Istituto Internazionale di Bibliografia, 555 †
Chiltern Hundreds, The, by A. J. Foster, 118 †
Chin Hills, The, by R. S. Carey and H. N. Tuck, 211; Photographs of Natives and Scenery, by Captain Rigby, 464; Language of the Lais as spoken by Tribes in the, by A. G. E. Newland, 648 †
China—
Commerce de la Chine, by F. Dujardin-Beaumetz, 549 †
Corea and Japan, Missions in, by Mrs. Bishop, 455 †
Côtes de Chine, par M. Lièvre, 339 †
Développement économique de la Chine et du Japon, par U. Pila, 549 †
Eisenbahnfrage in, von H. Feigl, 648 †
Great Plain of, Dr. von Cholnoky on hydrography of, 538
Imperial Maritime Customs, Reports of Trade, etc., 549 †
Lighthouses, Buoys, etc., List for 1897 .. 227 †
Lyonese Commercial Mission to, 94, 439
Mesny's Chinese Miscellany, 119 †
Nederlanders in, door W. Groeneveldt, 648 †
Western, Three Years in, by A. Hosie, 549 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000030

مكتبة قطر الوطنية
Qatar National Library

China—*continued.*
Western Sze-chuan, A Journey in, by Mrs. Bishop, 549 †
Chinese and British Boundaries, 208
Chinese Empire, M. Bonin's journey in the, 94
Chinese Refugees . . . in Mito, by E. W. Clement, 455 †
Chirripó volcano, 64
Chisholm, G. G., On the Distribution of Towns and Villages in England, 511 *; On the Relativity of Geographical Advantages, 654 †
Chobe and Okavanga rivers, 175
Cholnoky, Dr. von, on hydrography of the Great Plain of China, 538
Chuaula chief, Central Africa, 162; position of village, 171
Chubs or stone-carriers of Canadian rivers, 16
Church, Colonel G. E., Costa Rica, 56 *
Church Missionary Society, Proceedings of the, 655 †
Churchill, H. L., Photographs of Persia, 564
Chuy—Montevideo, cable interruptions, 268
Cigliano, cone and crater, 427
Cities, Location of, Some Geographic Causes determining the, by E. C. Semple, 654 †
Civilisation, A Measure of, by Marcus Rubin, 234 †
Clancey, C. J., Aid to Land-Surveying, 124 †
Clarke, Sir Andrew, remarks at the Antarctic Conference, 383
Clausentum, site of Roman town of, 513
Clayton, Colonel, Consular Experiences in Turkey, 548
Cleeve, Captain, on an Aide-Memoire to a Comparison of certain Geographical Distances, 334
Clement, E. W., Chinese Refugees . . . in Mito, 455 †
Climate—
Limites géographiques du Climat Tempéré, par J. Gebelin, 233 †
Of the Congo, 442; of Davis and Baffin bays, 442
Recent Researches on, by H. N. Dickson, 303
Coalfields in Sze-chuan, 21
Cochrane, Mr., Surveys in Manitoba, 628
Cocos bay, Costa Rica, 61
Cocos island, 73
Coghlan, T. A., Statistical Account of the Seven Colonies of Australasia, 341 †
Cohen, Dr. J. B., The Air of Towns, 232 †
Collie, Dr. J. Norman, Note on a Portable Mercurial Barometer, 206
Collins, F. H., Charts of Tidal Streams near the Channel Islands, etc., 125
Colombia and Costa Rica boundaries, 57
Colombia—
Colombia e la sua situazione economica, di R. de Dorfo, 457 †
Colombia—*continued.*
Reisebriefe aus Colombia, von Dr. F. Regel, 330, 457 †
Colonial Empire of 1837, by E. Salmon, 344 †
Colonial- und Weltverkehrskarte, Begleitworte zur, 654 †
Colonization, Systems of, by J. B. Nevins, 654 †
Colorado river, Costa Rica, 68
Columba, Prof., La tradizione geografica dell' età romana, 460 †
Combes, P., L'île de Crète, 453 †
Cone valleys and drainage, 479, 483
Congo—
Arabs, Fall of the, by S. L. Hinde, Review of, 174
Basin, M. Brasseur's explorations in the, 637
Climate of the, 442
Congo doit être notre Java, par J. Leclercq, 649 †
Historique, diplomatique, etc., par A. Chapaux, 649 †
Mongalaflusses in Centralafrika (Kongostaat), von F. Thonner, 649 †
State, trade of the, Mr. Pickersgill's report, 441
Connecticut Valley, Geographic Features of the, by W. Orr, 122 †
Constantinople, Letters from, by Mrs. Max Müller, 118 †
Constellation-figures, Origin of the Ancient Northern, by R. Brown, 345 †
Consular Experiences in Turkey, by Colonel Clayton, 548 †
Consular Reports, African, for 1896..440
Conway, Sir W. M.—
Expedition to Spitsbergen, 219
Letter on the Formation of a Lake in Nagar, 107
The First Crossing of Spitsbergen, 179, 232 †
Cool, Captain, book on Lombok Island, 98
Coolidge, W. A. B., Quelques noms de lieux dans la vallée de Saas, 226 †
Cooper, A. J., A New Theory of the Stability of Ships, 656 †
Cope, E. D., Obituaries of, by P. Frazer and J. S. Kingsley, 343 †
Copeland, Prof. R., On a Revised Map of Kaiser Franz Josef Land, etc., 180 *; letter from A. M. Brice on the same, 336
Coral-boring Experiments at Funafuti, 217
Cordillera of Patagonia, 402
Corinth, Gulf of, cable fractures in, 271
Cornet, J., Observations sur les Terrains Anciens du Katanga, 121 †
Cornish, C. J., Outdoor Life in Holland, 118 †
Cornish, Mr., on trade of Zanzibar, 440
Coronado Expedition, 1540–42, by G. P. Winship, 230 †
Cortese, E., Sulla forma di alcune Coste della Calabria, 451 †
Corvara, Monte, cone-slopes of, 422

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000016

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [142r] (136/186)

Costa Rica, by Señor R. Villafranca, 457 †; by Colonel G. E. Church, 56 *; mountains of, 58; coasts and rivers, 60–72; mineral wealth of, 73; internal communications, 74; climate, 75; flora and fauna, 76; history, 77; population and imports, 79, 80
Côte d'Or, Les cavernes de la, par C. Drioton, 546 †
Coudreau, M., expedition to the Xingu, 216
Council of R.G.S., Report of, 110
Coventry, early importance of, 526
Cradle hole cave, Ireland, 502
Crater slopes and drainage, 479, 480
Crete—
Chrétiens et Musulmans dans l'île Crète, par M. Ardaillon, 225 †
L'île de Crète, par MM. de Ceuleneer and Paul Combes, 453 †
L'île de Crète, par E. Chambeyron, 548 †
Crisci mound, Italy, 427
Crooke, W., Tribes, etc., of the North-Western Provinces of India, 120 †; History, Ethnology, etc., of the, 120 †
Cuba—
Île de Cuba, par J. du Fief, 457 †
Maps: Carte générale de l'île de Cuba, par V. M. Amábile, 126
Cueva del Drach in Majorca, 510
Culebra, Port, Costa Rica, 61
Culin, S., Mancala, the National Game of Africa, 649 †
Cuma, Italy, 420, 422
Cunningham, Major, remarks on "Nupe and Ilorin," 372
Curran, Rev. J. M., Occurrence of Precious Stones in New South Wales, etc., 652 †
Current Papers, No. 2, by H. C. Russell, 124 †
Cuspate Forelands, by F. P. Gulliver, 554†
Cust, R. M., Africa in 1897...649 †
Cutch, Superficial Deposits in, by Rev. J. F. Blake, 119 †
Cyprus, Actual and Possible, by P. Geddes, 118 †

D.

Dachstein-Kalkes, Chronologischen Umfang des, von Dr. E. v. Mojsisovics, 451 †
Dadelszen, E. J. von, New Zealand Official Year Book, 123 †
Dakhan villages, A Study of the, by B. H. Baden-Powell, 119 †
Dakolofe, altitude, etc., of, 394, 397
Dandafarra, altitude, etc., of, 394
Danish Expedition to the Pamirs, 536; to the East Coast of Greenland, 218
Danvers, F. C., Agriculture in Essex, etc., 454 †
d'Anville, J. B. Bourgnignon, von Dr. Wolkenhauer, 655 †
Dargilan, La Grotte de, par G. Carrière, 547 †
Dasht-i-Kavir and Dasht-i-Lut, Persia, 570, 578, 597
Date-palm cultivation, 222
Dates of Siwa, 602
David, Prof., coral-boring at Funaputi by, 640
Davidson, G., the Submerged Valleys of the Coast of California, 456 †
Davidson, J. W., Review of the History of Formosa, 456 †
Davis Bay and Baffin Bay, Climates in, Mr. Tarr on, 442
Davis, W. M., Large Scale Maps as Geographical Illustrations, 556 †; Plains of Marine and Subaërial Denudation, 554 †; The Use of Geographical Periodicals, 345 †; on evolution of river-basins, 621; Winds and Ocean Currents, 653 †
Davison, Ch., Distribution of Earthquakes in Japan, 530 *; On the Pembroke Earthquakes, 119 †
Dawson, G. M., Are the Boulder-Clays of the Great Plains Marine? 121 †; Recent Explorations in Canada, 229 †; medal awarded to, 108; surveys in Manitoba and British Columbia, 628, 629; in the Yukon Region, 631
Dawson, S. E., Discovery of America by John Cabot, etc., 456 †
Dawson, W. Bell, Survey of Tides and Currents in Canadian Waters, 553 †
Deasy, Captain, A Portable Mercurial Barometer, 203 *
De Baye, Baron, De Moscou à Krasnoïarsk, 120 †
Deckert, Dr., Politisch-geographische betrachtungen über Westindien, 231 †
Deep-sea temperature observations, 544
De Kalb, C., The Valley of the Amazon, etc., 651 †
De la Blache, Vidal, La zone frontière de l'Algérie et du Maroc, 552 †; Les voies de commerce dans la Géographie de Ptolémée, 555 †
Delagoa Bay—Durban, cable interruptions, 274
De la Jonquière, C., Les Italiens en Erythrée, 229 †
Delamere, Lord, expedition to Somaliland, 328
De la Noë, General, Les méthodes photographiques en topographie, 232 †
Delimitation of boundaries, Colonel Trotter on, 445
Delta morfologia della superficie terrestre, etc., by Prof. Porena, 342 †
Demmer, Le Djebel, par M. Blanchet, 229 †
Denmark—
Generalstabens topografiske kaart over, 557
Deposits of the Nile Delta, Prof. Judd on the, 539
Derbyshire, caves in, 507
Detmer, Dr., Landschaftsformen des nordwestlichen Deutschlands, 647 †
Deutsch Afrika: *see* Africa
Deutsche Kolonialliteratur von 1884–95, von M. Brose, 656 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Deutscher Kolonial Atlas, von P. Langhans, 562
Deutschland: *see* Germany
De Windt, H., The Klondike Goldfields, 553 †
De Windt, Dr. J., Recherches sur la constitution des îles, 653 †
Dickson, Baron Oscar, Obituary of, 106; (Biography), by A. G. Nathorst, 460 †; (Biography), by W. Wolkenhauer, 555 †
Dickson, H. N., Recent Researches on Climate, 303
Dickson, Lake, Patagonia, 403
Dickson, Mr., on trade of Tripoli, 440
Dictionary of National Biography, by Sidney Lee, 343 †
Dinklage, L. E., Treibeis im Süden, etc., 342 †
Dions, Le Spélunque de, par MM. Mazauric et Cabanès, 546 †
Diploma awarded to students under Mr. Coles, 565
Distribution of Mammals, Mr. Lyddeker on the, 99
Dodge, R. E., School Geography in the United States, 655 †
Dofunkuyin, altitude, etc., of, 393
Dolby-Tyler, C. H., and E. H. Giglioli, Strumenti Litici in uso presso ceste tribù del Rio Napo, 230 †
Dolmens in Musashi, Topographical Distribution of, by S. Yagi, 550 †
Dondiin et les Philippines, Le, par A. Gummá, 455 †
Donegal, Bartholomew's map of, 559
Dongola et la Nubie, par Dr. O. Abbate Pacha, 551 †
Dongola Expedition of 1896, by Captain A. H. Atteridge, 340 †
Dooman, Rev. I., the Influence of Greco-Persian Art on Japanese Arts, 455 †
Dorchester, Roman site at, 520
Dorfo, R. de, La república di Colombia e la sua situazione economica, 457 †
Douglas, C. E., award to, 109
Douglas, Jas., Consolidation of the Iroquois Confederacy, 122 †
Douglass, A. E., An Ascent of Popocatepetl, 651 †
Doutté, E., Excursion dans la région forestière du Cap Bougarone, 456 †
Dove, Dr. K., Wissenschaftliche Aufgaben in Südwestafrika, 176, 229 †
Dove glacier, Franz Josef Land, 189
Downing, Dr. A. M. (Biography of), 343 †; Cloud Statistics for Stations in India, etc., 119 †
Dragonnière et de Midroï, Les Rivierès souterraines de la, par Dr. P. Raymond, 646 †
Dragon's cave, Majorca, 510
Drainage Basin of Lake Superior, Area of, 97
Drioton, C., Les Cavernes de la Côte-d'Or, 546 †
Duclaux, E., Atmospheric Actinometry, etc., 233 †, 653 †
Duff, A. W., Seiches on the Bay of Fundy, 234 †; Tidal Phenomena of the St. John River, 650 †
Du Fief, J., Île de Cuba, 457 †
Duhuk, Persia, 580
Dujardin-Beaumetz, F., Le Commerce de la Chine, 549 †
Dunes of Gascony, Mode of Formation of, M. Durègne on, 634
Dungeness Foreland, by F. P. Gulliver, 454 †
Du Pasquier, Léon (Biography), by Dr. A. Penck, 343 †
Duponchel, A., Madagascar: chemins de ferde, 551 †, 552 †
Durand, Sir Mortimer, remarks on "Recent Journeys in Persia," 595
Durègne, E., Sur le mode de formation des dunes primaires de Gascogne, 225 †
Durègne, M., on the Mode of Formation of the Dunes of Gascony, 634
Dutch East Indies—
  Dagh Register . . . Nederlandts-Indie, by Heeres and Van Riemsdijk, 549 †
  Nederlandsch-Indisch Plakaatboek, door J. van der Chijs, 227 †
Dutch voyage—
  Eene Reis van eene Nederlansche Vloot, door W. Groenveldt, 554 †
Duysters, Ed., Impressions d'Égypte, 340 †
Dwarf Domestic Animals of Pygmies, by R. G. Haliburton, 555 †

E.

Earth—
  Is the Earth a Planet? by C. Robertson, 345 †
  Measurement of the, by A. Fowler, 232 †
Earth Pillars—
  Geographische Verbreitung und Natur der Erdpyramiden, von Dr. C. Kittler, 653 †
Earthquakes—
  Influences on cables, 282, 283
  In Iceland, 536
  In Japan, Distribution of, by Ch. Davison, 530 †
  Submarine, 132, 136
East, The—
  Geologisch-Geographische Reiseskizzen aus dem Orient, von Dr. A. Philippson, 117 †
Eastern Nagas of the Tirap and Namtsik, by S. E. Peal, 339 †
Ebeling, Dr. M., Vorlage des Schichten-Reliefs des Vesuv, 453 †
Economic Development in Tropical America, Mr. Nicholas on, 542
Écorce terrestre, Les Mouvements de l', par M. de Lapparent, 233 †
Ecuador, chart of ocean bed off, 264
Éducation des indigènes, L', par P. Vidal, 234 †
Education, Geography in, Prof. Spencer on, 220

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00007c

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [143r] (138/186)

Educational Subjects, Special Reports on, 655 †
Egbon hills, upper Niger, 356
Egypt—
Aegypten und Abessinien, Ein Blick auf, von L. Reinisch, 229 †
Flint Mines of, Discovery of, by H. W. Seton-Karr, 551 †
Impressions d'Égypte, par Ed. Duysters, 340 †
Maps: Bartholomew's Tourist Map of, 660
Origine des Égyptiens, etc., par Dr. Schweinfurth, 551 †
Temples de la Géographie dans l'Égypte Antique, par L. Mayou, 340 †
Uno sguardo sull' Egitto e l'Abissinia. dal Prof. L. Reinisch, 340 †
Winter Climate of, by H. Leigh Canney, 551 †
Egyptian Alphabet for the Egyptian People, 556 †
Ehmann, P., Sprichwörter . . . der Japanischen Sprache, 550 †
Eifel Maare, Dr. Halbfass's observations on the, 436, 647; Tiefenkarte der, von Dr. W. Halbfass, 347
Eisen, G., En färd till Baja California och Sonora, 456 †
Ekaterinoslav, population of, 199
Elias, Ney (obituary), by S. Wheeler, 101, 460 †
Elliot, D. G., Catalogue of Birds obtained by the Expedition into Somaliland, 340 †
Elter, Prof., on the earliest use of the name America, 328
Empire, The Unity of the, by Profs. Kirkpatrick and Prothero, 344 †
Engelhardt, Lieut., journey in East Africa, 328
England—
Canals and Navigable Rivers of, by L. E. Wells, 227 †
Caves of, 500
Towns and Villages in, Distribution of, by G. G. Chisholm, 511 *
England and Wales—
Bartholomew's Road Map of, 558
Ordnance Survey Maps, 125, 235, 346, 557, 657
Engler, A., Ueber die geographische Verbreitung der Rutaceen, etc., 233 †
Entstehungs geschichte des Geldes, von H. Schurtz, 556 †
Eremian Subregion of the Palæarctic Region, 88
Eritrea—
Avvenire della Colonia Eritrea, by L. Franchetti, 340 †
Italiens en Érythrée, by C. de la Jonquière, 229 †
Erlang temple, Sze-chuan, 24, 25
Ermine Street, great north road, 517
Escaut, Le cours de l', par M. A. Rutot, 225 †
Esser, Dr., exploration of the Lower Kunene, 212
Essex, Agriculture in, by F. C. Danvers, 454 †
Éthiopie: *see* Abyssinia
Ethnographie, Die geographische Methode in der, von Fr. Ratzel, 234 †
Ethnographische Beobachtungen . . . in Togo, von H. Seidel, 234 †
Europasian Subregion of the Palæarctic Region, 87
Europe, Racial Geography of, by Prof. W. Z. Ripley, 450 †; Dr. Angot on the Rainfall of Western, 634
European Russia, population of, 198
Evans' Lake, Canada, 7
Eysseric, M., journey in the interior of French Ivory Coast, 442

F.

Faces and Places, by Dr. L. Robinson, 460 †
Fanoch, pass below, 585
Farama, altitude, etc., of, 394
Farrington, O. C., Observations on Popocatepetl and Ixtaccihuatl, 651 †; the Eruptive Rocks of Mexico, 650 †
Fawcett, F., The Moplas of Malabar, 648 †
Fedoroff, V., Obok and the country bordering on the Gulf of Tajura, 340 †
Feigl, H., Die Eisenbahnfrage in China, 648 †
Felej, fort of, 613, 614
Felix and Lenk, Tabla de alturas . . . de la Republica Mexicana, 650 †
Ferguson, D. W., Captain Robert Knox (Biography), 655 †
Fez, Medical Report on the Mission of Sir G. Euan-Smith to, by W. G. Macpherson, 552 †
Fifty Years' History of the Russian Geographical Society, 53
Fiji, Meteorological Observations at, by J. D. Vaughan, 652 †
Filipinas: *see* Philippines
Finland—
Bodentemperatur in Mustiala, von T. Homén, 548 †
Population of, 198
Fischer, Th., Die . . . Grundlagen eines Landeskunde von Italien, 338 †; on the development of the Peninsula of the Apennines, 633
Fishes of North and Middle America, by D. S. Jordan and B. W. Evermann, 121 †
Fitzgerald, E. A., Expedition to Aconcagua, 96, 469, 567
Flahault, Ch., Essai d'une carte botanique . . . de la France, 451 †
Flammarion, Camille (Biography), 555 †
Flemish Cap, cable fractures on the, 261
Fletcher, F., Map of the East and West Kootenay District, 561
Fletcher, H., expedition to West Australia, 216
Flux, A. W., The Costs of Sea Transport, etc., 344 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

Foà, M., books on Africa, reviewed, 177; Explorations in the Zambezi-Nyasa Region, 212, 539; Voyage sur les bords du Zambèze, 229 †
Fodea, altitude, etc., of, 395
Föhn, Luftdrückvertheilung und die Gradienten bei, von J. M. Pernter, 653 †
Fondi di Baia, Italy, 418
Foote, R. B., Geology of the Bellary District, 120 †
Forbes, H. O., Antarctica, 125 †
Forel et Du Pasquier, Drs., Variations périodiques des glaciers des Alpes, 546 †
Forel, F. A., Seiches des lacs et ouragan-cyclone, 342 †, 544
Forest Trees in Canada, Geographical Distribution of, by Dr. R. Bell, 340 †
Formosa—
Geschichte der Insel, von Ludwig Riess, 550 †
History of, by J. W. Davidson, 456 †
Taiwan Island, Travel in the Northern Part of, by Y. Ishii, 456 †
Taiwan Island, by S. Yokoyama, 456 †
Forster, Dr., on river temperatures, 621
Forster, W. G., on cable fractures, 271
Fosse Way, old Roman road, 516
Foster, A. J., The Chiltern Hundreds, 118 †
Foureau, M., expedition in the Sahara, 213; work on the Sahara, reviewed, 176
Fournier, M., Cavernes des environs de Marseille, 547 †
Fournier, A., Sur la Prononciation de quelques noms de lieux dans les Vosges, 547 †
Foville, A. de, La géographie de l'or, 345 †
Fowler, A., Measurement of the Earth, 232 †
Fram, proposed new voyage of the, 98
France—
Carte botanique . . . de la France, Essai d'une, par M. Flahault, 450 †
Dunes of South-Western, 634
Écritures de, par M. de Mortillet, 338 †
France and Germany—
Medieval town in, by J. Birchall, 646 †
Franceschi, Prof., on climate, 306
Franchetti, L., L'avvenire della Colonia Eritrea, 340 †
Franco-German Boundary in West Africa, 635
Franz Josef Land—
Jackson, Mr., explorations in, 445
On a Revised Map of, etc., by Prof. R. Copeland, 180 *; Letter from Mr. Brice on, 336
Frazer, P., and Kingsley, J. S., In Memoriam E. D. Cope, 343 †
Frejlach, Dr. J., Věstnik Král České Společnosti Náuk, 646 †
French explorers in Africa, 213, 539
French Geography, Notes on, by F. P. Gulliver, 118 †
Frio, Rio, Costa Rica, 65
Frisian islands—
Rettung der nordfriesischen Insellande, von A. C. Leichsering, 547 †
Frontier Delimitation, Science of, by Lieut.-Colonel Trotter, 346 †, 445
Früh, Dr., Ein Relief der Schweiz, 226 †
Fuciner See einst und jetzt, von K. Hassert, 548 †
Fula tribe, Western Sudan, 357, 359
Funafuti, Boring Experiments at, 217; boring at, by Prof. David, 640; its Zoology, etc., by Ch. Hedley, 652 †
Fundy, Bay of, Seiches on the, by A. W. Duff, 234 †
Fuorigrotta crater, 429
Fyne, Loch, Circulation of the Water in, by Dr. H. R. Mill, 632, 654 †

G.

Gabarra, J. B., L'ancien port de Cap-breton, 646 †
Gabb, Prof., on the coast of Talamanca, 72
Gaffarel, P., Une excursion en Herzégovine et en Bosnie, 117 †
Gallegos valley, Patagonia, 408
Gallois, L., La territoire contesté entre le Venezuela et la Guyane Anglaise, 458 †
Gallwey, Major, remarks on "Nupe and Ilorin," 373
Gamong, W. F., Place Nomenclature of New Brunswick, 553 †
Gaping Ghyll cave, Yorkshire, 506, 509
Garbini, A., Alcune notizie fisiche sulle acque del Benaco, 451 †
Gariannonum, Roman town of, 514
Garwood, J., Across Spitzbergen with Sir Martin Conway, 459 †
Gascogne, Dunes primaires de, par E. Durègne, 225 †
Gascony, Dunes of, M. Durègne on the Mode of Formation of, 634
Gavazzi, Dr. A., La temperatura della superficie del Mare Adriatico, 554 †
Gayet, A., La découverte du Temple de Ramsès II. à Antinoë, 551 †; Les Fouilles d'Antinoë, 649 †
Gebelin, J., Essai de Géographie Appliquée, 461 †; Les limites géographiques du Climat Tempéré, 233 †
Geddes, P., Cyprus, Actual and Possible, 118 †
Geh, Beluchistan, 585
Geiger, Dr. Th., Conrad Celtis in seinen Beziehungen zur Geographie, 655 †
Geiger, Dr. W., Ceylon und seine Bewohner, 227 †
Geikie, J., The Last Great Baltic Glacier, 450 †
Geikie, Sir A., Annual Report of the Geological Survey of the United Kingdom, 119 †; remarks on "Sub-Oceanic Changes," 285; Volcanoes of the British Islands, note on, 307

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

Genealogy of the Sciences, by H. Arçtowski, 344 †
Geneva, Lake of—
Morphometrie des Genfersees, von Dr. Halbfass, 226 †
Gentil, M., Explorations in Lake Chad region, 213, 539
Geodesy—
Comptes-Rendus . . . de l'Association Géodésique Internationale, par A. Hirsch, 233 †
Gnomen de l'Observatoire et les anciennes Toises, de M. C. Wolf, 653 †
Geodetic positions, Formulæ . . . for the computations of, 232 †
Geographical Advantages, On the Relativity of, by G. G. Chisholm, 654 †
Geographical Distances, Aide-memoire to a Comparison of Certain, Captain Cleeve on, 334
Geographical Distribution of Plants, by Conway MacMillan, 346 †
Geographical education, progress of, 310, 311
Geographical Environment, Effects of, by G. G. Hubbard, 554 †; Influence of, by Cosmos Mindeleff, 234 †
Geographical Horizon, Enlargement of the, by G. Philip, 654 †
Geographical Index to Books, etc., for 1896..344 †
Geographical Literature of the Month—
Africa, 120, 228, 339, 456, 550, 649
America, 121, 229, 340, 456, 552, 650
Anthropogeography and History, 234, 460, 554, 654
Asia, 119, 227, 339, 454, 548, 647
Australasia and Pacific Islands, 122, 231, 348, 458, 553, 652
Biography, 343, 460, 555, 654
Europe, 117, 224, 338, 450, 546, 646
General, 343, 461, 555, 655
Mathematical Geography, 124, 232, 459, 653
Physical and Biological Geography, 124, 232, 342, 460, 554, 653
Polar Regions, 123, 231, 341, 458, 652
Geographical Periodicals, Use of, by W. M. Davis, 345 †
Geographical pictures, Dr. H. R. Mill on, 475
Geographical Problems, Some, by J. Scott Keltie, 308 *
Geographical Reading for Teachers, Dr. Mill on, 641
Geographical Society, Transbaikalian, 94; at Southampton, A New, 642
Geographisches Jahrbuch, von H. Wagner, 656 †
Geography—
Ancient, History of, by H. F. Tozer, 234 †, 331
At the British Association, Toronto, 1897..471
At Victoria University, 101
Bibliography of, by W. S. Sonnenschein, 555 †
Geography—*continued.*
Chapters on the Aims . . . of Teaching, by Fr. Spencer, 345 †
Definitions and functions of, 309, 310
Dei limiti . . . della Geografia, by Prof. Siragusa, 345 †
Educational Subjects, Special Report on, 655 †
Geografía en 1895, por R. T. Campos, 556 †
Geografia nelle scuole classiche, by Prof. Bigoni, 345 †
Geografia per le scuole secondarie, by Prof. G. Marinelli, 345
Géographie Appliquée, Essai de, par J. Gebelin, 461 †
Géographie de l'or, par M. de Foville, 345 †
Gli studi geografici . . . nell' educazione moderna, by Prof. Ricchieri, 345 †
In Education, Prof. Spencer on, 220
Metodo . . . secondario della Geografia, by Prof. Pasanisi, 345 †
Natural Geographies, The, by J. W. Redway, 656 †
Of Communications, by Sir H. Tyler, 556 †
Of Mammals: the Palæarctic Region, by W. L. Sclater, 84 *
Of Thuringia, by Prof. Regel, 207
Physical, Potamology as a branch of, by Prof. A. Penck, 619 *
Practical Geography in Manchester, by J. Howard Reed, 345 †
Scientific, in Germany, 311
Teaching of, 446
Wirtschaftsgeographie, Uebersichten der, von A. Oppel, 344 †
Zeitströmungen in der Geographie, von Dr. Wisotzki, 346 †
Geological Bibliography, Prof. de Margerie's, 332
Geological Society, Index to the *Quarterly Journal* of the, 344 †
Geological Society of Australasia, Inaugural Address by Jas. Stirling, 231 †
Geological Survey of Canada, Annual Report, 121 †; Topographical Work of the, by J. Burr Tyrrell, 623 *
Geological Survey of the United Kingdom, Annual Report, by Sir A. Geikie, 119 †
Geology of the Bellary District, by R. B. Foote, 120 †; of the Bermuda Islands, Mr. R. S. Tarr on, 639
Geomorphology—
Morfologia della superficie terrestre, etc., by Prof. Porena, 342 †
Gerini, G. E, Notes on the Early Geography of Indo-China, 436, 455 †
Gerlache, Commander de, Belgian Antarctic Expedition under, 331
German Africa: *see* Africa
German Colonial Literature, by M. Brose, 656 †
German Colonies—
Deutschen Kolonialgesellschaft, Jahresbericht der, 461 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000003

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

German Colonies—*continued.*
Deutscher Kolonial-Atlas, von P. Langhans, 562
Notes sur l'Empire Colonial de l'Allemagne, par H. Barré, 556 †
Verbrecherdeportation nach deutschen Kolonien, von J. Graf Pfeil, 556 †
German exploring expedition to New Guinea, 444
German-Portuguese Boundary in East Africa, 637
Germaniæ, Bibliotheca Geographica, von P. E. Richter, 547 †
Germany—
Handbook for travellers, by K. Baedeker, 118 †
Häufigkeit der Frost-, Eis- und Sommertage in Nord-Deutschland, von Dr. Schwalbe, 338 †
Lands-chaftsformen, von Dr. Detmer, 647 †
Maps: Eifelmaare, Tiefenkarte der, von Dr. Halbfass, 347; Geologische Karte des Deutschen Reiches, von Dr. Lepsius, 347; Karte des Deutschen Reiches, 558
Meteorologischen Instituts, Bericht über die Thätigkeit, von W. von Bezold, 647 †; Veröffentlichungen des, 647 †
Scientific Geography in, 311
Gessert, F., Reise längs der Flussthäler, 649 †
Ghara, North Africa, 598
Ghica-Comănesci, D., O călătorie prin tara Somalilor, 229 †
Gibbs, J. W., Biography of H. A. Newton, 555 †
Gilbert, G. K., Report on geological examination of . . . gravity stations, 233 †
Gindre, H., En Afrique Australe et à Madagascar, 552 †
Giorgi, Prof. de, L'orografia delle Puglie, etc., 451 †
Glacial age, effects of the, 379
Glareanus, Henricus, use of the name America, 329
Glenn, L. C., Applied Physiography in South Carolina, 457 †
Glimpse of the late War, by Major Callwell, 453 †
Godden, G. M., Nágá and other Frontier Tribes of North-East India, 549 †
Goeldi, Dr. E. A., Eine naturforscherfahrt nach dem Litoral des südlichen Guyana, etc., 341 †
Goklan Turkomans, Persia, 574, 575
Goko or Ngoko river, Congo basin, 441
Gold in Costa Rica, 73
Goldie, Sir G., remarks on "Nupe and Ilorin," 370
Goldsmid, Sir F. J., letter from, on "Kech-Makurán," 447; remarks on "Recent Journeys in Persia," 594
Goode, G. B., Memoir of, by S. P. Langley, 555 †
Gori, F., Antichi nomi dei fiumi di Romagna, 452 †
Gottsche, Dr., Die tiefsten Glacialablagerungen der Gegend von Hamburg, 225 †
Gould, B. A. (Biography), 343 †
Grand lake, Canada, 5
Grande de Tarcoles, Rio, 62
Grandidier, A., Voyage de M. Lemaire dans l'Androy, 551 †
Grantham, early importance of, 527
Graves, H., and A. B. Evans, The Roads round Oxford, 454 †
Gravity, Relative Determination of, etc., by G. R. Putnam; and report on geological examination of . . . gravity stations, by G. K. Gilbert, 233 †; Telegraphic Determination of the Force of, by E. D. Preston, 233 †
Gray, M. H., remarks on "Sub-Oceanic Changes," 287
Gray, R. Kaye, on cable fractures, 274; remarks on "Sub-Oceanic Changes," 288
Great Britain—
Handbook for travellers, by K. Baedeker, 454 †
Grecian Archipelago—
Griechischen Inseln des Ägäischen Meeres, von Dr. A. Philippson, 451 †
Greco-Persian Art, Influence of, on Japanese Arts, by Rev. I. Dooman, 455 †
Greece—
Geologische Reise in Nord-Griechenland, von V. Hilber, 451 †
Greece in the 19th century, by L. Sergeant, 647 †
Griechen nach Zahl, von A. Oppel, 118 †
Maps: Philip's Special Map of, 658
Meteorologische . . . Beobachtungen in Griechenland, von H. Hartl, 338 †
Thessalien und Epirus, von Dr. Philippson, 647 †
Greenland—
Cornell Glacier, Former Extension of, by R. S. Tarr, 342 †
Dänische Expedition nach Ostgrönland, von N. Hartz, 232 †
Expeditions: Peary's, 218; Lieut. Amdrup's, 218
Glacial Studies in, by T. C. Chamberlin, 124 †
Magnetic Observations on the Greenland Expedition, by G. R. Putnam, 124 †
Proposed new voyage in the *Fram* to, 98
Valley Glaciers of the Upper Nugsuak Peninsula, by R. S. Tarr, 342 †
Greffrath, H., Fortschritte der geographischen Forschungen und Reisen, 652 †
Gregory, Dr. J. W., Some Problems of Arctic Geology, 652 †
Greim, Dr. G., Die Gletscherbai in Alaska, 122 †
Greville, Hon. Ed., Year Book of Australia for 1897..341 †
Grillo-Rosso crater, 420

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000069

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [145r] (142/186)

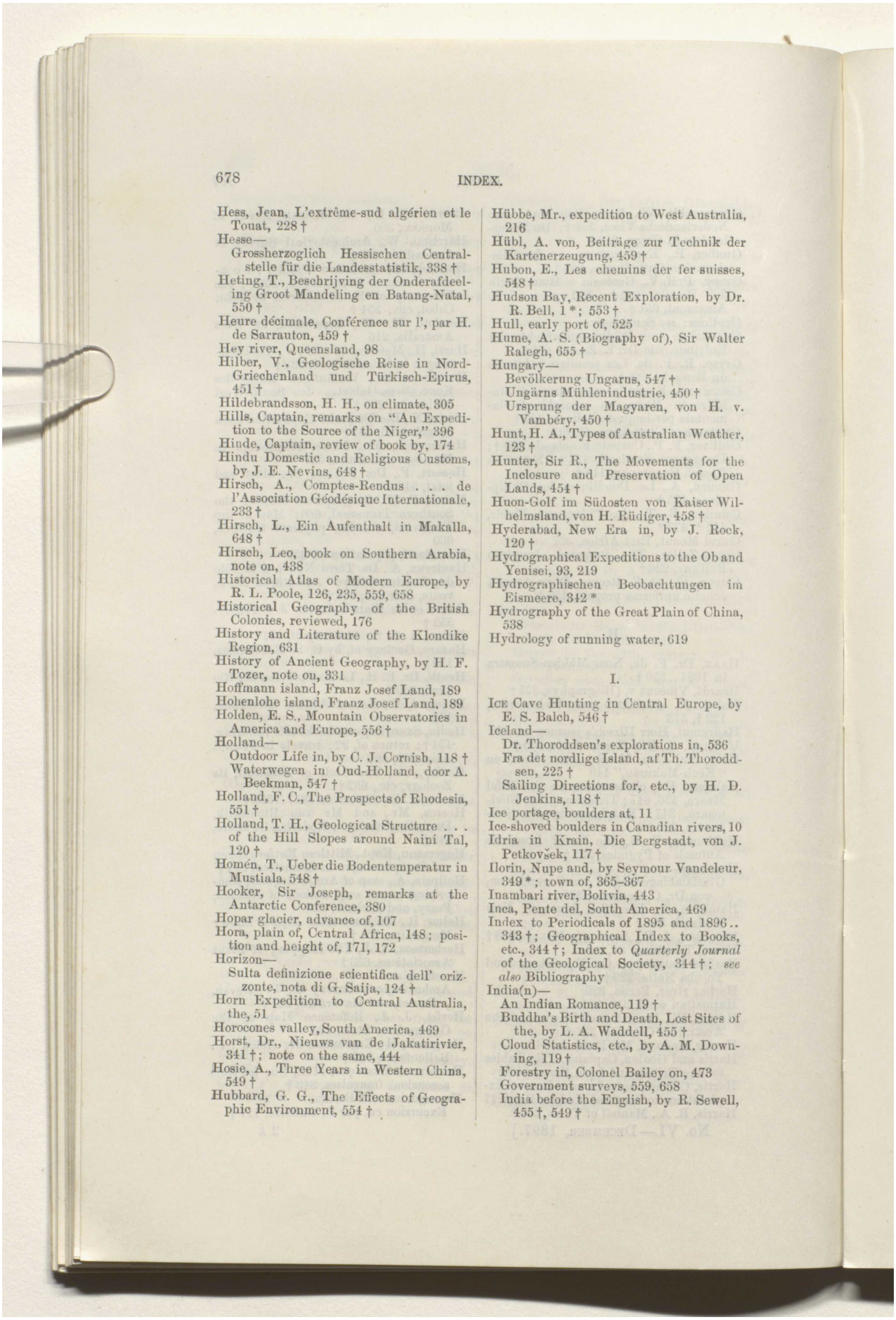
Groeneveldt, W., Eene Reis van eene Nederlandsche Vloot, 554 †; De Nederlanders in China, 648 †
Groffier, P., Explorations . . . des Missionnaires Catholiques, 656 †
Grossi, Prof. V., Geologia e Mineralogia del Brasile, 341 †; Nel paese delle Amazzoni, 651 †
Grottoes: *see* Speleology
Grundzüge einer Bildungsgeschichte der Erdrinde, von Dr. E. Zache, 461 †
Gryse, R. P. de, Les premiers habitants du Bengale, 648 †
Guarducci, F., Sulla opportunità di stabilire in Roma un caposaldo fondamentale per le quote italiane, 459 †
Guatusos of Costa Rica, 65, 66
Gulliver, F. P., Cuspate Forelands, 554 †; Dungeness Foreland, 454 †; Notes on French Geography, 118 †
Gummá, A., Le Dondiin et les Philippines, 455 †
Günther, R. T., the Phlegræan Fields, 412 *, 477 *
Gurui Mount, East Africa, 327
Guyer-Zeller, The Proposed Jungfrau Railway, 226 †
Guyou, G., et E. Reclus, D'un Atlas à échelle uniforme proposé, 459 †

H.

Haan, Dr. F. de, Naar Midden-Sumatra in 1684..550 †
Haardt, Vincenz v. (Biography), 555 †
Habel, J., Ansichten aus Südamerika, 122 †, 543
Hadramut, Herr Hirsch's journey in, 438
Hagerup, E., Den Norske Lods, 453 †
Haig, Maj.-Gen. M. R., letter from, on "Kech-Makurán," 449
Halbfass, Dr., observations on the Eifel Maare, 436, 647; Tiefenkarte der Eifelmaare, 347; Morphometrie des Genfersees, 226 †
Haliburton, R. G., the Dwarf Domestic Animals of Pygmies, 555 †
Hamburg—
Glacialablagerungen der Gegend von, von Dr. C. Gottsche, 225 †
Hamilton, A., Deep-Sea Fauna of New Zealand, 554 †
Hamilton, A. R., Ascents in Mexico, 553 †
Hanoi, Tongking, 94, *note*
Harford-Battersby, C. F., Niger and Yoruba Notes, 229 †
Harhaz river, Persia, 326
Harmattan wind, 350, 391
Harper, W., Growth and Progress of the Australian Colonies, 231 †
Harrar, trade of, Mr. Rodd on, 440
Harris and Goalen, Captains, Tide Tables for the British and Irish Ports, 548 †
Harris, Colonel, remarks on "Recent Explorations to South of Hudson Bay," 17
Harris, R. A., Manual of Tides, 233 †
Harris, W. B., the Roman Roads of Morocco, 300
Harrison, W., Archæological Survey of Lancashire, 227 †
Harrisse, H., Sébastien Cabot . . . considéré comme Cartographe, 554 †; the Discovery of North America by John Cabot, etc., 554 †
Harslett, H. W., expedition to West Australia, 216
Hartl, H., Meteorologische . . . Beobachtungen in Griechenland, 338 †
Hartmann, Dr., Vorläufigen Karte des Koncessions-Gebietes des South-West Africa Co., 229 †
Hartz, N., Die Dänische Expedition nach Ostgrönland, 232 †
Hassenstein, Dr., Neue Reiserouten in Marangu und Itawa, 561
Hassert, F., Der Fuciner See einst und jetzt, 548 †
Hatch, F. H., Geographical Map of the Southern Transvaal, 660; Map of the Transvaal, showing physical features, 660
Hausaland, population of, 357
Hautreux, A., De Terre Neuve à la côte des Landes, 342 †; Atlantique Nord, vents, courants, 654 †
Hawai et les États-Unis, par J. Servigny, 553 †
Hawes, A. G. S., Obituary of, 447
Hazara, Geology of, by C. S. Middlemiss, 120 †
Heath, Dr. E. R., La Exploracion del Rio Beni, 230 †
Heawood, E., Recent African Literature, 172
Hedin, Sven, Lop-nor-bäckenets vandring, 454 †; return of, 92; travels in Central Asia, 209, 566
Hedley, Ch., The Atoll of Funafuti, its Zoology, etc., 652 †
Heeres, J. E., Ambon in 1647..550 †
Heeres, Mr., and Mr van Riemsdijk, Dagh-Register . . . Nederlandts-Indie, 549 †
Hegemann, Kapt., Mittlere Entfernungen auf Dampferwegen in Seemeilen, 344 †
Heilprin, A., map of Arctic Regions, comprising recent explorations of Nansen, Peary, and Jackson, 125
Helms, R., the Australian Alps or Snowy Mountains, 231 †
Herbertson, A. J., The Mapping of Plant Associations, 653 †
Herefordshire—
Archæological Survey of, by Bevan, Davies, and Haverfield, 227 †
Herfst, J. J., Reference Map of the Orange Free State, 235
Hergesell, H., Ergebnisse der ersten . . . Ballonfahrt, 343 †
Hermite et Besançon, MM., Sur les trois ascensions françaises, 343 †
Herzegovina and Bosnia—
Excursion en, par P. Gaffarel, 117 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002d

مكتبة قطر الوطنية
Qatar National Library



Hess, Jean, L'extrême-sud algérien et le Touat, 228 †
Hesse—
Grossherzoglich Hessischen Centralstelle für die Landesstatistik, 338 †
Heting, T., Beschrijving der Onderafdeeling Groot Mandeling en Batang-Natal, 550 †
Heure décimale, Conférence sur l', par H. de Sarrauton, 459 †
Hey river, Queensland, 98
Hilber, V., Geologische Reise in Nord-Griechenland und Türkisch-Epirus, 451 †
Hildebrandsson, H. H., on climate, 305
Hills, Captain, remarks on "An Expedition to the Source of the Niger," 396
Hinde, Captain, review of book by, 174
Hindu Domestic and Religious Customs, by J. E. Nevins, 648 †
Hirsch, A., Comptes-Rendus . . . de l'Association Géodésique Internationale, 233 †
Hirsch, L., Ein Aufenthalt in Makalla, 648 †
Hirsch, Leo, book on Southern Arabia, note on, 438
Historical Atlas of Modern Europe, by R. L. Poole, 126, 235, 559, 658
Historical Geography of the British Colonies, reviewed, 176
History and Literature of the Klondike Region, 631
History of Ancient Geography, by H. F. Tozer, note on, 331
Hoffmann island, Franz Josef Land, 189
Hohenlohe island, Franz Josef Land, 189
Holden, E. S., Mountain Observatories in America and Europe, 556 †
Holland—
Outdoor Life in, by C. J. Cornish, 118 †
Waterwegen in Oud-Holland, door A. Beekman, 547 †
Holland, F. C., The Prospects of Rhodesia, 551 †
Holland, T. H., Geological Structure . . . of the Hill Slopes around Naini Tal, 120 †
Homén, T., Ueber die Bodentemperatur in Mustiala, 548 †
Hooker, Sir Joseph, remarks at the Antarctic Conference, 380
Hopar glacier, advance of, 107
Hora, plain of, Central Africa, 148; position and height of, 171, 172
Horizon—
Sulta definizione scientifica dell' orizzonte, nota di G. Saija, 124 †
Horn Expedition to Central Australia, the, 51
Horocones valley, South America, 469
Horst, Dr., Nieuws van de Jakatirivier, 341 †; note on the same, 444
Hosie, A., Three Years in Western China, 549 †
Hubbard, G. G., The Effects of Geographic Environment, 554 †
Hübbe, Mr., expedition to West Australia, 216
Hübl, A. von, Beiträge zur Technik der Kartenerzeugung, 459 †
Hubon, E., Les chemins der fer suisses, 548 †
Hudson Bay, Recent Exploration, by Dr. R. Bell, 1 *; 553 †
Hull, early port of, 525
Hume, A. S. (Biography of), Sir Walter Ralegh, 655 †
Hungary—
Bevölkerung Ungarns, 547 †
Ungärns Mühlenindustrie, 450 †
Ursprung der Magyaren, von H. v. Vambéry, 450 †
Hunt, H. A., Types of Australian Weather, 123 †
Hunter, Sir R., The Movements for the Inclosure and Preservation of Open Lands, 454 †
Huon-Golf im Südosten von Kaiser Wilhelmsland, von H. Rüdiger, 458 †
Hyderabad, New Era in, by J. Rock, 120 †
Hydrographical Expeditions to the Ob and Yenisei, 93, 219
Hydrographischen Beobachtungen im Eismeere, 342 *
Hydrography of the Great Plain of China, 538
Hydrology of running water, 619

I.

Ice Cave Hunting in Central Europe, by E. S. Balch, 546 †
Iceland—
Dr. Thoroddsen's explorations in, 536
Fra det nordlige Island, af Th. Thoroddsen, 225 †
Sailing Directions for, etc., by H. D. Jenkins, 118 †
Ice portage, boulders at, 11
Ice-shoved boulders in Canadian rivers, 10
Idria in Krain, Die Bergstadt, von J. Petkovšek, 117 †
Ilorin, Nupe and, by Seymour Vandeleur, 349 *; town of, 365–367
Inambari river, Bolivia, 443
Inca, Pente del, South America, 469
Index to Periodicals of 1895 and 1896 .. 343 †; Geographical Index to Books, etc., 344 †; Index to *Quarterly Journal* of the Geological Society, 344 †; *see also* Bibliography
India(n)—
An Indian Romance, 119 †
Buddha's Birth and Death, Lost Sites of the, by L. A. Waddell, 455 †
Cloud Statistics, etc., by A. M. Downing, 119 †
Forestry in, Colonel Bailey on, 473
Government surveys, 559, 658
India before the English, by R. Sewell, 455 †, 549 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00003d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [146r] (144/186)

India(n)—*continued.*
India in the Sixtieth Victorian Year, by Sir Roper Lethbridge, 455 †
India under Queen Victoria, by Sir A. Lyall, 119 †
Indischen Kastenwesens. Geschichte des, von H. Oldenberg, 549 †
Indischen Seespiegels Mohît. übersetzt von Dr. M. Bittner und Dr. Tomaschek, 339 †, 455 †
Maps: Bartholomew's map of North-West Frontier, 559; Philip's large-scale map, North-West Frontier, 659; Stanford's sketch-map of the same, 561
Nágá and other Frontier Tribes of North-East India, by G. M. Godden, 549 †
North-West Provinces of, and Oudh, Tribes, etc., of the, by W. Crooke, 120 †
North-West Provinces, their History, etc., by W. Crooke, 120 †
Rainfall in, by J. E., 228 †
Sea-routes to, Portuguese Celebration of the Discovery of the, 641
Survey of India Department, General Report, 549 †
Indians of America, arrows of, 66, *note*
Indo-China—
Early Geography of, by G. E. Gerini, 436, 455 †
Renseignements géographiques recueillis . . . au cours de l'expédition du Prince Henri d'Orléans, par E. Roux, 550 †
Ingall, E. D., Report on Mineral Statistics and Mines, 230 †
Ingleborough grotto, Yorkshire, 509
Insectivora of the Palæarctic Region, 86
Instruments lent to travellers, 115
Interozeanische Kanal, von Dr. H. Polakowsky, 329, 457 †: *see also* Panama
Iquique—Arica, cable interruptions, 265, 266
Iran plateau, Persia, 569
Irawadi, upper, Lieut. Pottinger's expedition to the, 210
Irazú volcano, Costa Rica, 59
Ireland—
Caves and grottoes in, 501
The Tourist in, by Earl of Mayo, 548 †
Thorough Guide Series, by M. J. B. Baddeley, 454 †
Iron workings in Central Africa, 156
Iroquois Confederacy, Consolidation of the, by James Douglas, 122 †
Is the Earth a Planet? by C. Robertson, 345 †
Isaia, altitude, etc., of, 393
Ischia, Navigirung im Kanal von, 452 †
Ishii, Y., Travel in the Northern Part of the Taiwan Island, 456 †
Island: *see* Iceland
Islands—
Recherches sur la constitution des îles, par Dr. J. de Windt, 653 †
Isle-à-la-Crosse, Du lac de l', par Émil Petitot, 341 †
Isle of Wight and New Forest, Bartholomew's map of, 559
Isurium (Aldborough), Roman town of, 515
Italian Discoveries in East Africa, 439; Expedition to Mount St. Elias, 443
Italians in Eritrea, Captain Jonquière's book on, 178
Italy—
Area dell' Italia naturale, del O. Marinelli, 339 †
Carta d'Italia, Lavori . . . nell' Istituto Geografico Militare per la, del Gen. B. De Benedictis, 451 †
Carta geologica del Regno, Sulla formazione della, del N. Pellati, 452 †
Carte d'Italia del secolo XV., etc., del A. Mori, 452 †
Cartografia italiana, Storia della, del A. Botto, 452 †
Ghiacciai del Massiccio del M. Disgrazia o Pizzo Bello, del Prof. Marson, 451
Ghiacciai italiani siano sistematicamente studiate, del Prof. Porro, 452 †
Glossario geografico dell' Italia del Medio-Evo, del Prof. G. D. Vedova, 452 †
L'émigration Italienne, par M. G. Yver, 555 †
Limite Convenzionale tra Italia Continentale e Italia Peninsulare, di L. de Magistris, 452 †
Montagne della Penisola Italiana, distinzioni, etc., del F. Porena, 452 †
Studi limnologici dei laghi italiani, etc., del Prof. D. Vinciguerra, 452 †
Sulla opportunità che l'area delle suddivisioni del Regno venga evaluata, etc., del Prof. Millosevich, 451 †
Terremoti della Romagna del 1781, del M. Baratta, 452 †
Volcanoes and mineral springs, 433
Wissenschaftlichen Landeskunde von Italien, von Th. Fischer, 338 †
Ivory Coast, French, M. Eysseric's journey in, 442

J.

Ja river, Congo basin, 441
Jack, R. L., Meridional Anthills of Cape York Peninsula, 231 †
Jackson-Harmsworth Expedition, Return of the, 445
Jacottet, E., Mœurs, coutumes et superstitions des Ba-Souto, 340 †
Jade-mines district, Lieut. Carey's report, 325
Jaegar, Dr., Problems of Nature, Researches and Discoveries of, 123 †
Jafar Bai tribe of Turkomans, 574 *note*
Jakati River, Dutch New Guinea, Exploration of the, 341 †, 444
Jaláli fort, Maskat, 612

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000001

مكتبة قطر الوطنية
Qatar National Library

Jálwar, inscriptions at, 223
Jamaica, Handbook of, for 1897, compiled by S. P. Musson and T. L. Roxburgh, 457 †; Photographs of, by Colonel Swinton, 563
James bay, Hudson bay, 8
Jameson, J. M., Climate of New York State, 122 †
Jansen, Dr. H., Die Müggelberge, der Müggelsee, etc., 547 †
Janssen, J., Four Days' Observations at the Summit of Mont Blanc, 118 †
Japan—
Ainu Words as illustrative of Customs, etc., by Rev. J. Batchelor, 455 †
Alcock, Sir Rutherford, work in, 645
Chinese Refugees in Mito, by E. W. Clement, 455 †
Earthquakes in, Distribution of, by Ch. Davison, 530 *
Earthquake shocks in, 132
Fissures in the Mountainous Land of Minami Komagōri, by K. Jimbō, 456 †
Influence of Greco-Persian Art on Japanese Arts, by Rev. I. Dooman, 455 †
Sprichwörter . . . der Japanischen Sprache, von P. Ehmann, 550 †
Jatoba river, South America, 215
Java et le Congo au point de vue colonial, par M. Leclercq, 461 †
Java, Triangulation von, von Dr. Oudemans, 120 †
Jenkins, H. D., Sailing Directions for Fiords, etc., of Iceland, 118 †
Jennings-Bramly, W., A Journey to Siwa, 598
Jervois, Sir W. Drummond, obituary of, 446
Jessup Expedition to the North Pacific Coast, 639
Johns, P., The Coalfields of the Colony of the Cape of Good Hope, 551 †
Johnston, Sir H. H., British Central Africa, 339 †; note on, 410
Johnston, T. B., obituary of, 446
Johnston, W. & A. K., Our Empire Atlas, 235
Jonquière, Captain, book on Eritrea, review, 178
Jordan, D. S., and B. W. Evermann, The Fishes of North and Middle America, 121 †
Jub, Expedition to the, under Major Macdonald, 211
Juby, Cape, region of, Dr. Zaytoun's observations on, 96
Judd, Prof., on Deposits of the Nile Delta, 539
Jungfrau—
Jungfraubahn, Die, von J. Wottitz, 226 †
Proposed Jungfrau Railway, by Guyer-Zeller, 226 †
Jura, Faune Cavernicole du, par A. Viré, 547 †

K.

Kaba river, West Africa, 255, 256
Kabba, upper Niger, 353
Kačna-Jama, La, par M. Marinitsch, 546 †
Kafiristan and its People, by Sir G. S. Robertson, 548 †; Kafiristan: its Manners and Customs, by Sir G. S. Robertson, 119 †
Kaiser, Alfred, Journey in East Africa, 540
Kaiser Franz Josef Land: *see* Franz Josef Land
Kaiser Wilhelmsland: *see* New Guinea
Kalangba, altitude, etc., of, 393, 397
Kalieri, West Africa, 253; altitude of, 394, 397
Kamange, altitude, etc., of, 393, 397
Kambaia, altitude, etc., of, 394
Kambwire's, Central Africa, 160; position, 171
Kamegaoka in the Province of Mutsu, by D. Satō, 550 †
Kamerun (*see also* Cameroons)—
Säugethiere des Kamerungebietes, von Dr. Y. Sjöstedt, 121 †
Kamindu, altitude, etc., of, 393, 397
Kanitz, F., Die russische Muonio-Expedition, 453 †
Kankuia, altitude, etc., of, 395
Kanpo, Sze-chuan, 27
Karonga, changes of coast-line at, 294, 295
Kasungu people and district, 156; position, etc., 171, 172
Katanga, Terrains Anciens du, par J. Cornet, 121 †
Katimbo, altitude, etc., of, 393, 397
Kaukasus: *see* Caucasus
Kawana, altitude, etc., of, 393, 397
Kech-Makurán, letter from Sir F. J. Goldsmid on, 447; letter from Gen. M. R. Haig, 449; letter from Mr. G. P. Tate on, 221
Keltie, J. Scott, Some Geographical Problems, 308; * Address to the Geographical Section of the British Association, 656 †
Kendal, early importance of, 529
Kennaway, Mr., remarks on receiving award for Mr. Douglas, 110
Kennicott, Robert, explorations in the Yukon district, 631
Kerguelan, Aux Terres de, etc., par M. Mercié, 652 †
Kerman, Persia, 580
Kéthulle, M. De la, Le pays des Niams-Niams, 456 †
Kew Observatory—
Description of the, 461 †; Report of the, 461 †
Kharkov, population of, 199
Khwash, Beluchistan, 586
Kia-ling, Sze-chuan, 22
Kiel—
Magnetische Beobachtungen an der Kieler Föhrde, von A. Schück, 647 †
Temperaturschwankungen in, von Prof. L. Weber, 647 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000021

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [147r] (146/186)

Kiepert und Moisel, Karte von Deutsch Ost-Afrika, 347, 561
Kilela, altitude, etc., of, 393, 397
King, G., Materials for a Flora of the Malayan Peninsula, 550 †
Kingsley, J. S., Obituary of E. D. Cope, 343 †
Kiniarok, Plateau of East Africa, 327
Kiridugu, West Africa, 250; altitude, 394, 397
Kirimandugu, altitude, etc., of, 394
Kirkpatrick and Prothero, Profs., The Unity of the Empire, 344 †
Kishineff, population of, 199
Kita-Lolo junction, country round the, 257
Kittler, Dr. C., Ueber die geographische Verbreitung und Natur der Erdpyramiden, 653 †
Klemm, G., Ueber ein typisches Lösspropil bei Aschaffenburg, 338 †
Klondike Goldfields, The, by H. De Windt, 553; † Clondyke Gold Fields, by M. S. Wade, 650 †; History and Literature of, 631; Waterways to, by H. B. Small, 650 †
Knipping, E., Das Wetter zwischen dem La Plata und Kap Horn, 341 †
Knonau, G. M. von (biography of), Josias Simler, 555 †
Knox, Captain Robert, by D. W. Ferguson, 655 †
Knudsen, M., Le plankton marin et les gaz de l'eau de mer, 125 †
Kokang Shan State, 209
Kolwah district, Kech Makurán, 221
Kondekoro, altitude, etc., of, 394
Kong Karls Land, Mr. Pike's exploration of, 543
Kootenay District, East and West, map by Fr. Fletcher, 561
Koppenteiche, Dr. Zacharias' investigations of the, 323
Kosciusko, Mount, Meteorological Observatory for, 330
Kosobeji, Nupe village, 355
Kota-Kota village, 169; position of, 171
Kouznetsoff, Colonel, expedition into Bukhara, 210
Krakatau, De eilanden, door J. Muller, 550 †
Krause, Dr. E., Vegetationskizze Mittelrusslands, 647 †
Krieg, Kapt., Hydrographische Beobachtungen . . . New Guineas, 652 †
Kropotkin, P., The Population of Russia, 196 *
Kru or Kruto, West Africa, 241, 243; altitude, etc., 393, 397
Kuan Hsien, 25
Kubeh-i-Subs at Kerman, 580, 581
Kuchan, Persia, 577
Kufuna, Kukuna, Kulakoia, altitude, etc., of, 393, 395
Kuh-i-Fanoch, 585
Kulturformen und ihre geographische Verbreitung, von Dr. A. Vierkandt, 460 †
Kulu im Himalaya, Reise nach, von Prof. Oppert, 228 †
Kundembaia, altitude, etc., of, 393, 397
Kunene river, Dr. Esser's exploration of the, 212
Kuranko country and people, 250–253
Kuril islands, eruptions in the, 138
Kuro Siwo current, 145
Kurubundo, altitude, etc., of, 393, 397
Kurunégala District, Ancient Cities in the, by F. H. Modder, 455 †

L.

Labrador Area, The, by A. P. Low, 229 †
Labrador Peninsula, Report on Explorations in the, by A. P. Low, 121; † topographical work in, 625
Lagos, The Colony of, by Sir G. T. Carter, 456 †, 551 †
Laing, J. W., Photographs of Vancouver Island, 348
Lajji Valley, Beluch-Kalat Frontier, 589
Lakes—
A Study for Teachers, by A. P. Brigham, 124 †
Geographical surveys of, 321, 322
Nomenclatura dei laghi, etc., del O. Marinelli, 342 †
Of the Riesen Gebirge, Dr. Zacharias' investigations, 323
Organismes inférieurs à la surface de quelques lacs Suisses, par E. Pitard, 342 †
Seiches des lacs et ouragan-cyclone, par M. Forel, 342 †
Lalande, P., Les Grottes artificielles des Environs de Brive, 546 †
La Libertad—Salina Cruz, cable interruptions, 265
Lallemand, Ch., Sur la précision comparée de divers mode de repérage de la verticale, etc., 124 †
Lancashire—
Archæological Survey of, by W. Harrison, 227 †
Physical Geography of, by H. Bolton, 227 †
Landor, H. S., return of, from Tibet, 537
Landslip on the Yang-tse, 194
Landslips by Overloading and Facial Shear, 142
Land-Surveying, Aid to, by C. J. Clancey, 124 †
Lange, J., Fra Smaarejser i Norge, 647 †
Langhans, P., Deutscher Kolonial Atlas, 562
Langley, S. P., Memoir of G. B. Goode, 555 †
Lanwa, upper Niger, 365
Lao-kai, Red river, 94
La Plata und Kap Horn, Das Wetter zwischen dem, von E. Knipping, 341 †
Lapparent, M. de, Les mouvements de l'écorce terrestre, 233 †
Lar or Lahr river, Persia, 326

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

La Serena—Valparaiso, cable interruptions, 267
La Starza, Italy, 422
Latitude, Variation of, by J. K. Rees, 124 †
Lauterbach and Kersting, Drs., Vorläufige Skizze des Reiseweges der Kaiser Wilhelms Land, 347
Lava-streams and Trachytic Rock Masses, 434
Lavieuville, G., Notice sur les cartes marines, 459 †
Leclercq, J., Le Java et le Congo au point de vue colonial, 461 ; † Le Congo doit être notre Java, 649 †
Lee, Sidney, Dictionary of National Biography, 343 †
Leeds, growth of, 528
Leichsering, A. C., Zur Rettung der nordfriesischen Insellande, 547 †
Lemaitre, M., on the hydrography of the Sanga river, 441
Lemoine, J., Exploration en Papouasie, 554 †
Lemoine, M., Service Hydrométrique du Bassin de la Seine, 225 †
Lengekoro, altitude, etc., of, 393, 397
Lenz, O., Sui cosidetti "popoli nani" dell' Africa, 228 †
Léopold II., Le lac, 551 †
Lepsius, Dr., Geologische Karte des Deutschen Reiches, 347
Le Souef, D., Ascent of Mt. Peter Botte, North Queensland, 458 †
Lessar, M., remarks on receiving medal for M. Semenoff, 108
Lethbridge, Sir R., India in the Sixtieth Victorian Year, 455 †
Leucade, Isola di, Cenni geologici sull', por C. de Stefani, 225 †
Le Vasseur, N., Anticosti, 552 †
Levita, Lieut. C. B., A Visit to South Africa, 552 †
Lewis, J. P., Place-Names in the Vanni, 455 †
Libbey, Prof. W., expedition to New Mexico, 214
Library catalogue of R.G.S., 565
Library of R.G.S., Report on, 114
Lieder, Herr, journey in German East Africa, 327
Lièvre, M., Sur les côtes de Chine, 339 †
Light and Plant-growth in the Arctic Regions, Prof. Wiesner on, 331
Lights of the World, List of (U.S. Hydrographic Office), 461 †
Lima, Sociedad Geográfica de, Memoria que presenta, Dr. D. L. Carranza, 556 †
Limba tribe, West Africa, 386
Limnology, progress of, 322
Limon Port, Costa Rica, 71
Lincoln, Roman sites at, 515
Lindeman, M., Geographischen Erforschung der Südpolarregion, 123 †, 231 † ;
Lipari—Milazzo, cable fractures, 271
Litharania—
Litauische sprachgebiet, von Dr. F. Tetzner, 646 †
Litharania—*continued.*
Littlehales, G. W., Recent Foreign Surveys, etc., 650 †
Liverpool, growth of, 528
Loangwa river, Central Africa, 161, 163
Lob-nor: *see* Lop-nor
Loch, Hon. E. D., Photographs of Morocco, 564
Lofu river, Tanganyika lake, 299
Lokko, Port, altitude, etc., of, 393
Lokoja, upper Niger, 349
Lombok island, Captain Cool's book on, 98
Lop-nor - bäckenets vandring, af Sven Hedin, 454 †
Loralai, by Major Yate, 549 †
Lord, W. B., The "Nautical Almanac" Office, 656 †
Lord Howe Island, Climate of, by H. C. Russell, 122 †
Lothian, Marquis of, remarks at the Antarctic Conference, 385
Lourenço Marques, trade of, Mr. Casement's report, 440
Low, A. P., Labrador Area, 229 † ; Report on Explorations in the Labrador Peninsula, 121 † ; Surveys in Canada, 625
Luapula and Lualaba rivers, 637
Luchu, Bibliography of, Contributions to, by B. H. Chamberlain, 550 †
Lucrine lake, Italy, 419
Lungasi or Ossa lake, Cameroons, 638
Lyall, Sir A., India under Queen Victoria, 119 †
Lyddeker, R., on the Distribution of Mammals, 99
Lynch, A., An Unnoted Corner of Spain, 226 †
Lyonese Commercial Mission to China, 94, 439
Lyons, Captain, Miss Raisin, and Miss Aston, Note on a Portion of the Nubian Desert, 552 †

M.

Mabole river, West Africa, 240
Macaire, S. Kyrillos, Mon voyage en Abyssinie, 551 †
Macassar, Renseignements recueillis à, 228 † ; *see also* Makassar
Macdonald, A. C., Notes on 'The Discovery of the Eastern Coast of New Holland,' 652 †
Macdonald, Major, expedition to the Jub, 211
Macgregor, Sir W., British New Guinea: Country and People, 553 † ; Explorations in New Guinea, 97
MacMillan, Conway, Geographical Distribution of Plants, 346 †
Macpherson, W. G., Medical Report on the Mission of Sir G. Euan-Smith to Fez, 552 †
Macquoid, Lieut., report on a tour in the Shan States, 325
Madagascar—
Chemins de fer, par A. Duponchel, 551 †, 552 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Madagascar—*continued.*
Expedition of 1895-96, by Captain S. Pasfield Oliver, 551 †
Media altezza dell' Isola di Madagascar, del Prof. O. Marinelli, 551 †
Organisation militaire et administrative de, 551 †
Voyage de M. Lemaire dans l'Androy, par A. Grandidier, 551 †
Voyages made by the Sieur D. B. to Madagascar and Bourbon in 1669-72, by Captain Pasfield Oliver, 551 †
Mader, Dr. F., Die Höchsten Teile der Seealpen, etc., 646 †
Madidi river, Bolivia, 443
Madina, altitude, etc., of, 393, 397
Madre de Dios river, 443
Maercker, Landesaufnahme von Deutsch-Ostafrika, 229 †
Mafuta's, position and height of, 171, 172
Magellan, Straits of, A Winter Voyage through the, by the late Admiral Meade, 458 †
Maggiore, Lago, Un cordone litoraneo presso Ispra sul, del C. Reale, 452 †
Magistris, F. de, Sull' opportunità di stabilire . . . il limite convenzionale tra Italia Continentale e Italia Penisolare, 452 †
Magnetic Declination in Franz Josef Land, tables of, 183; magnetic pole, south, position of, 381; Magnetischen und hydrographischen Beobachtungen im Eismeere, 342 †
Magwangwara tribe, East Africa, 327
Magyaren, Ueber den Ursprung der, von H. v. Vambéry, 450 †
Majorca, the Cueva del Drach in, 510
Makalla, Ein Aufenthalt in, von L. Hirsch, 648 †
Makanna, altitude, etc., of, 393, 397
Makaroff, Rear-Admiral, expedition to the North Siberian Sea, 219
Makassar - Strasse, Balabalagan- oder Kleine Paternoster-Inseln, 339 †; *see also* Macassar
Makran, 584
Makrán, letter from G. P. Tate on, 221
Malabar, The Moplas of, by F. Fawcett, 648 †
Malay Peninsula, Flora of the, by G. King, 550 †
Maldonado, R., Estudios geográficos . . . sobre Chiloé, 122 †
Malham, Dry River-bed near, 535
Maluran river and list of villages, 586, *and note*
Mammals—
Distribution of, R. Lyddeker on the, 99
Geography of: the Palæarctic Region, by W. L. Sclater, 84 *
Marine, Distribution of, Dr. Sclater on, 219
Mancala, the National Game of Africa, by S. Culin, 649 †
Manchester—
Early importance of, 527, 528
Manchester—*continued.*
Food Supply of, by W. E. Bear, 454 †
Ship Canal, The, by W. B. Tracy, 548 †
Manchuria—
Map of, by L. Borodovski, 126; Russian map of, 659; Observations météorologiques faites en, De M. Venukoff, 648 †
Opisanie Manchurii, by D. Pozdneyeff, 339 †
Manchurian subregion of the Palæarctic Region, 89
Mangues or Chorotegas of Costa Rica, 83
Manitoba and N.W. Territories, topographical work in, 628
Mantzu people and dwellings, 33 *et seq.*
Manu, discovery of the, Dr. Aguilar on, 443
Map-room of R.G.S., Report on, 115
Mapenna, altitude, etc., of, 393, 397
Mapping of Plant Associations, by A. J. Herbertson, 653 †
Maps, earthquake, 532
Maps, Large Scale, as Geographical Illustrations, by W. M. Davis, 556 †
Maps, New—
Africa, 126, 235, 347, 462, 561, 659
America, 126, 235, 347, 462, 561, 660
Arctic, 125
Asia, 126, 461, 559, 658
Australasia, 347, 462, 562
Charts, 127, 348, 462, 562
Europe, 125, 235, 346, 557, 657
General, 235, 348, 562
Photographs, 128, 236, 348, 464, 660
Marangu und Itawa, Neue Reiserouten in, von Dr. Hassenstein, 561
Maranham—Ceara, cable interruptions, 268
Maravilla, Lago, Patagonia, 405-407
Marble Arch cave, Ireland, 501
Marbut, C. F., Missouri, 457 †
Marco Polo's description of Dasht-i-Lut, 578
Margerie, Prof. De, Geological Bibliography, 332
Margidunum, Roman town of, 516
Marine Mammals, Distribution of, Dr. Sclater on, 219
Marinelli, Dr. O.—
Area dell' Italia naturale, 339 †
Breve contributo allo studio delle Brezze di Monte, 342 †
Distribuzione della popolazione della Sicilia, 452 †
Media altezza dell' Isola di Madagascar, 551 †
Sulla . . . nomenclatura dei laghi, 342 †
Marinelli, G., Cristoforo Negri, 343 †; Se e come l'Università italiana possa proveddere . . . Geografia per le scuole secondarie, 345 †
Marinitsch, M., La Kačna-Jama, 546 †
Markham, Sir C. R.—
Discovery by Baron Nordenskjöld that Fresh Water will be found, etc., 465 *
Opening Address, November 8, 1897 . . 565

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000036

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [148v] (149/186)

Markham, Sir C. R.—*continued.*
Promotion of Further Discovery in the Arctic and Antarctic Regions, 124 †
Remarks on "A Journey in Western Sze-chuan," 50; "An Expedition to the Source of the Niger," 395, 396; the Antarctic Conference, 374; "Nupe and Ilorin," 370, 373; presenting medals, etc., 107–109; "Recent Journeys in Persia," 594, 597
Marocco: *see* Morocco
Marriott, W., Hints to Meteorological Observers, 460 †
Marseille, Cavernes des environs de, par Fournier, 547 †
Marson, Prof., Sui ghiacciai del Massiccio del M. Disgrazia o Pizzo Bello, 451 †
Martel, E. A., British Caves and Speleology, 500 *; Sur l'hydrographie souterraine . . . du Dévoluy, 225 †
Martin, Th. C., Utilisation of Niagara, 122 †, 540
Martino, A. de, Sulla relazione di Amerigo Vespucci, 555 †
Martonne, M., on the Anthropogeography of the Upper Nile Region, 95
Maskat, Persian Gulf, 608; History of, 614–618
Mason, O. T., Primitive Travel and Transportation, 654 †
Massachusetts, State of, Geographic positions in, 230 †
Massama, altitude, etc., of, 395
Matabele Campaign, The, 1896, by Colonel Baden-Powell, 340 †
Matang, Sze-chuan, 40
Matina river, Costa Rica, 71
Mattagami, Lake, Canada, 2, 10
Mayo, Earl of, The Tourist in Ireland, 548 †
Mayou, L., Les Temples de la Géographie dans l'Égypte Antique, 340 †
Mazauric et Cabanès, MM., Le Spélunque de Dions, 546 †
McAdie, A., Equipment . . . of an Aerophysical Observatory, 233 †
McConnell, Mr., surveys in Manitoba, 628, 629
McDonnell ranges, Central Australia, 52
McEvoy, Mr., surveys in British Columbia, 630
McMahon, Captain, The Southern Borderlands of Afghanistan, 227 †; on Volcanoes of the Beluchistan Afghan Frontier, 588 *note*
McMahon, Lieut.-General and Captain, Notes on Some Volcanic and Other Rocks in Baluchistan, 455 †
McOuat, Mr., surveys in Canada, 625
Meade, the late Admiral, A Winter Voyage through the Straits of Magellan, 458 †; biography, 461 †
Measurement of the Earth, by A. Fowler, 532 †
Medals, royal, and other awards, presentation of the, 107
Mediterranean, cable fractures in the, 271
Meerenie valley, Central Australia, 52
Meetings of R.G.S., Session 1896-97 . . 107, 117, 224; the new session, 535
Melville, G. W. (Biography), 555 †
Menchia, tombs and villages of, 604, 605
Mendes, A. L., America austral, Cartas escriptas, 122 †
Mendi tribe, West Africa, 386
Menéndez, R., La Costa oriental de Yucatan, 651 †
Merâni fort, Maskat, 612, 617
Mercié, M. E., Aux Terres de Kerguelen, etc., 652 †
Mercurial Barometer, A Portable, by Captain Deasy, 203 *
Mergui Archipelago, The Selungs of the, by R. C. Temple, 648 †
Mesa Encantada of New Mexico, exploration of the, 541
Meshed, Persia, 578
Mesny's Chinese Miscellany, 119 †
Meteorological—
Conference, Report of the International, 460 †
Observatory for Mount Kosciusko, 330
Observers, Hints to, by W. Marriott, 460 †
Meteorology, Vienna College of, Directorship of the, 332
Mewes, R., Aufgabe und Stand der Südpolarforschung, 123 †
Mexicans in Costa Rica, 82
Mexico—
Archipelago del Norte, 553 †
Ascents in, by A. R. Hamilton, 553 †
Boundary between Mexico and British Honduras, 541
El Archipelago del Norte, por D. I. Rojas, 651 †
Eruptive Rocks of, by O. C. Farrington, 650 †
Geology of, by H. F. Bain, 456 †
Mexico-Guatemala Boundary Question, by Romero, 650 †
Photographs of, by G. L. Stephenson, 563
Rainfall in, Dr. Sapper on, 214
Recent Foreign Surveys under the direction of the U.S. Hydrographic Office, by G. W. Littlehales, 650 †
Tabla de alturas, por Drs. Felix y Lenk, 650 †
Meyer, Dr. H., Journey to the Headwaters of the Xingu, 215
Meyer, Dr. P. C., Die Völker des West Sudan, 462 †
Mia Ko, Mantzu village, 36
Michaux, Lieut., visit to the Muata Yanvo, 638
Middlemiss, C. S., Geology of Hazara, 120 †
Mill, Dr. H. R., on Geographical Pictures, 475; on Geographical Reading for Teachers, 641; Oceanographical Researches in Loch Fyne, 632; Report . . . on the Circulation of the Water in Loch Fyne, 654 †
Millosevich, E., Discussione delle osservazioni . . . alle seconde spedizione Böttego, 340 †; Sulla opportunità che

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

l'area delle suddivisioni del Regno venga evaluata, etc., 451 †
Millspaugh, Ch. F., Coastal and Plain Flora of Yucatan, 341 †
Milne, John, Sub-Oceanic Changes, 129 *, 259 *
Milne, Prof., seismological work of, 532, 534
Min or Fu river, Sze-chuan, 24
Mindeleff, C., Influence of Geographic Environment, 234 †
Mino and Owari, Japan, earthquakes in, 533
Miramar, Lago, underground lake, Majorca, 511
Miri fort, Kech Makurán, 223
Mischlich, A., Reisebericht in Bismarckburg, 121 †
Miseno, Capo di, 416, 417; Porto di, 418; Fumarole, 433
Mission river, Queensland, 98
Missionary Reports, Free Church of Scotland, 556 †
Missionnaires Catholiques, Explorations des, par P. Groffier, 656 †
Missouri, by C. F. Marbut, 457 †
Modder, F. H., Ancient Cities in the Kurunégala District, 455 †
Mohît, Die topographischen Capitel des indischen Seespiegels, 455 †
Möhn, Dr., Jahrbuch des Norwegischen Meteorologischen Instituts, 226 †
Mojsisovics, Dr. E. v., Ueber den chronologischen Umfang des Daschstein-Kalkes, 451 †
Mojsisovics, A. von, Death of, 642
Mollendo—Chorillos, cable interruptions, 265, 267
Moncelon, L., Le café à la Nouvelle-Calédonie, 123 †
Money, R., and Dr. Kellett Smith, Explorations West of Lake Nyasa, 146 *
Mongalaflusses, Das Gebiet des, von F. Thonner, 649 †
Monkeys of the Palæarctic Region, 86
Mont Blanc—
Ascent of, in 1830, by the Hon. E. B. Wilbraham, 547 †
Four Days' Observations on, by M. Janssen, 118 †
Plis parallèles qui forment le massif du Mont Blanc, par J. Vallot, 118 †
Monte Nuovo, fumaroles, 433
Montessus, M. F. de, on distribution of earthquakes, 534
Montevideo—Buenos-Ayres, cable interruptions, 268
Moon, Photographic Atlas of the, by Prof. Weinek, 348
Moore, J. E. S., Physiographical Features of the Nyasa and Tanganyika Districts, 289 *
Moraines of Recession and their Significance in Glacial Theory, by F. B. Taylor, 653 †
Moravian Missionaries' Explorations in Queensland, 98
Morgan, Mr. E. Delmar, on Russian work on Novaya Zemlya, 472
Mori, A., Di alcune Carte d'Italia del secolo XV., etc., 452 †
Morinnia, altitude, etc., of, 394
Morocco—
Le Maroc, par Dr. Rouire, 552 †
Medical Report on the Mission of Sir G. Euan-Smith to Fez, by W. G. Macpherson, 552 †
Photographs of, by the Hon. E. D. Loch, 564
Roman Roads of, by W. B. Harris, 300 *
Morris, Ch., The Primeval Ocean, 460 †
Mortillet, G. de, Les Écritures de France, 338 †
Mosbach, E., Streifzüge in den bolivianischen Anden, 651 †
Moscow, population of, 201; De Moscou à Krasnoïarsk, par Baron de Baye, 120 †
Mouat, Dr. F. J. (Biography), 461 †
Mountain Observatories in America and Europe, by E. S. Holden, 556 †
Mountain climbing—
Geschichte der Bergsteigens, von Dr. A. Zschokke, 557 †
Was ist ein Gebirge? von A. Neuber, 656 †
Mozambique—Zanzibar, cable interruptions, 274
Mpeseni chief and country, 163, 167
Muata Yanvo, Lieut. Michaux' visit to the, 638
Müggelberge, der Müggelsee, etc., von Dr. H. Jansen, 547 †
Muir, J., The Mountains of California, 341 †
Mulhall, M. G., Our Trade with Germany and Belgium, 548 †; Twenty Years of Trade, 556 †
Müller, A., und Dr. Scherman, Orientalische Bibliographie, 344 †
Müller, Dr. Curt, on Anthropogeography of the Upper Nile Region, 95
Müller, F. M., The Sacred Books of the East, 656 †
Muller, J., De eilanden Krakatau en Langeiland, 550 †
Müller, Mrs. Max, Letters from Constantinople, 118 †
Müller, P. A., on climate, 306
Muñoz, Colonel, Explorations in Bolivia and Peru, 443
Muonio-Expedition zur Beobachtung der Sonnenfinsterniss, von F. Kanitz, 453 †
Mur Kuh, Persia, 580
Murray, John, A Handbook for Residents and Travellers in Shropshire and Cheshire, 454 †
Murray, Dr. John—
On the Balfour shoal, 100
On the Distribution of the Pelagic Foraminifera, etc., 554 †
On the proposed Antarctic Expedition, 382
Murray, Mr., surveys in Ontario, 626
Mushkaf-Bolan Railway, The, by J. Ramsay, 339 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00004c

مكتبة قطر الوطنية
Qatar National Library

Mussadugu, altitude, etc., of, 394, 397
Musson and Roxburgh, Messrs., Handbook of Jamaica, 457 †
Mustiala, Bodentemperatur in, von T. Homén, 548 †
Mweru, Lake, Central Africa, 637

N.

Nachtigal, A., Die Eingeborenen Afrikas, 649 †
Nagar, Formation of Lake in, Letter from Sir W. M. Conway, 107
Nahuas (Aztecs) of Costa Rica, 83
Naiband Range, Persia, 580, 596
Naini Tal, Geological structure . . . of the Hill Slopes around, by T. H. Holland, 120 †
Nansen, Dr., Durch das Polargebiet, 458 †; Réception du, 458 †; Some Results of the Norwegian Arctic Expedition, 123 †, 342 †
Nansen, Jackson, und Wilkitzki, Russisch Asien und Franz-Josef-Land (map), 126
Naples, crater at, 428; catchment area, 482; valleys, 488
Naples-Posilipo chain of volcanoes, 416
Napo, Rio—
Strumenti litici . . . del Rio Napo, nota di Dolby-Tyler ed Giglioli, 230 †
Nasir-ul-Mulk, His Excellency, remarks on "Recent Journeys in Persia," 594
Nathorst, A. G., Ett önskningsmål för den svenska polar-forskningen, 459 †; obituary of Oscar Dickson, 460 †; on Swedish Polar Expedition, 641
National Photographic Record Association, 207
Natural Geographies, The, by J. W. Redway, 656 †
Nautical Almanac Office, Tables used in the, etc., 232 †
"Nautical Almanac" Office, by W. B. Lord, 656 †
Nautischen Astronomie, Umgestaltung der, 460 †
Navigation aérhydrique, La, par M. Pesce, 343 †
Nederlandts-Indie : *see* Dutch East Indies
Negri, C., Biography by G. Marinelli, 343 †
Nei paesi d'Islam in Barberia, etc., by G. B. Rossi, 656 †
Nelson river, Canada, 2
Neuber, A., Was ist ein Gebirge ? 656 †
Nevins, J. E., Hindu Domestic and Religious Customs, 648 †
Nevins, J. B., Systems of Colonization, 654 †
New Africa, The, by A. Schulz and A. Hammar, 229 †
New Brunswick, Place Nomenclature of, by W. F. Ganong, 553 †; topographical work in, 626
New Caledonia—
Café à la Nouvelle-Calédonie, par L. Moncelon, 123 †
Notes on, by Colonel Tajima, 458
Newfoundland Bank, cable fractures on the, 261
New Georgia, Ethnographical Notes in, by Lieut. B. T. Somerville, 231 †
New Guinea—
British, its Country and People, by Sir W. Macgregor, 553 †
Exploration en Papouasie, per J. Lemoine, 554 †
German, Expedition in, 444
Huon-Golf, Der, von Herr H. Rüdiger, 458 †
Hydrographische Beobachtungen, etc., von Kapt. Krieg, 652 †
Kaiser-Wilhelmsland-Expedition, Kurze Uebersicht, von E. Tappenbeck, 458 †
MacGregor's, Sir W., explorations in, 97
Maps : Kaiser Wilhelms Land, Vorläufige Skizze, von Drs. Lauterbach und Kersting, 347
Nieuws van de Jakati-rivier, door Dr. Horst, 341 †, 444
Newland, A. G. E., Practical Handbook of the Language of the Lais, 648 †
New South Wales—
Brabourne Papers, The, 231 †
Meteorology of, by H. C. Russell, 458 †
Photographs of Artesian bores in, 236
Precious Stones in, by Rev. J. M. Curran, 652 †
Newton, H. A., by J. W. Gibbs, 555 †
Newton, Margaret, Glimpses of Life in Bermuda and the Tropics, 231 †
New York State—
Climate of, by J. M. Jameson, 122 †
Physical Geography of, by R. S. Tarr, 122 †
New Zealand—
Census of, Results, 554 †
Crown Lands Guide, No. xiv., 123 †
Deep Sea, Fauna of, by A. Hamilton, 554 †
Handbook, with Map (Emigrants Information Office), 123 †
Tarawera Mount, Visit to, by H. M. Cadell, 123 †
Year Book, Official, by E. J. von Dadelszen, 123 †
Ngami, Lake, Dr. Passarge's expedition in region of, 212
Ngoni tribe, Central Africa, 150–153
Niagara, Utilization of, by Th. C. Martin, 122 †, 540
Niams-Niams, Le pays des, par M. de la Kéthulle, 456 †
Nianam river, Somaliland, 538
Nicaragua Ship Canal, 56, 329
Nicholas, F. W., Geological and Physical Conditions in Tropical America, 122 †, 542
Nicoya, peninsula of, Costa Rica, 59; gulf of, 61, 62
Niederen Tauern, Orometrisches aus den, von Fr. Schönberger, 546 †
Niederschlags - Beobachtungen, Ergebnisse der, von W. von Bezold, 451 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000099

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [150r] (152/186)

Niger—
Map of, Memorandum on the, 398
Maps: Boucle du Niger, dressée par Lieut. Spicq, 660
Niger and Yoruba Notes, by C. F. Harford-Battersby, 229 †
Photo-Longitude Plates taken by Lieut. Tyler, Report on the, 400
Places, List of, astronomically fixed, 397
Source of the, An Expedition to the, by Colonel Trotter, 237 *, 386 *
Source of, altitude and country round, 245, 246
Toutée's, Commandant, work on the, reviewed, 177
Upper, Climate of region of, 390
Nikolaeff, population of, 199
Nile Delta, Deposits of the, Prof. Judd on, 539; Stanford's large scale map of the, 659; Philip's New Map of the Nile Valley, 659
Nile Region, Upper, Anthropogeography of the, M. Martonne on, 95
Nisida crater island, 430
Noddawai river, Canada, 1, 2, 11; fauna and flora of district of, 12–16
Nordenskjöld, Baron, Discovery by, that Fresh Water will be found by boring through Hard Crystalline Rock, by Sir C. R. Markham, 465 *
Nordenskjöld, O., A Journey in South-Western Patagonia, 401 *; L'expédition suédoise à la Terre de Feu, 458 †, 542
Norman, J. M., Norges Arktiske Flora, 226 †
Normandy—
Dépôts pléistocènes, etc., par A. Bigot, 646 †
North Pole: *see also* Arctic
Northumberland, New Reduced Ordnance Survey of, by J. Bartholomew, 657
North-Western Provinces of India, Tribes, etc., of the, by W. Crooke, 120 †; History, etc., of the, by W. Crooke, 120 †
Norway—
Den Norske Lods, ved E. Hagerup, 453 †
Fauna Norvegiæ, by G. O. Sars, 225 †
Fra Smaarejser i Norge, by J. Lange, 647 †
Jahrbuch des Norwegischen Meteorologischen Instituts, von Dr. Möhn, 226 †
Norges Arktiske Flora, del J. M. Norman, 226 †
Wild Norway, etc., by A. Chapman, 225 †
Norwegian Andrée Search Expedition, 640
Norwegian Arctic Expedition, Some Results of the, by Dr. F. Nansen, 123 †, 342 †
Norwich, early port of, 525
Notice sur les travaux scientifiques publiés par J. Thoulet, 556 †
Nottingham, Roman sites at, 516; early port of, 525
Nouvelle-Calédonie: *see* New Caledonia
Nova Scotia, topographical work in, 626
Novaya Zemlya, Russian work in, Mr. Delmar Morgan on, 472
Nubian Desert, Note on a Portion of the, by Captain Lyons, Miss Raisin, and Miss Aston, 552 †
Nuovo, Monte, Italy, 419, 430
Nupe and Ilorin, by Seymour Vandeleur, 349 *, 650
Nyasa—
And Tanganyika Districts, Physiographical Features of, by J. E. S. Moore, 289 *
Lake, changes of level of, 294, 295; Explorations in Country West of, by R. Money and Dr. Kellett Smith, 146 *; steamers on, 441
Region, M. Foa's explorations in the, 212
Nyedu, altitude, etc., of, 393, 397
Nyi Buba tribe, West Africa, 212

O.

Ob and Yenesei Expedition, Success of, 538; Hydrographical Expedition, 93
Obituary List for 1896–97 .. 106
Obok, and the Country bordering on the Gulf of Tajura, by V. Fedoroff, 340 †
Observatory in the Pyrenees, 536
Ocean—
Current Papers, No. 2, by H. C. Russell, 124 †
Currents, 145
Distribution of the Pelagic Foraminifera . . . on the Ocean, by John Murray, 554 †
Geological changes beneath seas and oceans, 129
Physical Condition of the, by Captain Wharton, 125 †
Sub-Oceanic Changes, by Prof. John Milne, 129 *, 259 *
Winds and Ocean Currents, by Prof. W. M. Davis, 653 †
Oceanic Depths and Serial Temperature Observations, List of, 233 †, 544
Oceanographical Researches in Loch Fyne, by Dr. Mill, 632
Oceanography—
Dei lavori idrografici e talassografici . . . del Ufficio Idrografico Italiano, del G. Cassanello, 342 †
Progress of, 320
Terre-Neuve à la côte des Landes; trajet d'une bouteille, par A. Hautreux, 342 †
Oder, Régime de l', par M. Auerbach, 451 †
Oehlmann, Dr., Die Herzogtümer Bremen und Verden, 547 †
Ogilvie, Mr., Surveys in the Yukon district, 631
Okavanga river, Central Africa, 175
Oldenberg, H., Zur Geschichte des Indischen Kastenwesens, 549 †
Oldham, H. Yule, on Geography in Education, 220

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

Oliver, Captain Pasfield, Madagascar Expedition of 1895–96 .. 55 †; the Voyages made by the Sieur D.B. to Madagascar and Bourbon, 551 †
Olufsen, Lieut., expedition to the Pamirs, 536; Den danske Pamir Expedition, 648 †
Omán, history of, 614
Omo or Nianam river, 440, 538
Ontario, topographical work in, 626
Open Lands, Inclosure and Preservation of, by Sir R. Hunter, 454 †
Oppel, A., Die Griechen nach Zahl, 118 †; Uebersichten der Wirtschaftsgeographie, 344 †
Oppert, Prof., Reise nach Kulu im Himalaya, 228 †
Orange Free State, Reference Map of the, by J. J. Herfst, 235
Ordnance Maps, The Sale of, 436
Ordnance Survey Maps, England and Wales, 125, 235, 346, 557, 657
Orel island, Franz Josef Land, 185
Orient: *see* East
Orientalische Bibliographie, von Müller und Scherman, 344 †
Orr, W., Geographic Features of the Connecticut Valley, 122 †
O'Sullivan, H., Lecture on Northern Canada, 552 †
Oudemans, Dr., Die Triangulation von Java, etc., 120 †
Our Empire Atlas, by W. & A. K. Johnston, 235
Oxford, origin of, 526
Oxford University Bicycle Club, The Roads round Oxford, by H. Graves and A. B. Evans, 454 †
Oxus river, upper, 537; source of the, 105
O'Zoux, L., L'Agriculture à la Reunion, 650 †

P.

Pacific, earthquake shocks in the, 133
Pacific Coast, North, Jessup Expedition to, 639
Pacific Ocean—
Segelhandbuch für den Stillen Ozean, 657 †
Pacifico ridge, Italy, 427
Padirac, Gouffre de, Troisième exploration du, par MM. Martel et Rupin, 547 †
Pagade or Regina Margherita lake, 439
Paita—Sta. Elena, cable interruptions, 265
Palæarctic Region of the Geography of Mammals, 84
Palazzo Reale, mineral spring, 434
Palestine Exploration, Further Revelations, etc., by Rev. J. I. Whitty, 228 †
Palleske, R., Sven Hedin's Rückkehr von seiner Forschungsreise durch Mittelasien, 339 †
Pamalombe lake, Central Africa, 291
Pamirs, Expedition to, under Lieut. Olufsen, 536; Dänische Pamir-Expedition, Lieut. O. Oluffsen, 648; Dr. Sven Hedin's travels in the, 210
Panama—
Canal project, the, 56, 330
Interozeanische Kanal, von Dr. H. Polakowsky, 457 †
San Juan del Sur, cable interruptions, 265
Panarctic Subregion of the Palæarctic Region, 86, 87
Panjgur, 221
Pan-Long, Shan States, 325
Pao-ning Fu, Sze-chuan, 22
Papstein, A., Führer für den Auswanderer nach Brasilien, 651 †
Para—Maranham, cable interruptions, 269, 270
Parker, E. H., The Burmo-Chinese Frontier, etc., 228 †
Parsoné, W. E., on cable fractures, 266
Parthenon, The, and Earthquake of 1894, by F. C. Penrose, 225 †
Pasanisi, Prof. F. M., Il Metodo . . . della Geografia, 345 †
Passaga, Captain, of the French Boundary Commission in West Africa, 238
Passarge, Dr., Expedition in South Africa, 212
Passmore, Captain, on the Cocos island, 73
Patagonia—
American Expedition to, 640
Karte der Chilenisch-Argentinischen Grenzregion im Feuerland, 561
South-Western, A Journey in, by Otto Nordenskjöld, 401 *
Pati, Mount, upper Niger, 350
Patras—Corinth, cable interruptions, 271
Payer, Lieut., On Map of Franz Josef Land of, by Prof. R. Copeland, 180; Mr. Brice on, 336 *
Payne mountain and river, 404, 405
Peak District, Derbyshire, Caves of the, 507
Peal, S. E., Eastern Nagas of the Tirap and Namtsik, 339 †; obituary of, 333
Pearl fisheries at Bahrein, 592
Peary, Lieut., arctic expedition of, 218, 544; and the Cape York meteorite, 445
Pellati, N., Sulla formazione e pubblicazione della Carta geologica del Regno, 452 †
Pembroke Earthquakes, On the, by Ch. Davison, 119 †
Penang and Madras, cable interruptions, 276
Penck, Dr. A., Biography of Léon Du Pasquier, 343 †; Die Picos de Europa, etc., 226; † Potamology as a branch of Physical Geography, 619 *
Pendulmaalinger i København, etc., af Generalmajor Zachariae, 450 †
Pennycuick, Colonel, The Diversion of the Periyar, 339 †
Penrose, F. C., The Parthenon and earthquake of 1894 .. 225 †
Periodicals, Index to, for 1895 and 1896 .. 343 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000073

مكتبة قطر الوطنية
Qatar National Library

Periodicity of Good and Bad Seasons, by H. C. Russell, 124 †
Periyar, The Diversion of the, by Colonel Pennycuick, 339 †; Periyar Tunnel, by P. R. Allen, 339 †
Pernambuco—Bahia, cable interruptions, 268
Pernter, Prof. J., Director of Vienna College of Meteorology, 332; Luftdruckvertheilung und die Gradienten bei Föhn, 653 †
Perry, Prof., remarks on "Sub-Oceanic Changes," 286
Persia—
Dryness of, 569; deserts, 570
Maps: Geologische-Karte des nördlichen Persien, von A. Stahl, 659
Photographs of, by H. L. Churchill, 564
Recent Journeys in, by Captain P. M. Sykes, 568 *
Surveys in, by Mr. Stahl, 325
Persian Gulf, Ancient Trading Centres of the, by Captain A. W. Stiffe, 608 *
Peru, Explorations in, 443; Mapa del, by A. Raimondi, 561; Mapa del, by Vellerobe, 660
Pescadores point, cable fracture off, 266
Pesce, M., La navigation aérhydrique, 343 †
Pe-t'eo-shan, Sze-chuan, 31
Peterborough, Roman sites at, 516
Peters, Dr. C., Lecture on the Future of Africa, 228 †
Petifu, altitude, etc., of, 395
Petitot, E., Du lac de l'Isle-à-la-Crosse, 341 †
Petkovšek, J., Die Bergstadt Idria in Krain, 117 †
Pettersson, Prof., on climate, 305
Pfeil, J., Ein Beitrag zur Frage der Verbrecherdeportation nach deutschen Kolonien, 556 †
Philip, G., the Enlargement of the Geographical Horizon, 654 †
Philippin, C. A., Le Xingú paraense, 341 †
Philippines—
Bevölkerung der Philippinen, von R. Virchow, 550 †
Telegráficas submarinas en Filipinas, 550 †
Philippson, Dr. A., Die griechischen Inseln des Ägäischen Meeres, 451 †; Geologisch-Geographische Reiseskizzen aus dem Orient, 117 †; Thessalien, 338 †; Thessalien und Epirus, 647 †
Philip's large-scale map of the North-West Frontier of India, 659; new map of the Nile Valley, etc., 659; special map of Greece, 658
Phillips, P. Lee, Virginia Cartography, 457 †
Phlegræan Fields, The, by R. T. Günther, 412 *, 477 *
Photogrammetrie im Dienste der Militär-Mappierung, von A. Rummer, 459 †
Photogrammetrischen Verfahrens, Anwendung des, von M. Rosenmund, 653 †
Photographic Record Association, National, Sir Benjamin Stone on the, 207
Photographic surveying—
Méthodes photographiques en topographie, par Général de la Noë, 232 †
Photographs—
Africa, Italian Possessions on Red Sea Coast of, by Dr. Schweinfurth, 348
Baluchistan, by Major Yate, 236
Chin Hills, Natives and Scenery, by Captain Rigby, 464
Jamaica, by Colonel Swinton, 563
Mexico, by J. G. L. Stephenson, 563
Morocco, by Hon. E. D. Loch, 564
New South Wales, artesian bores in, 236
Persia, neighbourhood of Resht, by H. L. Churchill, 564
Quetta and surrounding country, by F. Bremner, 660
Samoa and Hawaii, by Colonel A. Swinton, 128
Sikkim and Tibet, 236
Vancouver Island, by J. W. Laing, 348
Physiographical Features of the Nyasa and Tanganyika Districts, by J. E. S. Moore, 289 *
Pianura catchment area, 481; valleys, 487; crater, 427
Pickersgill, Mr., on trade of the Congo State, 441
Pike, A., cruise in the Arctic Seas, 543
Pila, U., Le développement économique de la Chine et du Japon, 549 †
Pinton, P., Tre antiche vie romane nella Venezia, 453 †
Pinzgau—
Die Pinzgauer, von Dr. W. Schjerning, 224 †
Pirris, Rio Grande de, 63
Pisciarelli springs, 434
Pitard, E., Répartition des organismes inférieurs . . . de quelques lacs suisses, 342 †
Place-Names in the Vanni, by J. P. Lewis, 455 †
Plains of Marine and Subaërial Denudation, by W. M. Davis, 554 †
Plankton Marin et les gaz de l'eau de mer, par M. Martin Knudsen, 125 †
Plant Associations, The Mapping of, by A. J. Herbertson, 653 †
Plant-geography—
Geographische Verbreitung der Rutaceen, etc., von A. Engler, 233 †
Geographical Distribution of Plants, by Conway MacMillan, 346 †
Polakowsky, Dr. H., Der Interozeanische Kanal, 329, 457 †
Poland, Population of, 198, 201
Polar: *see* Arctic *and* Antarctic
Polar Current, The Great, by H. M. Prentiss, 458 †
Polargebiet, Durch das, von Dr. Nansen, 458 †
Poole, R. L., Historical Atlas of Modern Europe, 126, 235, 559, 658

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Popham, F. W., trading expedition to Siberia, 538
Popocatepetl—
Ascent of, by A. E. Douglas, 651 †
Observations on, and Ixtaccihuatl, etc., by O. C. Farrington, 651 †
Population of Russia, by P. Kropotkin, 196
Porcher, J., La Sainte-Baume et Saint-Maximin, 646 †
Porchester, Roman town at, 513, *and note*
Porena, F., A quali distinzioni . . . debbano sottoporsi le montagne della Penisola Italiana, etc., 452 †; Della Morfologia della superficie terrestre, etc., 342 †
Porpor, altitude, etc., of, 393, 397
Porro, Prof. F., Sull' opportunità che le variazioni dei ghiacciai italiani siano studiate, etc., 452 †
Port Darwin and Java, cable interruptions, 276
Port Limon, Costa Rica, 71
Portable Mercurial Barometer, A., by Captain Deasy, 203 *
Porto, Le Vin de, à l'Exposition de Bruxelles, 548 †
Portugal, Vasco da Gama Celebrations in, 220
Portuguese Celebration of the Discovery of the Sea Route to India, 641
Portuguese Colonies in Africa, Captain Vasconcellos' book on, 178
Portuguese occupation of the seaboard to Omán, 615, 618
Posilipo ridge, 429
Positions—
Geographische Ortsbestimmung an Lande, etc., von O. Tetens, 232 †
Poskin, Dr. A., L'Afrique Équatoriale, 649 †
Potamology as a Branch of Physical Geography, by Prof. A. Penck, 619 *
Pottinger, Lieut., Expedition to the Upper Irawadi, 210
Pozdneyeff, D., Opisanie Manchurii, 339 †
Pozzuoli, mineral springs, 433
Practical Geography in Manchester, by J. Howard Reed, 345 †
Prayer-wheels in Sze-chuan, 32
Prentiss, H. M., The Great Polar Current, 458 †
President's Opening Address, November 8, 1897.. 565
Preston, E. D., Telegraphic Determination of the Force of Gravity at Baltimore, 233 †
Primeval Ocean, The, by Ch. Morris, 460 †
Primitive Travel and Transportation, by O. T. Mason, 654 †
Problems of Nature: Researches and Discoveries of G. Jaeger, translated by H. G. Schlichter, 123 †
Problems, Some Geographical, by J. Scott Keltie, 308 *
Procida, Monte di, Italy, 419
Ptolemy's Geography—
Of Indo-China, M. Gerini on, 436, 455 †
Voies de commerce dans la Géographie de Ptolémée, par M. V. De la Blache, 555 †
Pugh's Almanac and Queensland Directory, 458 †; Map of Brisbane and Suburbs, 462; Map of Queensland, 462
Puntarenas, Costa Rica, 62
Putnam, G. R., Magnetic Observations on the Greenland Expedition, 124 †; Relative Determination of Gravity, etc., 233†
Pygmies, The Dwarf Domestic Animals of, by R. G. Haliburton, 555 †
Pyrenees, Mountain Observatory in the, 536

Q.

Quarto Catchment Area, 480; valleys, 486, 487; crater, 427
Quebec, topographical work in, 624
Queen, Address to the, from the R.G.S., 91
Queensland—
Ant-hills of Cape York Peninsula, by R. L. Jack, 231 †
Ascent of Mt. Peter Botte, by D. Le Souef, 458 †
Meteorology of, by C. L. Wragge, 231 †
Moravian Missionaries' explorations in, 98
Pugh's Almanac, etc., 458 †; map, 462
Quelta and surrounding country, Photographs of, by F. Bremner, 660

R.

Rabot, Ch., Les variations de longueur des Glaciers dans les Régions Arctiques, 652 †
Racial Geography of Europe, by Prof. W. Z. Ripley, 450 †
Railways—
Chemin der Fer d'Ambaka, 229 †
Eisenbahnprojekte in Deutsch-Ost-Afrika, von L. Bernhard, 229 †
In Costa Rica, 75
In South Africa, progress, 328
To India, by C. E. D. Black, 227 †
Raimondi, A., Mapa del Peru, 561
Rainfall in India, by J. E., 228 †; of Western Europe, Dr. A. Angot on, 634
Rainy Lake, etc., surveys of, 627
Ralegh, Sir Walter (Biography), by M. A. S. Hume, 655 †
Ramsay, J., The Mushkaf-Bolan Railway, 339 †
Ramsès II., La Découverte du Temple de, à Antinoë, par A. Gayet, 551 †
Rangoon—Penang, cable interruptions, 276
Rapid on the Yang-tse, The New, Mr. Bourne on, 191 *
Ratzel, Fr., Die geographische Methode in der Ethnographie, 234 †
Ravenstein, H., Karte der Schweizer Alpen, 658

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Raymond, Dr. P., Les rivières souterraines de la Dragonnière et de Midroï, 646 †
Reale, C., Un cordone litoraneo presso Ispra sul Lago Maggiore, 452 †
Rebello, J. J. de Brito, A edade de Affonso de Albuquerque, 234 †
Réception du Dr. Fridtjof Nansen, 458 †
Red Sea, Hydrographische Forschungen im Rothen Meere, 460 †
Redway, J. W., The Natural Geographies, 656 †
Reed, J. Howard, Practical Geography in Manchester, 345 †
Rees, J. K., Variation of Latitude, 124 †
Regel, Dr. F., Reisebriefe aus Colombia, 330, 457 †
Regel's Geography of Thuringia, 207
Regina Margherita lake, East Africa, 439
Reichelt, G. T., Der Tsangpo-Brahmaputrafluss, 228 †
Reinisch, L., Ein Blick auf Aegypten und Abessinien, 229 †; Uno sguardo sull' Egitto e l'Abissinia, 340 †
Rejaf, capture of, 213
Renauld, E., La Grotte de Baume-les-Messieurs, 546 †
Réunion, L'Agriculture à la, par L. O'Zoux, 650 †
Reventazon river, Costa Rica, 70
Revilliod, J. T., Viaje de Saïgon à Bangkok, 649 †
Rhodesia—
Economic Geography of, Mr. Jas. Bryce on, 474
Economic Value of, by F. C. Selous, 649 †
Prospects of, by F. C. Holland, 551 †
Sunshine and Storm in, by F. C. Selous, reviewed, 173
Ricchieri, Prof. G., Gli studi geografici . . . nell' educazione moderna, 345 †
Richardson, Mr., surveys in Canada, 625
Richter, P. E., Bibliotheca Geographica Germaniæ, 547 †
Richthofen peak, Franz Josef Land, 186, 336
Rickmers, W., Reise nach Ost-Bochara, 120 †
Ride through Western Asia, by C. Bigham, 228 †
Riesen Gebirge, Lakes of the, Dr. Zacharias' investigations, 323
Riess, L., Geschichte der Insel Formosa, 550 †
Rigby, Captain G. C., Photographs of Natives and Scenery of the Chin Hills, 464
Rio de Janeiro—Santos, cable interruptions, 268
Ripley, Prof. W. Z., The Racial Geography of Europe, 450 †
River-bed, Dry, near Malham, 535
Rivers, Science of, or Potamology, 619; suspended material in, 621
Robertson, C., Is the Earth a Planet? 345 †
Robertson, Sir G. S., Kafiristan: its Manners and Customs, 119 †; Kafiristan and its People, 548 †
Robinson, Dr. L., Faces and Places, 460 †
Roborovski, L'exploration, Asie Centrale, 648 †
Rock, J., The New Era in Hyderabad, 120 †
Rodd, Mr., on trade of Harrar, 440
Roggero, Prof., Ancora della linea di divisione tra l'Appennino Settentrionale e il Centrale, 451 †
Rojas, D. I., El Archipelago del Norte, 651 †
Romagna, Antichi nomi dei fiumi di, del F. Gori, 452 †
Roman Roads of Morocco, by W. B. Harris, 300 *
Roman towns of Britain, 512
Romero, Settlement of the Mexico-Guatemala Boundary Question, 650 †
Rong Kia river and valley, 41
Ronuro river, Xingu river, 215
Rosenmund, M., Anwendung des Photogrammetrischen Verfahrens, 653 †
Rossi, G. B., L'Iemen, avanti il profeta, 647 †; Nei paesi d'Islam in Barberia, etc., 656 †
Rostov-on-Don, population of, 199
Rotata, 239; altitude, etc., of, 393
Rothes Meer: *see* Red Sea
Rouire, Dr., L'Éthiopie, 551 †; Le Maroc, 552 †
Rouvier, G., La province chinoise du Yunnan, 549 †
Roux, E., Renseignements géographiques recueillis . . . aucours de l'expédition du Prince Henri d'Orléans, 550 †
Roviglio, A., Della Scandinavia e di un passo oscuro di Paolo Diacono, 118 †
Rovuma river, cable fractures in the, 275
Royal Colonial Institute, Index to Papers and Authors in the *Proceedings* of the, 555 †
Royal Geographical Society—
Address to the Queen, 91, 206
Anniversary Meeting, 107; Dinner, 116
Council of, Report, 110
Medals, royal, etc., presentation of, 107
Meetings of, Session 1896–97 .. 107, 117, 224
New Session, The, note on, 535
Royal, Isle, Lake Superior, 97
Rubin, Marcus, A Measure of Civilization, 234 †
Rücker, Prof., Terrestrial Magnetism, 125 †; remarks at the Antarctic Conference, 381
Rüdiger, H., Der Huon Golf, etc., 458 †
Rudolf, Lake, East Africa, 440; Mr. Cavendish's expedition to, 538, 566
Ruge, Dr. S., Development of the Cartography of America, 460 †; Die Entdeckung Nordamerikas durch Giovanni Caboto, 554 †
Rummer, A., Die Photogrammetrie im Dienste der Militär-Mappierung, 459 †
Ruscello, Monte, Italy, 422

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000001

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Russell, F. A. R., The Atmosphere in Relation to Human Life and Health, 232 †
Russell, H. C., Climate of Lord Howe Island, 122†; Meteorology of New South Wales, 458 †; Periodicity of Good and Bad Seasons, 124†; Current Papers, No. 2..124 †
Russia(n)—
Geographical Society, The Fifty Years' History of the, 53
Map of Manchuria, 659
Population of, by P. Kropotkin, 196 *
Russisch Asien und Franz-Josef-Land, etc., von Nansen, Jackson und Wilkitzki (map), 126
Russische Muonio-Expedition, Die, von F. Kanitz, 453 †
Temperatur russischer Flüsse und Seen, von A. Woeikof, 453 †
Vegetationskizze Mittelrusslands, von Dr. E. Krause, 647 †
Work in Novaya Zemlya, Mr. Delmar Morgan on, 472
Rutot, A., Le cours de l'Escaut, etc., 225 †
Ruvuma valley and plain, 637
Ryder, Lieut., award to, 109
Rykatscheff, M., on closing of rivers by ice, 621

S.

Saas—
Ascents near, by E. S. Balch, 226 †
Quelques noms de lieux dans la vallée de Saäs, par W. A. B. Coolidge, 226 †
Sabachnikoff et Levat, MM., Les placers aurifères de la Sibérie orientale, 228 †
Sacred Books of the East, etc., edited by F. M. Müller, 656 †
Sagliscendi, Vallone di, 483
Sahara, Dr. Zaytoun's remarks on the, 96; M. Foureau's work on the, reviewed, 176
Saïgon à Bangkok, Viaje de, por J. T. Revilliod, 649 †
Saija, G., Sulla definizione scientifica dell' orizzonte, 124 †
Sainte-Baume et Saint-Maximin, par J. Porcher, 646 †
St. Elias, Mount, Expeditions to, 214; Ascent of, by Prince Luigi Amadio, 443
St. Lawrence, Gulf of—
Hydrographie des St. Lorenz-Golfes, von Dr. Schott, 230 †
St. Louis river, 97
St. Louis—Fernando Noronha cable, fractures of, 262
Saint-Martin, V. de, and Schrader, MM., Atlas Universel de Géographie, 126
St. Thomé—St. Paul de Loanda, cable interruptions, 272
Salamaia, altitude, etc., of, 394
Salinas bay, Costa Rica, 61
Salm island, Franz Josef Land, 186
Salmon, E., The Colonial Empire of 1837.. 344 †
Salt plain near Siwa, 606
Salta y Jujuy, geologicas y mineras de las provincias de, por J. Valentin, 651 †
Salvatichi, Monte, Italy, 419
Samaindu, altitude, etc., of, 393
Samara, population of, 199
Samoa—
Dürre des Jahres 1896 auf der Insel Savaii, von W. v. Bülow, 123 †
Photographs of Samoa and Hawaii, by Colonel A. Swinton, 128
Samuel, Sir Saul, remarks at the Antarctic Conference, 383
San Carlos river, Costa Rica, 66
San Juan, Rio, Costa Rica, 60, 68; San Juan basin, 65
San Severino, Monte, Italy, 423
San Strato crater, 429
Sana Kachin country, Lieut. Turner's report on, 325
Sanaga river, Cameroons, 638
Sanaia, altitude, etc., of, 394
Sand beneath water, deposition of, 140
Sandile river, Central Africa, 162
Sanga River, Congo Basin, Hydrography of the, 441
Sanjines, V. E., Mapa Postal de Bolivia, 347
Sanpo river—
Tsangpo-Brahmaputrafluss, von G. T. Reichelt, 228 †
Sta.-Catharina—Rio Grande do Sul, cable interruptions, 268
Sta. Elena—Buenventura, cable interruptions, 265
Santa Teresa, crater, 430
Santos—Sta Catharina, cable interruptions, 268
Sapper, Dr., Das Nordliche Mittel-Amerika, 230†; Regenfall im Nördlichen Mittelamerika, 214, 457 †; map, 347
Sarapiqui river, Costa Rica, 67
Saratov, population of, 199
Sarmiento, Lake, Patagonia, 404
Sarrauton, H. de, Conférence sur l'Heure décimale, 459 †
Sars, G. O., Fauna Norvegiæ, 225 †
Satō, D., Kamegaoka in the Province of Mutsu, 550 †
Saville-Kent, W., The Market Fishes, etc., of Australia, 341 †
Saxony—
Kalender und statistisches Jahrbuch, 647 †
Scandinavia—
Della Scandinavia . . . di Paolo Diacono, por Prof. A. Roviglio, 118 †
Grunddragen af det centrale Skandinaviens bergbyggnad, af A. E. Törnebohm, 548 †
Schillings, Herr, journey to Kiniarok, East Africa, 327
Schjerning, Dr. W., Die Pinzgauer, 224 †
Schlagintweit, E., Die Berechnung der Lehre, 657 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000014

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume X, No. 6 [153r] (158/186)

Schlichter, Dr., Neues über Karl Mauchs Forschungen in Südostafrika, 552 †
Schmidt, A., Distribution of Magnetic Observatories, 234 †
Schoener, J. G., Schwedens Högfjällgebiet, 226 †
Schönau island. Franz Josef Land, 188
Schönberger, F., Orometrisches aus den Niederen Tauern, 546 †
School Geography in the United States, by Prof. R. E. Dodge, 655 †
Schott, C. A., Geodetic Positions in South-East Alaska, 230 †; Distribution of Magnetic Declination in Alaska, 230 †
Schott, Dr., Hydrographie des St. Lorenz-Golfes, 230 †
Schuchardt, Dr. H., Das Kharthwelische sprachgebiet im Südwestlichen Kaukasus, 346
Schulz, A., and A. Hammar, The New Africa, 175, 229 †
Schurtz, H., Beitrage zur Entstehungsgeschichte des Geldes, 556 †
Schwalbe, Dr., Ueber die . . . Sommertage in Nord-Deutschland, 338 †
Schwarz, P., Die ältere geographische Litteratur der Araber, 234 †
Schweinfurth, Dr. G., De l'Origine des Egyptiens, etc, 551 †; photographs of the Italian possessions on the Red sea coast of Africa, 348
Schweiz: *see* Switzerland
Sclater, Captain B. L., obituary of, 333
Sclater, Dr. P. L., Distribution of Marine Mammals, 219
Sclater, W. L., The Geography of Mammals: The Palæarctic Region, 84 *
Scotland—
Itinerary of Prince Charles Ed. Stuart, by W. B. Blaikie, 227 †
Sea-Route to India, Portuguese celebration of the discovery of the, 641
Sea Transport, Costs of, etc., by A. W. Flux, 344 †
Seasons, Good and Bad, Periodicity of, by H. C. Russell, 124 †
Sedimentation and erosion, 130, 139
Seeschiessen, Wasserschüsse, etc, von Dr. Sieger, 232 †
Seiches—
And their cause, M. Forel on, 544
Des lacs et ouragan-cyclone, note de M. Forel, 342 †
On the Bay of Fundy, by A. W. Duff, 234 †
Seine, Service Hydrométrique du Bassin de la, par MM. Lemoine et Babinet, 225 †
Seismic Survey of the World, Suggestions for, 281
Seismology—
Distribution of seismic activity, 131
Mouvements de l'écorce terrestre, par M. de Lapparent, 233 †
Science of, 530
Seli river, West Africa, 241, 242
Selous, F. C., review of book by, 173; The Economic Value of Rhodesia, 649 †
Semenoff, M., medal awarded to, 107
Semon, R, Im australischen Busch und an den Küsten des Korallenmeeres, 122 †, 217
Semple, E. C., Some Geographic Causes determining the Location of cities, 654 †
Senga chasm, Italy, 425
Septans, Lieut.-Colonel, Les Expéditions Anglaises en Asie, 119 †; en Afrique, 120 †
Sergeant, L., Greece in the 19th Century, 647 †
Sergi, G., book on Hamitic Race in Africa reviewed, 178
Servia—
Topographische Aufnahme des Konigreiches Serbien, von S. Truck, 453 †
Servigny, J., Hawai et les États-Unis, 553 †
Seton-Karr, H. W., Discovery of the Lost Flint Mines of Egypt, 551 †; Further Discoveries of Ancient Stone Implements in Somaliland, 552 †
Severn, Roman sites on the, 520; early navigation of, 524
Sewell, R., India before the English, 455 †, 549 †
Shabogama, Lake, Canada, 9
Shan States, Lieut. Macquoid's report on a tour in the, 325
Sharpe, Mr. A., on trade of British Central Africa, 441
Ships, Stability of, A New Theory of the, by A. J. Cooper, 656 †
Shirwa, Lake, country round, 290
Shropshire and Cheshire, Handbook for Residents, etc., by John Murray, 454 †
Shuck, A., Magnetische Beobachtungen an der Kieler Föhrde, 647 †
Shuster, 593; water mills of, 591
Bogdanovitch's explorations in, 685
Siao-Ho river, Sze-chuan, 31, 38
Siberia(n)—
Bogdanovitch's explorations in, 635
Placers aurifères de la Sibérie, par Sabachnikoff et Levat, 228 †
Population of Sakhalin and, 198
Sea, North, Hydrological Expedition to, 219
Trading expedition to, success of, 538
Yakuts of, 437
Sicily—
Popolazione della Sicilia, del Dr. O. Marinelli, 452 †
Siedel, H., Ethnographische Beobachtungen . . . in Togo, 234 †
Sieger, Dr., Seeschiessen, Wasserschüsse, etc., 232 †
Siemens, A., Cable Laying on the Amazon River, 122 †, 542
Sieroszewski, V. L., The Yakuts, note on, 437
Sierra de la Tinta, Notas geológicas sobre la, por E. Aguirre, 651 †
Sierra Leone, natives of, 387
Sikkim and Tibet, Photographs of, 236
Simitia, 254; altitude, etc., of, 394

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000049

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Simler, Josias, by G. M. von Knonau, 555 †
Simon, Henry, Occasional Letter, Special Nansen Number, 232 †
Singapore—Penang, cable interruptions, 276
Siragusa, Prof. G. B., Dei limiti . . . della Geografia, 345 †
Sirha pass, Beluchistan, 586
Sittra, Lake, 608
Siwa, A Journey to, in 1896, by W. Jennings-Bramly, 598 *
Sjöstedt, Dr. Y., Die Säugethiere des nordwestlichen Kamerungebietes, 121 †
Skertchly, E. F., Cagayan Sulu, its Customs, etc., 339 †, 537
Slave-raiding in the Central Sudan, 372
Small, H. B., The Waterways to Klondyke, 650 †
Smith, B. Leigh, Note on the Warm Undercurrent in the Arctic Ocean, 554 †
Smith, Dr. Donaldson, review of book by, 172
Smith, Dr. Kellet, and R. Money, Explorations West of Lake Nyasa, 146 *
Smith, Sir Donald, remarks on receiving medal for Dr. Dawson, 108; Western Canada, Before and Since Confederation, 121 †
Snowy mountains, Sze-chuan, 38
Sobat river, East Africa, 440
Soccavo crater, 428; catchment area, 481; valleys, 487
Socotra, Island of, by J. Th. Bent, 121 †
Sogurella, altitude, etc., of, 393, 397
Soldiering, etc., in British East Africa, by Major Macdonald, reviewed, 174
Solfatara crater, 425
Solomon Islands—
  Ethnographical Notes in New Georgia, by Lieut. B. T. Somerville, 231 †
  Report on the, by C. M. Woodford, 330, 341 †
Somaliland—
  Birds, Catalogue of, obtained by the Expedition into, by D. G. Elliot, 340 †
  Discussione delle osservazioni . . . alle seconda spedizione Bòttego, by E. Millosevich, 340 †
  Expeditions in, Bòttego's, 326; various, 328
  O călătorie prin tara Somalilor, by D. Ghica-Comănesci, 229 †
  Stone Implements, Ancient, in, by H. W. Seton-Karr, 552 †
Somerville, Lieut. B. T., Ethnographical Notes in New Georgia, 231 †
Somo, the T'u-ssu of, 42, 43; territory of, 46, 48; castle of, 48, 49
Songoia, altitude, etc., of, 394, 397
Sonnenschein, W. S., A Bibliography of Geography, 555 †
Soulié, R. P. J., De Ta-tsien-loû à Tse-kou, 549 †
Southampton, New Geographical Society at, 642
Southport—
  Fernley Observatory, Report, etc., of, by J. Baxendell, 227 †
Spaccata, Montagna, Italy, 423; Vallone di, 480
Spain—
  An Unnoted Corner of, by H. Lynch, 226 †
Speleology—
  British Caves and, by E. A. Martel, 500 *
  Cavernes de la Côte-d'Or, par C. Drioton, 546 †
  Cavernes des environs de Marseille, par M. Fournier, 547 †
  Faune Cavernicole du Jura, etc., par A. Viré, 547 †
  Gouffre de Padirac, par MM. Martel et Rupin, 547 †
  Grotte de Baume les-Messieurs, par E. Renauld, 547 †
  Grotte de Dargilan, par G. Carrière, 547 †
  Grottes artificielles des Environs de Brive, par M. Lalande, 546 †
  Spélunque de Dions, par MM. Mazaurie et Cabanès, 546 †
Spencer, F., Chapters on the Aims and Practice of Teaching, 220, 345 †
Sphinx bei Giseh, Ueber das Alter des, von L. Borchardt, 649 †
Spicq, Lieut., Carte de la Bouele du Niger, 660
Spitsbergen—
  Across Spitzbergen with Sir Martin Conway, by E. J. Garwood, 459 †
  Andrée Search Expedition to, 640
  Conway's, Sir Martin, expedition to, 219
  First Crossing of, by Sir W. M. Conway, 232 †; reviewed, 179
  Voyage au Spitzberg, par Nils Voll, 459 †
  Zum ewigen Eise, von G. Wegener, 459 †
Stahl, A. F., Surveys in Northern and Central Persia, 325; Geologische-Karte des nördlichen Persien, 659
Stanford, Bennett, expedition to Somaliland, 328
Stanford's Sketch-map of the North-West Frontier of India, 561; E., Large-scale map of the Nile, 659; Map showing position of the Yukon goldfields, 660
Stanovoi mountains, Bogdanovitch's exploration of the, 635
Steeb, C. R. von, Terraindarstellung mit Schiefer Beleuchtung, 459 †
Stefani, C. de, Cenni geologici sull' Isola di Leucade, 225 †; I soffioni boraciferi della Toscana, 452 †
Steffen, Dr., on the Chilian-Argentine Boundary Question, 214; Informe . . . exploradora del rio Aisen, 651 †
Stein, Lieut. Baron von, explorations in the Cameroons, 638
Stephan, Dr. H. v. (Biography), 555 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Stephen, Colonel A., Annual Sanitary Report for Assam, 648 †
Stephenson, G. L., Photographs of Mexico, 563
Steppe region, Russia, population of, 198
Stewart, Colonel, remarks on "Recent Journeys in Persia," 596
Stiffe, Captain A. W., Ancient Trading Centres of the Persian Gulf, 608 *
Stillen Ozean: *see* Pacific
Stirling, Jas., Inaugural Address to Geological Society of Australasia, 231 †
Stone, Sir J. B., on the National Photographic Record Association, 207
Strahan, A., On Glacial Phenomena . . . in the Varanger Fiord, 118 †
Stuart, Prince Ch. Edward, Itinerary of, by W. B. Blaikie, 227 †, 324
Studies for Students: Large Scale Maps as Geographical Illustrations, by W. M. Davis, 556 †
Stufe di Nerone, mineral springs, 433
Submarine Changes in Shallow Water, 146; dislocations, frequency of, 280; seismic districts, 134; volcanic action, 138; springs, 143
Sub-Oceanic Changes, by John Milne, 129 *, 259 *; Continental Slopes, Interruption to Cables on, 263
Sucio river, Costa Rica, 67
Südamerika: *see* America
Sudan—
  Maps: Völker des West Sudan, etc., von Dr. P. C. Meyer, 462
  Travel in, conditions of, 371
Südpolar: *see* Antarctic
Suisse: *see* Switzerland
Sumatra—
  Naar Midden-Sumatra in 1684, door Dr. de Haan, 550 †
Sunshine records, 306
Supan, A., Die norwegische Polarexpedition, 653 †
Superior, Lake, Area of Drainage Basin of, 97
Susu tribes, West Africa, 386
Sverdrup, Captain O. N. (Biography), 343 †; Proposed New Voyage of the *Fram*, 98
Swastika, The, the earliest known Symbol, by Th. Wilson, 654 †
Sweden—
  Borings for fresh water through granite rocks of, 465
  Schwedens Höfjällgebiet, von J. G. Schoener, 226 †
Swedish Polar Expedition under Dr. Nathorst, 641
Swedish Polar Researches—
  Ett önskningsmål för den svenska polarforskningen, ap A. G. Nathorst, 459 †
Swinton, Colonel, photographs of Jamaica, 563; of Samoa and Hawaii, 128
Switzerland [Suisse, Schweiz]—
  Chemins de fer Suisses, par M. Hubou, 548 †
Switzerland [Suisse, Schweiz]—*continued*.
  Handbook for travellers, by K. Baedeker, 453 †
  Maps: Karte der Schweizer Alpen, von H. Ravenstein, 658
  Rapport du Bureau Fédéral des Assurances, etc., 453 †
  Relief der Schweiz, von Dr. Früh, 226 †
  Suisses en dehors de la Suisse, par M. Zobrist, 453 †
  Zermatt and the Matterhorn, by E. Whymper, 548 †
Sykes, Captain P. M., Recent Journeys in Persia, 568 *
Sze-chuan, Western, A Journey in, by Mrs. Bishop, 19 *, 549 †; villages and buildings of, 22, 24, 26; coal in, 21; beauty of scenery, 32

T.

Ta Choh pass, 23
Taftan volcano, Beluchistan, 587
Tajima, Colonel, Notes on New Caledonia, 458 †
Takla Makan desert, 209, 313
Talamanca range, Costa Rica, 58, 72
Tamara, Roman town of, 514
Tanganyika, Physiographical features of district of, 298–300
Tappenbeck, E., Verlauf der Kaiser-Wilhelmsland-Expedition, 458 †
Tarawera Mount, A Visit to, by H. M. Cadell, 123 †
Tarcoles, Costa Rica, 62
Tarr, R. S.—
  Changes of Level in Bermuda Islands, 340 †
  Cornell Glacier, Former Extension of, 342 †
  On Climates in Davis Bay and Baffin Bay, 442
  On Geology of the Bermuda Islands, 639
  Physical Geography of New York State, 122 †
  Valley Glaciers of the Upper Nugsuak Peninsula, 342 †
Tasmania, Mineral and Land Map of, 562
Tate, G. P., letter from, on Kech-Makurán, 221
Ta-tsien-loû à Tse-kou, De, par R. Soulie, 549 †
Tauern: *see* Niederen Tauern
Taylor, F. B., Moraines of Recession and their Significance in Glacial Theory, 653 †
Teachers, Geographical Reading for, Dr. Mill on, 641
Teaching, Aims and Practice of, by F. Spencer, 345 †, 446
Tegetthof, Cape, Franz Josef Land, 186
Tehuelche Indians of Patagonia, 410
Teleki volcano, Lake Rudolf, 539
Tembi Kunda, 246; altitude, etc., of, 393, 397, 398
Tembiko source, West Africa, 244

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000003

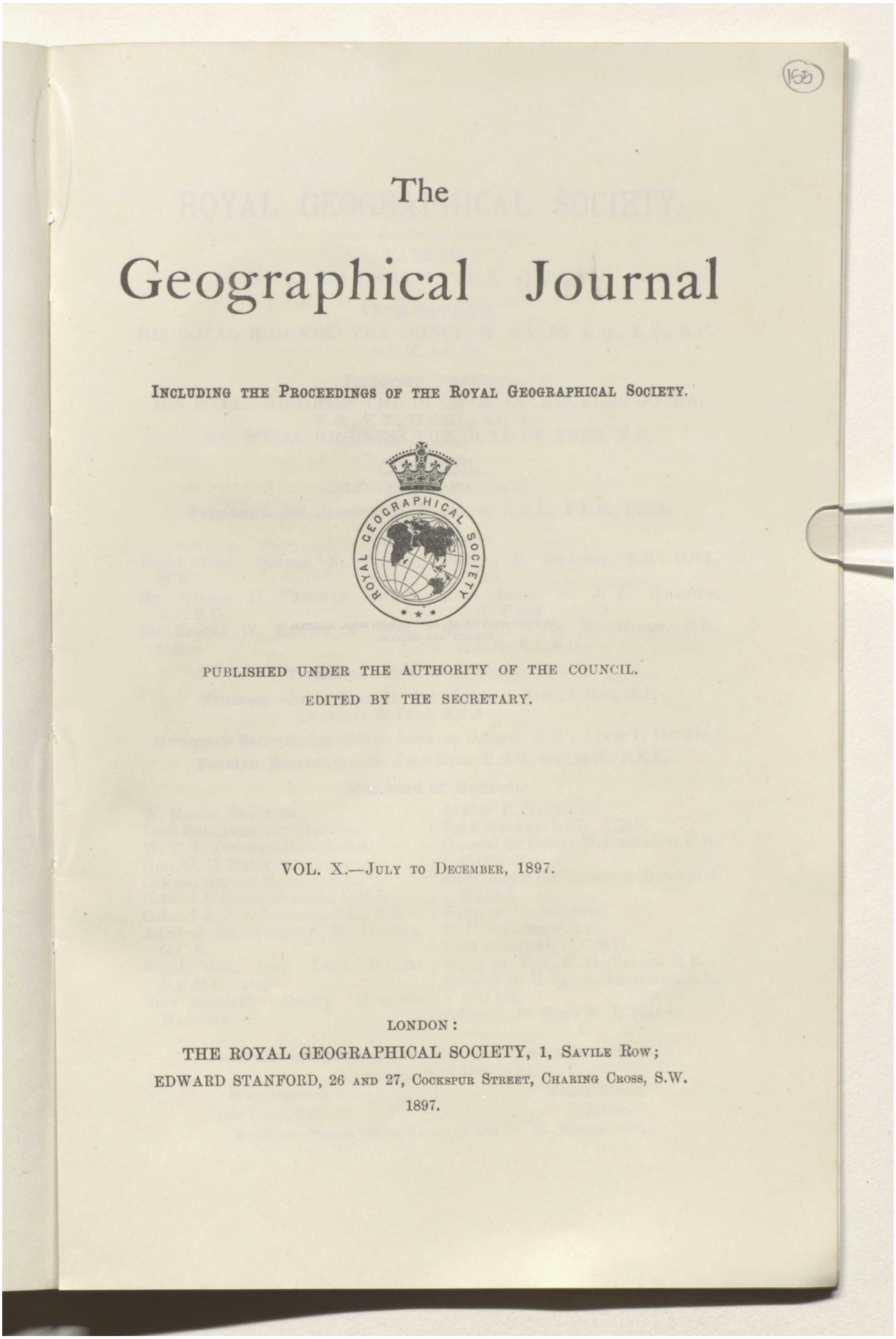
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Temple, R. C, The Selungs of the Mergui Archipelago, 648 †
Terraba, Rio Grande de, 63
Terraindarstellung mit Schiefer Beleuchtung, von C. R. von Steeb, 459 †
Terre Neuve à la côte des Landes, par A. Hautreux, 342 †
Terrestrial magnetism—
Comparison and Reduction of Magnetic Observations, Report of Committee, 234 †
Component Fields of the Earth's Permanent Magnetism, by L. A. Bauer, 234 †
Distribution of Magnetic Observatories, by A. Schmidt, 234 †
Terrestrial Magnetism, by Prof. Rücker, 125 †
Tetens, O., Ueber geographische Ortsbestimmung, etc., 232 †
Tetzner, Dr. F., Das litauische Sprachgebiet, 646 †
Tez, Beluchistan, 584
Thames, Roman sites on the, 520; early navigation of, 523
Theodolite measurements in Franz Josef Land, 187
Thessalien und Epirus, von Dr. Philippson, 647 †
Thessalien, von Dr. A Philippson, 338 †
Thompson, Prof., Report on Mission to Behring Sea, 650 †
Thomson, Captain A. S. (Biography), 655 †
Thomson, Joseph, Memorial to, at Thornhill, 101
Thonner, F., Das Gebiet des Mongalaflusses, 649 †
Thoroddsen, Dr., award to, 109; explorations in Iceland, 536; Fra det nordlige Island, 225 †
Thoulet, M., Cartes lithologiques sous-marines, 554 †; Notice sur les travaux scientifiques publiés par, 556 †
Through Unknown African Countries, by Dr. Donaldson Smith, reviewed, 172
Thuringia, Geography of, by Prof. Regel, 207
Tibet—
Exploratory work required in, 313
Fauna of, 89
From Leh to Peking across, by Captain Wellby, 648 †
Landor, Mr., return from, 537
Northern, Dr. Hedin's expedition across, 210
Tidal Phenomena of the St. John River, by A. W. Duff, 650 †
Tides—
And Currents in Canadian Waters, by W. Bell Dawson, 553 †
Manual of, by R. A. Harris, 233 †
Tables for the British and Irish Ports, by Captains Harris and Goalen, 548 †
Tierra del Fuego—
Expédition suédoise à la Terre de Feu, par M. O. Nordenskjöld, 458 †, 542
Tirap and Namtsik, Eastern Nagas the, by S. E. Peal, 339 †
Tisserand, Felix (Biography), 343 †
Tocolosida, Morocco, 302
Toises, Gnomen de l'Observatoire et les anciennes, de M. C. Wolf, 653 †
Tol Mi, Mantzu village, 35
Topinard, Prof. P., On the Anthropology of Brittany, 546 †
Topographical Work of the Geological Survey of Canada, by J. Burr Tyrrell, 623 *
Törnebohm, A. E., Grunddragen af det centrala Skandinaviens, 548 †
Toronto, British Association Meeting at, 471
Toulotte, Mgr., expedition in North Africa, 213
Toutée, Mission, Résultats Géographiques de la, 177, 229 †
Towns and Villages in England, Distribution of, by G. G. Chisholm, 511 *
Tozer, H. F., History of Ancient Geography, 234 †, 331
Trachytic Rock Masses and Lava-streams, List of, 434
Tracy, W. B., The Manchester Ship Canal, 845 †
Trade—
Anfänge des modernen Verkehrs Hamburgs mit Vorderindien u. Ostasien, von Dr. E. Baash, 234 †
Of China, Report on the, 549 †
Our trade with Germany and Belgium, by M. G. Mulhall, 548 †
Twenty Years of, by M. G. Mulhall, 556 †
Trading Centres of the Persian Gulf, 608 *
Tradizione geografica dell' età romana, del Prof. Columba, 460 †
Transbaikalian Geographical Society, 94
Transvaal—
Maps: Geological Map of the Southern, by F. Hatch, 660; Hatch's map of the, showing physical features, etc., 660
Tremulæ, or Busra, Morocco, 302
Trent, Roman sites on the, 520; early navigation of, 523
Trevor-Battye, A., Arctic and Antarctic, 232 †
Trigonometrical Survey of British South Africa, 441
Trigonometry—
Ausgleichung trigonometrischer Messungen, etc., von A. Weixler, 460 †
Trinidade, A Ilha da, 651 †
Tripoli, trade of, Mr. Dickson's report, 440
Trotter, Colonel, An Expedition to the Source of the Niger, 237 *, 386 *; The Science of Frontier Delimitation, 346 †, 445
Truck, S., Die erste topographische Aufnahme des Königreiches Serbien, 453 †
Tsa-ku-lao, Sze-chuan, 30
Tsangpo: *see* Sanpo

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b6

مكتبة قطر الوطنية
Qatar National Library



The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

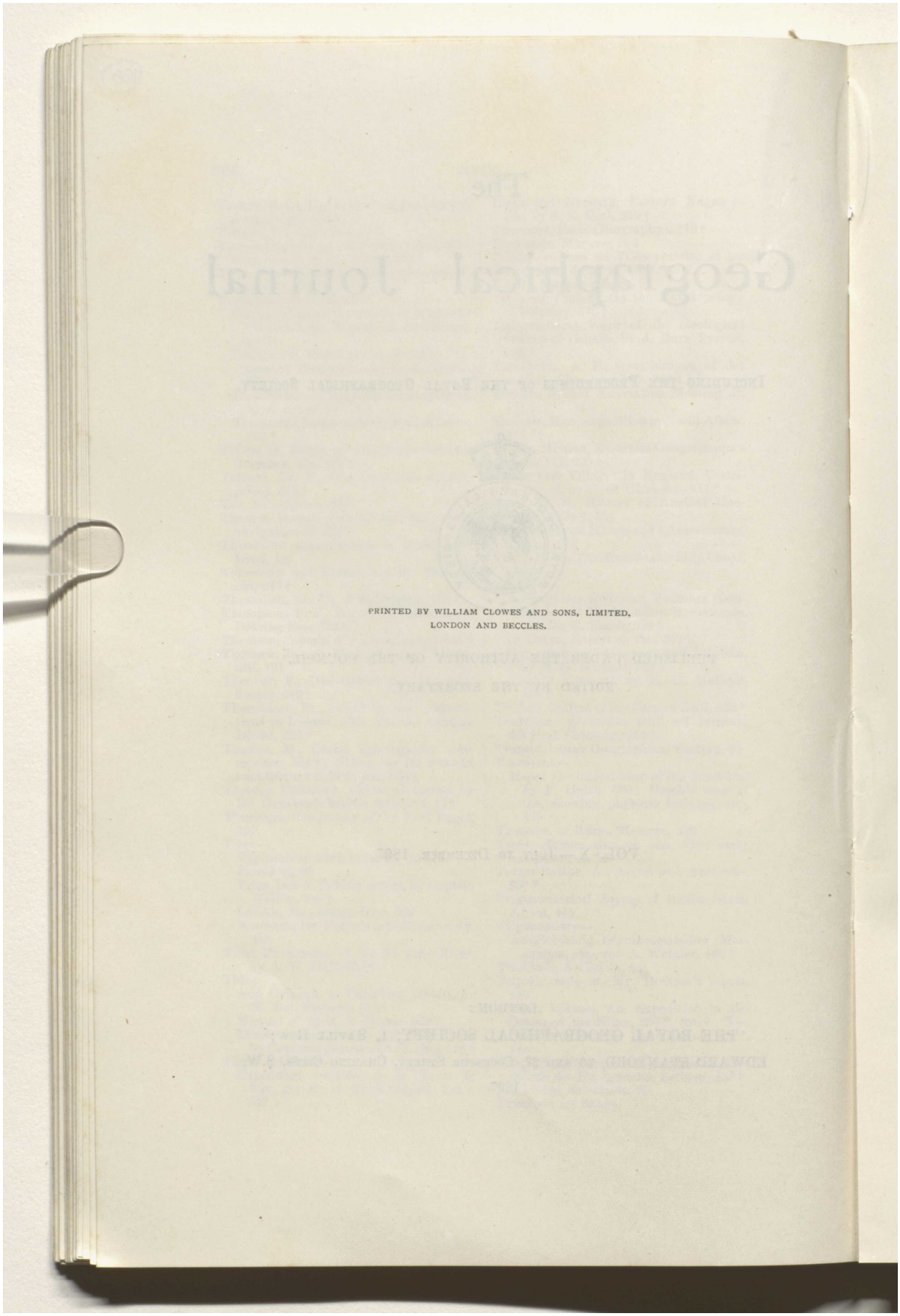
PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

VOL. X.—JULY TO DECEMBER, 1897.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.
1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000046

مكتبة قطر الوطنية
Qatar National Library



PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,
LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000047

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., &c., &c.

Honorary Presidents.

HIS ROYAL HIGHNESS THE DUKE OF SAXE-COBURG-GOTHA, K.G., K.T., G.C.S.I., &c., &c.
HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL

(ELECTED 17TH MAY, 1897).

President—Sir CLEMENTS R. MARKHAM, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Right Hon. GEORGE N. CURZON, M.P.
Sir GEORGE D. TAUBMAN GOLDIE, K.C.M.G.
Sir RAWSON W. RAWSON, K.C.M.G., C.B.
General R. STRACHEY, R.E., C.S.I., F.R.S.
Rear-Admiral W. J. L. WHARTON, C.B., F.R.S.
Gen. Sir CHAS. W. WILSON, R.E., K.C.B., K.C.M.G.

Treasurer—EDWARD L. SOMERS COCKS.

Trustees—Right Hon. Sir JOHN LUBBOCK, Bart., F.R.S., M.P.; CUTHBERT E. PEEK, F.S.A.

Honorary Secretaries—Major LEONARD DARWIN, R.E.; JAMES F. HUGHES.

Foreign Secretary—Sir JOHN KIRK, K.C.B., G.C.M.G., F.R.S.

Members of Council.

W. MORRIS BEAUFORT.
Lord BELHAVEN AND STENTON.
W. T. BLANFORD, LL.D., F.R.S.
Hon. G. C. BRODRICK.
Colonel GEORGE EARL CHURCH.
Colonel WILLIAM EVERETT, C.M.G.
Colonel J. FARQUHARSON, C.B., R.E.
Admiral Sir ANTHONY H. HOSKINS, G.C.B.
Right Hon. Lord LOCH, G.C.B., G.C.M.G., etc.
Rear-Admiral ALBERT HASTINGS MARKHAM.
ALFRED P. MAUDSLAY.
JOHN MURRAY, LLD., F.R.S.
General Sir HENRY W. NORMAN, G.C.B., G.C.M.G.
Surg.-Major Sir GEORGE S. ROBERTSON, K.C.S.I.
EARL OF SCARBROUGH.
P. L. SCLATER, F.R.S.
Lord STANMORE, G.C.M.G.
Major the Hon. M. G. TALBOT, R.E.
Colonel Sir HENRY R. THUILLIER, R.E., K.C.I.E.
Admiral the Hon. W. J. WARD.

Secretary and Editor of Publications—J. SCOTT KELTIE, LL.D.
Librarian—H. R. MILL, D.Sc.

Map Curator.
JOHN COLES, F.R.A.S.

Chief Clerk.
S. J. EVIS.

Bankers—Messrs. COCKS, BIDDULPH, and Co., 43, Charing Cross.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000071

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CONDITIONS OF FELLOWSHIP, &c.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that—

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his "admission fee, and £2 as his first annual subscription, or he may compound, "either at his entrance by one payment of £35, or at any subsequent period on the "following basis:—

Fellows of	20	years'	standing	and over	...	£12 10s.
,,	15	,,	,,	and under 20	...	£16
,,	10	,,	,,	,, 15	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the "Society so long as he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's periodical publications. The *Geographical Journal* is forwarded, free of expense, to all Fellows whose addresses are known.

Copies of the Regulations and Candidates' Certificates may be had on application at the Society's House, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000040

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

157

CONTENTS.

Authors are alone responsible for their respective statements.

No. 1. *July.*

PAGE

Recent Explorations to the South of Hudson Bay. By Dr. Robert Bell, F.R.S., of the Geological Survey of Canada 1
A Journey in Western Sze-chuan. By Mrs. Isabella Bishop 19
The Horn Expedition to Central Australia 51
The Fifty Years' History of the Russian Geographical Society 53
Costa Rica. By Colonel George Earl Church 56
The Geography of Mammals. By W. L. Sclater, M.A., F.Z.S., Director of the South African Museum 84
Address to Her Majesty the Queen 91
The Monthly Record 92
Obituary 101
Correspondence 107
Meetings of the Royal Geographical Society 107
Geographical Literature of the Month 117
New Maps 125

MAPS AND ILLUSTRATIONS—

Drying out after Rain 3
Typical View down Bell River 5
Aspen Woods along Bank of River 7
Point formed by Ice-shoved Boulders 11
Huge Boulder at Ice Portage 13
Chub Nest partly exposed 15
Scene on the Shen-kia-chao Pass 20
Sze-chuan Farmhouse 21
Ta Choh Pass 23
Roof of Erlang Temple 25
Kanpo 27
Rock Temple at Li-fan-ting 29
Mantzu Village of Tol Mi 35
Castle near Chute 37
A He-shui Family 39
Canyon of the Rong-kia 41
Ancient Tower, Somo 43
Gate of Somo Castle 49
Ney Elias, C.I.E. 103
Map of the Noddawai River and its Tributaries, south-east of James Bay (Canada) 128
Sketch-map of Northern and Central Sze-chuan 128
Map of Costa Rica 128
Map of the Palæarctic Region 128

No. 2. *August.*

Sub-Oceanic Changes. By John Milne, F.R.S., F.G.S. 129
Explorations in the west of Lake Nyasa. By R. I. Money and Dr. S. Kellett Smith 146
Recent African Literature. By E. Heawood, M.A. 172
The First Crossing of Spitsbergen 179
On a Revised Map of Kaiser Franz Josef Land, based on Oberlieutenant Payer's Original Survey. By Professor Ralph Copeland, Astronomer Royal for Scotland 180
The New Rapid on the Yang-tse. By F. S. A. Bourne 191
The Population of Russia. By P. Kropotkin 196

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

PAGE

A Portable Mercurial Barometer. By Captain H. H. P. Deasy 203
The Society's Address to the Queen 206
The Monthly Record 207
Correspondence 221
Meetings of the Royal Geographical Society 224
Geographical Literature of the Month 224
New Maps 235
MAPS AND ILLUSTRATIONS—
Fig. 1.—Bottom of Aquarium with and without water 141
Fig. 2.—Form of Upper Portion of a Mound of Wet Sand beneath Water 142
Fort Johnston 149
Lake Nyasa, from Bandawe 151
Native Iron-smelting Furnace 153
Caravan on the March 155
River Scene 157
Wall of Kambwire's Kraal, from Inside 159
Camp at Loangwa River 161
Loangwa River 163, 167
Native Smelting Furnace (disused) 164
Kambwire's Drum 165
Village Scene, Kota-Kota 169
Sketch-Map of the New Rapid, Yang-tse Kiang 193
The Barometer in its Normal Working Position 203
The Upper Carriage and Vernier, with Barometer 205
The Lower Carriage and Vernier, with Reservoir End of Barometer attached 205
Reduced Facsimile of the Address presented to the Queen by the Royal Geographical Society 206
Sketch-Map illustrating the Anglo-Chinese Agreement of June 5, 1897 208
Map of the North-Eastern Part of British Central Africa west of Lake Nyasa 236
Maps of Kaiser Franz Josef Land 236

No. 3. *September.*

An Expedition to the Source of the Niger. By Colonel J. K. Trotter, R.A. 237
Sub-Oceanic Changes. By John Milne, F.R.S., F.G.S. 259
The Physiographical Features of the Nyasa and Tanganyika Districts of Central Africa. By J. E. S. Moore, A.R.C.S. 289
The Roman Roads of Morocco. By Walter B. Harris 300
Recent Researches on Climate. By H. N. Dickson 303
The Volcanoes of the British Islands 307
Some Geographical Problems. By J. Scott Keltie, LL.D., Sec. R.G.S. 308
The Monthly Record 323
Obituary 333
Correspondence 334
Geographical Literature of the Month 338
New Maps 346
MAPS AND ILLUSTRATIONS—
Entrance to Town of Rotata 239
Crossing Trestle Bridge 240
Hammock Bridge over Seli River 242
Crossing Bagwe River 243
First Cairn placed by the Two Commissions at the Niger Source 245
Near the Source of the Niger 247
McKay's Grave at Bogoria (Boria) 249
Making Native Cloth at Berea 252
View from Heremakono 253
Country near the Fall of the Kita 256
Yumboya 258
Sub-Oceanic Changes:—Fig. 3.—Outside Cover damaged off Senegal, May 7, 1895. Fig. 4.—Buried in Mud, West Coast of Africa. Fig. 5. —West Coast of South America 260
Fig. 6.—Ocean Bed opposite Ecuador 264
Fig. 7.—Northern Coast of Brazil 267

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

PAGE
Fig. 8.—Picked up in the Gulf of Mexico in 1888 268
Fig. 9.—West Coast of Morocco 269
Fig. 10.—Cable grown round with Coral 270
Fig. 11.—Bay of Biscay 273
Nyasa-Tanganyika Districts:—Fig. 1.—Section through the two Southern Arms of Nyasa. Fig. 2.—The Coast round Mount Waller 292
Fig. 3.—Section of Country from Karonga to top of Plateau, North-West 296
Map of North-West Morocco 301
Map of Boundary between Sierra Leone and French Guinea 348
Sketch-Maps—I. Districts round the Southern Portion of Lake Nyasa. II. Districts round the Northern Portion of Lake Nyasa. III. Districts round the Southern Portion of Lake Tanganyika 348

No. 4. *October.*

Nupe and Ilorin. By Seymour Vandeleur, D.S.O., Lieut. Scots Guards .. 349
An Anglo-Australasian Antarctic Conference 374
An Expedition to the Source of the Niger. By Colonel J. K. Trotter, R.A. .. 386
A Journey in South-Western Patagonia. By Otto Nordenskjöld 401
A British Protectorate in Africa 410
The Phlegræan Fields. By R. T. Günther, M.A., Magdalen College, Oxford .. 412
The Monthly Record 436
Obituary 446
Correspondence 447
Geographical Literature of the Month 450
New Maps 461
MAPS AND ILLUSTRATIONS—
March to Kabba 351, 353
Market Canoe at Egga 355
Nupe Village 357
Taking Guns across Creek 359
Fulas on the March 361
Fula Emissaries entering Camp 363
River Niger 365
Inside Emir's Palace, Ilorin 366
Hausa Priest and Soldier 367
King of Tamisso 387
Stacking Rice 388
The Source of the Niger 389
View from the Western Patagonian Channels 403
Mount Payne, from the North 405
Mount Payne and Lake Sarmiento 406
Scenery from Baguales Mountains 407
Tertiary Hill with Basaltic Cones 408
Fig. 1.—Capo di Miseno, from the South 417
„ 2.—Porto di Miseno, from Capo Miseno 418
„ 3.—Porto di Miseno 418
Map of the Avernus Group of Volcanic Craters 419
Soundings in Lake Avernus 420
Fig. 4.—Lake Avernus, from North-east Corner 420
„ 5.—Arco Felice 421
„ 6.—Monte di Cuma, from the South 422
„ 7.—Campiglione Volcano, from the West 423
„ 8.—La Senga 424
Map of the Archiagnano group 425
Fig. 9.—View from Camaldoli over part of the Agnano Plain 426
„ 10.—Pignatiello Spur below Camaldoli 428
„ 11.—Tufa Cliffs East of the Cala di Trentaremi 430
Map of the Nupe and Ilorin Countries, lower Niger, with Plans of Bida and Ilorin 464
Sketch-Map of South-West rn Patagonia 464
Map of the Phlegræan Fields 464

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000056

مكتبة قطر الوطنية
Qatar National Library

PAGE

No. 5. *November.*

Discovery by Baron Nordenskjöld that Fresh Water will be found by boring through Hard Rock. By Sir Clements R. Markham, K.C.B., F.R.S. 465
Mr. Fitzgerald's Expedition to Aconcagua. By Edward A. Fitzgerald 469
Geography at the British Association, Toronto, 1897 471
The Phlegræan Fields. By R. T. Günther, M.A., Magdalen College, Oxford 477
British Caves and Speleology. By E. A. Martel 500
On the Distribution of Towns and Villages in England. By Geo. G. Chisholm, M.A., B.SC. 511
On the Distribution of Earthquakes in Japan. By Charles Davison, SC.D., F.G.S. 530
The Monthly Record 535
Obituary 545
Geographical Literature of the Month 546
New Maps 557
MAPS AND ILLUSTRATIONS—
Boring at Dalbyö 466
Spring reached by boring through Archaic Rock 468
Map V.—Valleys and Watersheds of Camaldoli 481
Fig. 12.—Vallone Verdolino, just before reaching the Soccavo Plain .. 482
Fig. 13.—Upper Slopes of the Cavone Delle Noce 484
Map VI.—Hills of Camaldoli 485
Maps VII. and VIII.—Various Diagrams and Sections 486
Fig. 14.—Bed of the Cavone Delle Noce 486
Fig. 15.—Path through young Chestnut Wood 496
Underground River at Marble Arch, Ireland 503
The Interior of Gaping Ghyll, in Yorkshire 506
Lago Miramar, Majorca 510
District in the Provinces of Mino and Owari 531
Sketch-Map of the Distribution of Earthquakes in Japan during 1885–1892 564

No. 6. *December.*

The President's Opening Address, November 8, 1897 565
Recent Journeys in Persia. By Captain P. Molesworth Sykes 568
A Journey to Siwa in September and October, 1896. By W. Jennings-Bramly 597
Ancient Trading Centres of the Persian Gulf. By Capt. A. W. Stiffe, R.I.M. 608
Potamology as a Branch of Physical Geography. By Prof. A. Penck, PH.D. 619
The Topographical Work of the Geological Survey of Canada. By J. Burr Tyrrell, M.A., B.SC., F.G.S. 623
History and Literature of the Klondike Region 631
The Monthly Record 632
Obituary 642
Geographical Literature of the Month 646
New Maps 657
MAPS AND ILLUSTRATIONS—
The Farman Farma's Garden at Mahun 571
The Taftan Range, Sarhad 573
The Governor of Magas and Family 576
The Fort at Bam 579
Kubeh-i-Subs or "Green Dome" at Kerman 581
Pass of the "Old Woman" between Shiraz and Bushire 583
Tombs of the Kaianian Maliks at Jalk 587
The Lajji Valley on the Beluch-Kalat Frontier 589
The Water-Mills of Shuster 591
Map of Siwa 601
Date-drying Yard, Siwa 605
Maskat, from the Anchorage outside the Forts 610
Maskat, from Makallah Bay, the Anchorage for Small Vessels 611
Inscription over Gateway in Fort Merani 612
Inscribed over a Window in Fort Merani 613
Fort of Felej 614
Sketch-Map of the New Franco-German Boundary in West Africa .. 636
Sir Rutherford Alcock, K.C.B., D.C.L. 644
Sketch-Map of Persia, Afghanistan, and Beluchistan 660
Maskat and Matrah in Oman, Arabia 660

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003b

مكتبة قطر الوطنية
Qatar National Library

Tsu-kuh-shan range, 50
Tufa cliffs near Cala di Trentaremi, 430
Tunis—
Carte de Reconnaissance (Service géographique de l'Armée), 126
Tupengato volcano, Andes, 96
Turialba volcano, Costa Rica, 59
Turkey, Consular Experiences in, by Colonel Clayton, 548 †; Stellung der Türken in Europa, von H. Vambéry, 227 †
Turkish expeditions to Maskat, 617
Turkistan and Transcaspian, Population of, 198
Turko-Grecian war: A Glimpse of the Late War, by Major Callwell, 453 †
Turkomans of Persia, 573, 574, *and note*; Churchill River, 121 †; surveys in Manitoba, 628, 629; Topographical work of the Geological Survey of Canada, 623 *
Turner, Lieut., report on the Sana Kachin expedition, 325
Tuscany: I soffioni boraciferi della Toscana, del C. de Stefani, 452 †
Tuscarora Deep, earthquakes at, 137
T'u-ssu of Somo, 42
Twenty Years of Trade, by M. G. Mulhall, 556 †
Tyler, Sir H., The Geography of Communications, 556 †
Tyrrell, J. Burr, Barren Lands of Canada, 229 †; and D. B. Dowling, Report on Country between Athabasca Lake and Churchill River, 121 †; surveys in Manitoba, 628, 629; Topographical Work of the Geological Survey of Canada, 623 *

U.

Ubangi river, Congo basin, 638
Uchungwe mountains, East Africa, description of, by Herr von Bruchhausen, 638
Uganda, Unyoro, etc., Two Years' Travel in, by C. F. S. Vandeleur, 228 †
Umlauft, F., Die Bahn auf den Wiener Schneeberg, 546 †
Ungarn: *see* Hungary
United Kingdom, Geological Survey of the, Annual Report, by Sir A. Geikie, 119 †
United States—
Coast and Geodetic Survey, Appendices relating to the Methods, etc., 122 †
Eleventh Census, Reports, 457 †
Geographical progress in, 317
Hydrographic Charts, 128, 348, 464, 563
Massachusetts, State of, Geographic Positions in, 230 †
Report, Annual, of the Chief of Engineers, 230 †
Unity of the Empire, The, by Profs. Kirkpatrick and Prothero, 344 †
Upeno river, East Africa, 440
Urbano, Captain Manoel, Death of, 544
Urmia, Lake, rise of, 93
Urua, L', pays des Balubas, par C. Brasseur, 340 †

V.

Valentin, J., Communicaciones geologicas . . . de Salta y Jujuy, 651 †
Valley Glaciers of the Upper Nugsuak Peninsula, by R. S. Tarr, 342 †
Valley, Typical, of Camoldi, 497
Vallot, J., Sur les plis parallèles qui forment le massif du Mont Blanc, 118 †
Valparaiso—Serena, cable interruptions, 265, 267
Vambéry, H., Die Stellung der Türken in Europa, 227 †; Ueber den Ursprung der Magyaren, 450 †
Vampire bats of Costa Rica, 77
Van der Chijs, J., Nederlandsch-Indisch Plakatboek, 227 †
Vancouver Island, Photographs of, by J. W. Laing, 348
Vandeleur, Lieut., Murchison Grant awarded to, 109; Nupe and Ilorin, 349 *, 650 †; Two Years' Travel in Uganda, Unyoro, etc., 228 †
Vanni, Place-Names in the, by J. P. Lewis, 455 †
Varanger Fiord, Glacial Phenomena in, by A. Strahan, 118 †
Varigny, H. de, Air and Life, 232 †
Vasco da Gama Celebrations in Portugal, 220
Vasconcellos, Captain, book on Portuguese Colonies, 178
Vaughan, J. D., Fiji, meteorological observations at, 652 †
Vedova, Prof. G. D., Glossario geografico dell' Italia del Medio-Evo, 452 †
Venetia—
I fiumi resorgiva . . . al territorio veneto, del Prof. G. L. Bertolini, 647 †
Tre antiche vie romane nella, del P. Pinton, 453 †
Venezuela: Territoire contesté entre le Venezuela et la Guyane Anglaise, par L. Gallois, 458 †
Venta Icenorum, site of Roman town of, 513
Venukoff, M., Observations météorologiques faites en Mandchourie, 648 †
Verdolino, Vallone, 482
Verticale, sur la précision comparée de divers mode de réperage de la, par Ch. Lallemand, 124 †
Vespucci, Amerigo, Sulla relazione di, del Dr. A. de Martino, 555 †
Věstnik Král České Společnosti Náuk, by Dr. J. Frejlach, 646 †
Vesuvius: Schichten-Reliefs des Vesuv, von Dr. M. Ebeling, 453 †; Osservazioni fatte al Vesuvio, del M. Baratta, 453 †
Victoria cave, Derbyshire, 508
Victoria-Nyanza, von Pater Brard, 96, 229 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

Victoria University, Geography at, 101
Vidal, P., L'éducation des indigènes, 234 †
Viellerobe, A. F. J. M., Mapa del Peru, 660
Vienna College of Meteorology, The Directorship of, 332
Vierkandt, Dr. A., Die Kulturformen und ihre geographische Verbreitung, 460 †; Die Indianerstämme Brasiliens, etc., 651 †
Vignéras, S., Une mission française en Abyssinie, 456 †
Villafranca, Señor R., Costa Rica, 457 †
Vinciguerra, Prof. D., Studi limnologici a tutti i laghi italiani, etc, 452 †
Virchow, R, Die Bevölkerung der Philippinen, 550 †
Virginia Cartography, by P. Lee Phillips, 457 †
Viscachas river, Patagonia, 406
Volcanoes of the British Islands, by Sir A. Geikie, note on, 307; of the Phlegræan Fields, 413-415; near the Beluchistan-Afghan frontier, note by Lieut.-General McMahon, 588, *note*
Voll, Nils, Voyage au Spitzberg, 459 †
Vosges, Pronouciation de quelques noms de lieux dans les, par A. Fournier, 547 †

W.

Wa states and tribes, 325
Waddell, L. A., Tibetan Guide-book to the Lost Sites of the Buddha's Birth and Death, 455 †
Wade, M. S., The Clondyke Goldfields, 650 †
Wagner, H., Geographisches Jahrbuch, 656 †
Wahehe, Die, von W. Arning, 121 †
Wainfleet, Roman site at, 514
Wakhan, people of, 537
Walcott, Ch. D., The Post-Pleistocene Elevation of the Inyo Range, 456 †
Wales, Roman roads in, 519
Waller, Mount, Nyasa lake, 292, 293
Wan Hsien, Sze-chuan, 19
Wangoni tribe, East Africa, 327
Warm Undercurrent in the Arctic Ocean, Note on, by B. Leigh Smith, 554 †
Washington, Sectional Map of, by O. P. Anderson, 123
Water in rivers, quantity of, 620; running water, distribution of, 622
Waterwegen in Oud-Holland, door A. Beekman, 547 †
Watling Street, old Roman road, 516
Wauters, M., on the Hydrography of the Sanga River, 441
Weber, Prof. L., Temperaturschwankungen in Kiel, 647 †
Wegener, Dr. G., Der Südpol, 342 †; Zum Ewigen Eise, 459 †
Weinek, Prof., Photographic Atlas of the Moon, 348
Weixler, A., Ausgleichung trigonometrischer Messungen, etc., 460 †
Wellby, Captain, From Leh to Peking across Tibet, 648 †
Wellia, altitude, etc., of, 395
Wells, C. F., and G. L. Jones, the lost members of Calvert Expedition, 444
Wells, L. E, Canals and Navigable Rivers of England, 227 †
Werther, Lieut., journey in East Africa, 327
Westenberg, C. J., Verslag . . . Batakland-en ten Noorden van het Tobameer, 550 †
West Indies—
British, Tobacco and Cotton Cultivation, by W. H. Burnley, 652 †
Politisch-geographische betrachtungen über Westindien, von Dr. Deckert, 231 †
Weyprecht, Lieut., surveys in Franz Josef Land, 181, 182
Whaling in the Antarctic, 383
Wharton, Admiral Sir W., remarks on "Sub-Oceanic Changes," 285, 288; on "Recent Explorations to south of Hudson Bay," 17, 18; Physical Condition of the Ocean, 125 †
Wheeler, S., Obituary of Ney Elias, 101, 460 †
Whiteley, J. G., Diplomacy of the United States in regard to Central American Canals, 652 †
Whitty, Rev. J. I., Palestine Exploration: Further Revelations, etc., 228 †
Whymper, E., The Valley of Zermatt and the Matterhorn, 548 †
Wickenburg, Count von, expedition to Somaliland, 328
Wiesner, Prof., on Light and Plant-growth in the Arctic, 331
Wilbraham, Hon. E. B., Narrative of an Ascent of Mont Blanc, 547 †
Wilczek island, 181
Wilson, Th., The Swastika, etc., 654 †
Wilson-Barker, Captain David (Biography), 555 †
Wind—
Einfluss des Windes, etc., 460 †
Studio delle Brezze di monte, del O. Marinelli, 342 †
Winds and Ocean Currents, by Prof. W. M. Davis, 653 †
Windt, H. de, Reisen an der Beringsstrasse, 122 †
Windward, Departure of the, 99
Winship, G. P., The Coronado Expedition, 230 †
Winsor, J., Baptista Agnese and American Cartography in the Sixteenth Century, 460 †
Wirtschaftsgeographie: *see* Geography
Wisotzki, Dr. E., Zeitströmungen in der Geographie, 346 †
Woeikof, A., Bemerkungen über die Temperatur russischer Flüsse und Seen, 453 †; on water in rivers, 620
Wolf, M. C., Le Gnomen de l'Observatoire et les anciennes Toises, 653 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Wolkenhauer, W., Biography of Oscar Dickson, 555 †; Giovanni Caboto, 655 †; J. B. Bourgnignon d'Anvilla, 655 †
Woltorf, Das zweiherrige Dorf, von R. Andrée, 547 †
Woodford, C. M., Report on the British Solomon Islands, 330, 341 †
Woods, Lake of the, Geological . . . Map of, 235
Worcester, Roman site at, 520
World, Chart of the, by Dr. H. Berghaus, 236
Wottitz, J., Die Jungfraubahn, 226 †
Wragge, C. L., Meteorology of Queensland, 231 †

X.

Xingu, Dr. H. Meyer's Journey to the Headwaters of the, 215; M. Coudreau's Expedition to the, 216

Y.

Yagi, S., The Topographical Distribution of Dolmens in Musashi, 550 †
Yakuts, The, by M. Sieroszewski, note on, 437
Yang-tse, The New Rapid on the, Mr. Bourne on, 191 *
Yaria, altitude, etc., of, 394
Yate, Major, Loralai, 549 †; Photographs of Baluchistan, 236
Year Book, New Zealand Official, by E. J. von Dadelszen, 123 †
Yemen—
L'Iemen, avanti il profeta, by G. B. Rossi, 647 †
Yenisei and Ob, Hydrographical Expedition to the, 93; trading expedition to, 538
Yerembo, altitude, etc., of, 393, 397
Yokoyama, S., On the Island of Taiwan, 456 †
Yomut Turkomans, 674, *note*
Yorkshire—
Caves of, 509
Dry River Bed near Malham in, 535
Yorkshire—*continued.*
Thorough Guide Series, by M. J. B. Baddeley, 453 †
Yucatan, Coastal and Plain Flora of, by Ch. F. Millspaugh, 341 †; Costa Oriental de, by R. Menéndez, 651 †; Neuere Forschungen in Chichen-Itza, 651 †
Yukon river, Alaska, discovery and literature of the, 631
Yukon goldfields, Stanford's map showing position of the, 660
Yunnan, La province chinoise du, par G. Rouvier, 549 †
Yver, G., L'émigration Italienne, 555 †

Z.

Zachariae, Generalmajor, Relative Pendulmaalinger i København, 450 †
Zacharias, Dr., on the Lakes of the Reisen Gebirge, 323
Zache, Dr. E., Grundzüge einer Bildungsgeschichte der Erdrinde, etc., 461 †
Zambezi: Voyage sur les bords du Zambèze, d'après M. Foa, 229 †
Zambezi-Nyasa Region, M. Foa's explorations in the, 212
Zanotti-Bianco, O., Sulle misure di arco di meridiano, etc., 459 †
Zante—Canea, cable interruptions, 271
Zanzibar—
Abschaffung der Sclaverei auf, 340 †
Cable interruptions, Zanzibar-Mombasa, 274
Trade of, Mr. Cornish's report, 440
Zaytoun, Dr., observations on the Sahara, 96
Zeitströmungen in der Geographie, von Dr. E. Wisotzki, 346 †
Zenker, Dr. W., on Climate, 304
Zermatt, Valley of, and the Matterhorn, by E. Whymper, 548 †
Zimmerman, M., Le voyage de Nansen, etc., 232 †
Zobrist, M., Les Suisses en dehors de la Suisse, 453 †
Zschokke, Dr. A., Zur Geschichte der Bergsteigens, 557 †
Zum Ewigen Eise, von G. Wegener, 459 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

INDEX TO MAPS.

EUROPE.

Phlegræan Fields—
Archiagnano Group of Craters, Sketch-map, 425
Avernus Group of Volvanic Craters, Sketch-map, 419
Phlegræan Fields—*continued.*
Camaldoli, Valleys and Watersheds, Sketch-map, 481; Hills of, Sketch-map, 485
General Map, 464

ASIA.

Anglo-Chinese Agreement, Sketch-map, 208
Japan, Earthquakes in, Distribution of, Sketch-map, 531, 564
Maskat and Matrah in Oman, Arabia, 660
Persia, Afghanistan, and Beluchistan, Sketch-map of, 660
Sze-chuan, Northern and Central, Sketch-map, 128
Yang-tse Kiang, New Rapid on the, Sketch-map, 193

AFRICA.

Africa, British Central, North-Eastern Part of, 236
Franco-German Boundary, The New, 633
Morocco, North-West, showing Roman Roads, 301
Nupe and Ilorin Countries, Lower Niger, 464
Nyasa and Tanganyika Lakes, Districts round, Sketch-maps, 348
Sierre Leone and French Guinea, Boundary between, 348
Siwa, Map of, 601

AMERICA.

Costa Rica, 128
Noddawai River and its Tributaries, Canada, 128
Patagonia, South-Western, Sketch-Map, 464

ARCTIC.

Kaiser Franz Josef Land, from Lieut. Payer's Survey, 236

GENERAL.

Palæarctic Region of the Geography of Mammals, 128

ILLUSTRATIONS AND DIAGRAMS.

EUROPE.

Phlegræan Fields—
Arco Felice, 421
Avernus, Lake, 420
Camaldoli, View from, 426
Campiglione volcano, 423
Capo di Miseno, 417; Porto di Miseno, 418
Cavone delle Noce, Upper slopes of the, 484; Bed of the, 486
Phlegræan Fields—*continued.*
Chestnut wood, Path through, 496
Diagrams and sections, Various, 486
La Senga, 424
Monte di Cuma, 422
Pignatiello spur, 428
Tufa cliffs, 430
Vallone Verdolino, 482

ASIA.

Japan, Earthquake districts, provinces of Mino and Owari, 531
Persia—
Farman Farma's garden at Mahun, 571
Fort at Bam, 579
Governor of Magas and family, 576
Kubeh-i-Subs or "Green Dome" at Kerman, 581
Lajji valley, 589
Pass of the "Old Woman," 583
Persia—*continued.*
Taftan range, Sarhad, 573
Tombs of the Kaianian Maliks, 587
Water-mills of Shuster, 591
Persian Gulf—
Fort of Felej, 614
Inscriptions over gateway in Fort Merani, 612; over a window, 613
Maskat, 610, 611

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000021

مكتبة قطر الوطنية
Qatar National Library

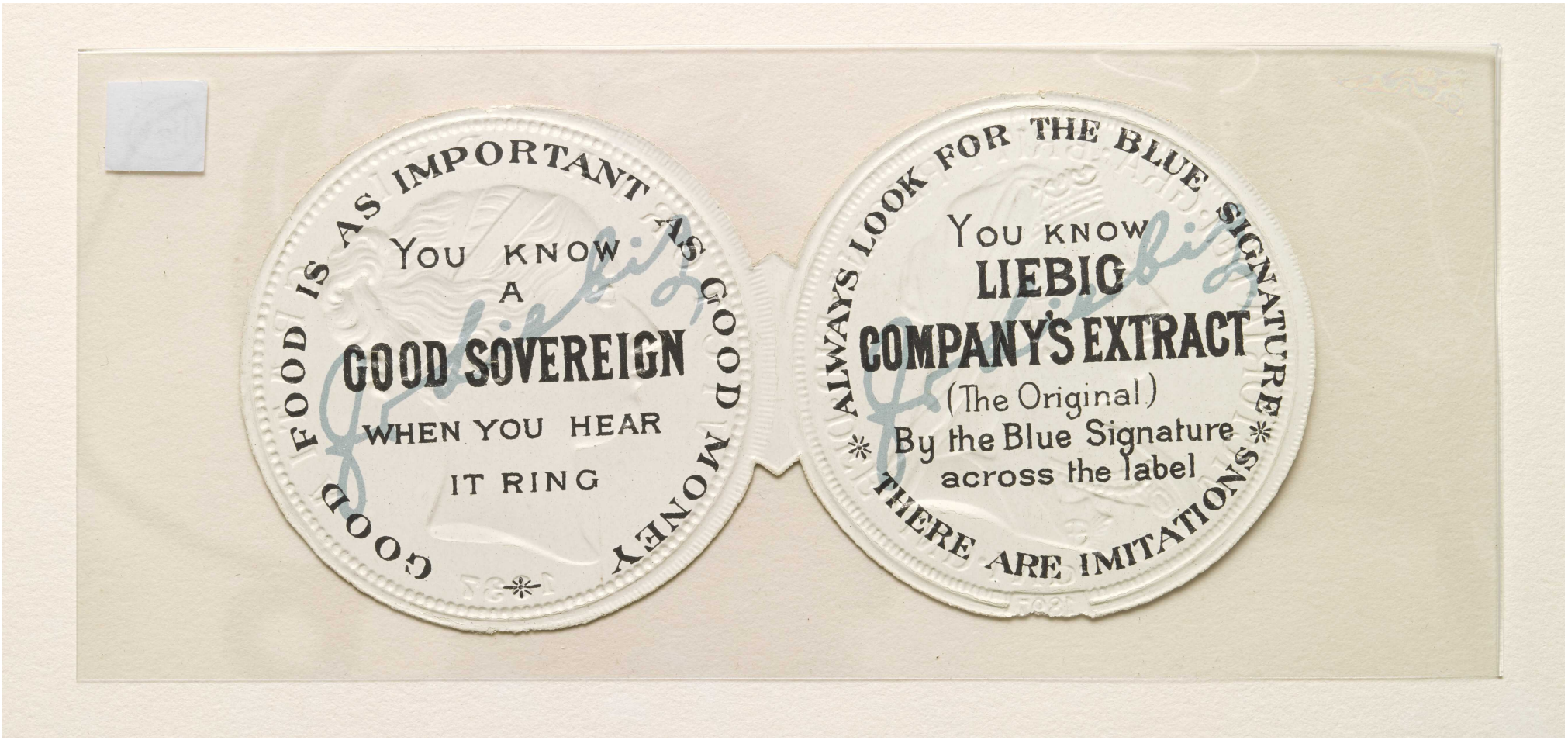
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

ASIA—*continued.*

Sze-chuan—
Chute, Castle near, 37
Erlang temple, Roof of, 25
He-shui family, 39
Kanpo, 27
Li-fan-ting, Rock temple at, 29
Mantzu village of Tol Mi, 35
Sze-chuan—*continued.*
Rong-kia, Canyon of the, 41
Shen-kia-chao pass, Scene on the, 20
Somo, Ancient tower, 43; Gate of castle, 49
Sze-chuan farmhouse, 21
Ta Choh pass, 21

AFRICA.

Journey to Siwa—
Date-drying yard, Siwa, 605
Niger Regions—
Bagwe river, Crossing, 243
Cairn, First, placed at the source of Niger, 245
Hammock bridge over Seli river, 242
Heremakono, View from, 253
King of Tamisso, 387
Kita, Country near fall of the, 256
McKay's grave at Bogoria, 249
Native cloth-making, 252
Rotata, Entrance to town of, 239
Source of the Niger, 389; Near the, 247
Stacking rice, 388
Trestle bridge, Crossing, 240
Yumboya, 258
Nupe and Ilorin—
Emir's palace, Ilorin, 366
Fulas on the march, 361; Fula emissaries entering camp, 363
Hausa priest and soldier, 367
Nupe and Ilorin—*continued.*
Kabba, March to, 351, 353
Market canoe at Egga, 355
Niger river, 365
Nupe village, 357
Taking guns across creek, 359
Nyasa Region—
Caravan on the march, 155
Fort Johnston, 149
Kambwire's drum, 165
Kambwire's kraal, Wall of, 159
Kota Kota, Village scene at, 169
Loangwa river, 163, 167; Camp at, 161
Native iron smelting furnace, 153, 164
Nyasa lake from Bandawe, 151
River scene, 157
Nyasa-Tanganyika Districts—
Karonga to top of plateau, Section of country from, 296
Nyasa, Section through southern arms of, 292
Waller, Mount, Coast round, 292

AMERICA.

Hudson Bay Region—
Aspen woods along bank of river, 7
Bell river, Typical view down, 5
Chub nest partly exposed, 15
Drying out after rain, 3
Ice portage, Huge boulder at, 13
Ice-shoved boulders, Point formed by, 11
Patagonia—
Baguales mountains, Scenery from, 407
Patagonian channels, Western, 403
Payne, Mount, 405, 406
Tertiary hill, with basaltic cones, 408

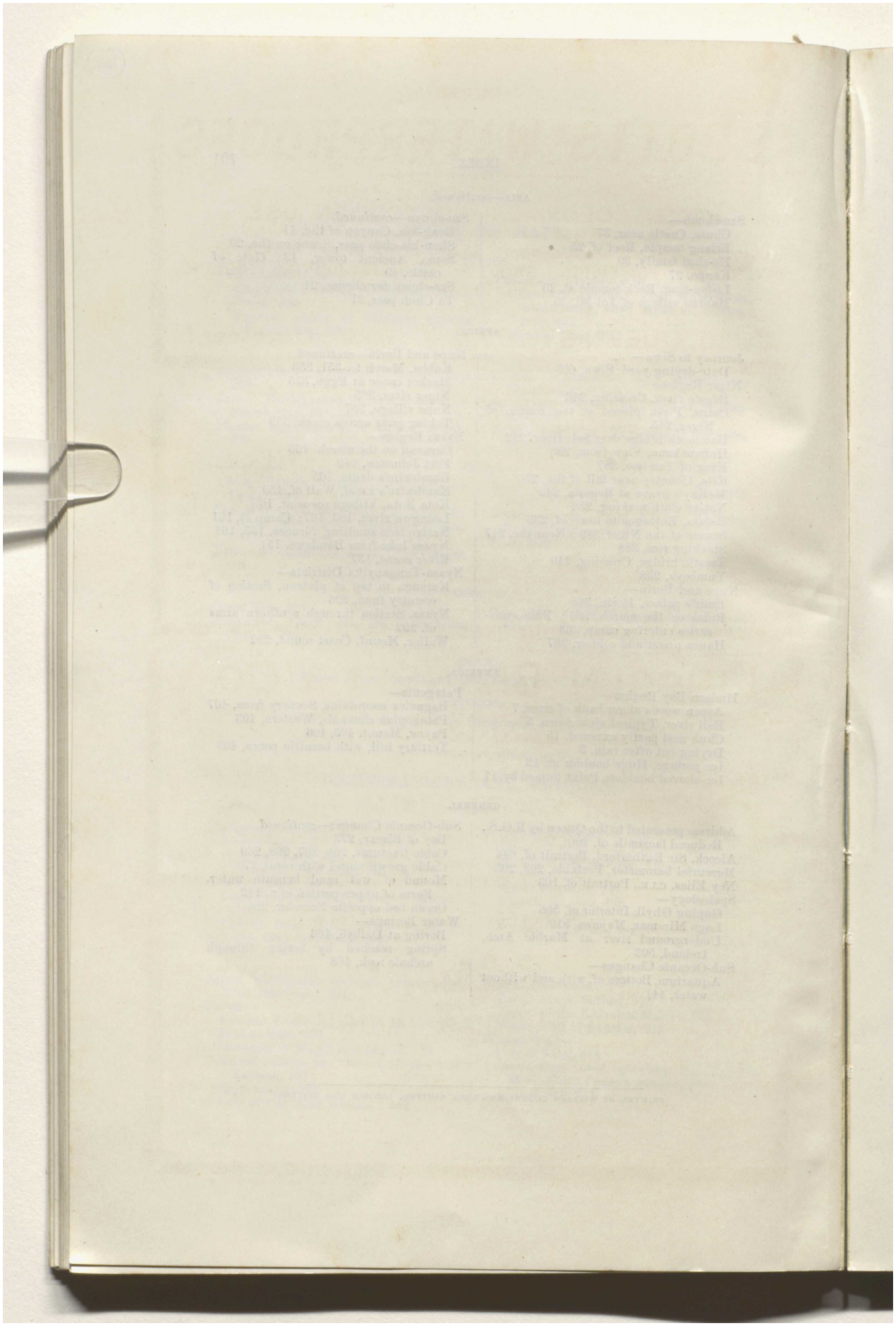
GENERAL.

Address presented to the Queen by R.G.S., Reduced facsimile of, 206
Alcock, Sir Rutherford, Portrait of, 644
Mercurial barometer, Portable, 203, 205
Ney Elias, C.I.E., Portrait of, 103
Speleology—
Gaping Ghyll, Interior of, 506
Lago Miramar, Majorca, 510
Underground river at Marble Arch, Ireland, 503
Sub-Oceanic Changes—
Aquarium, Bottom of, with and without water, 141
Sub-Oceanic Changes—*continued.*
Bay of Biscay, 273
Cable fractures, 260, 267, 268, 269
Cable grown round with coral, 270
Mound of wet sand beneath water, Form of upper portion of a, 142
Ocean bed opposite Ecuador, 264
Water Borings—
Boring at Dalbyö, 466
Spring reached by boring through archaic rock, 468

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000ad

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002d

مكتبة قطر الوطنية
Qatar National Library

ABBOTTS' WATERPROOFS

Manufacturers of High-class and Reliable Goods for

HOME, COLONIAL, AND FOREIGN USE,

As supplied to Fellows of the Royal Geographical Society.

REGULATION ARMY WATERPROOF. REGULATION NAVAL WATERPROOF.

WATERPROOFS FOR FISHING, SHOOTING, HUNTING, DRIVING, TOURING, YACHTING, CYCLING, Etc.

Contractors to the Admiralty, War Office, India Office, Metropolitan Police, etc.

Only Address: 15, QUEEN ST., CHEAPSIDE, LONDON, E.C. Works: Limehouse, E.

Awarded Gold Medal Liverpool International Exhibition, 1886.
Also Grand Prix (Highest Award) Antwerp, 1894.

ENGLISH MANUFACTURED

SWEETENED TOBACCOS AND CIGARETTES.

RICHMOND CAVENDISH Co., Ltd., LIVERPOOL.

SPECIAL BRANDS:—

"Pioneer" Golden Flake Cut. Twin Clouds. "Richmond Smoking Mixture." Richmond Navy Cut. Superfine Bird's Eye. "Hand it Round," Fine Cigarette Tobacco. Golden Bird's Eye. "Golden Brown" Fine Cut. Bright and Black Plug Cavendish in all usual sizes.

PRICE LISTS ON APPLICATION. ESTABLISHED OVER THIRTY YEARS.

LINCOLN, BENNETT & Co.,

1, 2 and 3, SACKVILLE STREET, and 40, PICCADILLY, LONDON, W.

Hat Manufacturers.

BY SPECIAL APPOINTMENT

To T.R.H. THE PRINCE and PRINCESS OF WALES.



PATENT INSULATED HELMETS FOR TROPICAL CLIMATES,

As supplied to Fellows of the Royal Geographical Society.



MACONOCHIE BROTHERS,

Purveyors by Appointment to HER MAJESTY THE QUEEN. 139 GOLD MEDALS



Purveyors by Appointment to H.R.H. THE PRINCE OF WALES. AND FIRST AWARDS.

MACONOCHIE'S INDIAN CURRIES The finest exported.

CURRIED FOWL, RABBIT, PRAWNS, LOBSTER, &c. Prepared in ½ lb., 1 lb., and 2 lb. tins.

MACONOCHIE'S WORCESTER SAUCE A delight to Epicures.

MACONOCHIE'S MEATS, SOUPS, and SAUSAGES of all kinds.

18 *different kinds of Sausages; Oxford, Suffolk, Cambridge, &c.*

The following specialities are particularly worth attention :—

Haricot Mutton.	Stewed Kidneys.	Veal Cutlets in Tomato Sauce.
Spiced Beef.	Minced Collops.	Rumpsteak and Onions.
Stewed Rump Steak.	Calves' Head and Bacon.	Picnic Beef.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

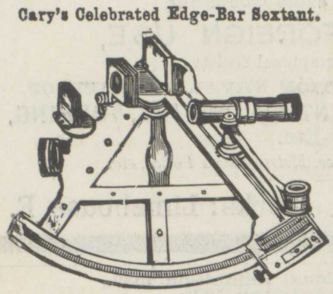
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000be

مكتبة قطر الوطنية
Qatar National Library

CARY'S

TRAVELLING SETS OF SURVEYING INSTRUMENTS,

Cary's Celebrated Edge-Bar Sextant.



ONLY MAKER of Capt. George's Patent Barometers, Artificial Horizons, & Double Sextants.

Consisting of Barometers, Compasses, Sextants, Artificial Horizons, Binocular Glasses, &c., &c., specially made for the Royal Geographical Society, by

H. PORTER,

APPRENTICE AND SUCCESSOR TO THE LATE

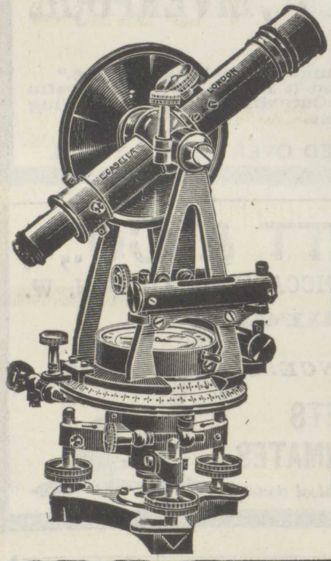
W. CARY,

Optician by Special Appointment to the Admiralty, War Office, India Office, Trinity House, Swedish, Norwegian, and other Foreign Governments.

7, Pall Mall, London, S.W.

ESTABLISHED OVER 100 YEARS.

GOLD MEDALS AND HIGHEST AWARDS.



L. CASELLA,

Surveying, Mining, Meteorological,

AND

ELECTRICAL INSTRUMENT MAKER

TO THE

Admiralty, Ordnance, Board of Trade, British and Foreign Governments; various Observatories; The Royal Geographical, The Royal Meteorological Societies, and the principal Scientific and Meteorological Societies throughout the World.

Every improvement in Instruments for the

Army, Navy, & Scientific Explorations,

Many of these now being made in Aluminium, for portability.

And special sets of portable and other Instruments as supplied to the Royal Geographical Society and other Explorers.

147, HOLBORN BARS, LONDON, E.C.

Telegraphic Address: "ESCUTCHEON, LONDON."

HERBERT BLOCKLEY, SUCCESSOR TO LUND & BLOCKLEY

(Late VINER, Established 1801.)



Watch & Clock Makers



TO

The Queen, the Royal Family, Royal Geographical Society, Admiralty, Foreign and Colonial Offices, &c.

Sole Authorised Makers of the R. G. S. Watertight Half-Chronometer Keyless Fusee Watch. Watches for all Purposes. Marine Chronometers.

41, DUKE STREET, ST. JAMES'S, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000039

مكتبة قطر الوطنية
Qatar National Library

CYCLE SECTION:—*Attention is called to the following announcements of Manufacturers of High Grade Cycles suitable for Travellers.*

RIDE
PETREL
CYCLES.
High-Class Machines. BEST of Workmanship and Material.
NO PIECEWORK in their Manufacture.
Correspondence invited. Catalogue free on application.
THE PETREL CYCLE CO., Long Eaton.
General Manager: HARRY TUNLEY.

MAC GREGOR CYCLES
Are surpassed by none. Latest machinery, best materials and workmanship only being employed in their manufacture.
THE ROB ROY
IS A PERFECT AND THOROUGHLY SOUND MACHINE AT A MODERATE PRICE.
The New Mac Gregor Cycle and Engineering Co., Ltd.,
NOTTINGHAM, ENGLAND.

Robin Hood Cycles
Are High-grade Machines.
UP TO DATE.
THOROUGHLY RELIABLE.
MODERATE IN PRICE.
WRITE FOR ILLUSTRATED LIST.
ONLY ADDRESS—
The Robin Hood Cycle Co., Ltd.,
NEWDIGATE STREET,
NOTTINGHAM.

For the Traveller and Tourist.—*See* SHAKESPEARE.
Best that e'er I saw! *Midsummer Night's Dream*, act v. sc. 1.
Excellent workman! *Timon of Athens*, act v. sc. 1.
Light and not heavy! *Much Ado*, act iii. sc. 4.
Value me above the world! *Love's Labour Lost*, act v. sc. 2.
Oh! how well the wheel becomes it. *Hamlet*, act iv. sc. 5.
I set the world on wheels! *Two Gentlemen of Verona*, act iii. sc. 1.
Report speaks goldenly! *As you like it*, act i. sc. 1.
Celerity is never more admired! *Antony and Cleopatra*, act iii. sc. 7.
Your choice agrees with mine! *Pericles*, act ii. sc. 5.
Cunning in the working! *Much Ado*, act ii. sc. 2.
Lead thou first! *Comedy of Errors*, act v. sc. 1.
Employed to hasten on his expedition. *Two Gentlemen of Verona*, act i. sc. 3.
So you must be the first! *Measure for Measure*, act ii. sc. 1.
A HIGH-GRADE MOUNT AT A MODERATE FIGURE.
Catalogues from
The Beeston Machinists Co.,
BEESTON, NOTTS., ENGLAND.

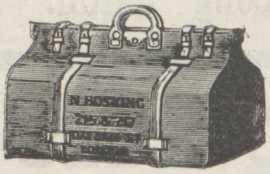
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b1

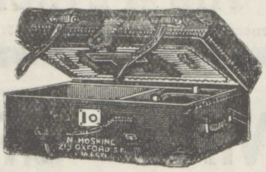
مكتبة قطر الوطنية
Qatar National Library

GENUINE BEESTON CYCLES.
THE BEESTON ENGINEERING CO., Ltd.,
BEESTON, NOTTS., ENGLAND.

"THE VELOX."
"All the machines are beautifully built, and are such as to commend themselves to any one who knows what a bicycle ought to be."—*Wheelman.*
"In style and finish these machines are worthy of all praise."—*Wheeling.*

FOR TRAVELLERS
ESTABLISHED 1873.
THE OSLADE CYCLES
Send post card for list.
Are the result of 26 years' practical experience and continuous trading, and combine all the good qualities requisite in a first-class Machine.
MANUFACTURED BY
THE BIRMINGHAM CYCLE AND ENGINEERING CO.,
HURST ST., BIRMINGHAM.



ESTABLISHED 1750.
As Supplied to Members of the Royal Geographical Society.


N. HOSKING,
Solid Leather Portmanteau, Trunk & Bag Manufacturer,
215 & 217, OXFORD STREET.
Speciality in Ladies' Light Travelling Dress Baskets and Cabin Trunks.
PURSES, LETTER CASES, AND FANCY LEATHER GOODS, AND ALL KINDS OF LEATHER BAGS.



Established nearly a Century.
HILL & SON,
4, HAYMARKET, LONDON,
Manufacturers of
Sporting, Table, Toilet, & Pocket Cutlery,
ALPINE ICE-AXES, SKATES,
AND FINE STEEL WORK GENERALLY.
Practical Dodgy Utilities for Home Requirements and Travellers' Use.
Reliable English-made Goods at Moderate Prices

PLEASURE CRUISE to the WEST INDIES.
THE ORIENT COMPANY
Will despatch their Steamship GARONNE, 3901 tons register, 3000-horse power, from London, on the 8th JANUARY, for a TWO MONTHS' CRUISE, visiting TENERIFFE, BARBADOS, TRINIDAD, GRENADA, MARTINIQUE, ST. LUCIA, SANTA CRUZ, JAMAICA, BERMUDA, MADEIRA, arriving back in London 10th March.
Winter afloat in the West Indies is most like a glorious summer, and at such a time—when Yachts and Steam Launches are laid up at home—the trip should be taken.
Managers {F. Green & Co. / Anderson, Anderson & Co.} Head Offices: Fenchurch Avenue.
For passage apply to the latter firm, at 5, Fenchurch Avenue, London, E.C.; or to the West-end Branch Office, 16, Cockspur Street, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

INDIA, CEYLON, JAVA, QUEENSLAND, BURMAH, PERSIA, EAST AFRICA, &c.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED,
BRITISH INDIA ASSOCIATION.

MAIL STEAMERS FROM LONDON TO

CALCUTTA.	BOMBAY.	BRISBANE.
MADRAS.	KURRACHEE.	BATAVIA.
COLOMBO.	BAGHDAD.	ROCKHAMPTON.
RANGOON.	ZANZIBAR.	TOWNSVILLE.
MAURITIUS.	MOMBASSA.	MARYBOROUGH.

For Dates see Daily Advertisements.

Delivering Mails, Passengers, Specie, and Cargo to all the principal Ports of INDIA, BURMAH, EAST AFRICA, QUEENSLAND, and JAVA.

Every comfort for a tropical voyage.

Apply to GRAY, DAWES, & CO., 23, Great Winchester Street, E.C., and Craven House, Northumberland Avenue, W.C.; or to GELLATLY, HANKEY, & CO., Albert Square, Manchester; 51, Pall Mall, and Dock House, Billiter Street, London.

AUSTRALIA, HONOLULU, FIJI, NEW ZEALAND.

NEW SWIFT PASSENGER ROUTE by Swiftest Atlantic Steamers (any line) to Montreal or New York; thence *viâ*

CANADIAN PACIFIC RAILWAY AND VANCOUVER.

Taking in the Grand Scenery of the "Rockies." Many optional Routes, including Niagara and Chicago. Stop-over privileges granted.

CANADIAN-AUSTRALIAN ROYAL MAIL STEAMSHIP COMPANY, LTD.

Largest, Swiftest, and Finest Steamships running from American Continent to Australasia, leave VANCOUVER as follows:—

R.M.S. AORANGI—Captain Hepworth, R.N.R. ... ... December 13, 1897.
R.M.S. MIOWERA—Captain Thos. Free, R.N.R. ... ... January 10, 1898.
R.M.S. WARRIMOO—Captain C. W. Hay ... ... February 7, 1898.

THENCEFORWARD FOUR WEEKLY.

Calling at VICTORIA, B.C., HONOLULU, FIJI, and WELLINGTON, en route to SYDNEY.

Electric Light, Hot and Cold Baths, Good Cuisine, Large Cabins. For Descriptive Pamphlets, Tickets, and Berths, apply to Passenger Department, CANADIAN PACIFIC RAILWAY, 67, King William Street, E.C.; 30, Cockspur Street, S.W.; or to the Managers, JAMES HUDDART & COMPANY, 150, Leadenhall Street, London, E.C.

NORTH GERMAN LLOYD.

FAST MAIL STEAMERS will sail regularly from Southampton, as under:—

NEW YORK.—Direct, Wednesdays and Mondays. Special train from Waterloo Station on sailing day. Liberal accommodation and high-class cuisine.

CHINA AND JAPAN.—By new Fast Mail Steamers, with all modern improvements, leaving every 28 days, taking passengers for Genoa, Naples, Egypt, Aden, Colombo, Singapore, Hong Kong, Shanghai, and Japan ports.

AUSTRALIA (Albany, Adelaide, Melbourne, and Sydney).—By Imperial Mail Fast Steamers, every 28 days.

RIVER PLATE (Monte Video and Buenos Ayres), taking passengers to and from Las Palmas (return tickets). New steamers of good power and exceptional first-class accommodation. Low fares through from London.

Apply to KELLER, WALLIS, & CO., 32, Cockspur-street, Charing Cross; 2, King William-street, E.C. Telephone No. 2012; Telegrams, "Teutonic, London;" and at Manchester and Southampton; or to the North German Lloyd, 2 bis, Rue Scribe, Paris.

Special "Round the World" rates by either of the above lines.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005a

مكتبة قطر الوطنية
Qatar National Library



THE MOST FASHIONABLE
AND
POPULAR HOTEL IN EUROPE.

HOTEL CECIL, LONDON.

SPLENDID SITUATION;
EVERY LUXURY and COMFORT;
UNEQUALLED CUISINE, and MODERATE CHARGES.

THE
MAGNIFICENT BANQUETING HALLS,
CAPABLE OF SEATING 1500 GUESTS, ARE NOW OPEN FOR
PUBLIC AND REGIMENTAL DINNERS, BALLS, ENTERTAINMENTS,
WEDDING RECEPTIONS, Etc., Etc.

Full Particulars on Application to
G. P. BERTINI, Manager.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

HÔTEL MÉTROPOLE, LONDON

NORTHUMBERLAND AVENUE, TRAFALGAR SQUARE.

The Hôtel Métropole, London, offers unequalled accommodation for real comfort and luxury in every detail.

Numerous single and double Bedrooms, also Bedrooms, with private Bathroom and Lavatory attached; all most comfortably and beautifully furnished.

Suites of Private Apartments varying in accommodation from Bedroom and Sitting-room, with or without private Bath and Dressing-room, to the princely suites comprising Dining, Drawing, and Reception Rooms, with Bedrooms, Dressing-rooms, and Bathrooms.

The Restaurant, well known for its high standard of excellence, is also available for guests not staying in the Hotel. Table d'Hôte Breakfast, Luncheon, and Dinner. Also *à la carte* Service at moderate prices.

THE GORDON HOTELS ARE—

GRAND HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND WHITEHALL ROOMS, } LONDON.
HÔTEL VICTORIA, LONDON.
FIRST AVENUE HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND CLARENCE ROOMS, } BRIGHTON.

BURLINGTON HOTEL, EASTBOURNE.
ROYAL PIER HOTEL, RYDE, I. OF W.
CLIFTONVILLE HOTEL, MARGATE.
LORD WARDEN HOTEL, DOVER.
HÔTEL MÉTROPOLE, FOLKESTONE.
HÔTEL MÉTROPOLE, MONTE CARLO.
HÔTEL MÉTROPOLE, CANNES.

Proprietors—THE GORDON HOTELS, LIMITED.

WILLESDEN CANVAS (Green, Rot-Proof),

FOR

TRADE MARK. WILLESDEN WATERPROOF W W UNIQUE REGD. 1860.

TRAVELLERS' TENTS, &c.

Used by the Following amongst others

Awarded Sixteen Gold and Silver Medals.

THE POST OFFICE.
THE ADMIRALTY.
THE INDIA OFFICE.
THE CROWN AGENTS FOR THE COLONIES.
THE EGYPTIAN GOVERNMENT.
THE SOUTH AUSTRALIAN GOVERNMENT.
H.M. THE GERMAN EMPEROR.
MR. HENRY M. STANLEY.
THE JACKSON-HARMSWORTH EXPEDITION.
THE ECLIPSE OF THE SUN EXPEDITION.
THE LATE MR. THEODORE BENT.
MR. VILLIERS (War Correspondent).

And the Principal Travellers during the last quarter of a century. Used also by all the leading Tent Makers.

NOTE. None genuine unless bearing our Registered Trade Mark as above.



NOTE. Intending users should always order Willesden Canvas.

SOLE MANUFACTURERS—

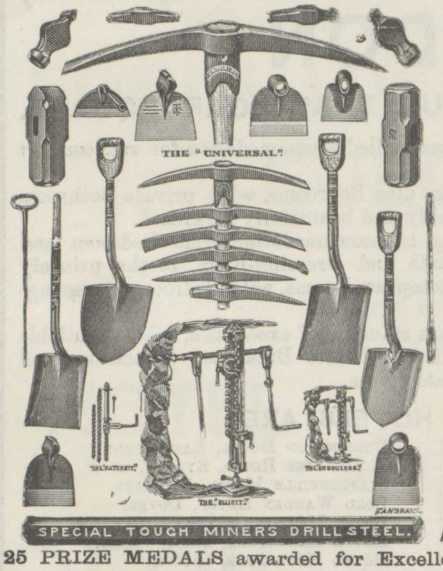
Willesden Paper & Canvas Works, Willesden Junction, London, N.W.

Telegrams: "IMPERMEABLE, LONDON." ESTABLISHED 1870.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

HIGH-CLASS TOOLS



SPECIAL TOUGH MINERS DRILL STEEL.

FOR
MINERS, CONTRACTORS, QUARRYMEN, AND AGRICULTURISTS,
Of all Patterns and for all Markets.
Our Tools are made of the best Sheffield Steel and are Warranted.
They are unequalled in quality and finish.
"UNIVERSAL" AND "ACME" PICKS.
Hand and Power Boring Machines for ROCK and COAL.
PICKS, SHOVELS, SPADES, FORKS, HOES, AXES, HAMMERS, WEDGES, CROWBARS, &c.
Special Tough Drill Steel.
Shear, Cast, and Blister Steel.
Saws, Files, Rasps.
IMPORTERS OF HICKORY HANDLES.
25 PRIZE MEDALS awarded for Excellence of Quality and Original Designs.
Hardy Patent Pick Co., Ltd., Sheffield, England.

MINERVA PRINTING OFFICE.



ESTAB. 1790.

DARLING & SON, LIMITED
(Printers to H.M. Stationery Office),
1, 2, 3 & 5, GREAT ST. THOMAS APOSTLE
(Mansion House Station),
AND
31, EASTCHEAP, LONDON, E.C.
PRINTERS OF BOOKS OF TRAVEL, NEWSPAPERS, MAGAZINES, PERIODICALS, &c.
ENGRAVERS OF BONDS & BANK NOTES.
ACCOUNT BOOK MANUFACTURERS & LITHOGRAPHERS.
ESTIMATES FREE.



BROWN & ROWLEY,
WATLING STREET, CITY,
Printers,
Account Book Manufacturers,
AND
General Stationers.
Contractors to the Royal Geographical Society.

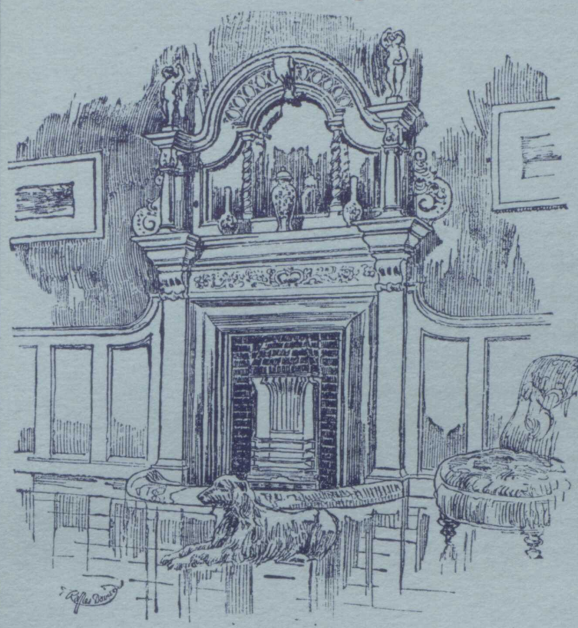
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

(167)

Barnard, Bishop & Barnards, Limited,



"REGISTERED DESIGN."

Original Manufacturers of
THE CELEBRATED
Slow Combustion,
OR,
COUNTRY PARSON'S STOVE,
Invite a visit to their new West End Show Rooms,
23, PRINCES STREET, CAVENDISH SQUARE, LONDON, W.,
Where a most recherché selection of their newest designs in
Carved Wood and other Mantels,
Tiled Stoves, Slabs, Fire-irons, Curbs,
Artistic Wrought Ironwork,
ETC., MAY BE SEEN.
CATALOGUES FREE.
Intending purchasers waited upon in London and the Suburbs by competent representatives free of charge.

MANUFACTORY: NORWICH.

The Military Equipment Stores & "Tortoise" Tents Co., Ltd.,

OFFICES & SHOWROOMS: 7, WATERLOO PLACE, S.W.

Telegraphic Address: "Wagonage, London."

POLAR EXPEDITIONS COMPLETELY FITTED OUT AND PROVISIONED.

If Suitable Notice is given, Arrangements can be made for the Purchase or Hire of a Scotch, Norwegian or American Whaler; also for the Hire for a Summer Sporting Cruise of a completely fitted-out Walrus Sloop, with Crew comprising competent Ice Pilot and Officers.

Siberian Dogs.
Russian Ponies.
Reindeer.
Reindeer Dried Meat.
Russian Log Huts.
Sledges (Dog, Hand, or Reindeer).
Ski.
Finmarken Ski.
Telmarken Ski.
Extra long flat Ski as used by Nansen for smooth ice.
Sails and Masts in bamboo for Sledges.
Fur Malitzas.
Fur Sovike.
Loupthu.
Pimmies.
Reindeer-skin Toboc.
White Blanket Tobogaining Suits.

Fur Dog-skin Gloves (leather-lined).
Watertight Sealskin Boots with leather feet.
Fur-lined Sea Boots.
Reindeer Sleeping Bags.
Sheep-skin Caps for crew.
Cat-skin Stockings.
Loose Tan Reindeer Skins.
Black Swedish Skin Jackets lined with red flannel for crew.
Brown ditto for officers.
Reindeer-skin Finskoo.
Elk-skin Winter Boots.
Lapp Pesks with hood and glove attached.
Young and Old Reindeer Stockings.
Black Leather Ski Boots for Ski-running.

Ice Spikes with straps.
Finn Bindings for Ski.
Ice Sledge Boats.
Walrus or Whale Boats.
Aluminium Boats.
Berthon Boats.
James or Sayce Collapsible Boats.
Arctic Collapsible Huts.
Walrus and Whale Harpoons.
Lines and Lances.
Bottle-nose Whale Lances.
Grindacrooken.
Alpine Rope.
Masts, Sails, and Oars for Ice and Walrus Boats.
Bamboos with flags attached for marking positions in the ice.

All descriptions of Flags, Sledge Covers, Valises, Special Tents, Jackson's Aluminium Stoves, Canteens, Forks, Spoons, &c., &c.
Special Condensed Food for Sledging and Arctic work.
All requirements of Provisions to keep preserved & sweet for a number of years.
Jaeger Vests and Drawers, Ice Axes, Alpen Stocks, Plane Tables, Compasses, Barometers for Altitude, small Registering Thermometers, Wet and Dry Bulbs, and other Instruments.
Guns, Rifles, Harpoon Guns, Revolvers, Ammunition, &c., &c.
Medicine Chests and complete Medical Stores.
Military Equipment Co. Compressed Coffee, Tea, Cocoa, Sugar, Salt, &c., in Tablets.

MILITARY, EXPLORING AND SPORTING EXPEDITIONS COMPLETELY FITTED OUT, AND PROVISIONED TO ALL PARTS OF THE WORLD.

All Applications for Advertisements to be made to—
WALTER JUDD, LTD., 5, QUEEN VICTORIA STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

APRIL, 1897. VOL. IX. NO. 4.

The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

SUMMARY OF CONTENTS.

(For Details, see over.)

	PAGE
The First Crossing of Spitsbergen. By Sir W. MARTIN CONWAY	353
Two Years' Travel in Uganda, Unyoro, and on the Upper Nile. By C. F. S. VANDELEUR, D.S.O., Lieut. Scots Guards	369
The Southern Borderlands of Afghanistan. By Captain A. H. MCMAHON, C.I.E.	392
The Perso-Baluch Boundary. By Colonel T. H. HOLDICH, R.E., C.B.	416
The River Oder	422
The Teaching of Geography in Relation to History. By A. W. ANDREWS	427
The Monthly Record	441
Obituary	453
Correspondence	454
Meetings of the Royal Geographical Society, Session 1896–97	456
Geographical Literature of the Month	456
New Maps	469
Maps and Illustrations.	

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.

PUBLISHED MONTHLY.] [To Non-Fellows, Price 2s.

For Notices as to the Society's Meetings and other important matters, see p. iv.

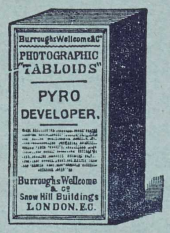
Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001d

مكتبة قطر الوطنية
Qatar National Library

Photographic

TRADE TABLOID MARK

'Tabloids' (B. W. & Co.)



Of all Chemists and Dealers.

PHOTOGRAPHIC 'TABLOIDS' have been used with signal success by travellers and explorers in all parts of the globe. They keep equally well and produce the same excellent results in every climate from that of the Arctic Regions to that of the Tropics. Their compactness has enabled explorers to develop and fix important plates on the spot, so that the risk of keeping undeveloped negatives is avoided. In short, the advantages of Photographic 'Tabloids' are, that they are always ready for instant use, they save trouble and space and prevent disappointment and failure.

List of Photographic 'Tabloids.'

DEVELOPING 'TABLOIDS':—
Eikonogen ... ... in bottles of 15 & 40
,, with Quinol ,, 15 & 40
Paramidophenol ... ,, 12 & 25
Pyro-Developer ... ,, 20 & 55
Pure Pyrogallic Acid, 1 gr. ,, 42 & 100
,, ,, ,, 2 gr. ,, 24 & 55
,, ,, ,, 4 gr. ,, 15 & 36
Pyrogallic Acid with Eikonogen ... ,, 15 & 40
Quinol ... ... in bottles of 20 & 55
Quinol with Pyro. ,, 18 & 45
ACCELERATOR 'TABLOIDS' ,, 30 & 100
RESTRAINER 'TABLOIDS':—
Potassium Bromide, 1 gr. ,, 30 & 100
Ammonium Bromide, 1 gr. ,, 30 & 100
TONING 'TABLOIDS':—
Toning Gold Compound, in tubes containing 3 'Tabloids.'



Burroughs, Wellcome & Co., Snow Hill Buildings, LONDON.

"Mixes well with Wines and Spirits—admirably adapted for the purpose."—*The Lancet.*

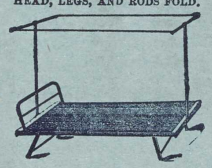
"Johannis"

PROPRIETORS: JOHANNIS, LIMITED.
25, REGENT STREET, LONDON, S.W.

ISAAC CHORLTON & CO.'S PATENT SPRING BEDSTEADS.

17, Blackfriars St., MANCHESTER. Also 149, Queen Victoria St., LONDON.

HEAD, LEGS, AND RODS FOLD.



FOR ALL CLIMATES.

PACKS IN PARTS.



As supplied to the Admiralty, War Office, India Office, etc., and to Members of the Royal Geographical Society.

Supplied by all Furnishers and Shippers.



FOLDS IN CENTRE.

ALL CHORLTON'S GOODS BEAR THIS TRADE MARK.

None other are Genuine.



GREAT VARIETY.

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

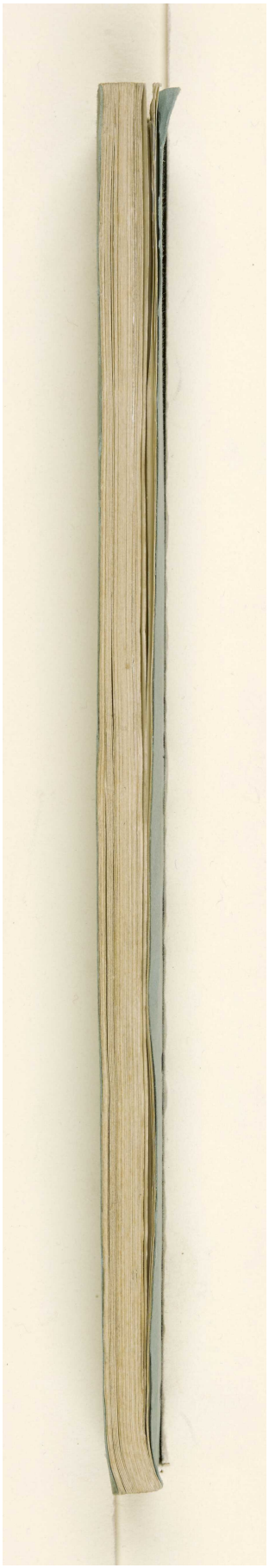
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000069

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000ab

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000002

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000013

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000069

مكتبة قطر الوطنية
Qatar National Library

THE GEOGRAPHICAL JOURNAL. To Advertisers.—All communications respecting Advertisements and Bills to be sent to the Advertisement Manager, Mr. Walter Judd, 5, Queen Victoria Street, Mansion House, E.C.

H. SOTHERAN & CO.,
Booksellers, Bookbinders & Publishers.
GENERAL AGENTS FOR PRIVATE BOOKBUYERS & PUBLIC INSTITUTIONS
In India, the Colonies, America, and foreign parts.
A MONTHLY CATALOGUE of SECOND-HAND BOOKS: Specimen No. post free.
LIBRARIES PURCHASED OR VALUED FOR PROBATE.
Telegraphic Address: Bookmen, London. Code in Use: Unicode.
140, STRAND, W.C., & 37, PICCADILLY, W.

THE DR. NANSEN
AND
JACKSON-HARMSWORTH
EXPEDITIONS
WERE SUPPLIED BY
SPRATT'S PATENT LTD.
WITH THEIR
SHIP BISCUITS,
FOR HUMAN USE,
AND
PATENT DOG CAKES
FOR THE DOGS.

EYE-STRAIN, with its consequences—HEADACHE, GIDDINESS, SLEEPLESSNESS, etc.—
is prevented and relieved by timely use of
BROWN'S CORRECT VISION SPECTACLES and ANTI-PRESSURE EYE-GLASSES.
Prices from 2s. 6d., upwards. Gold frames from 21s.



BROWN'S CELEBRATED "SCORER" FIELD GLASS.
Shows number of people in boats 4 miles distant, and is unrivalled for all-round excellence. None are genuine without "Brown, Glasgow," on eye-pieces, and "Scorer" on top bar. Price 35s., post free.

BROWN'S POCKET ANEROID,
For measuring heights and forecasting weather, at 21s. is pronounced equal in value to many at double price.

BROWN'S OPTICAL LANTERNS,
For Teachers and Lecturers. Vary in price from 25s. to £20. They give 8 to 20 feet pictures, and possess all the latest improvements.

JAMES BROWN, 76, St. Vincent St., GLASGOW.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

For List of Council and Officers, Conditions of Admission to the Fellowship of the Society, and Society Notices, see pages ii. and iv.

The Geographical Journal.

Authors are alone responsible for their respective statements. In MS. communications all new or unfamiliar geographical names should be written in imitation of Roman type.

CONTENTS.—APRIL.

PAGE

The First Crossing of Spitsbergen. By Sir W. Martin Conway 353
Two Years' Travel in Uganda, Unyoro, and on the Upper Nile. By C. F. S. Vandeleur, D.S.O., Lieut. Scots Guards 369
The Southern Borderlands of Afghanistan. By Captain A. H. McMahon, C.I.E. . . . 392
The Perso-Baluch Boundary. By Colonel T. H. Holdich, R.E., C.B. 416
The River Oder 422
The Teaching of Geography in Relation to History. By A. W. Andrews . . . 427
The Monthly Record 441

EUROPE
Local Geographical Work in Scotland
Bibliography of Spain and Portugal

ASIA
A New Work on Mongolia
The Submarine Earthquake of Kamaishi on June 15, 1896
Ancient Trading Centres of the Persian Gulf

AFRICA
Lieut. Hourst's Journey down the Niger
Mr. Weatherley's Visit to Lake Bangweolo
Johannesburg
Geography of Africa

AMERICA
The Outline of Cape Cod
Documents relating to the Venezuela and British Guiana Boundary Question

AMERICA—*continued*.
The Peruvian Territory in the Amazon Basin
The Region round the Headwaters of the Xingú
The Bolivian Rubber Industry
Volcanoes of Salvador and South-Eastern Guatemala

AUSTRALASIA AND OCEANIC ISLANDS
Sir William Macgregor's Journey across New Guinea
Mr. Collingridge on the Discovery of Australia

GENERAL
Wagner's Geographical Year-book
The Twelfth German Geographical Congress
A Journal of School Geography
Honours to Dr. Nansen

Obituary—Sir Thomas Elder, G.C.M.G. 453
Correspondence—On the Formation of Sand-dunes. By F. J. Goldsmid 454
Meetings of the Royal Geographical Society, Session 1896-97 456
Geographical Literature of the Month 456
New Maps 469

MAPS AND ILLUSTRATIONS.

Fig. I. Stratified Moraine in Ice-Plough Glacier; Fig. II. Contorted Moraine in Ice *Fronting p.* 356
Fig. III. Formation of Crescentic Moraines, Grit Ridge; Fig. IV. Terminal Moraine, Ivory Glacier . . . . . *Fronting p.* 358
Fig. V. Ivory Glacier, overriding Terminal Moraine; Fig. VI. View to West of Fig. V., showing Further Advance . . *Fronting p.* 360
Fig. VII. Most Westerly View of Ivory Glacier, Ice advancing; Fig. VIII. View of Terminal Fronts of Booming and Baldhead Glaciers *Fronting p.* 362
Fig. IX. Ice Talus formed from Advancing Upper Layers, Booming Glacier; Fig. X. View showing Raised Edge of Booming Glacier *Fronting p.* 364
Fig. XI. Booming Glacier, looking up; Fig. XII. Upper Portion of Booming Glacier, showing Centre sagging away from Side of Valley *Fronting p.* 366
View of Lake Victoria from Miran, Nandi Country 371
Murchison Falls, Victoria Nile 375
Mosindi Fort, Unyoro, Mount Fumb . . . 379
Wanyoro Chief and Followers 381
Guaso Maso Fort, Nandi Country 385
View of Nandi Country South from Guaso Maso Fort 387
Khorassan Plains, looking towards Dochina and Katawaz 395
Zarmelan Plain at Domandi 397
Lora River at its Junction with the Shirto River . 399
Sand Desert near Amir Shoh 403
Marching in Sandhills 405
Ruin at Godar-i-Shah 407
Robat, with the Mabite Dokh and Mount . . 409
The Neza-i-Sultan 411
Sketch-Map of part of Spitsbergen . . . 472
Sketch-Map of the Mountains along the Shores of Wijde Bay, Spitsbergen 472
Map of Uganda and Unyoro 472
Sketch-Map of Baluchistan and its Afghan and Persian Borders 472

SOLD BY

PARIS: Barrère.
VIENNA: Artaria & Co.
HAMBURG: L. Friederichsen & Co.
ST. PETERSBURG: Watkins & Co.
MANCHESTER: John Heywood.
EDINBURGH: Douglas & Foulis.
DUBLIN: Hodges, Foster & Co.
BERLIN: D. Reimer.
LEIPZIG: F. A. Brockhaus.
NEW YORK: International News C.
MELBOURNE: E. A. Petherick & C.

STREETER & CO., LTD.,
JEWELLERS, PRECIOUS STONE AND GEM MERCHANTS, LAPIDARIES.

GEMS UNSURPASSED. *PEARLS PRE-EMINENT.*

At the Renowned Store of Streeter & Co. can be seen the Latest Novelties in Jewellery and Perfection in Gems.

STREETER & CO., Ltd., the recognized Authorities on all Precious Stones,
18, NEW BOND STREET, LONDON, W.

a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000040

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., &c., &c.

Honorary-Presidents.

HIS ROYAL HIGHNESS THE DUKE OF SAXE-COBURG-GOTHA, K.G., K.T., G.C.S.I., &c., &c.
HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL.

(ELECTED 15TH JUNE, 1896.)

President—Sir CLEMENTS MARKHAM, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Hon. GEORGE C. BRODRICK.
Right Hon. GEORGE N. CURZON, M.P.
Sir GEORGE D. TAUBMAN GOLDIE, K.C.M.G.
Sir RAWSON W. RAWSON, K.C.M.G., C.B.
General R. STRACHEY, R.E., C.S.I., F.R.S.
Rear-Admiral W. J. L. WHARTON, C.B., F.R.S.

Treasurer—EDWARD L. SOMERS COCKS.

Trustees—Right Hon. Sir JOHN LUBBOCK, Bart., F.R.S., M.P.; CUTHBERT E. PEEK, F.R.A.S

Honorary Secretaries—Major LEONARD DARWIN, R.E.; JAMES F. HUGHES.

Foreign Secretary—Sir JOHN KIRK, K.C.B., G.C.M.G., F.R.S.

Members of Council.

W. M. BEAUFORT.
Lord BELHAVEN AND STENTON.
GEORGE CAWSTON.
Colonel J. FARQUHARSON, C.B., R.E.
WILFRED HUDLESTON, F.R.S., F.G.S.
J. K. LAUGHTON.
Right Hon. Lord LOCH, G.C.B., G.C.M.G., etc.
GEO. SUTHERLAND MACKENZIE.
Rear-Admiral ALBERT HASTINGS MARKHAM.
ALFRED P. MAUDSLAY.
JOHN MURRAY, LL.D., F.R.S.
General Sir HENRY W. NORMAN, G.C.B., G.C.M.G.
HOWARD SAUNDERS, F.L.S., F.Z.S.
Right Hon. the EARL OF SCARBROUGH
P. L. SCLATER, F.R.S.
Rear-Admiral E. H. SEYMOUR, C.B.
Major the Hon. M. G. TALBOT, R.E.
Colonel Sir HENRY R. THUILLIER, R.E., K.C.I.E.
Lieut.-Colonel J. K. TROTTER, R.A.
Admiral the Hon. W. J. WARD.
Lieut.-Colonel C. M. WATSON, R.E., C.M.G.

Secretary and Editor of Publications—J. SCOTT KELTIE, LL.D.

Librarian—H. R. MILL, D.Sc.

Map Curator.
JOHN COLES, F.R.A.S.

Chief Clerk.
S. J. EVIS.

Bankers—Messrs. COCKS, BIDDULPH, and Co., 43, Charing Cross.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that,

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his admission fee, and "£2 as his first annual subscription, or he may compound, either at his entrance by one payment of "£35, or at any subsequent period on the following basis:—

Fellows of 20 years' standing and over	...	...	...	£12 10s.
„ 15 „ „	and under 20	...	...	£16
„ 10 „ „	„ 15	...	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the Society so long as "he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's Periodical Publications.

Copies of the Regulations and Candidates' Certificates may be had on application at the Society's Office, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

GABARDINE COMBINATION SPORTING OUTFITS

OUTSIDE GABARDINE, INSIDE RAIN-PROOFED TWEEDS (Burberry's Patent).

PROOF AGAINST WAIT-A-BIT THORNS AND SPEAR-GRASS. RAIN, SLEET, OR SNOW. HOT AND COLD WINDS. ANTS AND TROPICAL INSECTS.

(The latter points are of special importance for India and Africa.)

Yet perfectly VENTILATING, very DURABLE, and as COMFORTABLE as ordinary Tweed Garments.

"For lightness combined with strength, nothing has been found to equal the material known as GABARDINE, manufactured by Burberry, of Basingstoke. This substance deserves special recommendation, as one suit will generally outlast three or four made of other and perhaps more expensive cloth."—*The Sportsman in South Africa.*



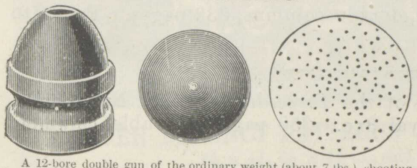
Write to **T. BURBERRY & SONS,** 30, Haymarket, LONDON, and BASINGSTOKE,

Stating climate required for, and Estimates, Information, and suitable Patterns will be sent free.

J. & W. TOLLEY'S

"UBIQUE" Ball and Shot Gun.

AN INVALUABLE WEAPON FOR INDIA AND THE COLONIES.



A 12-bore double gun of the ordinary weight (about 7 lbs.), shooting from both barrels shot with the pattern and penetration of a first-class shot-gun, and conical bullets up to 150 yards, with the accuracy of an Express rifle.

PRICE FROM 20 GUINEAS.

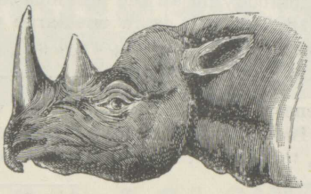
Col. PARKER-GILMORE (the eminent author and explorer) writes: "The 'Ubique' is a weapon I should advise all visitors to India or Africa to become possessed of."

From Lieut. H. M. BIDDULPH, Rifle Brigade, Srinagar, Kashmir, India, June 10, 1893: "I must write to thank you for the magnificent gun you made for me. I mean the 'Ubique' 12-bore. I consider it a marvellous weapon, and fully equal to, if not a great deal better than, the various similar weapons in the market. What astonished me is that you do not advertise it to shoot well up to 150 yards. I have made two bulls out of three shots with it at that distance, and on two or three occasions have killed running animals with it at 160 to 180 yards. In a year's shooting trip I have killed more than half my total bag with it. *The shooting at small game was most satisfactory. I brought down two mallard with it at 45 yards. Geese, duck, ramchikor, chikor, sand-grouse, pigeons, snipe, and hares were shot with it. I give you a complete analysis of its doings.*"

From O. J. MORRIS, Esq., Fort Victoria, Mashonaland, S. Africa, May 24, 1893: "Both the weapons ('Ubique' and '577 'Magnum' express rifle) are most satisfactory. J—— shot a fine lioness with the 'Ubique' one early morning. It has demolished various big buck, and one of the biggest Koodoo Bulls I ever saw was killed by J—— with it, and with shot it has kept the camp well supplied with birds. *Game is getting rather scarce about here, and some other waggons travelling with us depend entirely on us for meat.*"

"UBIQUE" GUNS

FOR LARGE GAME SHOOTING.



MADE IN 10 AND 8 BORES.

10-bore firing 8 drs., and 8-bore firing 10 drs., powder. Giving greater penetration than a rifle. Light and handy as a gun.

EXPRESS RIFLES,

·400, ·450, ·500, ·577 BORES. (Semi-smooth bore, non-fouling rifling.)

·303 SPORTING RIFLE,

Firing Split, Nickel-covered, or Solid Bullet and Smokeless Powder.

SINGLE AND DOUBLE

BIG GAME RIFLES.

10, 8, and 4 BORES.

J. & W. TOLLEY, Gun and Rifle Manufacturers,

59, NEW BOND STREET, LONDON, W.

ABBOTTS' WATERPROOFS

Manufacturers of High-class and Reliable Goods for

HOME, COLONIAL, AND FOREIGN USE,

As supplied to Fellows of the Royal Geographical Society.

REGULATION ARMY WATERPROOF. REGULATION NAVAL WATERPROOF.

WATERPROOFS FOR FISHING, SHOOTING, HUNTING, DRIVING, TOURING, YACHTING, CYCLING, Etc.

Contractors to the Admiralty, War Office, India Office, Metropolitan Police, etc.

Only Address: 15, QUEEN ST., CHEAPSIDE, LONDON, E.C. Works: Limehouse, E.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006d

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

NOTICES.

Extra Publications.—'The Pamirs and the Source of the Oxus.' By the Right Hon. George N. Curzon, M.P. 83 pp., royal 8vo, with many Illustrations and large new Map of the Pamirs. Price, bound in half-calf, to non-Fellows, 6*s.* nett; to Fellows, 3*s.*—'Notes on the Kuril Islands.' By Captain H. J. Snow. 8vo. 88 pp., with two large Charts, revised by Captain Snow. Price, in boards, to non-Fellows, 4*s.* nett; to Fellows, 2*s.*—'Eastern Persian Irak.' By General A. Houtum-Schindler. 8vo. 132 pp., with Map. Price, to Fellows, in boards, 2*s.*; bound in half-calf, 3*s.* 6*d.*; to non-Fellows, in boards, 3*s.* 6*d.*; in half-calf, 5*s.* nett.—'A Journey on the Upper Mekong, Siam.' By H. Warington Smyth. Sixty illustrations and three maps. Price, bound in half-calf, to Fellows, 4*s.*; to non-Fellows, 7*s.* 6*d.*

The New Library Catalogue.—A new Authors' Catalogue of the Library is now ready, embodying all the previous catalogues, and the additions during the thirteen years 1880–93. It is in one large volume, double columns, 833 pages. Price, to Fellows, 5*s.*; to non-Fellows, 10*s.*

General Index to the fourteen volumes of the *Proceedings R.G.S.*, New Series. This Index is now ready. One vol. Royal 8vo. 250 pages. Double columns. Price, to Fellows, 2*s.*; to non-Fellows, 5*s.*

Evening Meeting.—Paper to be read at the Evening Meeting in April:—**Monday, April 12.** Fourth Centenary of the Voyage of John Cabota, 1497. By the President.

Annual Dinner and Conversazione.—The Annual Dinner of the Society will take place on the evening of the Anniversary Meeting, May 17, in the Whitehall Rooms of the Hôtel Metropole, at 7·30 p.m. A Conversazione will be held in the month of June; intimation as to the date and place will be sent to the Fellows next month. It is requested that Fellows intending to be present at the Dinner will send intimation to the Chief Clerk as soon as possible.

Educational Lectures.—Under the joint auspices of the Society and the London University Extension, Mr. H. J. Mackinder, M.A., is giving a course of twenty-five lectures on the Geography of Europe, Asia, and Northern Africa, at Gresham College, Basinghall Street, E.C., on successive Mondays at 6 p.m. To these lectures Fellows are admitted free on showing their tickets. For details apply to the Secretary, London University Extension, Charterhouse, E.C.

Any Fellow resident in this country, desiring to have notice of the subjects of papers to be read at the Society's Meetings forwarded to him, can receive such notices by post on payment in advance to the Chief Clerk, at 1, Savile Row, of 2*s.* per session.

The Society's House will remain open for the Convenience of Fellows on the evenings of the Society's ordinary meetings till 8.15.

Election of Council.—In accordance with the resolution of the Council of November 10, 1891, it is herewith notified that "any names of persons qualified to fill the vacancies occurring on the Council, with their qualifications, suggested in writing to the Secretaries before the first of May by Fellows, will be considered by the Council in drawing up the Balloting List" for the next Annual Meeting.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000016

مكتبة قطر الوطنية
Qatar National Library

MIDLAND GRAND HOTEL,
St. Pancras Station,
London, N.W.
Telegraphic Address to each Hotel: "MIDOTEL."



MIDLAND RAILWAY HOTELS

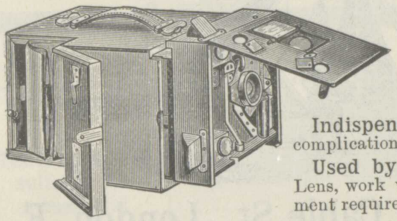
LONDON: MIDLAND GRAND,
ST. PANCRAS STATION, N.W.
Shilling Cab Fare to nearly all Theatres and West End. Close to King's Cross Metropolitan Station. Bedrooms, including Electric Light & Attendance, from 4/-.

LIVERPOOL: ADELPHI, *The Hotel de Luxe of the North.*
Entirely remodelled and refurnished. Telephones in every room.
Every Luxury and Requirement.
Very comfortable and convenient for Transatlantic passengers staying in Liverpool either before or after the sea voyage.

Bradford: MIDLAND. | Leeds: QUEENS.
Derby: MIDLAND. | Morecambe: MIDLAND.
TARIFFS ON APPLICATION.
W. TOWLE, Hotels, &c., Manager.
Chief Office: MIDLAND GRAND HOTEL, N.W.

THE "N. & G." CAMERAS
FOR HAND & TRIPOD.

SEVEN DISTINCT PATTERNS—For Pictures 4¼ × 3¼ in., 9 × 12 centimetres, 5 × 4, 6½ × 4¼, 6½ × 4¾ in., and Stereoscopic, on any Plates or Films.



THE "N. & G." CAMERAS
stand years of constant work in the most trying climate, and never need repairs.
Hundreds in use throughout the World.

Indispensable to Beginners, because free from mechanical complications and extremely simple to work.
Used by the Leading Experts, because they take any Lens, work with any Plates or Films, and provide every adjustment required in Photography.

COMPLETE CATALOGUE, 1s. 3d. Post-free.
Abridged Catalogue, free on application.

NEWMAN & GUARDIA, LTD.,
92, SHAFTESBURY AVENUE, LONDON, W.

(THE ORIGINAL FIRM ESTABLISHED 1810.)
MAPPIN BROTHERS.
Only London Showrooms: { 220, REGENT STREET, W. / 66, CHEAPSIDE, E.C. (Next Sir John Bennett's.)
Manufactory: THE "QUEEN'S" WORKS, SHEFFIELD.
Manufacturers of "QUEEN'S" PLATE AND CUTLERY, SOLID SILVER PLATE, DRESSING BAGS, ETC.
ILLUSTRATED CATALOGUE POST-FREE TO ANY PART OF THE WORLD.
Goods forwarded to the country on approval.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000074

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

PHOTOGRAPHS.

ROYAL GEOGRAPHICAL SOCIETY.

It would greatly add to the value of the Collection of Photographs which has been established in the Map Room of the Royal Geographical Society, if all the Fellows who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they would be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

SQUATTER'S TENT. Walls 3′ 0″ Poles 7′ 0″ high, and Valise. WITH LONG FLY.



SLY, DIBBLE, & CO., 213, Cable St., London, E.

MAKERS and SHIPPERS of the following :—

TARPAULINS AND WATERPROOFED SHEETS, To suit all Climates.
Hammocks, Kit-Bags, Haversacks, Water-coolers, etc. Flags and Bunting. Ropes, Lines, and Twines. Canvas and Ducks.
MARQUEES AND TENTS. Large stock of Second-hand Tents for Sale.

Cheques to be crossed Smith, Payne & Smiths. *ILLUSTRATED PRICE LIST, post free.*

The LARKIN COLLECTIONS OF ORIENTAL ART,

KWASON DRAWINGS,

AND

17th Century Dutch & Flemish Pictures.

GALLERY: 28, New Bond St., W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000042

مكتبة قطر الوطنية
Qatar National Library

The Sportsman's and Explorer's Camera

IS THE

Stereoscopic Company's BINOCULAR,

Because when ready to take 30 Pictures it weighs 19 Ounces only.



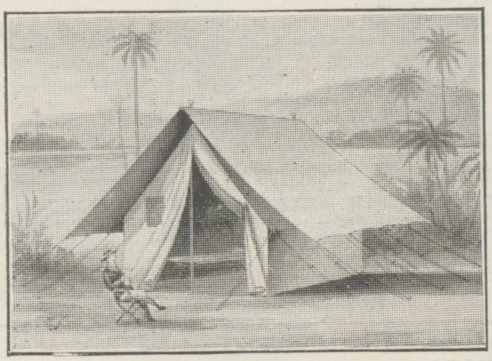
It is used like a Field Glass. Takes instantaneous and time exposures. Gives Pictures 7 in. by 5 in. when used with the simple printing and enlarging apparatus. Price **£5 5s.** only. Complete with enlarging apparatus, **£10 10s.**

FREE Lessons to Purchasers.

THE LONDON
STEREOSCOPIC Co.,
106 & 108, Regent St., W.;
and 54, CHEAPSIDE, E.C.

TENTS FOR AFRICA.

Tents specially suitable for Africa and Hot Climates,
AS SUPPLIED TO
Mr. H. M. Stanley,
Major Wissmann,
Count Teleki,
The late Sir Gerald Portal,
Captain Stairs,
The Imperial British East Africa Co., etc.



Camp Furniture, Folding Camp Bedsteads, Canteens, Luncheon Baskets, Camp and General Equipment for the Traveller and Explorer.

THE "EXPLORER'S" TENT (with outside Fly or Double Roof).
Made from the Patent Green Rot-Proof and Waterproof Canvas.
The Fly is made to reach the ground on each side of the Tent if required.

MAJOR VON WISSMANN writes as follows in reference to the Tents, etc., supplied to him by us :—
"I shall have much pleasure in mentioning your Tents, Camp Furniture, and other Equipage in my next book, as these goods gave me every satisfaction." (Signed) H. Von Wissmann, Major.

CATALOGUES ON APPLICATION.

NOTE FULL ADDRESS: JOHN EDGINGTON & CO.,
19, LONG LANE, WEST SMITHFIELD, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

The "PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY," new series, consists of 14 volumes, extending from 1879 to 1892.

Each volume covers on an average 840 pages, the selling price being 18s. per volume.

These volumes not only contain full reports of the papers read at the Royal Geographical Society, by all the great travellers and geographers of the period, but constitute a record of exploration and geographical work in all parts of the world.

Each volume contains numerous maps, all of them original, embodying the results of exploration, and executed in the best style. In the 14 volumes there are some 350 maps, besides numerous illustrations of characteristic scenery in the least-known parts of the world.

It is believed that a complete set of the *Proceedings* would be a valuable addition to public libraries and other institutions, while many private individuals might wish to have the volumes. As it is desired to reduce the stock in hand, the series is now offered, bound in cloth, at £6 per set. Application to be made to the Chief Clerk, Royal Geographical Society, 1, Savile Row, London, W.

In addition to the *Proceedings*, the Society has issued four volumes of "Supplementary Papers," containing a large number of Memoirs and Narratives of considerable length, besides several valuable Bibliographies. These will be sold for half price, £2 for the four volumes. These contain over 30 Maps and numerous Illustrations.

SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE.

THE STRUGGLE OF THE NATIONS: EGYPT, SYRIA, AND ASSYRIA. By Professor MASPERO. Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With Maps, 3 Coloured Plates, and over 400 Illustrations. Demy 4to (approximately), cloth, bevelled boards, 25s. Half morocco, gilt edges (bound by Rivière), 50s.

This is a companion volume to "The Dawn of Civilization," and contains the history of the ancient peoples of the East from the Fourteenth Egyptian Dynasty to the end of the Ramesside period. This interval covers the sojourn of the Israelites in Egypt and their Exodus therefrom. Also the further history of the Hebrews down to the Eighth Century B.C.

THE DAWN OF CIVILIZATION (EGYPT AND CHALDÆA). New and Revised Edition. By Professor MASPERO. Edited by the Rev. Professor SAYCE. Translated by M. L. MCCLURE. With Map and over 470 Illustrations, including three Coloured Plates. Demy 4to (approximately), cloth, bevelled boards, 24s. Half morocco (bound by Rivière), 48s.

Professor Maspero, by using the result of the most recent researches in Egypt and Mesopotamia, has brought this new Edition up to the latest date.

BIBLE PLACES; OR, THE TOPOGRAPHY OF THE HOLY LAND. A succinct account of all the Places, Rivers, and Mountains of the Land of Israel, mentioned in the Bible, so far as they have been identified; together with their modern names and historical references. By the Rev. Canon H. B. TRISTRAM, D.D., LL.D., F.R.S. New Edition brought up to date. With Map. Crown 8vo, half bound, 5s.

"It is now the most recent, the most readable, the most reliable manual of Palestine we possess."—*Expository Times.*

DR. NANSEN: THE MAN AND HIS WORK. By FREDERICK DOLMAN. With Map and Illustrations. Crown 8vo, cloth boards, 1s.

THE ROMANCE OF THE SEA: ITS FICTIONS, FACTS, AND FOLK-LORE. By FRED WHYMPER. With numerous Illustrations. Crown 8vo, cloth boards, 5s.

THE HEROES OF THE ARCTIC, AND THEIR ADVENTURES. By FRED WHYMPER, Author of "The Romance of the Sea," etc. Ninth Edition, Revised and brought up to date, with Illustrations and Map of the Arctic Regions. Crown 8vo, cloth boards, 3s.

THE ROMANCE OF SCIENCE: OUR SECRET FRIENDS AND FOES. By PERCY FARADAY FRANKLAND, Ph.D., B.Sc. (London), F.R.S. Third Edition, Revised and Enlarged. Post 8vo, cloth boards, 3s.

"It is a book which every Clergyman, every Magistrate, every Guardian of the Poor, every Governor of a School ought to possess and master."—*Guardian.*

SIMPLE EXPERIMENTS FOR SCIENCE TEACHING. With numerous Diagrams, including 200 Experiments fully illustrating the Elementary Physics and Chemistry Division in the Evening School Continuation Code. By J. A. BOWER. Crown 8vo, cloth boards, 2s. 6d.

LONDON: NORTHUMBERLAND AVENUE, W.C.; 43, QUEEN VICTORIA STREET, E.C.
BRIGHTON: 129, NORTH STREET.

THE MANUFACTURING
GOLDSMITHS' & SILVERSMITHS' COMPANY,
Show Rooms: 112, REGENT STREET, LONDON, W.
INVITE INSPECTION OF THEIR LARGE AND CHOICE STOCK OF
Diamond Ornaments, High-Class Jewellery and Presentation Plate.
ILLUSTRATED CATALOGUE POST FREE. GOODS FORWARDED ON APPROVAL.

The Goldsmiths' Alliance, Ld. (A. S. Savory & Sons), late of Cornhill, E.C., is transferred to this Company.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000097

مكتبة قطر الوطنية
Qatar National Library

A BOON TO TRAVELLERS.

LIEBIG

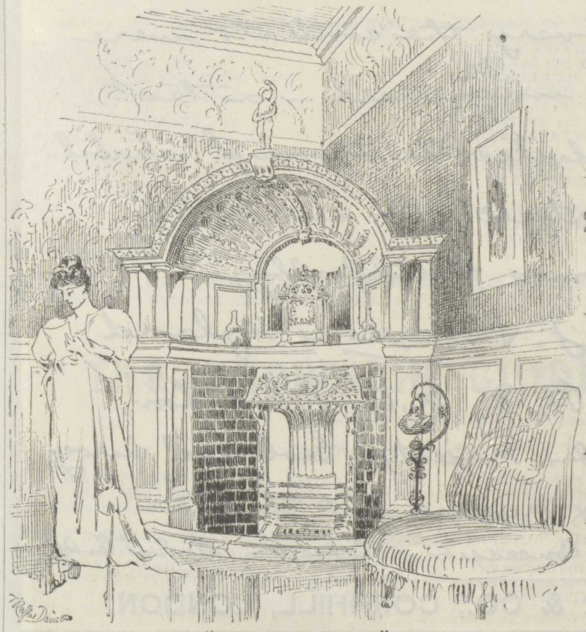
COMPANY'S EXTRACT

J. Liebig

Always look for the BLUE SIGNATURE. There are many imitations which have not the same flavour and are not so carefully manufactured.

KEEPS FOR ANY TIME IN THE HOTTEST CLIMATES, AND GOES FURTHER THAN ANY SIMILAR ARTICLE.

Barnard, Bishop & Barnards, Limited,



"REGISTERED DESIGN."

Original Manufacturers of
THE CELEBRATED
Slow Combustion,
OR,
COUNTRY PARSON'S STOVE,
Invite a visit to their new West End Show Rooms,
23, PRINCES STREET,
CAVENDISH SQUARE,
LONDON, W.,
Where a most recherché selection of their newest designs in
Carved Wood and other Mantels,
Tiled Stoves, Slabs, Fire-irons, Curbs,
Artistic Wrought Ironwork,
ETC., MAY BE SEEN.
CATALOGUES FREE.
Intending purchasers waited upon in London and the Suburbs by competent representatives free of charge.

MANUFACTORY: NORWICH.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006a

مكتبة قطر الوطنية
Qatar National Library

EXPLORING EXPEDITIONS
COMPLETELY EQUIPPED BY
S. W. SILVER & CO., CORNHILL, LONDON.

London, July 16/96

Messrs S. W. Silver & Co.,
Cornhill, E. C.,

Gentlemen,

You may be interested in hearing that during my recent journey to the coast from British Central Africa (Northern Rhodesia) one of the airtight cases furnished by you was at the bottom of a river for fully 20 minutes, and that on recovery the contents were found to be uninjured – a test which establishes the thorough reliability of the article you supply.

Yours faithfully,

J. Shearson Hyland

Ph. D., M.A., F.G.S., Lon.,
Late of Her Majesty's Geological Survey;
Geologist & Mineralogist to the
Rhodesia Concessions' Expedition into Brit. Cen. Afr.

S. W. SILVER & CO., CORNHILL, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000075

مكتبة قطر الوطنية
Qatar National Library

1897 *ISSUE NOW READY.*

THE STATESMAN'S YEAR-BOOK.

Statistical and Historical Annual of the States of the World, for the Year 1897. Edited by J. Scott Keltie, LL.D., Secretary to the Royal Geographical Society. Thirty-fourth Annual Publication. Revised after Official Returns. Crown 8vo, 10*s.* 6*d.*

In the new Edition for 1897 the whole of the statistical and other information has been thoroughly revised throughout. In many cases fresh matter has been introduced. In the sections dealing with the commerce of the various States of the World information is given with regard to the systems on which the customs tariffs are levied. This information has been kindly supplied by the Governments of the various countries. The sections dealing with the Navies have been thoroughly revised, so that it is possible to see at a glance the actual strength of each of the great Navies. Prefixed to the Year Book are a series of specially prepared maps and tables exhibiting the changes which have taken place during the sixty years of her Majesty's reign, and enabling a comparison to be made under several important heads between the British Empire and the other great States. All the changes made during the past year in political frontiers have been noted. By the publication of this Annual a few weeks after the beginning of the year it is possible, in the case of some of the more important States, to give the statistics of the previous year. This will be found to be the case in the present issue. It is believed that no other Annual is of so much service to the statesman, the politician, the publicist, the statistician, and all who have to do with public affairs, as the Statesman's Year Book.

THE TIMES.—"Few books can be said to be indispensable. But among the limited number to which this praise can be given room must unquestionably be found for the *Statesman's Year-Book*. It fills a place in the reference literature of the world such as no other publication of its kind, in any language, quite occupies. It is not only that it finds an honoured place on the table of every statesman and publicist; but from the fact that the information it contains is largely supplied by the Governments of the different countries, it has attained a sort of official standing, so that its pages are consulted in every quarter of the globe, and its statistics referred to in despatches as entitled to unlimited acceptance. This high reputation has not, it need scarcely be said, been attained in a day or a year, and, if the *Statesman's Year-Book* now stands at the head of the great army of works of reference which each year are poured forth by the Press, it is because its conductors have never rested satisfied with the success they have obtained, but have always shown that every year shall be an improvement on its predecessor."

MACMILLAN AND CO., Ltd., LONDON AND NEW YORK.

BAEDEKER'S TOURIST GUIDE-BOOKS.

Illustrated with numerous Maps, Plans, Panoramas, and Views. 12mo, cloth.

GREECE. 8*s.*
GREAT BRITAIN. 10*s.*
LONDON and ITS ENVIRONS. 6*s.*
BELGIUM and HOLLAND. 6*s.*
THE RHINE. 7*s.*
NORTHERN GERMANY. 8*s.*
SOUTHERN GERMANY. 5*s.*
AUSTRIA. 7*s.*
THE EASTERN ALPS. 10*s.*
NORTHERN ITALY. 8*s.*
CENTRAL ITALY and ROME. 7*s.* 6*d.*
SOUTHERN ITALY and SICILY. 6*s.*
NORWAY and SWEDEN. 10*s.*
NORTHERN FRANCE. 7*s.*
SOUTH-EASTERN FRANCE. 5*s.*
SOUTH-WESTERN FRANCE. 5*s.*
PARIS and ITS ENVIRONS. 6*s.*
SWITZERLAND. 8*s.*
LOWER EGYPT. 12*s.*
UPPER EGYPT. 10*s.*
PALESTINE and SYRIA. 12*s.*
UNITED STATES. 12*s.*
CANADA. 5*s.*
THE TRAVELLER'S MANUAL OF CONVERSATION IN ENGLISH, FRENCH, GERMAN, and ITALIAN. 3*s.*
CONVERSATION DICTIONARY in FOUR LANGUAGES: ENGLISH, FRENCH, GERMAN, and ITALIAN. 3*s.*

GUIDE to the PUBLIC COLLECTIONS of CLASSICAL ANTIQUITIES in ROME. By Wolfgang Helbig. 2 vols. 14*s.*

THE THOROUGH GUIDE SERIES.

Illustrated with numerous Maps and Plans.

Edited by M. J. B. BADDELEY, B.A., and C. S. WARD, M.A.

THE ENGLISH LAKE DISTRICT. Net 5*s.*
SCOTLAND. Part I. The Highlands. Net 6*s.* 6*d.*; Part II. Northern Highlands. 3*s.* 6*d.*; Part III. The Lowlands. 4*s.*
NORTH DEVON and NORTH CORNWALL. Net 3*s.* 6*d.*
SOUTH DEVON and SOUTH CORNWALL. Net 4*s.*
THE PEAK DISTRICT. Net 3*s.*
THE EASTERN COUNTIES. Net 3*s.* 6*d.*
NORTH WALES. Net 5*s.* Part I., 3*s.*; Part II., 2*s.* 6*d.*
SOUTH WALES. Net 3*s.* 6*d.*
IRELAND. Part I. Northern Counties. Net 4*s.*; Part II. Southern Counties. 5*s.*
SURREY and SUSSEX, including TUNBRIDGE WELLS. Net 3*s.* 6*d.*
YORKSHIRE. Part I. (East.) Net 2*s.* 6*d.*; Part II. (West.) 3*s.*
Two parts in one vol. Net 5*s.*
ORKNEY and SHETLAND. Net 1*s.*
ISLE OF WIGHT. Net 2*s.* 6*d.*

London: DULAU & CO., 37, Soho Square, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000be

مكتبة قطر الوطنية
Qatar National Library

CLOTHED WITH AIR

CELLULAR UNDERWEAR AND SHIRTS.

THE HEALTHIEST AND MOST ECONOMICAL FOR TRAVELLERS.

Extract from C.T.C. HANDBOOK AND GUIDE, 1896-97, p. 52.

"From the peculiar manner in which CELLULAR CLOTH is woven (forming a network of minute air-cells next the skin), it allows, even more fully than wool, the free evaporation of perspiration on the side next the skin. . . . It is less bulky, and is lighter to carry; it dries much more quickly; it is more easily washed, and its prime cost is much smaller. Last, but not least, it is quite free from that bane of all woollen goods, the liability to shrinkage."

BEST FOR ALL SEASONS AND CLIMATES.
ESTIMATES FOR OUTFITS SUPPLIED ON APPLICATION.
To be obtained in all the principal cities and towns in the United Kingdom, the Colonies, and India.

Illustrated Price List of full range of Cellular goods for Men, Women, and Children, sent Post Free on application.

Full assortment of goods at the following retail houses :—

ROBERT SCOTT, Ltd., 14 and 15, Poultry, London, E.C.
OLIVER BROS., Ltd., 417, Oxford Street, London, W.

WHOLESALE ONLY—

THE CELLULAR CLOTHING CO., Ld.,
72 & 73, FORE STREET, E.C.

DR. J. COLLIS BROWNE'S CHLORODYNE



ORIGINAL AND GENUINE

IS THE GREAT SPECIFIC FOR CHOLERA,

COUGHS, COLDS, ASTHMA, BRONCHITIS.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Dr. J. C. BROWNE (late Army Medical Staff) DISCOVERED a REMEDY to denote which he coined the word CHLORODYNE. Dr. Browne is the SOLE INVENTOR, and, as the composition of Chlorodyne cannot possibly be discovered by Analysis (organic substances defying elimination), and since the formula has never been published, it is evident that any statement to the effect that a compound is identical with Dr. Browne's Chlorodyne *must be false.*

This Caution is necessary, as many persons deceive purchasers by false representations.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Vice-Chancellor Sir W. PAGE WOOD stated publicly in Court that Dr. J. COLLIS BROWNE was UNDOUBTEDLY the INVENTOR of CHLORODYNE, that the whole story of the defendant Freeman was deliberately untrue, and he regretted to say it had been sworn to."—See *The Times*, July 13th, 1864.

DIARRHŒA, DYSENTERY. GENERAL BOARD of HEALTH, London, REPORT that it ACTS as a CHARM, one dose generally sufficient.

Dr. GIBBON, Army Medical Staff, Calcutta, states: "2 DOSES COMPLETELY CURED ME of DIARRHŒA."

From SYMES & CO., Pharmaceutical Chemists, Simla. *Jan.* 5, 1880.

To J. T. DAVENPORT, London.

DEAR SIR, — We congratulate you upon the widespread reputation this justly-esteemed medicine has earned for itself all over the East. As a remedy of general utility, we much question whether a better is imported, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances *ad infinitum* of the extraordinary efficacy of DR. COLLIS BROWNE'S CHLORODYNE in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power.

We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best, and also from a sense of duty we owe to the profession and the public, as we are of opinion that the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.—We are, Sir, faithfully yours, SYMES & CO., *Members of the Pharmaceutical Society of Great Britain, By Excellency the Viceroy's Chemists.*

DR. J. COLLIS BROWNE'S CHLORODYNE is the TRUE PALLIATIVE in NEURALGIA, GOUT, CANCER, TOOTHACHE, RHEUMATISM.

DR. J. COLLIS BROWNE'S CHLORODYNE is a liquid medicine which assuages PAIN of EVERY KIND, affords a calm refreshing sleep WITHOUT HEADACHE, and INVIGORATES the nervous system when exhausted.

DR. J. COLLIS BROWNE'S CHLORODYNE rapidly cuts short all attacks of EPILEPSY, SPASMS, COLIC, PALPITATION, HYSTERIA.

IMPORTANT CAUTION.
The IMMENSE SALE of this REMEDY has given rise to many UNSCRUPULOUS IMITATIONS. Be careful to observe Trade Mark. Of all Chemists, 1s. 1½d., 2s. 9d., and 4s. 6d.

SOLE MANUFACTURER,
J. T. DAVENPORT, 33, Gt. Russell St., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000092

مكتبة قطر الوطنية
Qatar National Library

INDEX TO ADVERTISEMENTS.

Where no folio is given, Advertisement does not appear this month.

	PAGE
Admiralty Charts.	
Potter, J. D.	20
Ammunition.	
Normal Powder Syndicate, Ltd.	24
Booksellers.	
Potter, William	19
Sotheran & Co. ..... *Cover*	2
Boots.	
Norman, S. W.	23
Cabinet Makers.	
Crockett, J. T., & Son	24
Camp Beds.	
Chorlton, L., & Co. ..... *Cover*	4
China & Glass.	
Pearce, A. B.	24
Contractors' Tools, etc.	
Hardy Patent Pick Co., Ltd. *Cover*	3
Cutlery.	
Hill & Son	14
Decorative Iron Work.	
Hart, Son, Peard & Co., Ltd.	
Disintegrating Machinery.	
Hardy Patent Pick Co., Ltd. *Cover*	3
Field Glasses.	
Brown, James ..... *Cover*	2
Steward, J. H.	
Foods for Travellers.	
Bovril (British, Foreign & Colonial), Ltd.	16
Hafford & Co.	24
Liebig & Co.	9
Maconochie Bros	17
Spratt's Ship Biscuits ..... *Cover*	2
Galvanized Wire Netting.	
Barnard, Bishop, & Barnards, Ltd.	9
Guns & Rifles.	
Greener, W. W.	
Tolley, J. & W.	3
Hat Manufacturers.	
Lincoln, Bennett & Co.	17
Hotels & Restaurants.	
Hôtel Cecil	22
Hôtel Métropole	23
Midland Grand Hotel	5
Instruments for Travellers.	
Cary's	19
Casella, L.	20
Insurance.	
Imperial Insurance Co., Ltd.	18
Jewellers.	
Smith, S., & Sons	13
Goldsmiths' & Silversmiths' Co	8
Mappin Bros.	5
Streeter & Co., Ltd.	1
Medicines & Medicine Cases.	
Browne, Dr. Collis	12
Burroughs, Wellcome & Co. *Cover*	4
Keating	14
Miscellaneous.	
Larkin	6
Outfitters.	
Cellular Clothing Co., Ltd.	12
Jaeger's Woollen Co.	
Silver, S. W., & Co.	10
Thresher & Glenny	
Photographic Outfits.	
Dollond & Co.	
London Stereoscopic Co.	7
Newman & Guardia	5
Platinotype Co.	18
Ross & Co.	21
Shew, J. F., & Co.	24
Printers & Account Book Manufacturers.	
Brown & Rowley	24
Darling & Son, Ltd.	23
Publishers.	
Constable, A., & Co.	17
Dulau & Co.	11
Johnston, W. & A. K.	14
Macmillan & Co., L'd.	11
Society for Promoting Christian Knowledge	8
Ship Owners.	
British India Steam Navigation Co.	21
Huddart, James	21
North German Lloyd Co.	21
Sporting Outfits.	
Burberry & Sons	3
Stationers, etc.	
Brown & Rowley	24
Stores for Expeditions, &c.	
Military Equipment ..... *Cover*	3
Tea Importers.	
Higgs, W. A., & Co.	13
Tents.	
Edgington, B., Ltd.	
Edgington, J., & Co.	7
Piggott Bros. & Co.	16
Sly, Dibble, & Co.	6
Willesden Paper & Canvas Works	15
Tobacco Manufacturers.	
Richmond Cavendish Co., Ltd.	18
Wood & Son	
Tours.	
Co-operative Travel	14
Orient Co.	20
Travelling Bags.	
Hosking, N.	19
Watch & Clock Makers.	
Smith, S., & Sons	18
Blockley, H.	19
Waterproof Clothing.	
Abbotts'	3
Waterproof Roofing.	
Willesden Paper & Canvas Works	15

OOPONG

(REGISTERED).

A Blend of Choicest India and Ceylon Teas,

PER 2/- LB.

The best value in Tea ever offered to the Public. Six Pounds and upwards forwarded the same day as ordered, carriage paid, to any part of the United Kingdom.

This Tea is supplied in hermetically sealed air-tight cases to Travellers, Yachtsmen, and Expeditions.

W. A. HIGGS & CO., TEA IMPORTERS,

39, HIGH STREET, ISLINGTON, LONDON, N.

AND BRANCHES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008d

مكتبة قطر الوطنية
Qatar National Library

CO-OPERATIVE EDUCATIONAL TRAVEL,
ORGANIZED BY
HENRY S. LUNN, M.D., B.A., F.R.G.S.,
Fellow of the Medical Society of London.
CRUISES ACCOMPANIED BY
J. T. WOOLRYCH PEROWNE, M.A.,
Late Classical Scholar of Corpus Christi College, Cambridge.

EIGHT GUINEA CYCLING TOURS TO NORMANDY AND BRITTANY.
TEN GUINEA SWISS TOURS TO THE OBERLAND, ENGADINE, CHAMOUNI, ZERMATT, AND THE ITALIAN LAKES.
CRUISES TO THE NORWEGIAN FJORDS, THE NORTH CAPE AND ICELAND.
BALTIC CRUISE TO THE NORTHERN CAPITALS OF EUROPE, St. Petersburg, Stockholm, Copenhagen, and Christiania.
MEDITERRANEAN CRUISES TO THE HOLY LAND, EGYPT, CONSTANTINOPLE, AND ATHENS.
A WESTERN MEDITERRANEAN CRUISE TO NORTH AFRICA AND SOUTHERN SPAIN.

FULL PARTICULARS FROM THE SECRETARY,
5, ENDSLEIGH GARDENS, LONDON, N.W.

V. R.
ISSUED TO COMMEMORATE THE 60th YEAR OF HER MAJESTY'S REIGN.
NOW READY.
THE VICTORIA REGINA ATLAS.
Royal Quarto. 12½ × 10 inches. Containing 200 Plates—Political, Physical, and Astronomical.
Frontispieces illustrating the Time of all Nations, Arms of Great Britain and her Colonies, National Arms, the Flags of all Nations, and Complete Index of 94,250 Names.
Half-bound Persian Morocco, £1 1s. Full-bound French Morocco, £1 8s.
This Atlas is Dedicated by Special Permission to Her Majesty.

W. & A. K. JOHNSTON, Geographers to the Queen.
Edina Works, Easter Road; and 7, Hanover St., EDINBURGH.
5, White Hart St., Warwick Lane, LONDON, E.C.

REMEMBER THE BLACK BEETLES
TELL YOUR COOK
To well sprinkle the floor near the fireplace and kitchen cupboard last thing at night with "KEATING'S POWDER," unrivalled killer of Fleas, Beetles, Moths (harmless to animals). Sold everywhere, *only* in tins, 3d., 6d., and 1/- each.

Established nearly a Century.
HILL & SON,
4, HAYMARKET, LONDON,
Manufacturers of
Sporting, Table, Toilet, & Pocket Cutlery,
ALPINE ICE-AXES, SKATES,
AND FINE STEEL WORK GENERALLY.
Practical Dodgy Utilities for Home Requirements and Travellers' Use.
Reliable English-made Goods at Moderate Prices.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

WILLESDEN CANVAS (Green, Rot-Proof),

FOR

TRAVELLERS' TENTS, &c.

TRADE MARK. REGD. 1880.

Used by the Following amongst others—

Awarded Sixteen Gold and Silver Medals.

THE POST OFFICE.
THE ADMIRALTY.
THE INDIA OFFICE.
THE CROWN AGENTS FOR THE COLONIES.
THE EGYPTIAN GOVERNMENT.
THE SOUTH AUSTRALIAN GOVERNMENT.
H.M. THE GERMAN EMPEROR.
MR. HENRY M. STANLEY.
THE JACKSON-HARMSWORTH EXPEDITION.
THE ECLIPSE OF THE SUN EXPEDITION.
MR. THEODORE BENT.
MR. VILLIERS (War Correspondent).

And the Principal Travellers during the last quarter of a century. Used also by all the leading Tent Makers.

NOTE. None genuine unless bearing our Registered Trade Mark as above.



NOTE. Intending users should always order Willesden Canvas.

A FEW OPINIONS OF USERS.

Prof. A. H. Church, M.A., F.R.S.—"Willesden Canvas appears to resist the attack of moisture and of Animal Organisms."

H. M. Stanley, Esq.—"As regards the Tent Canvas which proved so indestructible, it deserves every credit. While the Canvas resisted rot and damp and decay, the twine with which the tent had been sewn gave way several times because it had not been dipped into the preservative. We remedied that in Africa by unravelling some Canvas, and using its threads. No other Canvas is fit for any damp weather. I could say much about it, but all my Officers know its superiority to Canvas unprepared."—*August* 4, 1890.

The Secretary General Post Office, London.—"I have to inform you that the bags have satisfactorily answered the purpose for which they were obtained, namely, that of protecting the parcels, etc., from the surf or heavy rains during disembarkation."—*August* 30, 1895.

Jas. W. Addyman, Esq., Starbeck.—"I have nothing but praise for the Canvas. I have found it weather-proof, wind-proof, and immensely strong."

Theodore Bent, Esq.—"We always travel with green fly Tents with double flaps, the whole made of Willesden Canvas, which does not get mouldy when folded up wet."—*The Album, July* 8, 1895.

SOLE MANUFACTURERS—

WILLESDEN PAPER & CANVAS WORKS,

WILLESDEN JUNCTION, LONDON, N.W.

Telegrams: "IMPERMEABLE, LONDON." ESTABLISHED 1870.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000054

مكتبة قطر الوطنية
Qatar National Library



TENTS

FOR THE

TRAVELLER

AND

EXPLORER.

Write for our "Red Bound Catalogue" of Tents and Camp Equipment, post free.

THE MOST PERFECT TENT is PIGGOTT BROS. & CO.'S "PROSPECTING TENT." Made double. The inner roof being suspended 12 inches below the ridge, allows of a free circulation of air between the outer and inner roofs. The inner roof has ventilators, protected by mosquito net. *Made from Green Waterproof and Rot-Proof Canvas.*

PIGGOTT BROS. & CO., MANUFACTURERS,
57, 58, 59, Bishopsgate Street Without, LONDON.

EXPLORERS AND TRAVELLERS

Should always include in their food stores a supply of

BOVRIL

Which contains in an easily digestible form the entire nourishment of Prime Ox Beef, obtained from selected cattle reared in Australia and South America.

In Nansen's "Farthest North" a Photograph taken by Dr. Nansen of the "Fram" embedded in the Ice shows packages branded BOVRIL containing our food preparations taken by the gallant explorer.

BOVRIL (British, Foreign, and Colonial) LTD., LONDON,
FOOD SPECIALISTS AND CONTRACTORS TO H.M.'S GOVERNMENT.
Chairman—The Right Hon. LORD PLAYFAIR, G.C.B., LL.D.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Geographical Journal.

No. 4. APRIL, 1897. Vol. IX.

THE FIRST CROSSING OF SPITSBERGEN.*

By Sir W. MARTIN CONWAY.

On June 17, 1596, Spitsbergen was discovered by the Dutch navigator, William Barents. On the 300th anniversary of that day, by a strange chance—for it was nothing but a chance—the party of which I had the honour to be leader came in sight of the island. During those three centuries its coasts and waters have been more frequently and better studied than any other portion of the Arctic regions; but the interior remained practically unknown, and had only been penetrated by explorers on three occasions. In 1892, Herr Gustav Nordenskjöld crossed the inland ice in three days from Horn sound to Schoonhoven (Recherche bay); in July of the same year he spent four days in the hill country between Advent and Coles bays; lastly, in 1892, Mons. Charles Rabot, with some men from the French man-of-war *La Manche*, landed at Sassen bay, and spent three days marching up the Sassendal, ascending Peak Milne-Edwards, and returning to Sassen bay by the same route.

Our party consisted of Dr. J. W. Gregory, whose book on the 'Great Rift Valley of East Africa' is well known; Mr. A. Trevor-Battye, author of 'Ice-bound on Kolguef;' Mr. E. J. Garwood, an expert mountaineer, geologist, and photographer; and my cousin, Mr. H. E. Conway, artist. We took with us two Norwegian sailors, two Tromsö ponies to draw our sledges, and one whale-boat. After some trouble with the ice that infested the seas to the south and west of Spitsbergen and delayed our entry into Ice fjord, we made a successful landing on Advent point, the spit which protects the mouth of Advent bay. Our steamer was shared with the

* Paper read at the Royal Geographical Society, January 25, 1897. The common spelling of the name Spitzbergen is wrong. The name is Dutch, and should be spelt Spitsbergen (from *spits*, "a point"). Map, p. 472.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000058

مكتبة قطر الوطنية
Qatar National Library

proprietors of a wooden inn which was to be erected, and since has been erected, on Advent point. The inn, however, was of no use to us, for it did not come into existence till some weeks after any work we had to do in its neighbourhood had long been finished. The weekly boat, however, that came to bring up tourists was a convenience, for it enabled us to keep in touch with the outer world.

Before sailing from home I read, I believe, everything published about Spitsbergen in the chief European languages and Dutch. The Scandinavian tongues are unknown to me. I also conversed with many persons who had been in Spitsbergen. The result was that I had, as usual, received an entirely false impression of what the interior would be like. We expected to find a series of boggy coast valleys, and a snowy or icy interior. Acting on the best advice we could get, we equipped ourselves with Nansen sledges, and with ponies to draw them. The sledges were utterly unsuited to the work they had to do, and involved us in infinite troubles. The last thing we expected to find was an intricate mountain country, a tangle of ridges and valleys. A German traveller, who in 1891 climbed Mount Lindstrom, and, for a wonder, looked into the interior, described it as an "*unabsehbare weisse Flache.*" It is, however, nothing of the sort. We expected to be able to gain a good general idea of the country by taking two or three lines across it. The moment we actually saw the nature of the ground, it became evident that nothing worth doing could be accomplished in that fashion.

A glance at the map we made will show the kind of country we had to explore, and the nature of the information with regard to its topography that was worth obtaining. The northern and southern parts of Spitsbergen are, in the main, covered with great accumulations of ice, except along the west shore of Wijde bay, where is a relatively fertile area. The middle of the island, west of the main watershed, is a region of boggy valleys, fertile slopes, and mountain ridges, or the remains of a high plateau. The nature and interest of this country can be shown by a few specimen areas. The east shore of Wijde bay is formed by a long and very uniform slope, about 1000 feet high. The ice-sheet almost reaches the edge of this slope, except at a few places where the plateau has been broken down into valleys, whereby tongues of ice reach or approach the sea. Here you have an example of a plateau protected from denudation by ice. Along the north-east side of the Sassendal you have a very similar plateau, from which, however, the ice-sheet has been withdrawn in recent times. Denudation has begun, and the plateau is being cut down by narrow and precipitous cañons, from which it derives the name Colorado Berg. These cañons are not being gradually lowered, but they are gradually creeping back. However short, all are practically of the same depth. It is at their heads that they are formed. Each is eating its way back with considerable rapidity. Here you have the first stage in the formation of a mountain group.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000057

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Consider now the whole area west of the Sassendal, between it and Advent bay, bounded on the north by Ice fjord, and on the south by Advent vale. It appears that the ice that once covered it was gradually withdrawn, beginning from the west. As you go westward, then, you come to mountains in a more advanced stage of manufacture. The hills that look down upon the Sassendal are the bluff-fronted remains of a plateau, only a little more cut down than the Colorado Berg. Except in two cases, the valleys that penetrate them from the Sassendal are short. Further west come rounded hills, such as Mount Lusitania. Beyond De Geer valley are maturer peaks, with clearly defined arêtes and faces such as we are familiar with in the general run of mountain regions.

Where mountains are most developed valleys are oldest. Advent vale may be taken as type of these. As the ice retreated eastwards, Advent vale widened and crept back, receiving the drainage of a constantly developing valley-system, whose eastern watershed ran close behind the Sassendal bluffs. Later on the Sassendal tributaries became more active, and ate their way back, stealing one after another of the headwaters of Advent vale. The Esker valley is a good instance of this. It was formerly drained by Advent vale; now it drains in the opposite direction. Brent pass divides the drainages, but will not long continue so to do, for already a small stream, descending almost on to the pass, is in process of being stolen by the Esker. It now divides its waters upon its fan when in flood, one stream going to Advent vale, the other to the Esker. Fulmar valley, which formerly drained into Agardhs (Foul) bay, has been similarly invaded by the Sassendal, and many more instances might be quoted.

The great interest, therefore, of this peculiar island of temperate climate in the midst of Arctic ice-sheets, lies in the fact that here you have one of the very best examples in the world of the processes of mountain and valley manufacture. It was the perception of this fact that altered our plans, and showed that it was a far more important matter to make a fairly detailed examination of one portion (in itself, however, not inconsiderable) of Spitsbergen, than to scamper hurriedly across two or three separate belts. We did, in fact, cross from sea to sea along three different lines; but, instead of selecting them as far as possible from one another, we so arranged them that each should display the flank of the next. We crossed from Advent bay to Klok (Van Mijen) bay, from Klok bay to Sassen bay, and from Sassen bay to Agardhs bay and back, finally returning along the shore of Sassen bay to Hyperite Hat, and completing our work by expeditions into the heart of the important mountain region to which I have already referred. Having thus cleared the way by what I fear you may think a dry geographical disquisition, I may be permitted to approach the more generally interesting account of adventures by the way.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

First, however, I must premise that this journey into the interior was not the whole of our work. A portion of our party remained for some time at the coast, and worked there. Mr. Trevor-Battye and my cousin made various boat-expeditions from Advent Point, and spent some time in and about the North fjord; and Mr. Trevor-Battye went up Dickson's bay to its head, landed there, and made a long expedition up a glacier previously unexplored. Dickson's bay has been visited seldom—by Lamont in 1871, by Professor Nathorst in 1882, by Lieut. (now Major) Stjernspetz, who surveyed it in 1883, by Nordenskiöld, and doubtless by a few others; there is no published description of it, except a too brief account by Stjernspetz, who landed at its head, and walked up the north glacier to a pass whence Wijde bay was visible.

Garwood, on our first arrival, climbed the peak at Cape Starashchin, and later on our geologists and artist spent a few days at Green harbour for collecting and sketching purposes. The whole party also made, in the little steamer *Expres* (12 tons net), a voyage of over 1000 miles round the coasts of the island, during which we visited North-East land, the Seven islands, traversed Hinloopen strait twice, closely approached Wiches land, visited Andrée's balloon establishment, and entered every considerable bay in Spitsbergen except Lomme bay, Liefde bay, Cross bay, and Michel Reinier's (Van Keulen's) bay. Finally, whilst I remained at Advent Point to try and obtain a solar observation for the purpose of deducing an important true bearing, Garwood and Trevor-Battye went to Horn sound, and made the first ascent of Mount Hedgehog, or Horn Sunds Tind, the highest measured mountain in Spitsbergen.

All having landed at Advent Point on June 20, Garwood and I made a trial trip inland, and on the 23rd definitely started with the two ponies and sledges. A brief experience manifested that the task we had undertaken was not going to be a light one. The west shore of Advent bay is formed by a low cliff with slopes above it. The sledges had to be dragged across these slopes. They are boggy, though nothing like the bogs we afterwards encountered, and they are cut up by gullies, large and small. Down each gully flows a stream, arched over at this time by snow-beds. The snow was rotten, and here the ponies stuck for the first of a countless number of times. Each time they stuck we had to dig or haul them out, and ourselves lug the sledges over—a fatiguing operation. Beyond the cliffs we descended on to the flat, consisting of soft mossy bogs, rotten snow-beds, torrents from 1 to 2 feet deep, and bogs consisting of an unsupporting mixture of stones and mud. None of these things were so bad near Advent bay as we found them further inland. The worst were near Agardhs bay. The snow-beds were so sodden that the foot trod right through them, making a green hole, which was immediately filled with water. The streams were innumerable at this time of energetic thaw. In one mile near the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000053

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



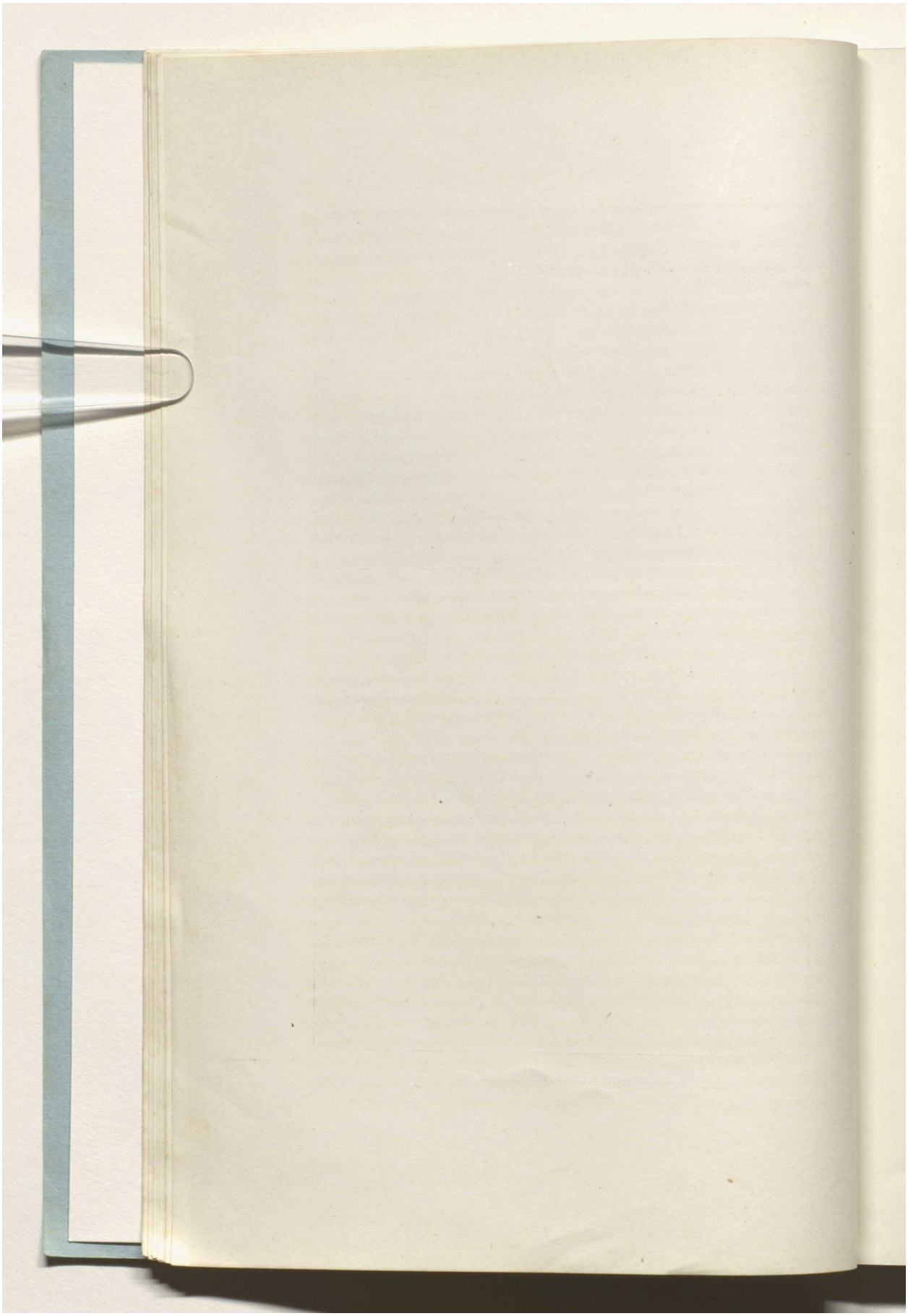
FIG. I.—STRATIFIED MORAINE IN ICE-PLOUGH GLACIER.



FIG. II.—CONTORTED MORAINE IN ICE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000030

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000021

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

head of Advent vale, Gregory counted fifty-two channels which had to be waded, besides a number narrow enough to be jumped. Some streams in the island were 100 yards wide or more. All were rapid; some so deep and swift that they carried us off our legs. Frequently they rolled the sledges over and over, tangling up the traces about the ponies' legs and causing complications. The bogs were just bogs, into which the ponies used to stick fast, so that one had to be used to haul the other out. We were often reduced almost to desperation, but ultimately we always got over, thanks greatly to Garwood's energy and resource. It need scarcely be said that a few miles of this kind of country was a day's march. Our range was limited by the powers of the animals. I may as well state once for all that it generally rained when we were marching.

One of our ponies bolted back to Advent point from our first camp. While he was being fetched, Garwood and I made a double journey onward, and formed a camp at the foot of the range of hills that form the watershed between Advent and Klok bays. We called the place Cairn camp (338 feet), and made it our centre for a few days. Hence one afternoon we climbed by a phenomenally rotten and, in places, very narrow rock ridge to Bunting bluff (2480 feet), where we emerged through the cloud-roof into brilliant sunshine, and found ourselves at the edge of an undulating snowfield. The view was of sparkling brilliancy and indescribable beauty. A two hours' tramp over this snowfield and the ascent of a corniced snow-arête beyond took us to the summit of Fox peak (3180 feet), whence we looked abroad over a region of glaciers and multitudinous peaks. A valley stretched away at our feet, leading to a wider valley, which debouched into Klok bay. Unfortunately, valleys and bay were alike buried beneath a pall of cloud, through which ranges of snow-white peaks jutted up, far as the eye could reach.

The result of this climb (leaving geology out of the question, of which it is not my part to speak) was to give us an insight into the general topography of an intricate region, and to manifest that there was no route to Klok bay practicable for ponies, at all events at this time of year. Accordingly, next day Garwood and I loaded ourselves with food, instruments, photographic apparatus, rope, and so forth, and set out for Klok bay. We went up a side valley, on to and up the glacier at its head, and so to a pass (Fox pass, 2550 feet) adjacent to Fox peak. This gave access to Plough glacier, down which we waded rather than walked, for the snow was deep and soft in the extreme. For a time we even advanced on all-fours, such was the toilsomeness of upright progression. A dense fog did not make the surroundings more cheerful. Below the glacier came a stony area; then a region of mixed ice, snow, and water at the foot of another glacier; and then a boggy and utterly desolate valley. At one point I tumbled into a pool of snow-slush, and was soused to the skin. We

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume IX, No. 4 [180v] (31/172)

plodded down the valley till we were too tired to go another step, and then we lay down in a hollow between two walls of snow, with nothing but one mackintosh cape to cover our legs. That was a dreary resting-time. Icy rains fell on us at intervals. A few hours were enough.

Going forward again, we soon came out into a very big flat valley, the valley of the Shallow (Ondiepe) river, as the Dutch called it in their time. Only a bog-flat here intervened between us and the waters of Klok bay. Across the valley were some fine mountains, pouring out a great glacier on to the flat. Other glaciers were seen emptying into the valley higher up. We returned by the way we had come, to near the foot of Plough glacier; then, taking another head valley, we crossed the range by a lower and better pass (Bolter pass, 1340 feet), descended over a wide snowy area, in which a large lake of snow-slush had to be circumvented, and ultimately came out into Advent vale close to our first camp. The walk from thence to our tent at Cairn camp was almost more than we could manage.

After this Gregory joined us, and we went forward up Advent Vale for two marches, and encamped close to Brent pass (450 feet). A large glacier debouched on the plain opposite camp, descending from a wide and far-reaching snowy basin. The edge of this glacier was broken into seracs all the way round, and these kept constantly falling with a loud booming crash. To this glacier Garwood returned a few weeks later, when he climbed on to it, and ascended one of the peaks that rise from it. One more march carried us over Brent pass and down the Esker valley to Advent vale, just where the Esker river tumbles over in rather a finely set little waterfall. The descent of the Esker valley was very laborious, for everything was in the worst possible condition—snow deep and slushy, gullies many and all cluttered up with rotten snow, river flooded, bogs numerous and soft.

From Waterfall camp Gregory walked down to Sassen bay, expecting to meet our comrades; but the ice, packing into Ice fjord, made the mouth of the Sassendal inaccessible by water. So Gregory returned, and next day walked from Waterfall camp to Advent bay by the way we came—a really colossal undertaking, which he accomplished in twenty-four hours. When the ice broke up, he and Trevor-Battye came round, and walked up the Sassendal to join us. Trevor-Battye returned to the boat after a day's visit, and went off to Dickson's bay; Gregory came on with us to the east coast. Garwood and I spent these days exploring the neighbourhood, climbing peaks, and investigating valleys. The weather was beautifully fine, the sun shining brightly all twenty-four hours round. It was a joy to live.

Starting on again, we went up the Sassendal to a big side valley, and turned up it, hoping to find a way to Foul (Agardhs) bay; but the appearance of things not being propitious, we returned next day to the Sassendal, and went further up it to a much bigger side valley. This

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

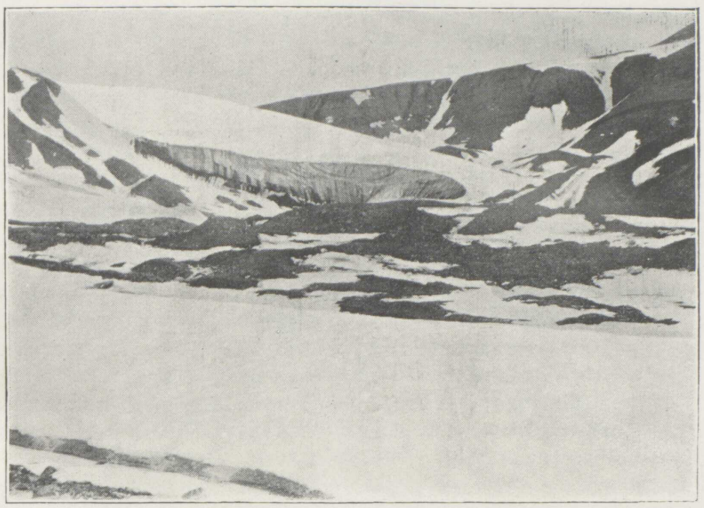


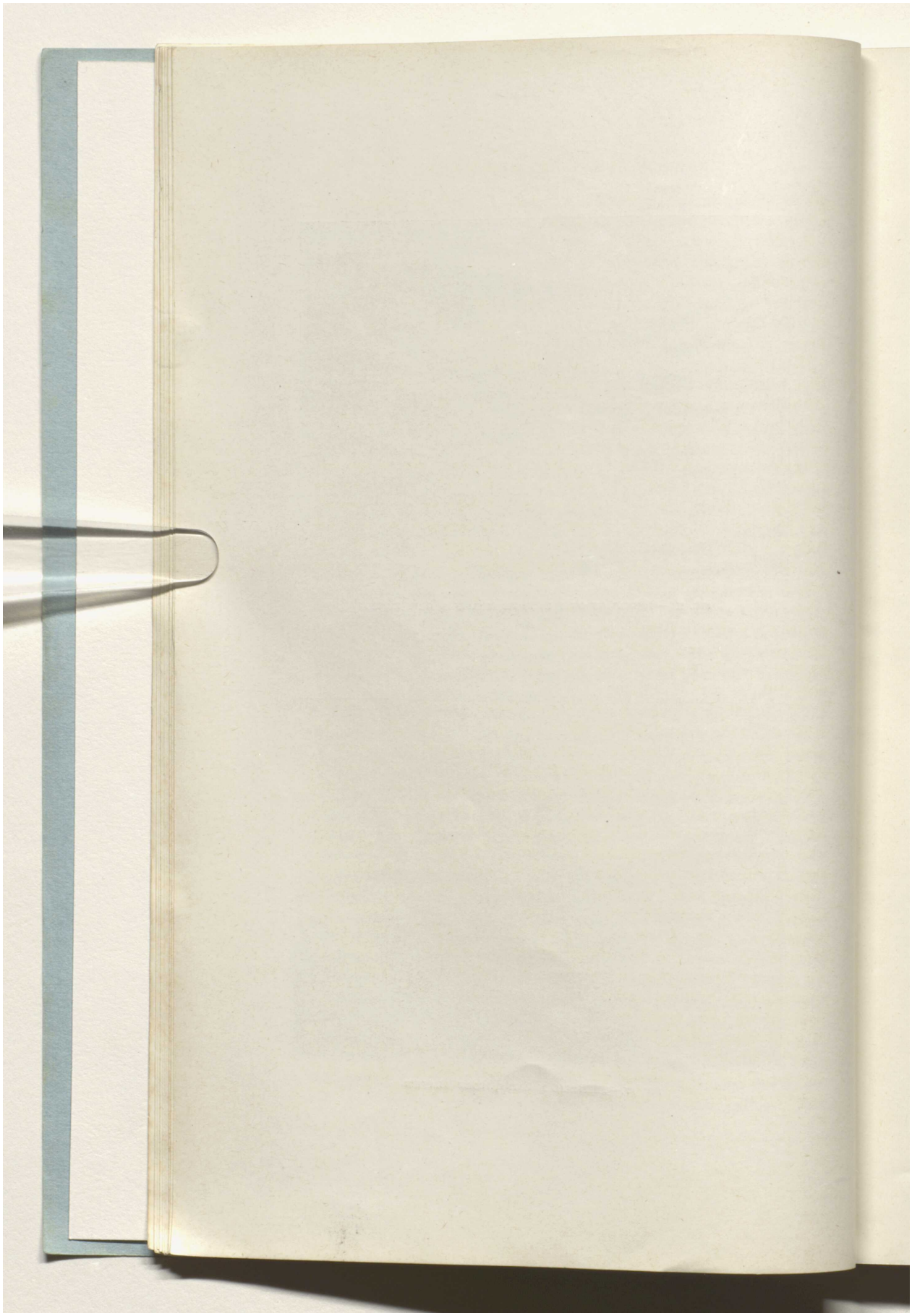
FIG. III.—FORMATION OF CRESCENTIC MORAINES, GRIT RIDGE.



FIG. IV.—TERMINAL MORAINE, IVORY GLACIER.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000017

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

seemed obviously the right route to take. An endless procession of fulmar petrels, flying up the Sassendal from Ice fjord, all turned up this valley, evidently on their way to the east coast. We named it Fulmar valley, and determined to follow their lead. Mile after mile we advanced, yet never a pass came in sight, nor any sign of an ice-sheet. We began to think we might reach Foul bay without crossing ice at all. Coming to a place where there were old moraines and a change in the aspect of the valley, we pitched camp.

Next day we entered the moraines a short distance beyond camp. They belonged to a set of side glaciers. They formed a hideous chaos of broken rocks, and heaps of mud piled upon ice. The river flowed in an ice gorge, with ice cliffs on either hand and the sloping moraine and ice chaos above. To drag the sledges over this was a terrible job. Once a sledge and pony began sliding down sideways, and were only just arrested at the edge of the ice-cliff. The torrent had to be crossed, various ascents and descents made. Stones were constantly giving way, ponies sprawling about, and almost every accident happened that one can imagine. Ultimately we emerged into an almost level valley, closed at the far end by a wall of ice, which proved to be the side of a great glacier flowing across the valley. The last reach of Fulmar valley was the worst. It was a bog of incredible nastiness. We tried high up, and we tried low down; it was equally bad everywhere. There was always one pony stuck, and often both. How we got through I don't know. At last we did reach the ice-wall, and camped (370 feet) at the foot of it.

While the others were pitching camp, looking after the ponies, and cooking, I went on and climbed the hill to our left of the glacier. An ascent of only 600 feet placed me on the crest of a ridge, which I presently followed for a mile or two to its highest point. The moment I reached the ridge, the great glacier—Ivory glacier—appeared spread out at my feet, pouring down in a wide stream from the inland ice-sheet, whose wide low domes limited the view upwards. Below, it spread out into a vast oval-domed termination, a portion of whose side was the wall that overhung our camp. The whole of this oval-domed end has come down since the year 1871, when Heuglin records the main valley as having been a flat green swamp. In the other direction beyond and above this icy dome I saw Foul bay and Wybe Jans Water, with quantities of ice upon the sea, all glittering in sunshine; and then, on the remote horizon, the snow-decked mountain front of Edges land, supporting a brilliant cushion of white cloud. I yelled the good news to my companions below, and went on up the ridge. A gale of wind blew, making wild music in the crags. On I went, passing shoulder after shoulder, and ever finding another ahead, till the last one came, and I looked abroad over the noble ice-sheet, and beheld it swelling up and up to the hurrying clouds or the blue sky. Sunshine

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000047

مكتبة قطر الوطنية
Qatar National Library

lay in patches upon the splendid expanse; lakes of sapphire-blue here and there diversified the great glacier's frozen area. It was a gorgeous vista. Unfortunately, I had no camera with me, but only surveying instruments. The cold was intense. I could not remain long on the exposed summit. The descent to camp was a long-drawn-out fight with the opposing gale.

Next day (July 17) Gregory, Garwood, and I returned to my first point of observation and again enjoyed a good view, though not so fine a one as before. We descended on to the glacier, and crossed its wide white foot in about two hours' walking. By a great stroke of luck, we hit off what was perhaps the only point where the ice could be quitted easily on the Foul bay side. For there the glacier ends in an ice-cliff over 100 feet in height, falling to a pile of moraine-hills over 200 feet high. The point where we reached the ice-cliff gave access to a slope down which steps could be cut to a snow-slope not too steep for a glissade. We ran down the moraines, and were at once on the swampy flat that fills the head of Foul (Agardhs) bay. A stream was waded, and we walked far out on to the flat to an amorphous region that was half land, half water. Stranded icebergs in the bay looked down upon us over the mud-flat. We had crossed to the east coast for the first time on record. I leave you to imagine our satisfaction.

The night that followed our return to camp was signalized by a hideous gale, in which the ponies suffered severely. A pool of mud surrounded the tents. Rolling up our loads, and the mud with them, we fought the way down the valley, and in two days reached Waterfall camp, where we divided, Garwood returning to Advent bay over Brent pass, Gregory and I descending the Sassendal to Sassen bay, and there turning along the coast. We camped at two different places, and made expeditions inland, climbing Mount Lusitania (3120 feet), whose summit Garwood and I had attempted but failed to reach from the other side. We also explored the large valley that divides in half the mountain region between the Sassendal and Advent bay. We named it De Geer valley, after the leader of the Swedish expedition, at this time engaged in surveying the coast of Ice fjord. An interesting group of side valleys enter De Geer valley from the west. They contain many small glaciers, and are surrounded by peaks of individual form. Before we could attempt to explore them vile weather returned, and thenceforward these peaks remained buried in clouds as long as we were in Spitsbergen. This area, and a corresponding valley that debouches on Ice fjord near the mouth of Advent bay, were the only portions of this instructive mountain group that we did not actually penetrate, or at least behold from several points of view. We returned to Advent Point thirty-six days after leaving it, and were startled with the changes made in our absence. The tourist inn was built, and was being painted. Other visitors, besides ourselves and the Swedes, had their camps on the spit. Presently

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000009

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

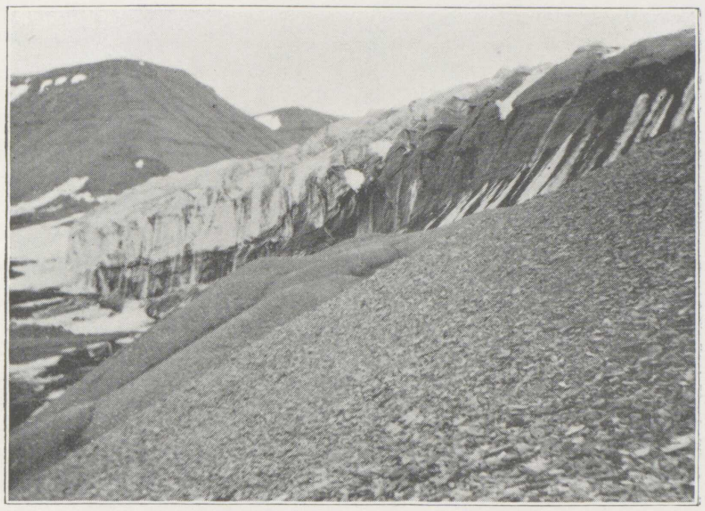


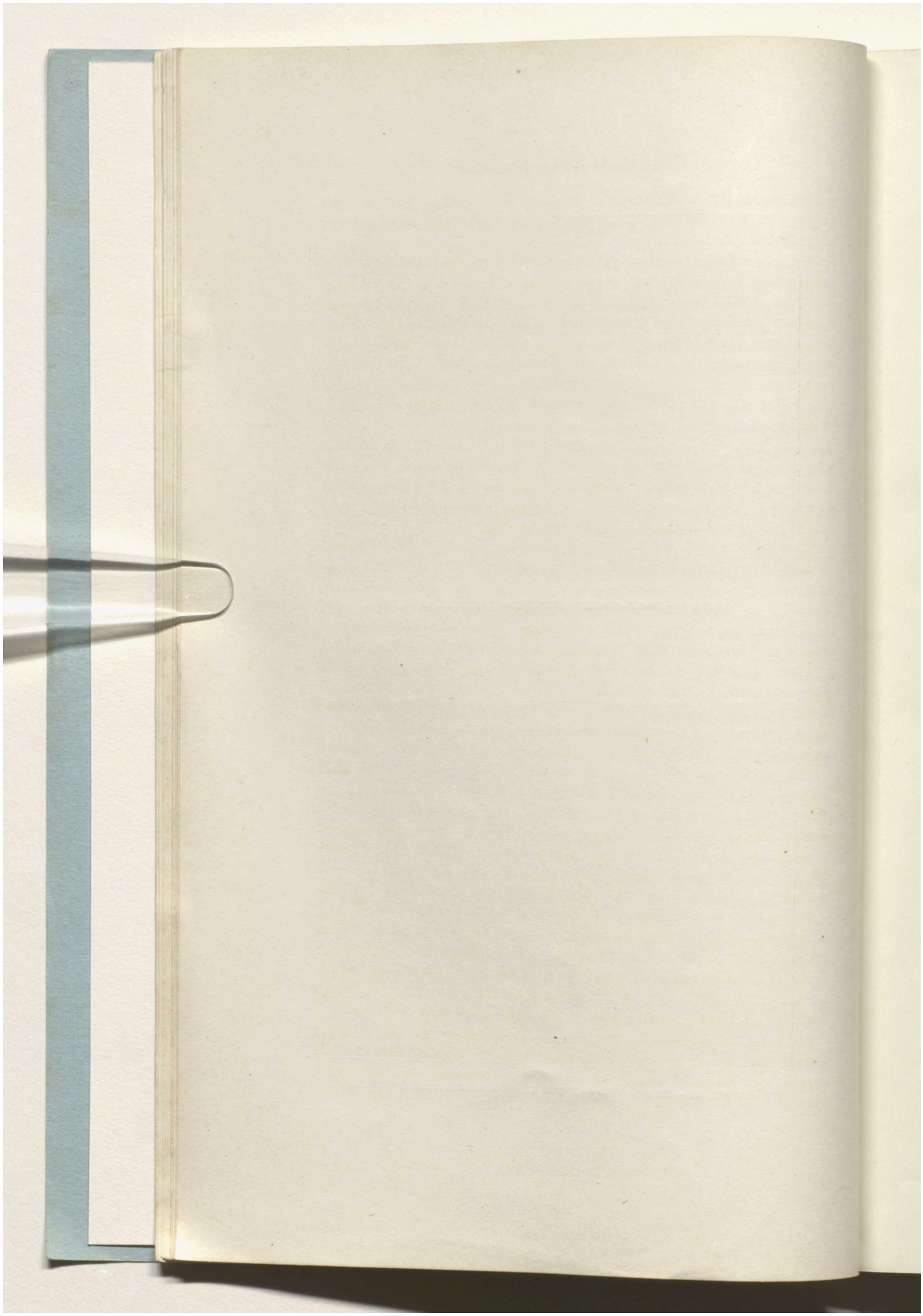
FIG. V.—IVORY GLACIER, OVERRIDING TERMINAL MORAINE.



FIG. VI.—VIEW TO WEST OF FIG. V., SHOWING FURTHER ADVANCE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000026

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

a German tourist steamer came in and emptied its passengers upon the shore. We felt that we had returned from the wilderness to a centre of advanced civilization.

Having thus very briefly related how we accomplished the main purpose of our expedition, I shall now still more briefly describe the second part of our journey. Whilst making the needful preliminary inquiries in England, as to what had been done in Spitsbergen, and what still needed to be done, I fell under the fascination of the varied and peculiar literature that concerns itself with these inhospitable shores, till the study of that literature became, for me, an object in itself, and not merely a means to an end. There is much in it that is topographically obscure; much, too, that depends for its interest upon the undescribed setting of scenery in which recorded events took place. Thus the attainment of some general knowledge of the Spitsbergen coasts from personal observation became a matter of importance to me, little though I expected to fall in with so rare a chance of accomplishing that end as the summer of 1896 afforded.

For this year the ice left the Spitsbergen coasts. While we were crossing the island, a tourist steamer advanced without difficulty or danger to 81° 32′—an amazing record. The sea was open away to the east as far as any vessel explored it. There was no ice in Hinloopen strait or in Wijde bay. When knowledge of these facts came to us, I hastened to hire the little 12-ton steamer *Expres*, which had been taking tourists up to see Andrée's balloon, and, as soon as we could obtain possession of her, away we sailed.

Quitting Advent point on August 5, we ran to Green harbour, picked up our geologizing companions, who had been working there, and steamed northward in dark and heavy weather. Snow and rain besoms swept across the sea one after another in rapid succession, and all the coast hills were hidden in cloud. The only cabin in our boat was no bigger than a grand piano, so that the five of us, having to cook and live in such close quarters, were not easily fitted together. There was no deck to stand on. Every inch of room was occupied by barrels full of coal. We tumbled in this fashion up Keerwyk (or Foreland sound), across the mouth of King's bay, then up the coast, past seven wide glaciers, called the Seven Icebergs, and through the South gat into Dutch bay, on whose western shore once stood Smeerenburg, the blubber-boiling establishment of the Dutch. Over against it, on Danes island, just where the "cookery of Harlingen" used to stand, we found the balloon, which we visited under Herr Andrée's guidance. His skipper sold us more coal, and away we went in the gloomy weather northward to find the ice.

Alas! the edge of the pack had come down more than a degree during the last fortnight. We found it all too soon in 80° 15′, and turned east by south along it for an hour's steaming, then north-east for four hours. The pack now stretched southward, a great cape of ice,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000024

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

as it proved, coming down upon Verlegen Hook. We feared that our eastward way was to be thus early closed, and our hopes sank rapidly. Between the point of the ice-cape and Verlegen Hook there was, however, a way by which, with tortuous navigation in and out amongst drift ice, we were enabled to reach open water once more. It stretched away to the northward further than we could see, so we steamed on again north-east by north, hoping to get round to the north of the Seven islands. There was a chance, almost a probability, that the pack which was rapidly coming down would beset Verlegen Hook before our return, but we decided to risk it and push forward.

A westward-bound sloop came in sight. We hailed her, and learnt that she had been hunting to the eastward of Outger Reps island, where a fortnight before all had been open water. The pack driving down had forced her to quit that region. Already, her skipper said, the pack was down on the Seven islands. Six hours' steaming carried us to 80° 39′ (Walden bearing east-south-east), where we found the pack again, stretching across to Table island. So we ran for Walden, of whose geological structure nothing had previously been recorded (I believe), and landed on its east side. Our ice-master, Bottolfsen, had served the Wellman expedition in the same capacity. With him we visited the ruins of Wellman's hut. We climbed about the weather-worn rock, and had striking views of the cloud-covered Parry's island and its neighbours, and away to the east as far as Cape Platen. Ice-blink showed all round to the east, and the edge of the pack was visible at no great distance. The sea where Phipps' vessels had so narrow an escape, and where young Nelson encountered the bear, was still quite ice-free. Nothing could exceed the desolation of the view in all directions, but especially to the south, where a heavy pall of cloud lay on the inland ice-sheet of North-East Land.

As it was hopeless, in our little iron boat, to try and push eastward, we ran back to Verlegen Hook, and found that a strong south wind was keeping open water off that important point; so we changed our plans once more, and decided to run down Hinloopen strait and see whether we could circumnavigate the main island. Some writer has told of the fine mountains that border this passage. I wished to see them, and, if possible, to get some record of them. As a matter of fact, they do not exist; there are only wall-faced plateau fronts of rock, in no respect striking till you come close under them, so that the scenery of the strait is tame from end to end, the sides and islands being very low in comparison with the width of the channel.

To us the most interesting object seen was the great glacier front that borders the west side of the strait for over 20 miles from Hecla Hook to Lomme bay. It is the edge of the sheet of ice that covers the New Friesland promontory. A fifteen hours' run, during which we saw hardly any floating ice, except a few pieces fallen from the glaciers,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

185



FIG. VII.— MOST WESTERLY VIEW OF IVORY GLACIER, ICE ADVANCING.

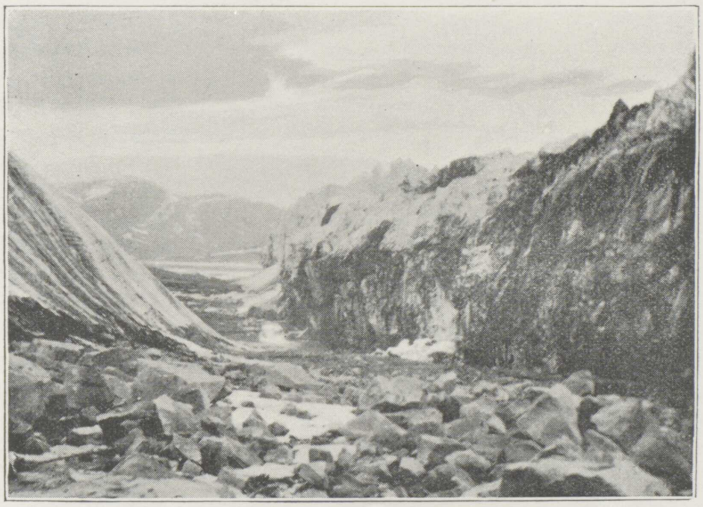
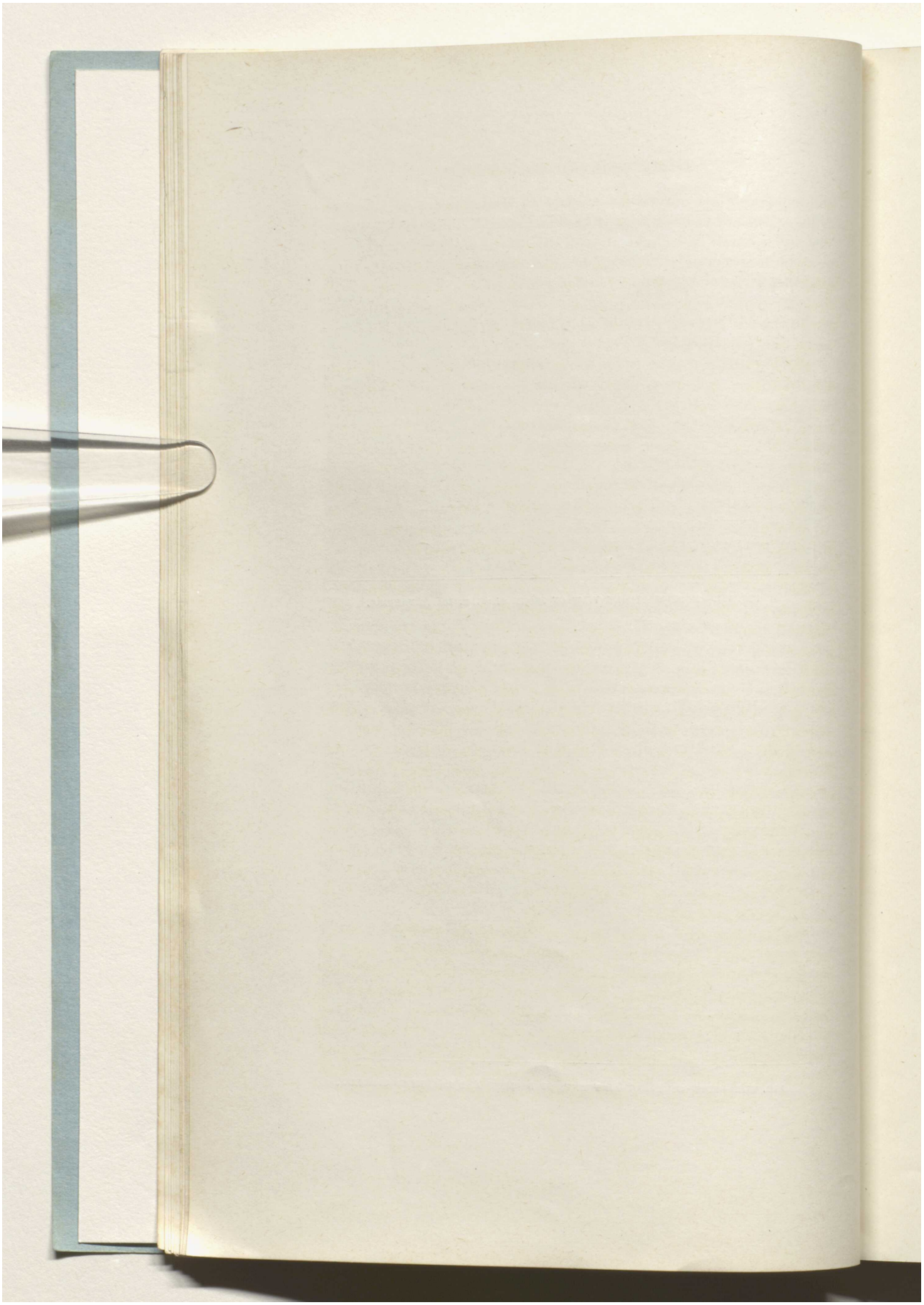


FIG. VIII.—VIEW OF TERMINAL FRONTS OF BOOMING AND BALDHEAD GLACIERS.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000051

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

brought us off Cape Weyprecht, towards which we steamed in hopes to get into Unicorn bay and through Heley's sound. But it was not to be. The bay was full of ice, and Heley's sound was unapproachable. Returning along the edge of the pack, which stretched far out into Olga sea from Barents and Edges Land, we rounded its north point, and then followed along it to the south-east. An ice-blink rising before us extended ever more to the east as we advanced, and finally filled the whole horizon ahead.

The high land of Wiche's Land rose above the horizon, and became more and more definite as we neared it. The pack stretched across to it, and we were strongly drawn to make the land, which no geologist has ever investigated. But neither was this to be. The ice-master refused to linger in these waters in such a tin kettle of a boat under existing conditions, when the ice-pack was, as we had occasion to observe, coming up from the south and would soon be at Cape Torell, where a walrus sloop that we hailed had found it only three days before. All we could do, therefore, was to stay long enough to sketch the outline of the land, and observe the sheet of hyperite that covers its top, and makes a nodding cap to its bold north cape.

The run back to Verlegen Hook presented no new features, save in fresh combinations of clouds, snow-brooms, and barren hills. We rounded the point through drift-ice, and then turned south to explore Wijde bay, again chiefly for the sake of beholding the mountains said to border it. Here we were not to be disappointed. The scenery of Wijde bay is superb. Its level-topped east side, crowned with the edge of the ice-sheet, is broken at three points, where great glaciers descend to the bay between splendid walls of rock. The west coast is lined by a row of mountains, some of grand form, and all together forming an impressive assemblage. A series of deep valleys cut back between them and lead many miles into the interior. The shores at the north end of the bay were buried under snow, and had an exceedingly desolate and arctic appearance, but a little further in a great change of climate became manifest. The snow-line rose to 1000 feet above sea-level; boggy valleys took the place of snow-flats, and such glaciers as there were all descended from high catchment areas of snow.

Having reached Cape Petermann, we made for the west shore of the west fjord, where I landed my companions, and proceeded on alone to the head of the fjord, to see whether it was worth while to land there and make a dash for Dickson's bay and back. The low clouds, however, would have rendered this a valueless exploit, for surveying would have been impossible; so, after sketching and photographing the mountains, I returned for the others, and we steamed back to the north. So strong a south wind (doubtless local) had been blowing for the last two days wherever we were, that we thought it likely Andrée might decide to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000047

مكتبة قطر الوطنية
Qatar National Library

ascend in his balloon. We hurried off, therefore, to Dutch bay again, where all was still. The south wind had not blown at that point till we came in.

After a few hours' pause, and obtaining some more coal, we ran out through Danes gat, and then for Magdalena bay. The sun was shining brightly for the first time in a fortnight, and we had a gay passage for a while; but just as we entered Magdalena bay, the "pearl of arctic scenery," as it has been called, a heavy cloud-bank came sweeping up with a squall from the south, and we were only just in time to see the beautiful peaks and steep glaciers that surround this blue inlet overwhelmed by the hurrying battalions of the sky. An hour or two later we were running down the coast again, bound for King's bay, which we entered to its head, to gain some idea of the way the inland ice lies in that neighbourhood, the trend of the glacier valleys, and the nature of the famous Three Crowns peaks. The clouds lifted a little and showed us these things for a brief interval, and all was hidden once more.

I had still an important observation to make in the branch of Bell sound, which is wrongly called Van Mijens bay. Its old name is Klok bay; Van Mijens is a little harbour outside Axel island, in the north shore of Bell sound. A straight run carried us to Cape Lyell, where Gregory was left to collect fossil plants. Then we crossed Bell sound to the north end of Axel island, and entered Klok bay through the narrow passage, where the tide was rushing in wild haste, so that the otherwise calm waters boiled about us and carried our boat this way and that like a cork. Once within the entry all was still. I landed the remainder of my companions on Axel island, and ran on alone towards the mouth of the valley of the Shallow river, or Dry fjord, which I visited for the purpose of linking up the rough survey Garwood and I made when crossing from Advent vale. This was no sooner accomplished than the engines broke down, and we had to anchor for three hours whilst repairs were done. I then visited the little-known and falsely charted south-east extension of Klok bay. It runs much further east than the chart indicates, and its enclosed inner harbour would be an excellent point of attack for this part of the interior of the island. Only late in the season, however, is it likely to be found ice-free.

When the others had been fetched from their different resorts, it was discussed whether we should run for Horn sound. But the necessity, under which I considered myself placed, to make all possible endeavours to get an observation for true bearing at Advent point, compelled me to return there at once, seeing that the steamer that was to carry us back to Norway was due within two days. My agent's blunder was the cause of this early return. I had ordered him, and he had contracted to arrange for us to be fetched about the middle of September. We accordingly went to Advent bay, where Gregory, H. E. Conway, and I

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000be

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

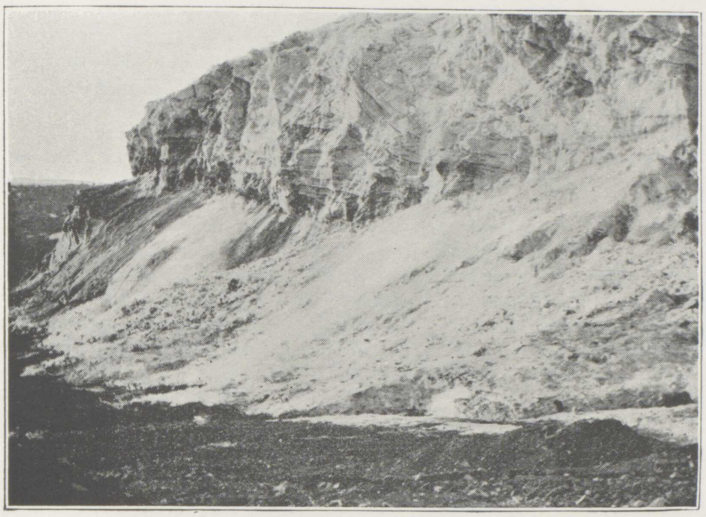


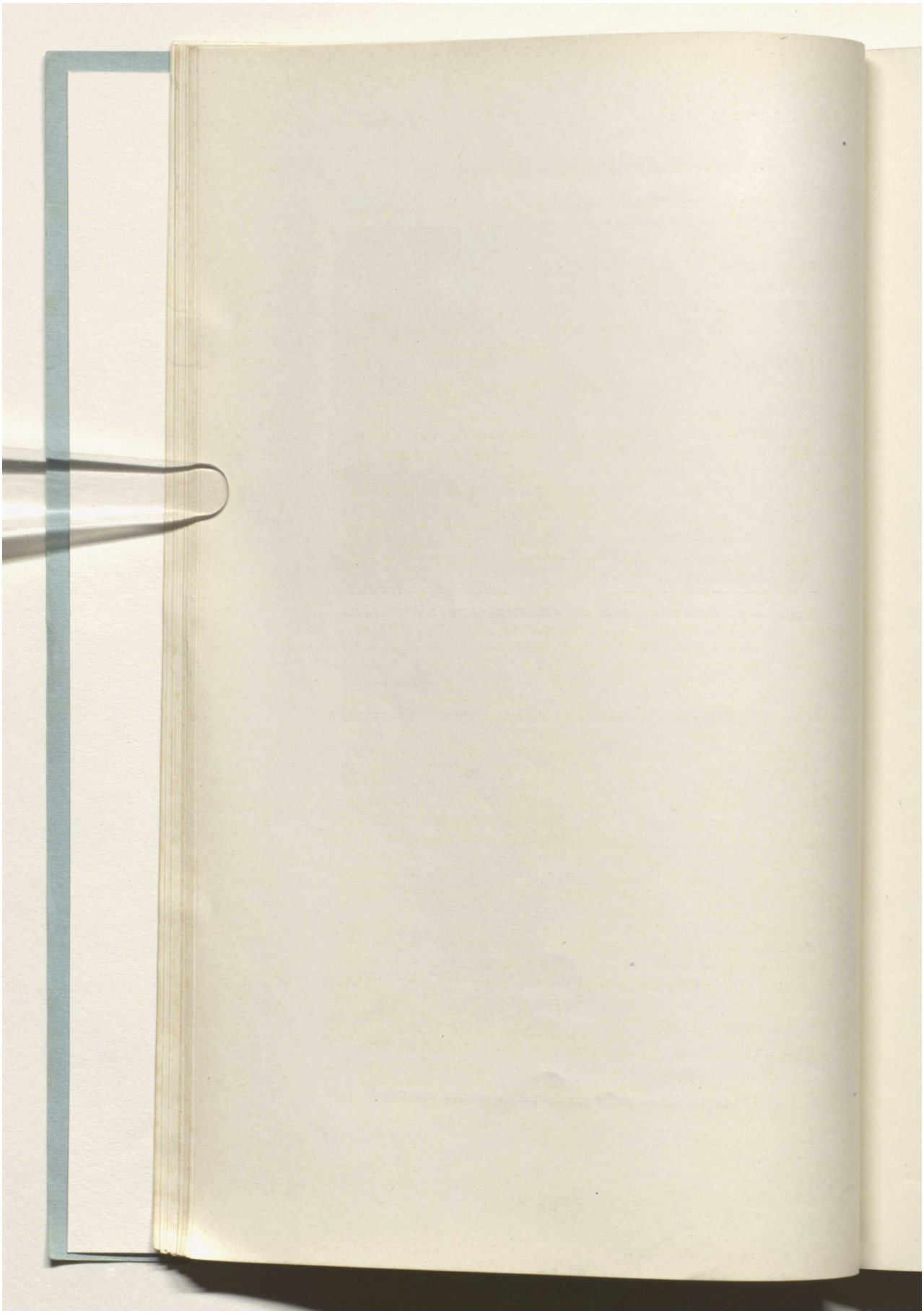
FIG. IX.—ICE TALUS FORMED FROM ADVANCING UPPER LAYERS, BOOMING GLACIER.



FIG. X.—VIEW SHOWING RAISED EDGE OF BOOMING GLACIER.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b4

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000039

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

were dropped to pack the baggage and make the required observation, whilst Garwood and Trevor-Battye went down to Horn sound and made the first ascent of Hedgehog mountain (or Horn Sunds Tind), whereof an account has been published in the pages of the *Alpine Journal*.

Before the reading of the paper, the PRESIDENT said: There is no occasion to introduce to you our friend Sir Martin Conway, who is so well known for his excellent work in the Karakoram, and I am quite sure he has done equally good work in Spitsbergen.

After the reading of the paper, the following discussion took place:—

Dr. J. W. GREGORY: After the long account Sir Martin Conway has given of the narrative of our expedition, it may be better if I refer for a minute or two to some of the scientific problems we went to study, as these were responsible to a large extent for the fact that we did not cover so much ground as we had hoped when leaving England. We never left the bog-filled valleys for the ice without feeling relief, and we never went from the ice to the valleys without regrets. No doubt it would have been easier and pleasanter to have spent the time scampering over the inland ice rather than working in the valleys and on the margins of the ice-sheet. We soon found that if we wanted to do any serious work we must keep in the valleys and on the margins of the ice-sheet. To take one illustration. In a paper read here two or three years ago, Professor Bonney denied that glaciers can do any important work in the way of erosion. In a paper read shortly afterwards by Admiral Markham, he treated this view as beneath criticism, and suggested it was impossible for any man who has seen the glaciers of Greenland to doubt that they had eroded the valleys in which they lie: accordingly, we wished to settle whether the fjords of Spitsbergen had been formed by glacial erosion or in some other way. In England we thought the most suggestive evidence would be obtained by examination of the watershed at several points at a considerable distance from one another, but we had not arrived a week before we saw we should have to tackle the question in a different way. What was wanted was an accurate map of a belt across the island, and not a sketch-map of the ridges. Sir Martin Conway altered his plans, and has made a map which throws much light on the topography and geography of Spitsbergen, and will serve as a basis for the geological map Mr. Garwood and I hope to work out during the coming summer. We don't bring back, I am afraid, any very startling biological novelties; but this will cause little surprise, as biologists have learned to expect as little from arctic work as the Pharisees expected from Nazareth.

There is little apparent connection between dragging sledges through peat bogs and the ordinary work in a museum; but, as a matter of fact, the knowledge gained and the general idea the journey gave me as to the conditions of life in a high arctic latitude will be of very great help in my daily task of trying to decipher the evidence of fossils as to former geographical changes. We also hoped to get a good deal of information as to the ways of arctic ice, and to detect characters by which to determine whether certain English glacial deposits had been formed by land ice, marine ice, or a central ice-cap. In Spitsbergen we could see these forms working side by side. It gave us information which both Mr. Garwood and I thought threw a flood of light on the ordinary phenomena of English glacial geology.

We often hear very exaggerated stories about the changes of climate that have taken place in the arctic regions. We hear of the shores of the Arctic Ocean having been fringed by coral reefs, while along the shores grew groves of palms; but I am afraid the collections we made do not support these exaggerated and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000065

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

extreme views, which at one time or another have very considerably influenced geology in England, especially as to changes of climate and their causes. We found the country full of interest and with so many problems to work out that the journey was not wasted. And for this we have to thank Sir Martin Conway for the great amount of trouble he devoted to the equipment and preparations.

The PRESIDENT: We have seen a number of portraits said to represent Mr. Garwood. I have some suspicion that some of them represent Sir Martin Conway himself. I am sure you will be glad to see and welcome Mr. Garwood here, and hear any remarks which he may have to make on the results of the journey.

Mr. GARWOOD: After the very thrilling account Sir Martin Conway has given you of my little adventure, I feel rather an impostor in standing before you to-night, for I ought to be somewhere down that river.

I will not take up your time with any general remarks, but I should like to describe to you, with the help of a few photographs on the screen, some of the most interesting points presented by the glaciers we encountered during our expedition across the island.

But before I do this, I show you a photograph of Sir Martin Conway making a survey at midnight on the top of Fox peak, and I should like to express my intense admiration for the manner in which he executed the map which we hold in our hands to-night. On this particular occasion I shivered for nearly half an hour, while he was absorbed in his work, with the thermometer several degrees below freezing-point, and a cutting wind blowing round us from the inland ice.

Turning to the subject of glaciers, this photograph (Fig. I.) shows very clearly the stratified condition of the moraine which accumulates under the ice. In England we have the problem of the Glacial Period to work out, and we sometimes encounter boulder clays, which, it is said, must have been formed under the sea, because all stratified beds must be formed under water. I just show you that we have in Spitsbergen moraines, which are stratified, being formed 7 or 8 miles from the coast, underneath land-ice.

The next slide (Fig. II.) shows a very interesting example of the action of some of the glaciers in these high latitudes. We have here a glacier composed of several tributary streams united in one valley; the lower portion of the ice-stream has been forced through a narrow channel, and the ice and moraine at the bottom have been bent over at the edges, so that when the ice melts back we shall have a contorted moraine produced. Thus we have examples of both stratified and contorted drift, and both have been formed under land-ice.

In Greenland we have exactly similar examples. I show you these to-night because it is interesting to note that we have the same phenomena occurring in Spitsbergen.

Then we have another perplexing problem of the Glacial Period in Britain—the formation of crescentic moraines. In Spitsbergen we sometimes find tributary glaciers flowing round the sides of mountains down on to the top of larger ice-streams, and as the ends of these melt, they deposit their terminal moraines on the surface of the main glacier; this latter flows down the valley, carrying the terminal moraines with it, and these are melted out and deposited far from the spot where they were formed (Fig. III.).

We had exactly the same thing taking place in England, notably in the neighbourhood of the Pennine range, when glaciers flowed down to the coast round mountain ranges whose summits stood up above the ice, resembling, probably, the Greenland "Nunatakken" of the present day.

Fig. IV. is a photograph to show you the terminal moraine of the Ivory glacier, consisting of rounded water-worn pebbles—an interesting example of a raised beach

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

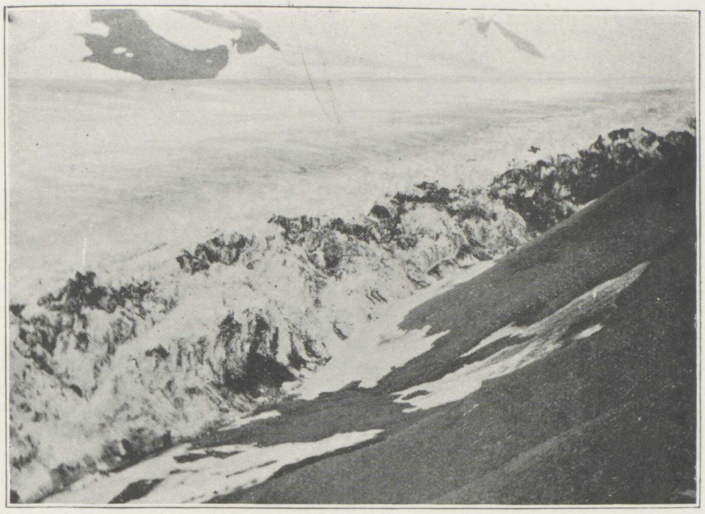


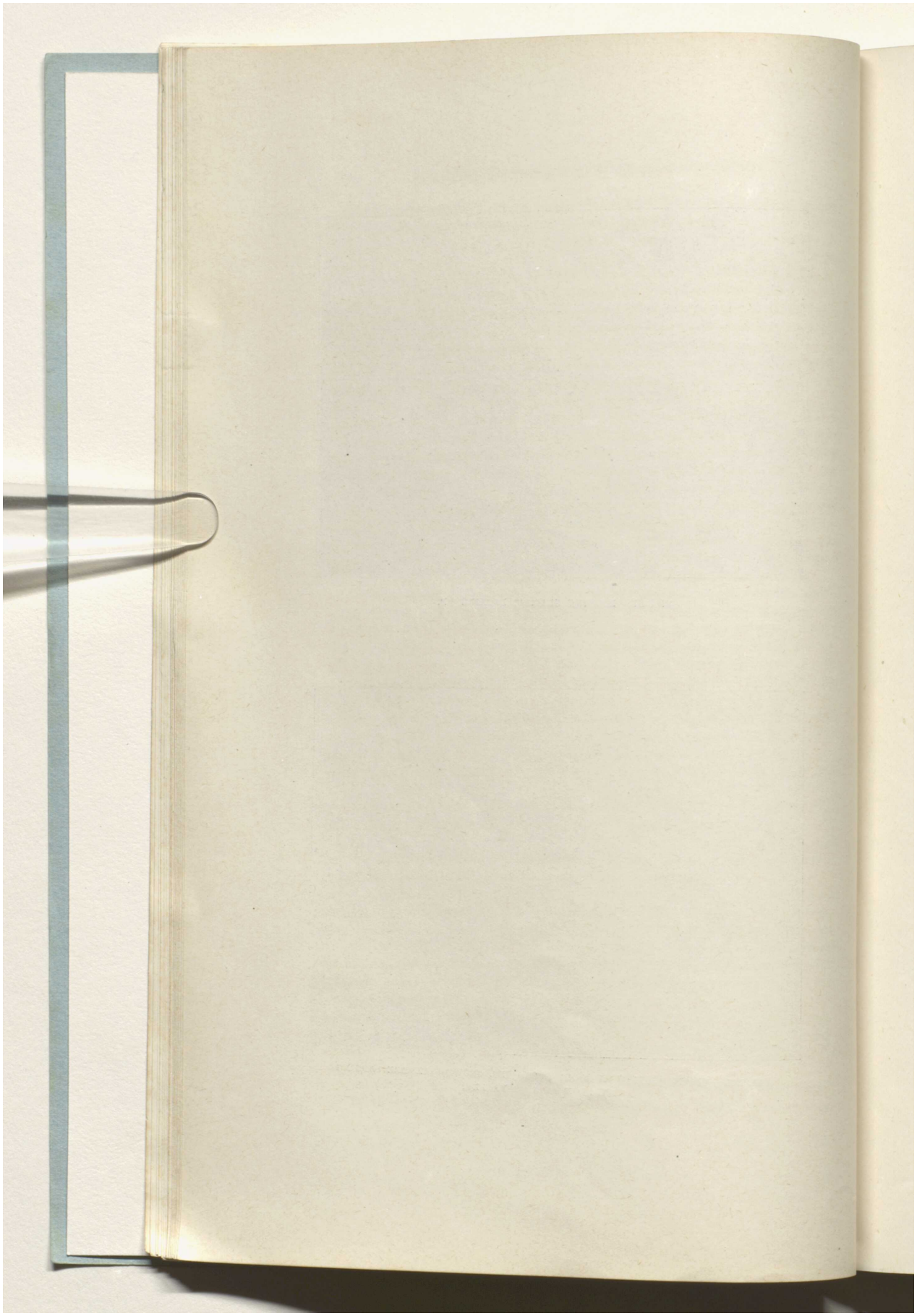
FIG. XI.—BOOMING GLACIER, LOOKING UP.



FIG. XII.—UPPER PORTION OF BOOMING GLACIER, SHOWING CENTRE SAGGING AWAY FROM SIDE OF VALLEY.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000ac

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000031

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

which has been caught up and deposited greatly above its original level. As far as we can see, the glaciers in Spitsbergen are for the most part advancing.

As we approach its westerly termination, this great glacier is seen over-riding its old terminal moraine (Fig. V.), whilst Fig. VI., taken further to the west, shows a remnant of the terminal moraine with the ice advancing over it.

An interesting point to notice is the mode of advance of these glaciers; the top layers, shearing over the lower ones, advance more rapidly, until they overhang to such an extent that they break off, forming a "talus" of ice below; over this the glacier advances, finally over-riding the moraine completely (Fig. VII.). Glaciers advancing in this manner do not, therefore, push forward loose material lying in their path, but flow over it; the lower layers of ice, embayed behind this obstacle, are, however, dragged over it by the upper advancing layers, and bring up with them fragments of the raised beach frozen into their under surface. Dr. Gregory and myself found no difficulty in collecting fragments of driftwood, shells, and bones of whales, mixed with pebbles, which had been raised several hundred feet above the original level of the beach in this manner. This fact is of great interest.

I went up that peak of which Sir Martin Conway spoke, to study the advance of Booming glacier. From here you can clearly see the character of the advance; the snout and sides of the glacier are over-riding the old terminal and lateral moraines, leaving a depression in the centre. Looking down on it in this way, it bears a striking resemblance to a large dish of trifle, the sides of which are edged with biscuits, represented here by the shattered pinnacles of ice.

It is interesting to compare the terminal face of Booming glacier with that of its shrunken tributary from the Baldhead, now fast receding into its own valley (Fig. VIII.), the latter showing the retreating snout characteristic of an average Swiss glacier, while in the distance can be seen the old lateral moraine.

The next photograph (Fig. IX.) shows a nearer view of the advancing front of Booming glacier, with its characteristic ice "talus." Figs. X. and XI. are two views, one looking down the glacier, and the other looking up; in both of these the raised edge and depressed centre are noticeable. During our first visit, Dr. Gregory and I attempted to cross the glacier. I succeeded in getting up one side, but we doubted if the descent of the other side would prove feasible, and prudently beat a retreat—a precaution which my subsequent observations completely justified (Fig. IX.).

The last view (Fig. XII.) shows the upper part of the glacier, where the centre is shrinking away from the sides. In both this and the neighbouring valley the shrinkage was plainly visible.

An important point to consider is, "Why is this glacier advancing?" It might be said, "Because the climate is getting colder." I am inclined to think that the advance is due, on the contrary, to an amelioration in the climate. The centre has a shrunken appearance in the upper part of the basin; it is, in fact, being drawn away from the sides of the valley. This would not be the case if the advance were due to an increase in the snowfall, and the fact that the Baldhead glacier, before alluded to (Fig. VIII.), is retreating, although occurring in the same snow-basin, also militates against this hypothesis. We know that a rise in temperature increases the mobility of ice, causing it to move more rapidly, and we must, I think, attribute to this cause the general advance of the Spitsbergen glaciers at the present day, rather than to any refrigeration of the climate.

Sir Martin Conway has told you of the difficulties we had with the sledges drawn by ponies. It has been suggested to me that we did not use the right draught-animal, and, as many of you may wish to go to the district after listening to Sir Martin Conway's very interesting paper to-night, I have brought you an

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000004

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ideal traveller's equipage. If you harness a polar bear in the shafts, with a reindeer leading, you will, I am convinced, make extremely rapid progress.

The PRESIDENT: Mr. Trevor-Battye requested that he might be called upon last. I have no doubt he was anxious not to take the wind out of anybody else's sails.

Mr. TREVOR-BATTYE: Mr. Trevor-Battye wished to be called upon last in the hope that he might not be called upon at all—a very good reason; and really, after Sir Martin Conway's most charming speech, there is not much for him to say, especially as he is not supported by any views or photographs, although in the next room will be found exhibited his sketches of Dickson's bay, Wijde bay, Hinlopen strait, the Seven Islands, and other places. Frankly, without illustrations it is very hard to be interesting, and therefore, I think, the less I say the better. I will only add to Sir Martin Conway's interesting account, that in Eckman's bay there is a very striking instance of an advancing glacier. This, which I named the "Splendid glacier," is advancing so rapidly that, within the twenty-five years or so that have elapsed since North fjord was surveyed, it has filled up a great part of the head of the fjord, which is put upon the charts as a large branch of the sea, in the middle of which is an island. It has now advanced upon the island, and within a very few years the head of the fjord will be entirely filled up. On the other hand, the most important glacier at the head of Dickson's bay is a retreating glacier, which is dying back very rapidly. It is now so late that I will not ask you to listen to anything more.

The PRESIDENT: I am sure the meeting will agree with me that we have seldom listened to such an interesting paper, and to such interesting speeches as those that followed it. The description given by Sir Martin Conway of the formation of hills and valleys is particularly interesting and instructive because of its general application. I should have wished to have made various remarks on this subject, only I have a sore throat; but I cannot sit down without referring to the way in which Sir Martin Conway has done his work. You already know, from what you have heard, how able he is as a descriptive geographer, and I wish to bear witness to the trouble he took before starting, and to the trouble he is taking now, to inform himself of the former history of Spitsbergen. I say without any hesitation that Sir Martin Conway has a greater knowledge of the literature of Spitsbergen than any other living man. I am sure you will all wish me to return our very sincere and hearty thanks to him for his most interesting description of Spitsbergen, and for his admirable series of photographs, and you will wish me to thank the members of his staff for the valuable information they have given us.

SIR MARTIN CONWAY'S MAP.—The general outline has been taken from the Admiralty charts, but enlarged, and the interior filled in from a sketch-survey made in June, July, and August, 1896. The southern coast-line of Sassen bay is taken from a map made in 1892 by the officers of the French man-of-war *La Manche* (*Bull. de la Soc. de Geographie*, 1894, p. 56). The coast-line of Temple bay and the northern part of Sassen bay are from Prof. A. G. Nathorst's survey made in 1882 (*Ymer*, 1883, p. 134). The position of peak "Milne-Edwards" was determined by M. Charles Rabot in 1892, on the occasion of the visit of *La Manche*. Details of glaciation of the east coast are taken from Dr. W. Kükenthal's map in *Petermanns Geogr. Mitteilungen*, 1890, Plate 5. Dickson's bay is from the survey made in 1883 by Lieut. Stjernspetz, the neighbourhood of the house at Cape Thordsen is from a survey by the same officer. The coast-line of Klaas Billen bay is from Nathorst and De Geer's survey of 1882. Skans bay is from a survey by the officers of *La Manche* in 1892. The corrections and additions at the head of Dickson's bay are from Mr. Trevor-Battye's observations in 1896.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

TWO YEARS' TRAVEL IN UGANDA, UNYORO, AND ON THE UPPER NILE.*

By C. F. S. VANDELEUR, D.S.O., Lieut. Scots Guards.

STARTING from Mombasa on September 7, 1894, with Mr. Jackson and Captain Ashburnham, and a large caravan of about four hundred men, carrying arms and ammunition, we reached Port Alice on Lake Victoria at the end of November, after a most successful march under the leadership of Mr. Jackson, during which only two men died. After a short stay in Uganda, I started with Major Cunningham for Unyoro and the Nile. We followed the road leading by Singo and across the river Kafu at Baranwa, and eventually arrived at the headquarters, Fort Hoima, on January 1, 1895, where Major Cunningham took over the command from Captain Thruston, who was returning home. We were delighted to get our ponies safely across the very bad swamps, and they were the first animals to reach this country from the East Coast. Halting here for five days, we marched to Kibero on the 7th. The country becomes more open on nearing the Albert Nyanza, and rocky in places, until all of a sudden the edge of an enormous escarpment is reached, 1200 feet below which lies the great lake, as a rule covered by a white haze which obscures the horizon and the mountains on the western shore. Our home for the next three weeks was to be a steel boat about 20 feet long, into which we packed ourselves with a crew of sixteen men, consisting of eight Sudanese, most of whom had been on Emin Pasha's old steamers, and eight Zanzibaris, including our own servants. They were certainly the worst rowers I have ever seen. The two races were also always accusing each other of doing no work. Besides them, we had a friendly Wanyoro chief called Keyser, who spoke the Lure language.

We entered the Nile on the second day, and, on nearing Wadelai, found the river narrowed considerably, with a very strong current, which we found it difficult to make way against on our return journey. We camped one mile further on, at Emin Pasha's old fort of Wadelai, which was then completely overgrown. We set fire to all the grass round, as much to diminish the myriads of mosquitoes as to give us a clear field of fire in case of surprise, the natives appearing very hostile. The mosquitoes throughout the journey, at night and in the early morning, made life miserable, and it was a penance to take observations for latitude and longitude at night. After Wadelai, we glided rapidly past narrow channels formed through the floating vegetation and papyrus, stopping sometimes near the villages on the banks to ask for news, which was very unreliable, some of the natives even stating that the Dervishes were close in front. Our guide, crouching down in the

* Paper read at the Royal Geographical Society, November 23, 1896. Map, p. 472.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008a

مكتبة قطر الوطنية
Qatar National Library

bows of the boat, frequently invoked Allah after this, and comforted himself with a long pipe. The further we went from Wadelai, the more friendly the natives seemed to become. They are continually fighting among themselves, and lead a precarious existence. Beyond Bora, an old Egyptian fort on the right bank, the river is very broad—about 1½ mile—though the actual channel through the sud is only about 500 yards in width. There is a large village at Unigwe, under a chief called Abu Suma. The banks between here and Dufile seemed well populated, though the country did not look very inviting. Villages were hidden away among the high rocks and boulders on small hills close to the river, and there was a certain amount of mtama and dhurra cultivation. We could see the high hills behind Dufile in the distance, and late in the afternoon of January 14 we reached the old fort, situated close to the water's edge at a bend of the river on the left bank. The parapet and ditch were still very distinct, and there were some mud-brick houses, some lemon and cotton trees, the only signs remaining of the Egyptian occupation. It was a relief to get on shore, after sitting cramped up on one's tent and baggage, together with a maxim gun, in the stern for no less than ten or twelve hours. We also felt the heat very much after the climate of the Lake districts.

I believe we were the first white men to have reached Dufile, since the abandonment of the place in November, 1888. We walked across from a village called Karas to a bend of the river below the head of the rapids. Here the river was only about 40 yards broad, the banks wooded, and strewn with enormous boulders of rock. The river makes a great bend where it forces its way through the hills, and shortly afterwards dashes down over the Fola cataracts, where, of course, navigation is impossible. The Madi natives are a fine, strong-looking race, and with them we met a representative of Abu Sulla, an important chief living one day's march below Dufile, on the right bank. He was dressed in white cloth, which was probably obtained from the Arabs or Mahdists to the north.

Our return journey to the Albert Nyanza was rather tedious, owing to the strong stream. Near Unigwe we saw hartebeest and some other antelope with short curved horns. There were plenty of water-buck, and an enormous quantity of hippos, especially just above the rapids, where we at first mistook them for rocks. On the eastern shore, up to the Victoria Nile, we could see a fine open grass plain, with scattered bushes, along which some stately giraffe were walking, also some Senegal hartebeest and other antelope. It is difficult to make out the entrance of the Victoria Nile, and there is always a mirage on the horizon. There is a good deal of sud, and many floating islands at the mouth of it. On a second journey on Lake Albert, I visited the fort at Mswa and the west coast up to Mahagi. The lake seems certainly unhealthy to people coming from the high ground, and on returning to Fort Hoima, the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

whole of the escort—twelve men—who had been left at Kibero, were very ill with fever. One man died in consequence. I myself was down with fever; the men had indulged in hot sulphur baths while at Kibero, and must have taken a chill afterwards from the cold wind off the lake, which would account for their being so ill.

The people on the west of the Albert Nyanza used to pay tribute to Kabba Rega, but that of course is at an end now. They fight among themselves a good deal. The Shulis in the angle contained by the two Niles are inclined to be friendly. With steamers on the lake, and the railway to the Victoria Nyanza, a large extent of country would be opened for trade, and there is no limit at present to the ivory to be



VIEW OF LAKE VICTORIA FROM MIRAN, NANDI COUNTRY.

obtained from the countries bordering the Albert. There is no hindrance to navigation down to Dufile.

Soon after our return at the end of January, it was found that Kabba Rega had broken the truce concluded in December, that his envoy had run away, and that he had raided the country south near Toru, killing friendly chiefs, so that hostilities broke out again. I accompanied three expeditions during the next seven months, and I was enabled to survey the whole of Northern Unyoro, including the course of the Victoria Nile from Lake Ibrahim to the Murchison falls; also a part of the Lango or Wakedi country. The surveying was carried out under a certain amount of difficulty, as the country was hostile, and one always had to have an escort.

On our return we heard that Mr. Jackson was now the acting commissioner, in place of Colonel Colvile, who had been very ill, and started home.

The most notable landmark in Unyoro is Mount Fumbi, which is

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

three-quarters of a mile long, and about 150 to 80 yards in breadth at the top; it has precipitous sides, covered with grass, low trees, and shrubs, and is 762 feet above Masindi fort, the present headquarters, and 4640 feet above the sea. It can be seen distinctly from most parts of the country, even from close to the Murchison falls. From the top of it one has a magnificent view over the country, which, however, looks decidedly disappointing; the dull green of the swamps preponderates, bits of yellow here and there mark the mtama cultivation, intermingled with banana groves, especially to the west and north-west, which is very thickly populated. Close to the east, between the Kisoga line of hills, lies a small lake fringed with papyrus, from which rises the river Kata-gurakwa, that flows through a narrow gorge in the hills, and across a flat plain covered with low trees to the Kafu river. Far to the north-west several hills stand out, among which the Gisi peak is the most noticeable. The ground slopes gradually down towards the lake in gentle undulations. The valleys, in the immediate vicinity of Mount Fumbi, are very fertile, and covered with quantities of Indian corn, dhurra, mtama, tobacco, semsem oil, and bananas plantations. The castor-oil tree is also often found. This hill is used as a refuge in time of war, and we found some tusks of ivory hidden away on the top, one of them weighing no less than 164 lbs. Kabba Rega is still supposed to have a quantity of ivory concealed in the swamps and rivers.

In the first expedition we left the high ground to our left, and found the road as far as Kangara hill very bad indeed; we had to cross two deep swamps, one called the river Tabashari. After this the country became more open, and covered with nice short grass. The road appeared very well used, and led along the base of the ridge, running north-east from Katonezi to the gorge at Kisoga, where there was a very well posted ambush of Wanyoro. This district was under a chief called Mbogo, who with Irata, another important chief, have now retired with their king into exile in the Lango country. We marched away over the waterless plain round Kaduku hill, another very prominent landmark to the Nile, which we joined near Kunguru island. The country here is very flat and open, and dotted about with lovely Borassus palms. It was hard to believe that the Nile was really in front of us—it looked far more like a great papyrus swamp; and, indeed, it was not till reaching Magia hill that one was enabled to see the water, and get a view of this magnificent river, over 1000 yards broad, and truly, as Speke described it, "a giant at its birth." Here we met Captain Dunning, D.S.O., and Captain Ashburnham, who had made their way with another column by a very good road along the river Kafu *viâ* Mruli. The former gallant soldier and best of comrades died afterwards, to our great sorrow, whilst we were transporting him and also Major Cunningham, both severely wounded, to our nearest station. I do not think Sir Samuel and Lady

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000084

مكتبة قطر الوطنية
Qatar National Library

Baker could have execrated the fœtid swamps and dense overgrowth more than we did whilst striving to get the stretchers over and across these obstacles.

The river Titi runs into the Nile close to Magia hill, and in rain is quite impassable. In the second expedition we travelled by a higher and much better road *viâ* Kibugumia and Katonezi, through the same gorge at Kisoga, and across the level dried-up plain to Mruli, where a column with Captain Teruan, D.S.O., and Lieut. Madocks joined us from Uganda.

The road through the hills was the main road to the old capital at Ruampara, and Kabba Rega's subjects were certainly obliged to keep the roads in very good order; the old bridges across the swamps, made of palm trees, were still standing. We found a small village called Chagwe in the plain, where the water was very bad and scarce.

Mruli used to be the old capital in King Khamrasi's time, in 1864, and has always had a certain importance from being on the main road to Uganda. This was the most southern post occupied by Gen. Gordon, and I saw the site of the old fort on the right bank of the Kafu. It is low and unhealthy, and there is a great deal of sud along the banks of the Nile here, which is also continually blocking up the mouth of the Kafu, only about 30 yards broad. A few miles up the Kafu there is a fine grass plain on both sides, where there are to be found elephant, kobus kob, Jackson's hartebeest, also smaller antelope. The river there is a nice running stream between steep banks, and several villages and banana plantations are scattered about in the distance.

The Nile at Mruli is about 900 yards broad, and had distinctly risen since I was there in February, and one was able to see the water over the papyrus. We heard afterwards that Lake Victoria had risen considerably, which would have accounted for it; in fact, the pier built by Colonel Colvile at Port Alice was completely covered with water.

After considerable opposition, the passage of the Nile was forced at Mruli, and the force crossed to the other bank, which is pretty steep, and at first gives one the impression of being an island. Canoes had been brought overland all the way from Lake Victoria, in sections, and the ribs were then sewn together. The Wanyoro do not understand making these canoes themselves, and only use dug-outs, made principally of the palm trees. Mr. Grant brought some canoes down the river from Namionjwa, one of which was called the flag-ship. It was hewn out of a single tree, and held easily fifty men, with a maxim gun in the bows.

We were now in the unknown Wakedi country, and made our way along the right bank of the Nile. The country was thickly wooded with very fine trees, and 10 miles to the east lay some high hills

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000091

مكتبة قطر الوطنية
Qatar National Library

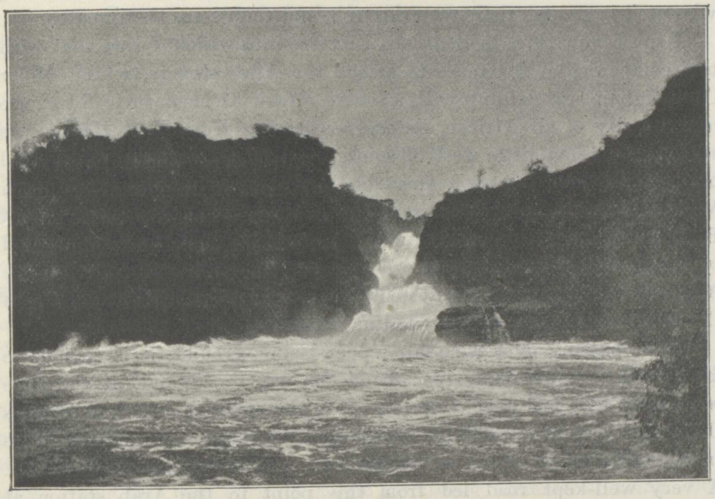
between Kalengary hill and the high Mahorsi ridge. I noticed several traps for hippos formed by upright poles with weighted spear-point arranged so as to drop on the animal. There was a lovely bit of country at Kitao, opposite Kajumbura island, covered with Borassus palms and shady trees, with a green lawn stretching down to the water's edge. The remains of Kabba Rega's residence, which he had well chosen, were still to be seen, and on the rising ground among the trees about a mile off were some Wakedi villages. Our troubles were now to begin, and between here and Foweira we had to cross deep swamps and rivers running into the Nile. No less than seven men were frightfully bitten by crocodiles, two of them about 100 yards behind me. Three succumbed to their wounds later on from blood-poisoning. A crocodile scare occurred very easily after this, and it was alarming to see the great mass of people swaying from side to side in the deep water in their endeavours to get out of the way of the supposed crocodile. Our next camp, Kosoka, was situated between the river and a curious hill called Kibuze, on the top of which are strewn large blocks of granite. This hill can be seen from Lake Kioja. On reaching Niamabare, I followed the course of the river Lenga for some way on a flying column with Lieut. Madocks. This is a large river, which, according to a Wakedi prisoner, extends for a long way inland. We passed through several large villages, which consisted of a quantity of big cone-shaped huts, with a curious entrance forming a porch about 3 feet in diameter. The interior of the huts was in some cases painted white, and ornamented with rough patterns. They had no protection in the form of a fence round, and apparently the people live in peace with each other, although they do not owe allegiance to any one man, and each village is quite independent of the other. This fact would make it rather difficult for any expedition entering the country, as, although some villages might be friendly, the others could not be depended upon. The people grow large quantities of mtama, dhurra, sweet potatoes, semsem oil, tobacco, beans, etc., and have plenty of honey. They possess few cattle or sheep, but a great quantity of dogs, usually about the size of a fox-terrier, and a yellow colour. The country is covered with low trees and bushes, and grass about 3 feet high. The people, as can be gleaned from their name, Wa Kedi, which means naked people, wear absolutely no clothes. They are a small race; the men have the centre teeth of the lower jaw taken out, and some have beads sewn on to a tuft of hair at the back of the head. They are a formidable race armed with spears and poisoned arrows, and are fond of attacking at night. Some days to the north-east along the Lenga is a country said to be full of camels, donkeys, and ponies, and a people wearing gold ornaments in their ears. The people north of the river Dukhi seem to be quite different, and have walled villages. This river runs into the Nile at Foweira; the current is very rapid,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008a

مكتبة قطر الوطنية
Qatar National Library

and a large Waganda canoe was upset when trying to cross it, which resulted in the drowning of a very nice chief and about ten men.

We recrossed the Victoria Nile at Foweira, about where Sir Samuel Baker crossed in 1872, and although the river is about 500 yards broad in the open, and there is a strong stream, nearly all our two thousand cattle captured from Kabba Rega swam safely over. Navigation ends soon after this, when the Nile begins to dash down over the Karuma falls in a succession of rapids to the Albert Nyanza. In the angle contained by the Nile here the vegetation is very thick, and there is dense grass about 14 feet high, also what may be described as thin forest. A most wonderful old woman, wife of Khamrasi, the former



MURCHISON FALLS, VICTORIA NILE.

king of Unyoro, and mother of Kabba Rega, was captured on this expedition, with several members of the royal family, by Captain Ashburnham. She had escaped being thrown with the remainder of Khamrasi's wives into his grave as described by Baker. She is enormously fat and unwieldy, and is always carried about on an angareb (bedstead). She is reported to be very bloodthirsty, and used to think nothing of ordering fifty people to have their heads cut off in her own district, which used to extend south from Hoima to Bugoma. The royal family will not eat potatoes or bananas, and as women in Unyoro will not eat chickens or sheep, she is rather difficult to feed. However, as long as she gets plenty of pombe, which is the intoxicating spirit made from bananas, and plenty of milk, she is quite happy. It was curious to see in what awe the Waganda people seemed to be of her, and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

I have heard the chiefs say that not one of them would dare to touch Kabba Rega even if they came up with him. We marched back from here to Masindi, where a strong fort was built, about $1\frac{1}{2}$ mile due west of Mount Fumbi, and a little east of Baker's old fort. It is exactly in the same latitude as Kibero, namely, 1° 41′ N., and Mruli is in 1° 39′ N. This is our most northern line of occupation; the whole of Unyoro has now been definitely declared to be in the Protectorate.

On our return to Hoima, we found that they had been having exciting times there with lions, which had carried off several people. The natives all said they had never heard of lions there before; they fortunately went away from Hoima after this, but took some women and children from Kitanwa in July. The grass huts proved little obstacles to the lions, who used to scratch their way through, and then seize the inmates.

I must now turn to Southern Unyoro, into which I was sent with two companies of Sudanese to attack the Arab slavers, whilst Major Cunningham was laid up with a severe attack of hæmaturic fever, the most deadly of all African diseases. Starting from Fort Hoima, we steered at first a little west of south on Msaga Ncasi, a high conical hill, round which there is a great deal of cultivation, and then through Misriandura, past the left of some high hills, which form the gate of Bugoma. This latitude, 1° 13′ N., was the most southern point reached by Baker in his route from Mruli to Vacovia, when he discovered the Albert Nyanza. We then crossed two big swamps, the headwaters of the Kafu, which can be seen winding away in the distance.

After passing over some fairly open rising ground, it is curious to find, 5 miles further on, a river about 30 yards broad, and, at the time we crossed it, 4 feet deep, running off in the opposite direction towards the Albert Nyanza. This river is called the Ravasanja, and would be impassable during the rains; it rises in the same swamps as the Kafu. A very well-kept road led from this point to the Arab station at Mwenda's, which we had the good fortune to surprise and capture, and where many slaves were found; also a quantity of gunpowder, arms, ivory, and a great quantity of cloth. I may mention that these Arabs had been in the country for some years, and it was on them Kabba Rega depended for his supply of gunpowder and guns in exchange for slaves and ivory. One woman told me she had been sold for three goats, with one goat extra for her child.

The country between Mwenda's and Kisimba is very fertile, and covered with banana plantations and cultivation. After crossing a deep swamp and river called Embaya, the country alters entirely, and one enters a line of rugged hills, covered with blocks of granite in curious and fantastic shapes. Streams rise in these hills, which rapidly become papyrus swamps. Passing through a gap in the hills, we gradually ascended to a high mountainous plateau, where there is a big village called Bianja. Further on we reached the Msisi river, which

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

flows to the west, turning and twisting through the high rocky hills on each side of it. We could see the Nakabimba fort, just built on a high hill south of the Msisi by Mr. Foaker; and to my delight and astonishment, who should come down to meet me but my former adjutant and brother officer, Captain Pulteney, whom I certainly did not expect to meet in this wild part of Central Africa. Mr. Foaker said he had seen the snow on Ruwenzori three times during the six weeks he had been there, but I was unlucky enough not to get a good view of it.

The fort is in latitude 38′ 24″ north of the Equator, and is 4582 feet above the sea, and it was naturally much colder and fresher. It is a wild and rugged country, but there are a good many Wanyoro living in the valleys among the hills. The Msisi in rain is very deep; it is crossed by means of a causeway made by bundles of papyrus heaped one over the other. I returned by a different route as far as Mwenda's for the purpose of surveying, leaving the granite hills at Bwyaga. Here we were almost on the watershed, and the ground sloped down to the Albert Nyanza on the west and north-west.

The territory between Hoima and the Msisi river used to be under the chiefs Rabadongo, Chikakule, Abaswese, and Mwenda, who have been hostile so long; they have all come in to make peace now, and the two former were at Kampala at the beginning of this year. The people have settled down, and are making roads and cultivating their fields. They are not so civilized as the Waganda, and their huts and villages are not nearly so neat. They make the same bark cloth, and dye it black by putting it into the mud of a swamp for one day, and then leaving it in the sun. Their musical instruments consist of primitive stringed instruments, drums, horns, and whistles. They believe in a god called Rubanga, to whom they sacrifice goats, chickens, etc., in case of severe illness or at the time of war, and there are medicine men called Ubandwa, who perform magic by killing animals, or using the leaves of plants. They used to try and bring disaster upon us by burying a sheep with its throat cut and head just out of the ground, also by leaving a chicken in an earthenware pot on the pathway; the Sudanese were always chary of going near these. After a funeral, the relations of the dead man sacrifice a goat, and are supposed to remain in the house for a period of seven days; and when a king died, there used to be a general slaughter for one day, when most of the inhabitants hid themselves as far away as possible. The men and the women are great smokers, and make very good earthenware pipes, also very good pottery.

The jiggers were a perfect plague in this country, though they are now making their way towards the East Coast of Africa. Besides various kinds of grain, beans, sweet potatoes, bananas, yams, etc., sugar-cane is grown in some places. Locusts form a certain food-supply, and white ants are eagerly sought after. The natives prepare coverings of straw on the hillocks where they are to be found, and capture them by means

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000045

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of fire at the period of their transformation into winged insects. During a long night march we undertook to surprise Rabadongo, the king's katikiro, at Misriandura, and a force of Wanyoro and some Arabs, we were astonished about 1 a.m. at seeing fires in all directions, and at once concluded that our column had been detected, and that these were watch-fires to announce our approach. The country was hilly and thickly populated, and these fires made a very weird effect. It turned out afterwards that they were only the fires made to capture the white ants.

The climate of the uplands of Unyoro is a fairly good one, and is, I think, drier than that of Uganda. The maximum temperature registered at Fort Hoima, during the time I was there, was 89°, and the minimum 49°; as a rule, the thermometer did not go below 60° at night. The rains are very variable. In September, October, and November there is usually most rain; and July was the coolest month. There will be a great demand in this country for cloth, European clothing of all sorts, boots, shoes, etc.

In September I received orders to proceed to Uganda with a company of Sudanese from the Unyoro garrison, to take part in the expedition against the Nandi tribe east of Lake Victoria, who had been cutting up caravans on the main road to Uganda, and had also treacherously murdered a trader named West. I returned by a different and most excellent road by Mruli, and along the Victoria Nile to Lake Kioja.

On arriving in Uganda, I found that Mr. Berkeley had become commissioner, and was now at Port Alice. Kampala, under the charge of Mr. George Wilson, was in a very flourishing condition; the size of the town had increased, and was increasing daily, all the people seeming very happy and contented. An interesting event happened while I was there, which was the arrival of Bishop Tucker's large caravan, with which were five missionary ladies, the first who have ever reached Uganda, and I am glad to say that they all arrived in good health after their arduous march. There was great excitement among the people, who went in crowds to meet them. Bishop Hanlon and the English Roman Catholic mission had also arrived lately, after an adventurous march, and have established themselves on one of the high hills of which Mengo is composed.

We started from Kampala with the troops for the Nandi expedition on October 14, and marched round the lake, through Usoga and Kavirondo, crossing the Victoria Nile at Jinga. After a few days' delay at Mumia's to make the necessary preparations, we marched along the usual caravan road as far as Kabras before entering the country. There is a small depôt here, garrisoned by Sudanese, which has to supply the Guaso Masa fort with food. The great obstacle to transport has been the total absence of food between Kikuya and Kabras, a distance of

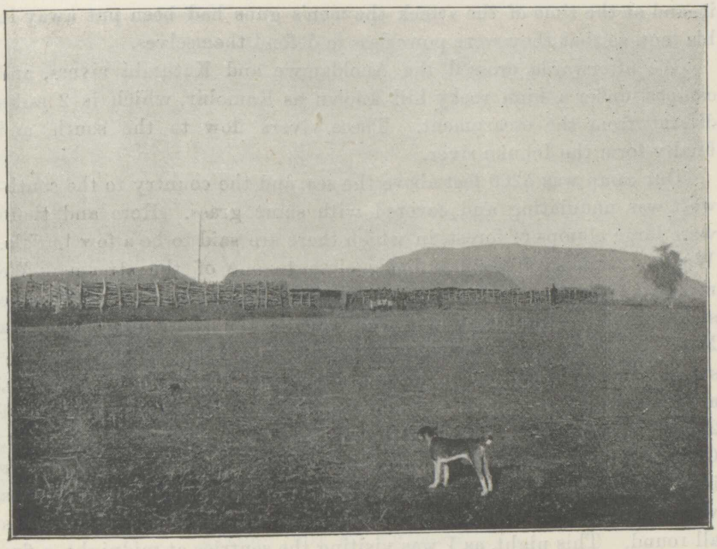
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

twenty-two days for a loaded caravan going up country, with the exception of the Eldoma station, which has only been made latterly, and is unable to supply caravans with food. In addition to this, the difficulties had been increased by the Wa Nandi being hostile, and waylaying caravans on the main route between the top of the Mau escarpment and Kabras, in consequence of which the Guaso Masa post had been established.

We could get very little information about the Nandi country, and had to trust principally to two Wa Kwavi, who had been in the country years before; to a Zanzibari porter, the sole survivor of West's party;



MOSINDI FORT, UNYORO, MOUNT FUMBI.

and a Nandi woman, who had fallen in love with him, and helped him to escape. He had been sent into the country by West for the purpose of trading, and was away at the time of the massacre; he was then taken before the Laibon, or head medicine man, and kept a prisoner, until this woman left her own husband, children, and country, and assisted him to escape. The man had picked up the language in a very short time.

From where we turned off the caravan road, a high black wall of mountains could be seen in front of us, running from north to south, when it becomes less perceptible. The upper slopes were covered with dense forest, which in some cases extended a little way down the escarpment. We soon left the last Kabras villages, in one of which the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Nandi had killed nine people two nights before, notwithstanding their high mud wall and deep ditch. Two of the Kabras natives came with us a short way to show us the path, but none of them would venture to accompany us far into the dreaded Nandi country. After passing through a small belt of forest, and then between some small hills covered with boulders of granite, we reached the place where West and his men were murdered—a gruesome spot, with several skulls lying about, also his table and chair. He had evidently been in no fear of a surprise, and had placed his camp near the edge of a thick wood, and close to a lovely stream of running water, which forms really the head-waters of the Narogare or Lusumo river. There was no zareeba round it, and at the time of the attack the men's guns had been put away in his tent, so that they were powerless to defend themselves.

We afterwards crossed the Anoldamwe and Katumbi rivers, and camped under a high rocky hill known as Kamobir, which is 2 miles distant from the escarpment. These rivers flow to the south, and finally form the Ichuko river.

Our camp was 5260 feet above the sea, and the country to the south-west was undulating and covered with short grass. Here and there were large clumps of forest, in which there are said to be a few buffalo. We saw tracks of these animals close to one of the streams. We marched along the escarpment the next day, where we discovered some small huts and patches of mtama cultivation, the first signs of the Wa Nandi. After several ineffectual attempts to get up, we found a very steep path, which led to an open grass-covered space close to the top, and we camped here at a height of 6332 feet. The column consisted of 250 men, about 300 followers, and 4 Europeans—Major Cunningham, Captain Pulteney, Dr. Mackinnon, and myself, and we used to pack into a thorn zareeba about 80 to 90 yards square. The officers' tents were together in the middle, and the men used to build small grass huts all round. This night, as I was visiting the sentries at midnight, a fire suddenly broke out among the huts of No. 9 company, and spread with the greatest rapidity, doing much damage, fanned by the strong wind that was blowing. The wind increased to a gale, and when morning broke it was intensely cold. The Zanzibaris and Lendu porters were stiff with cold, and could with difficulty carry their loads. Fortunately, they are the most light-hearted people, and soon became good-humoured, and began to chaff each other. It was found impossible to get through the thick forest in front of us, and we had, with disgust, to retrace our steps and make our way right down to the bottom of the steep hills again, and ascend by another route. This time we found a native track through the forest, and, passing over an altitude of 6850 feet, reached some scattered houses at a place called Samwiti. We then made our way in a northerly direction, through several belts of forest, and over swampy streams to Kimong, and from there east along a grassy spur to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000001

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Alagabiet hill, which is one of the main features of the country. Small clusters of huts were hidden away in openings in the forest, and the last village occupied by the Wa Nandi was near Kimong.

We had not seen many of the natives as yet, though poisoned arrows had been fired at us in the forest. I made the height of Alagabiet hill 7128 feet, and from the top of it one had a very good view over the valley of the Guaso Masa river, and across a very open country to the eastward, which is uninhabited. Hartebeest, water-buck, and oribi are to be found there. The country immediately south of Alagabiet is very swampy, which is caused by the streams running down this way from the forest, and we had to retrace our steps along our old road to



WANYORO CHIEF AND FOLLOWERS.

Samwiti. Captain Sitwell and Mr. Foaker were with another column, working in this direction, which, however, unfortunately missed us, and passed along the lower ground towards Kabras, down south to Kitolo's.

From Samwiti we steered straight for a high bluff called Usun, to the right of which there appeared to be a gap in the long line of hills in the far distance. The villages were now becoming more numerous, and there were cattle-tracks in all directions. There was still a good deal of forest about, belts of which run out from the main forest to the south-west. The weather was usually dull and cloudy, and there were occasional showers of rain in the afternoon and night. The natives first tried conclusions with us on the open ground east of the river Kimonde, which is about 6 feet deep, and crossed by a native bridge. There were two large bodies of them, from four to five hundred strong,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000062

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

armed with big spears and shields, similar to the Masai. They seemed excellently organized, and, formed in three sides of a square, charged with tremendous dash almost on to the Sudanese, who received them with a very heavy fire. It was a critical moment, but luckily the Sudanese stood firm. Several of our men were killed this day, whom we could ill afford to lose.

The Nandi are a fine-looking race, very black, strong, and muscular. They dress their hair like the Masai, and are fond of covering it with red grease, also their bodies. The warriors wear big head-dresses made of monkey or goat skins, ornamented with cowries, and sometimes a sort of leather cape slung over the shoulder. They are great workers in iron, and we passed a very large smelting-furnace near the Kimonde river. Their huts are small and circular, lined with clay, and are scattered about the country without any protection whatever, showing that they have never had anything to fear from their neighbours. The women resemble the Masai very much, and distort the lobes of their ears, as a rule, with large pieces of wood. They wear a great many iron wire rings round the arms and legs. The spears are not so well finished, and the shields are not so finely ornamented, as the Masai ones; the latter are very heavy, and painted a dull red colour, as also are in some instances the spears.

About 8 miles beyond the Kimonde river we crossed the Amai river. After crossing the river, we reached a fine open country with rolling hills covered with many huts. The district is called Kiture, and is a very populous one. There is fine pasturage for cattle, sheep, and goats, of which there were many tracks along the paths leading down to the river. Further on we crossed two channels of the river Kaimeen by means of native bridges. The latter are made with big trees, and are quite the best I have seen made by natives, and our cattle, etc., were able to cross by them. My faithful companion, the pony, was still with me, and did better in this country than in any other. When suffering from jiggers in Unyoro, I do not know how I should have got on without him, though I could not take him with me always. There was a piece of bloodstained cloth hanging on the bridge, which was probably meant as a defiance. Several bodies of armed natives showed in front and on the flanks, and the column closed up and advanced very carefully to prevent the large crowd of porters and Sudanese followers, which are such an encumbrance, from being charged. Away to the north-east there extended a bare open plain, uninhabited, and with hardly a tree on it. We had been gradually ascending from 6627 feet at Samwiti to over 7000 feet, until we came to the end of the plateau, where there was a precipitous drop of nearly 1000 feet into the valley beneath. The blue waters of Lake Victoria could be seen to the south-west, beyond the plain which runs down to Ugowe bay, and to the south again the country appeared hilly and mountainous.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

From a high hill called Teito the view was magnificent, and I was able to fix the position in longitude very accurately by bearings on Alagabiet hill and Eldalat hill, which bore 345½ and 350° respectively; I also took observations for variation of the compass. A good path led down to the valley, and it was quite like going from winter into summer. There was a great quantity of cultivation, principally mtama, which was ripe, and also a few sweet potatoes, which we had not yet found in this country. We ascended gradually again up the valley towards the gap, until the high bluff called Usun was close to our left. On reaching this point, which is called Kabarer, or Kamwentowe, we found a deep ravine in front of us, and on the far side there were what looked like a series of buttresses jutting out from the Mau escarpment, and the country looked very rugged and mountainous. Below us lay the Sagane river, which works its way almost from the very edge of the mountains through a lovely valley, completely enclosed by enormous hills, to the north called Engoroboby, and to the south Tinderait.

We descended by a steep path under a cliff, and some natives amused themselves by throwing down rocks, which came hurtling over the heads of the caravan. Fortunately only a few were thrown, and only three men were injured by splinters. We reached the Sagane river in one hour, at a point 5352 feet above the sea; it flows through a gap in the hills to Ugowe bay. There were a good many Nandi living in this valley and on the hills around. At the head of it we commenced the ascent of Mau by a native track through the forest, which commences almost immediately. We got among the bamboos near the top, and eventually camped at an altitude of 8900 feet, in an open space surrounded by clamps of bamboo forest. The difference between this point and our camp in the Sagane valley was 2860 feet, and it was a hard climb for loaded porters. The top of Mau consists of an undulating plateau, broken up in places by deep ravines, covered with short grass, and in places by clumps of forest. There are no inhabitants on the top of Mau, except some occasional Wanderobbo hunters, and the few tracks we saw were the paths used by Nandi raiding-parties. Although at this height, we were not safe from the Nandi, who hung round the column, and one woman was killed and another wounded, when going out a short way to draw water. It was very cold, and wretched for the men, and we usually had a cold sleet driving in our faces when on the march, also accompanied by a dense mist. We entered a series of small valleys, and had to cross several swampy streams, passing also a small lake. Some Jackson's hartebeest were seen, and there were also a very few tracks of buffalo, rhinoceros, and elephant. Our highest camp was 9100 feet above the sea, and from here we had to cut our way down through thick forest to reach the Uganda-Mombasa road. We spent nine hours cutting continuously, and I never was so glad as when we emerged on to the caravan road at a point called Campy ya Mwiba, or by the Masai Ngare

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000020

مكتبة قطر الوطنية
Qatar National Library

Lekonge, about 7 miles north-west of Eldoma ravine station. At this time I had fifty men with me, and was much hampered by having to carry two sick men on stretchers. It was nearly dark, and the prospect of having to spend the night in the forest without water was not a nice one. There was great delight among the Zanzibaris when they recognized the spot, as I think they had long given up the idea of ever reaching the road.

We reached Eldoma the next day, November 24, where Mr. Martin had built a very strong fort, situated on a hill not far from the ravine, from which, on a fine day, Lake Baringo can be seen flashing in the sunlight, and a lovely view obtained across to the Leikipia range. There is a very fine waterfall at the east end of the ravine, which divides into two channels. This was the furthest point the soldiers had yet been from their native country. This district is now under Mr. Jackson, who was for so long acting commissioner after Colonel Colvile left. A great quantity of food has been planted, and Masai are being induced to settle round. The opening up of the Nandi country will make a great difference to this station, as it is only two days to the fertile Sagane valley, where quantities of food can be obtained. The headquarters of a company of Sudanese are stationed here, under Hussein Aga. Our return journey was much easier, owing to the road being cut through the forest, and I was soon able to rejoin the main column at Mitele, to the joy of my men, who were glad to leave the bleak and inhospitable Mau plateau and bask in the sunshine again. Just before the descent the sun came out, and a lovely panorama unfolded itself. Looking down over the dark green forest, which extends and becomes thicker to the south, the different valleys could be distinctly traced leading to the great plain; the rugged hills near Usun showed up plainly in the foreground, and over them again the waters of the Victoria Nyanza. The next day we climbed up to the top of the range of hills known as Tinderait, and travelled across an open and very hilly country inhabited by the Wa Nandi. We were much delayed by small streams and rivers running down from the mountains, and we eventually camped on the third day close under the Endubo mountain, on a range running down towards the valley of the Nyando river, called by the Masai Kedowa, or Merto. There were a few people living on the mountains close, but this is about their limit, and there were no houses in the plain south or towards the lake. It is 59 miles from here to Lake Nakuro, and the Masai with us said there was a fairly good track over the mountains, and that it was open until the descent through forest on the further side. I fancy this track would bring one out close to the Guaso Masai river, and of course, if it could be used, it would shorten the route from the East Coast to Lake Victoria very considerably, as there is no difficulty in going along the Nyando valley to Ugowe bay, where there is a harbour.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

We marched in a westerly direction from here into the big plain at a level of 4000 feet, which is covered with short grass, and a few thorn bushes and small trees. There are no inhabitants until one approaches the lake, when there are several villages belonging to a chief called Kitoto. Towering over the plain to the west rises the great Nandi escarpment, which runs right down to Ugowe bay, and then round by the Wa Tiriki and Maragotia hills. It was very hot and steamy in the plain, and there were thunderstorms in the evening and night. We crossed the river Enolgotwe, flowing between steep banks, and 4 miles further on reached the base of the hills, where we found a very well-marked road, evidently used by the Nandi to drive their cattle and



GUASO MASO FORT, NANDI COUNTRY.

flocks down to graze. We climbed up to the top of the plateau again, over 2000 feet, along a small watercourse, and on arriving there found the hills covered with boulders of granite, and very bare. There was a dense mist most of the day, and it was very cold and damp. The country reminded me exactly of Mr. Rider Haggard's description of the unknown country in his book 'The Children of the Mist,' excepting that we failed to find the beautiful princess, and were received with poisoned arrows instead. The poison did not have much effect when the arrows were taken out at once, and, under the skilful treatment of Dr. Mackinnon, the patients nearly all recovered.

About 9 miles from the edge of the plateau the forest begins. We travelled along it for some way before entering it, which we did by a very bad path, frightfully muddy and steep in places. This road brought

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

us out at a place called Kavaren, 6000 feet high, where we camped on rising ground near some small hills covered with blocks of granite. There were still a good many Nandi here. A belt of forest about 5 miles broad separates them from a large Kavirondo tribe called the Kabalusia, and it was curious to emerge from the forest into this populous and most fertile district, inhabited by an entirely different type of natives, thick lipped, curly hair, and very ugly. On all sides there extended fields of mtama, telebone, potatoes, and banana plantations. The people wear small skins, and I noticed an old Kavirondo woman with a stone fixed in her chin by way of an ornament. The people had a good many cattle and sheep, and must pay a large tribute to the Nandi. Between these people and the Kakamega, another section of the Wa Kavirondo, we crossed the river Rukus, or Rukuse, a very fine river 25 to 30 yards broad, which flows through a gap in the Nandi escarpment, after it has received the Kimonde, Amai, and Kaimin rivers, and flows into Lake Victoria. We did not arrive among the usual walled villages of Kavirondo until we reached the Asori people, not far from Mumia's. The whole country between Nandi and Mumia's, where we arrived back on December 9, is densely populated, and very fertile. The caravan took four hours to cross the Lusumo river by means of a creeper bridge. There was a very strong stream, but the cattle and donkeys managed to swim across further up. One of the donkeys was swept past us down the rapids, being tossed about among the rocks, and we were astonished and pleased to find him alive at the lower end of them. The river is full of crocodiles, and one of the people from the fort was carried off in the act of drawing water at the crossing. At Mumia's we joined forces with another column under Captain Sitwell, and on December 14 started into the country again by a route a little north of the one previously taken.

The Nandi are ruled by a medicine man called the Laibon, who lives near Moran, close to the edge of the plateau. Under him there are several Leigunanis, or leaders of bands. The people consult the Laibon in everything, and he advises them as regards their expeditions and war-parties. I am afraid he has rather lost his reputation since we entered the country, and the last news was that he had been obliged to leave the country hurriedly. He told his people that they had got nothing to fear from us, as the powder would soon get damp, and then our cartridges would not go off. The Nandi war-parties have been in the habit of raiding the country far to the north, and, similar to the Masai, their custom is to attack at night. The people speak the same language as the Sotik, Lumbwa, and Kamasia peoples, and intermarry with them. They are also friends with the Kabalusia, Kakamega, and Wa Tiriki people.

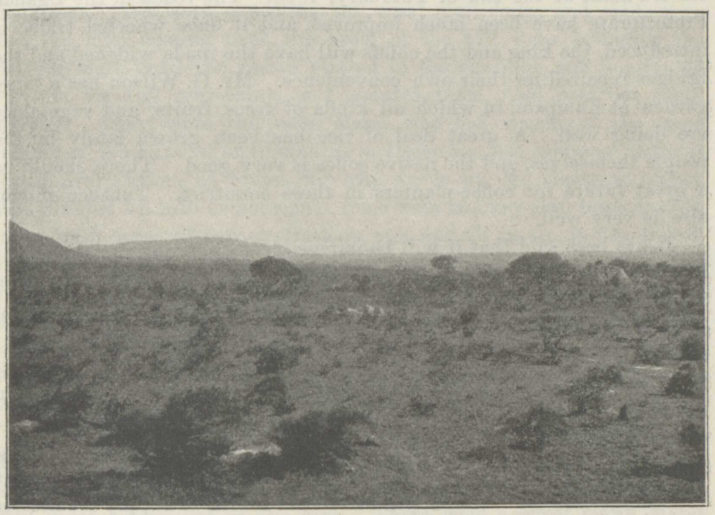
The Nandi country lies at an average height of over 6000 feet above the sea, and is excellently adapted for colonists. There is perfect grazing

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000022

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ground, and the people have large numbers of cattle, sheep, and goats. I had my pony with me the whole time, and he was never sick or sorry. The soil is very fertile, except in the northern portion beyond Alagabiet, where it is stony and barren. The climate is a very good one; it is cold at nights on the high ground, and the thermometer rarely went over 80°. There was a good deal of rain at night when we were there. I am glad to say that before our departure the Nandi had made peace, and sent in presents of ivory. What surprised them more than anything was the fact of the Sudanese women accompanying their husbands on the war-path. It would be a great shortening of distance if the road, or even the railway, could be run through the Nandi country to Mumia's,



VIEW OF NANDI COUNTRY SOUTH FROM GUASO MASO FORT.

after the ascent of the Mau mountains has been made by the usual route past the Eldoma station. At a point on the top of the escarpment the ground slopes gradually down towards the Rukus valley; it is an open slightly undulating plain, until the Nandi villages are reached. A belt of thick forest, from 8 to 10 miles in width, forms rather an obstacle, but after this Kavirondo and a fine open country is reached. Instead of passing through an uninhabited desert as at present, a cultivated track would be reached very soon, and the district between Nandi and Mumia's is the most food-producing centre of this part of Africa. With a railway from the coast, and steamers on the Victoria Nyanza, timber and fuel will be in great demand, and this Nandi forest will be of inestimable value. Some of the trees are very fine ones, and the supply would last for a great number of years. As will be seen from the map, the forest

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume IX, No. 4 [200v] (71/172)

stretches a long way from north to south, and the edge of it is not far from Ugowe bay. In Kavirondo, with the exception of Kikelelwa's forest, hardly a tree is visible, and great difficulty is experienced in getting wood. No one realizes what Captain Lugard did for our rule in Central Africa, by going over to the west of Lake Albert, and enlisting these former soldiers of Emin Pasha's in our service. Needless to say that without them it would have been almost impossible to have held the country.

On our return to Uganda, we marched along the right bank of the Nzoia, and through the Wanifa country to the Maandi hills, and on to Port Victoria at Berkeley bay. After a short time spent in Uganda, I started home at the end of February, 1896. The roads in the Uganda Protectorate have been much improved, and if once wheeled traffic is introduced, the king and the chiefs will have the roads widened and the bridges repaired for their own convenience. Mr. G. Wilson has a large garden at Kampala, in which all kinds of trees, fruits, and vegetables are doing well. A great deal of rice has been grown lately by the people themselves, and the native coffee is very good. There should be a great future for coffee-planters in these countries. Tobacco should also do very well.

It has been said that it will be impossible to get native labour, but I can only say that at present in Uganda itself the people have been induced to carry loads in the Protectorate, and perform a certain amount of work; numbers of natives bring in timber for Mr. Hobley at Mumia; until the outbreak of Masai, hundreds of Wa Kikuyu were carrying loads to Eldoma; and at Machakos they have been induced to work in the fields. Owing to the administration of the country, a cessation of war, and internal strife, the population of Uganda and the surrounding countries is increasing largely. As they become more civilized their wants will increase, and they will be forced to work to supply themselves with the necessities of life. Wonders have been done by the missionaries, and no end of the people are able to read and write. One still sometimes meets horrible objects in the streets without hands, noses, ears, or lips—awful proofs of the old barbarities.

A regular post has been established, which the chiefs avail themselves of to write to each other.

On my way home, I was sorry to see the ravages caused by the locusts in the magnificent banana plantations of Usoga. All the leaves were eaten off the trees, and the people had given up driving them off in despair.

One result of the railway will be that horses and donkeys will be transported rapidly through the belt of country infested by the tsetse fly, lying between the Tsavo and Kibwezi, and ought to reach Uganda in good condition. Animals do well there, if properly looked after, though dangers exist in snakes, and bad grass met with in places. It

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

is a great pity that a determined effort has not been made to capture young zebra, and to tame and train them for transport purposes. Even in Uganda itself there are zebra, near Lake Isolt, in the province of Singo, also in Buddu and Chagwe. The rinderpest, which killed so many cattle and buffalo, seems to have died out. Small herds of buffalo have been seen lately by government officials in various parts of the Protectorate.

A silver currency has already been introduced, several loads of rupees having been sent up from the coast, and the days of beads and cowries are numbered. An interesting event, on the way down to the coast, was the meeting of a Masai war-party while crossing the Mau mountains. We were expecting the coast mail daily, and made sure that the men coming over the brow of the hill were bringing the precious mail, until the spears glinted in the sunlight, and finally 487 warriors, in full war-paint, as I counted them, filed past our small caravan. They were the same Masai who had massacred the large number of Wa Kikuyu and Swahilis in December, not, however, without strong provocation, as found out afterwards by Mr. Jackson. They were divided up into detachments, some with monkey-skin head-dresses, others with capes of ostrich feathers, etc., and all in single file, travelling very rapidly. Some cattle and goats were being driven after them, to provide them with food on the journey to Ingoboto, east of Mount Elgon, to raid the Kimariongo tribe. We congratulated ourselves on their being friendly, and, after a talk with the leaders, who were very anxious for us to go with them, passed on our way. At Naivasha we met Captain Sclater and Captain Smith of the Royal Engineers, with a party making the waggon-road from Kikuya to the lake. Their carts had reached this point from the coast. The road down the Kedong escarpment was nearly completed, having been cut with great labour out of the rock. There were a great many Masai kraals between the Gilgil river and Naivashe, and I met the great chief Terary with his old father, who weighed 20 stone.

On arriving at the coast, we found a great change had taken place in Mombasa, owing to the railway, work on which had just been begun. A hotel had been started, and shops of all sorts; also a Cook's Agency, which I trust will soon be advertising tours to Lake Victoria and Uganda.

In conclusion, I wish to pay a tribute to my commanding officer, Major Cunningham, who conducted all the expeditions I have mentioned with such skill and success, and who gave me every facility for mapping and taking observations. He is, I suppose, a unique instance of a white man in Africa who does not grumble and become ill tempered when he has fever, and I feel lucky to have had the good fortune to serve under him.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001a

مكتبة قطر الوطنية
Qatar National Library

TABLE OF LATITUDE AND HEIGHTS.

	Latitude north.	Heights.		Latitude north.	Heights.
	° ′ ″	Feet.		° ′ ″	Feet.
Buniga camp	0 54 36	—	Bajan	2 14 57	—
Kaduma fort	1 5 56	—	Kibega	2 8 52	—
Baranwa fort	1 14 14	—	Kijange	1 36 37	—
Hoima fort	1 26 56	3820	Kikingo	1 32 15	—
Kibero fort	1 41 1	2113	Chikunika	1 16 56	—
Mahagi	2 6 28	—	Kalagala	0 39 7	—
East bank of Nile near Amat	2 26 30	—	Ntebi	—	3820
Wadelai old fort, left bank	2 43 11	—	Mumia's	0 20 6	4421
Dufile old fort, left bank	3 34 21	—	Kikelelwa's (near) ...	0 21 12	—
Lukwia	1 58 21	—	Kamobir hill	0 22 32	—
Kangara	1 32 28	—	Samwiti	0 18 36	6627
Kajumbura island ...	1 51 10	—	Kimong	0 25 26	6872
Kilianongo	1 51 45	—	Alagabiet mountain...	0 24 49	7128
Kibugumia	1 34 33	—	Kiture	0 10 48	6650
Kisoga camp	1 39 8	—	Teito	—	7119
Mruli	1 39 3	3510	Mitete	0 0 41	6039
Lukungu	1 39 27	—	Olmasidi	0 15 7	—
Kitao	1 50 36	—	Sendege's plain ...	—	3990
Niambari	2 0 26	—	Paugwa	—	4425
Foweira, near old station	2 11 14	3170	Chibonyai	—	6545
Kirunguru	2 1 2	—	Kwakiminu	—	6445
Dwempindu	1 54 42	—	Kavaren	—	5998
Kigia	1 48 47	—	Runye	—	5310
Masindi fort	1 41 5	3878	Siyonso	—	4800
Raymond	0 22 41	—	Kabras	—	5464
Mwenda's	1 4 15	3733	Moran	0 0 13	6455
Nakabimba fort ...	0 38 24	4582	Moraba peak	—	6212
Kimena	—	3470	Kevillat peak ...	—	5800
Paniatoli	2 5 44	3636	Tiriki	0 1 19	4969
			Marugwa peak ...	0 1 30	5428
			Chubugumo	0 8 37	4946

MERIDIAN DISTANCES.

Longitude of Hoima, 31° 21′ 15″ E.

		° ′ ″
Kaduma fort, east of Hoima	interval 4 days	0 7 45
Mruli fort (first observation) east of Hoima	„ 6 „	0 42 15*
Kivari (Unyoro) „ „	„ 4 „	0 22 45
Kibana (Unyoro) „ „	„ 3 „	0 19 0
Mruli fort (second observation) „ „	„ 9 „	0 43 15*
Niambari, east of Mruli	„ 6 „	0 17 30*
Foweira, west of Niambari	„ 3 „	0 1 15*
Dwempindu, west of Foweira	„ 3 „	0 14 45
Wadelai fort, east of Hoima	„ 5 „	0 6 45*
Dufile fort, east of Hoima	„ 9 „	0 40 45
Kibero, west of Hoima	„ 2 „	0 5 45

* Rate of watch determined at both places.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000025

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Before the reading of the paper, the PRESIDENT said: This evening we are to listen to a most interesting paper by Lieut. Vandeleur, who has been for the last two years in Uganda and Unyoro, and who not only has visited the localities rendered famous by Speke, Grant, Baker, and Gordon, but has also explored a great deal of most interesting country previously unknown. I will now call upon Lieut. Vandeleur to read his paper.

After the reading of the paper, the following discussion took place:—

The PRESIDENT: We have the pleasure of welcoming here to-night Major Cunningham, Lieut. Vandeleur's commanding officer, and I am sure the meeting will be very pleased if he will kindly address a few words to us upon the subject of the paper.

Major CUNNINGHAM: I should like to say how carefully the map has been compiled by the lecturer. It is not an ordinary sketch, but it is made by observations of latitude and longitude, very often effected under great difficulties; having to watch for any particular star with the mosquitoes round about you is really difficult work. One of the points in the lecture I shall have to draw attention to is about labour in Uganda. They do labour now a good deal, but it is not quite free labour; it is obtained, of course, from the chiefs, and we don't quite know how much pressure is brought to bear upon the peasantry by the chiefs in order to bring them to the scratch. The Masai, although a source of trouble outside, are quite quiet in our own territory; but they are in the habit of going raiding in the territories which will some day come under our administration. They have seen our expeditions go out to punish people for murder and that kind of thing, and the usual way to punish a native tribe is to take away their cattle; they have, therefore, come to the conclusion that we are cattle-raiders. The result was, that when we met this party going out for a raid, after we had refused to go with them, they asked us to tell them where the cattle were. The Nandi country could undoubtedly be colonized by Europeans, who could live there and rear their children there—more than could be said for a good many of these countries. A great obstacle to the peaceful settlement of Uganda and Unyoro is now removed, as Kabarega now lives on the other side of the country, and nearly all of his people have come back, and will gradually settle down. In conclusion, I will say how well supported I was by my officers and men, the Sudanese especially, and there is no doubt Captain Lugard did a very good stroke when he secured the services of these men from the other side.

Dr. J. W. GREGORY: Considering the number of times that Unyoro has been traversed by Europeans, it is surprising how difficult it has been to get any precise cartographic information about it, and many questions of geographical importance await solution until we have a correct map of that district. I should say, from the numerous traverses made by Lieut. Vandeleur, that when his map is published, it will help materially in the study of that district. We have all listened to the paper with great interest, as Unyoro has always been regarded as a political dependency of Uganda; and if Uganda is to be made the key to the upper Nile valley, it is absolutely necessary to get a clear and safe road through Unyoro. In the campaign for the establishment of British supremacy there Lieut. Vandeleur played a very conspicuous part. I am sure every Fellow of this Society will have been pleased to hear Lieut. Vandeleur's tribute to the wisdom of Captain Lugard in introducing the Sudanese into Uganda, as they enabled us to maintain our hold over that country.

The PRESIDENT: Sir Harry Johnston is such a very old friend of ours, and we are always so pleased to hear him, that we shall be glad if he will address us to-night, as I think it is likely that, with his knowledge of Africa, some fresh geographical ideas may have occurred to him while listening to this interesting paper.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Sir HARRY JOHNSTON: I won't detain you, at this late time in the evening, with any remarks more than to say how much interested I have been in this paper, because, of course, the greater part of Buganda and, I should say, Bunyoro belong to what may be called Bantu Africa—that is to say, to that portion of Central Africa inhabited by races speaking tongues allied to the Bantu stock. I am particularly interested in the Baganda, as they are generally called in their own country, from the fact that so many have followed me in almost all my expeditions in Eastern and Central Africa. In 1884, when starting for Kilimanjaro, Sir John Kirk entrusted to the late Mr. Stokes the organization of my caravan, having great confidence in his judgment of men, and Mr. Stokes picked out some Baganda who had in some way or other found their way down to Zanzibar, and a few of them are to-day serving the British Government in the British Central Africa Protectorate, having remained with me ever since; they are now settled in Nyasaland, and will probably remain there for all time, still maintaining their Luganda speech between themselves. There is a great community of feeling all along the great lakes, as the people are of kindred origin and not much separated from the parent stock. The language spoken in Bunyoro and Buganda belong to the most archaic forms, almost being the Sanscrit or Lithuanian of the Bantu family. It is to be hoped that, in organizing this Protectorate, we shall endeavour to compile vocabularies of these languages before they are too absolutely corrupted by Swahili, because it would be an immense help in throwing light on the structure of the Bantu group. I almost take for granted that in Buganda and Bunyoro, Swahili, the language of Zanzibar, is becoming the universal language of the country. It is inevitable, as it is, of course, impossible for Europeans to attempt to learn every single dialect. We must have some common language, as in India, where Hindustani is the medium of expressing our thoughts to the natives in such a simple fashion as to be understood, and I should say Swahili is in every way fitted to be that medium, and it is to be hoped—and it is a hope expressed for some years past—that we may before long possess a chair at either one or other of our universities for the teaching of Swahili in a scientific manner, so that officials may arrive with some knowledge of the language, which will enable them to make themselves understood almost anywhere between the Equator and the Zambezi.

The PRESIDENT: We have to thank Lieut. Vandeleur for more things, I think, than the paper read to us this evening. Lieut. Vandeleur has been well known to us for some time as a good observer. I remember being astonished at the accuracy of his route survey, made with very small means, when shooting lions in Somaliland. He has now done much bigger work, and I feel he is of the stuff of which our gold medallists are made, a man despising dangers and hardships, an ardent sportsman, conciliatory to the natives, and a good scientific explorer. In his paper he has pleased us, first of all, by bringing to our minds the memories of our great explorers of former days, and describing some of the scenes which they visited—of Speke and Grant, of Baker and Gordon. I remember, now many years ago, that Dr. Norton Shaw came to my house with a young officer, who said he believed he had discovered the lake source of the Nile, asking me to go with him to Sir Roderick Murchison, and induce our President to undertake an expedition. Well, that expedition was undertaken at the joint expense of the Royal Geographical Society and her Majesty's Government, which I submit is a most excellent precedent. We heard from time to time from men who went up the Nile hoping to obtain news of Speke and Grant. At length the great explorers themselves arrived, and almost entranced us with the importance of their discoveries and the charming way they described them. We then had equally fascinating accounts of the routes of Sir Samuel and Lady Baker and Gordon. Lieut. Vandeleur

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000073

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

has brought all these things to our minds by visiting the same places. The two most interesting of his photographs were those of the Murchison falls. He has done a great deal more than this, for he has explored countries hitherto quite unknown, especially the highlands beyond the Victoria Nile and other upland countries further to the eastward. We also have to thank him for his interesting photographs, and especially for that magnificent display, the results of his rifle, which has been arranged in the other room—as fine a show of heads as I have ever seen. It is a great pleasure to us all to know that the Queen has commanded both Major Cunningham and Lieut. Vandeleur to proceed to Windsor Castle to-morrow, to receive from her Majesty's hands those distinctions which they fully merit and have so nobly won.

It is for us on this occasion to return our warmest thanks for what they have done in exploring work, and to Lieut. Vandeleur our hearty thanks for the interesting paper he has read to us.

LIEUT. VANDELEUR'S MAP.—The map has been reduced from Lieut. Vandeleur's original drawing. The route from Kampala to Munia is the same as the railway route surveyed by Captain Pringle, and published by the Intelligence Department (see *Journal*, vol. ii., 1893, p. 112). Other additions have been made from Dr. B. Hassenstein's maps, published in 1892 and 1895 in *Petermanns Mitteilungen*.

THE SOUTHERN BORDERLANDS OF AFGHANISTAN.*

By Captain A. H. McMAHON, C.I.E.

I AM going to take you along the southern border of Afghanistan from the Gomal river to the Persian frontier, and will endeavour to describe the country which forms the southern portion of Afghanistan and the northern portion of what is commonly known as Baluchistan.

I purpose to confine myself chiefly to a brief geographical description of the countries traversed by the Baluch-Afghan Boundary Commission, which, as one of the results of the Durand Mission to Cabul in 1893, recently delimitated and demarcated the boundary between the territory belonging to the Amir of Afghanistan and that under the government of India, from Domandi, a place on the Gomal river, to Koh-i-Malik-Siah, on the Persian border. The Koh-i-Malik-Siah mountain marks the southernmost point of the boundary between Afghanistan and Persia, as agreed upon by those two governments, after the Seistan Mission of 1872, when General Sir Frederic Goldsmid, assisted by General Sir Richard Pollock, acted as arbitrator between those governments.

The Baluch-Afghan Boundary Commission started in March, 1894, and by June, 1896, succeeded in laying down the boundary-line to Persia. The length of this line from the Gomal to Persia is over 800 miles, and it took us nearly two full years to complete it. To give a detailed description of over 800 miles of country, or of the varied personal incidents of the two years' wanderings of the mission in that

---

* Paper read at the Royal Geographical Society, February 22, 1897. Map, p. 472.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

country, is impossible in the small compass of this paper; and I can only give the general characteristics of the country, with a few remarks here and there on places of more than ordinary interest. In our wanderings we traversed many tracts of country hitherto seen by only a very few Europeans, and again large tracts hitherto unvisited by any Europeans at all.

The general characteristics of the whole country we traversed are, I may say, barren dryness—barren hills and mountain ranges and vast open plains, where, in most cases, either want of water or the unsettled state of the people has prevented the cultivation of the soil. Rocks and stones, varying from the size of the huge gigantic boulders on the mountain-sides to that of the small pebbles and shingle of the strands of the dry torrent beds, cover the greater portion of the surface of the country, while another large portion is given up to deserts of deep soft sand. Throw in here and there springs of water of widely varying medicinal properties and every degree of saltness, and you have a rough general idea of the country I am describing. To those who indulge in varied mineral waters, and would like to test the varying effects of petroleum, sulphur, ammonia, potassium, either mixed or by themselves, I can recommend them to pay a visit to that country. But they must remember that, unfortunately, none of the springs are labelled, and so you don't know until afterwards what you are drinking.

However, I must not lead you for a moment to suppose that this country has no redeeming features. Refreshing green oases here and there, sometimes in the form of green wooded valleys with rippling streams of pure water, sometimes in forest lands along the high mountain-tops, sometimes in the form of extensive tracts of rich cultivation in wide valleys and plains, break the monotony of the vast wastes around, and afford a relief to the eye and a pleasure to the senses which none but travellers in that country can fully realize. Then, again, the clear, dry, sparkling atmosphere, the deep blue cloudless skies of the greater part of the year, and the almost boundless horizons produce feelings of exhilaration and a sense of freedom which go far to make up for the shortcomings of the country in other respects. Last, but not least, we find the inhabitants a fine manly race, whose love of independence is as rugged as their hills, and whose stubborn bravery is unquestionable. With fair complexions and splendid physique, they form for the most part a magnificent race of men.

On April 5, 1894, our mission reached Domandi, a dreary uninhabited spot 3500 feet above sea-level, at the junction of the Gomal and Kundar rivers, the starting-point of the boundary-line which we were to lay down. Our party consisted of six British officers: Captain R. J. Mackenzie, R.E., was the survey officer; Captain C. Griffiths, 16th Bengal Cavalry, and Captain F. G. Fowler, 1st Baluches, commanded the cavalry and infantry escort; Surgeon-Captain F. W. Gee was our

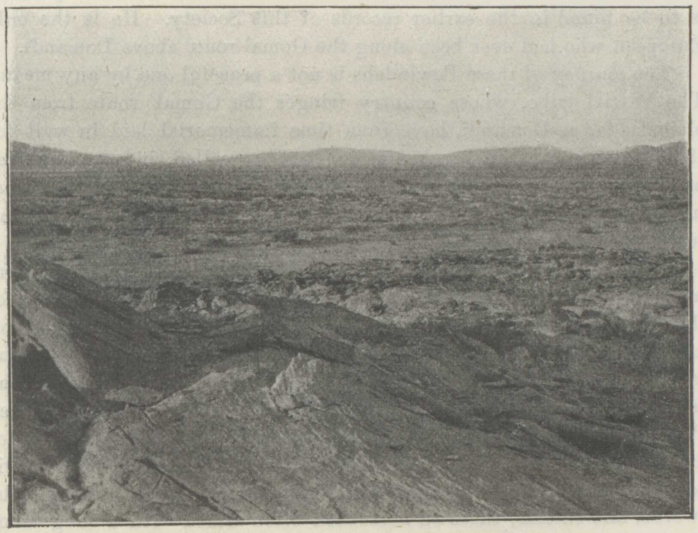
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

medical officer; and Lieut. R. A. E. Benn came as intelligence officer. We had an escort of 150 infantry and 60 cavalry. Our whole party, including escort, survey party, office establishment, and tribal chiefs and followers, amounted to about 1000 men and 600 animals, *i.e.* camels, horses, and ponies. The Afghan commissioner, who subsequently joined us, brought an escort and camp following amounting to much the same number as ours. The Afghan commissioner was Sardar Gul Mahommad Khan, a near relation of the Amir of Afghanistan.

Domandi deserves a few words of mention. Here the Gomal and Kundar rivers meet and form one stream under the name of the Gomal,



KHORASSAN PLAINS, LOOKING TOWARDS DOCHINA AND KATAWAZ.

which, some 80 miles below Domandi, after cutting its way through narrow gorges through the Suleiman range, issues out on to the Derajat plains of the Punjab. The Gomal has for many ages been a great trade route between Afghanistan and India. The Ghilzai and Lohani tribes, both of whom are commonly known under the name of Powindahs, come down in their thousands year by year in the autumn from the highlands of Afghanistan by this route to India, bringing with them their women and children, and huge herds of camels, sheep, and goats. Over 70,000 camels are sometimes known to be thus brought down in one season. The various tribes which compose the great Ghilzai and Lohani clans, *i.e.* the Suleiman Khels, Nasirs, Kharotis, Mian Khels, and others, after the manner of Afghan tribes, are mostly at feud one with another, and so they find it more convenient to avoid each other on their march up

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002b

مكتبة قطر الوطنية
Qatar National Library

and down the Gomal. They have, therefore, a regular order of going fixed by long-established custom, and according to this order they move down tribe by tribe each autumn from the highlands of Afghanistan to the plains of India. When the heat of the Indian spring sets in, they all turn their faces homewards, and tribe by tribe, in the old-established order, they wend their way up the Gomal again to the cooler regions of their summer highlands, which they know by the general name of Khorassan. Above Domandi, about half of them continue up the Gomal river, and the other half takes the more western route along the Kundar river. Lieut. Broadfoot, in 1839, travelled in disguise from Ghazni with a Powindah Kafila to India, and an account of his adventurous journey is to be found in the earlier records of this Society. He is the only European who had ever been along the Gomal route above Domandi.

The journey of these Powindahs is not a peaceful one by any means. The Waziri tribe, whose country fringes the Gomal route from the plains as far as Domandi, have from time immemorial laid in wait for these passing caravans, or kafilas, as they are called, and year by year have exacted their tribute of blood and loot from any caravan that, from inferior numbers or want of precautions, may have offered an opening to their ever-watchful enemies.

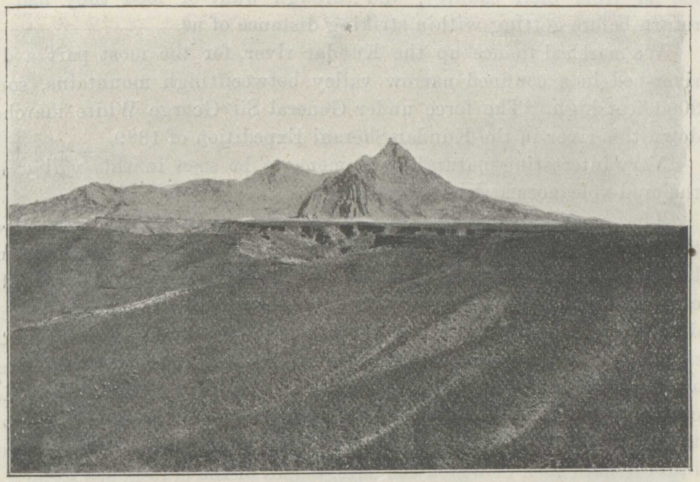
At the time of our stay at Domandi in 1894, the Waziris were making themselves particularly objectionable. The yearly exodus of the Powindah tribes from India to Afghanistan was at its height, and kafila after kafila of these tribes used to pass our camp, all with the same tale of woe—so many men killed and wounded at one place on the road, and so many camels carried away at some other place by the hated Waziris. To see these large kafilas passing, as we did, day after day for many weeks, was a very interesting sight. First of all came their advance party of fighting men, armed to the teeth with guns, pistols, swords, and shields, those on horseback often armed with a long lance in addition to their other martial equipment. With these march their musicians with drums and sirinais, which are a rather pleasing kind of reed instrument. Every now and then one of the footmen breaks into a dance, singing at the top of his voice, and spins round and round waving his sword and rifle; another and another join in, and they dance madly round until exhausted or the rough nature of the ground makes further dancing impossible. On approaching the place where they intend to camp, music and dancing are renewed with redoubled vigour, and often continued until the ladies of their household, who are following behind, have arrived, and have erected the tents and arranged the belongings of their lords and masters. After the fighting men come long strings and strings of camels, donkeys, and cattle, sheep and goats, accompanied by more fighting men, and crowds of women and children. All except the men are laden with something—the camels with heavy loads of merchandize or household belongings, others with gaudier trappings carrying

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the women folk of the wealthier men; and you see women staggering along, one with a child on her back, another with a lame sheep under her arm; children carrying smaller children or kids or lambs. Then come the donkeys and bullocks, some with loads, others with children and babies roped face upwards on their backs. One by one, as they reach the camping-ground, the women and children unpack their belongings and set up their tents; the latter is not a difficult process, as it only consists of setting up four sticks and draping coarse black goathair blankets on the top and round the sides. Then the boys and a guard of well-armed men drive off the camels and flocks to graze on the adjacent mountain-



ZARMELAN PLAIN AT DOMANDI.

sides, while the remainder lie down in the shelter of trees and rocks and lazily watch their women folk laboriously fetching water and cooking the mid-day meal.

There is one feature about the Powindahs' return journey to Afghanistan which makes it preferable, if you have the choice, to march with them on their autumn march to India rather than with them, as we did, on their return march to Afghanistan. What I mean is this, that all those who die on the march down or during their winter stay are buried, but many of them are dug up again on the return journey and carried home to be interred in Afghanistan. If you see a camel coming along with long suspicious-looking boxes on his back, you know they contain some defunct Powindah making his final journey to his last resting-place.

We stayed at Domandi some three weeks, and while there our presence ensured the protection of the passing kafilas, and we ourselves

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000070

مكتبة قطر الوطنية
Qatar National Library

were fortunately left alone by the marauding Waziris, who were too busily and more profitably employed in attacking and looting the Powindah kafilas further down the Gomal river. In this we were fortunate, as our small camp would have fared ill in a fierce, sudden night attack of the nature which was made on the brigade under General Turner a few months afterwards at Wano, a place only some 30 miles from Domandi, during the subsequent Waziri expedition, when a force was sent into their country. The Waziris did, it is true, some while after our departure from Domandi, send, as a sort of after-thought, a large picked raiding-party after us; but we had by then got too far from their country, and through want of food they had to return before getting within striking distance of us.

We marched thence up the Kundar river, for the most part a dry river-bed in a confined narrow valley between high mountains, some 9000 feet high. The force under General Sir George White marched down this river in the Kundar Sherani Expedition of 1889.

Very interesting natural phenomena to be seen in this valley are the mud volcanoes at Khut Kanda.

These curious volcanoes are situated on a neck of high ground on the south bank of the Kundar river. We saw some ten or more craters, large and small, in activity, and all round were a large number of dry craters of inactive volcanoes. These craters vary from 2 to 30 feet in diameter inside. It appears that, while the active craters are constantly drying up and become inactive, new active ones suddenly make their appearance close by. These volcanoes are of a thick liquid mud, which comes bubbling up from below, and every now and again surges over the crests of the craters. The mud deposited by this overflow forms into the hard rock of which the outer slopes of the craters are formed.

After some two months in the Kundar valley, where the heat and bad water seriously affected the health of our camps, we gradually proceeded onwards up the Kundil and Sharan Toi rivers, ascending into higher and higher levels until, by the end of June, we reached the highlands of Khorassan.* Here we found ourselves in country hitherto unvisited by Europeans, up in high open sandy plains varying from 6000 to 7000 feet above the sea—in the summer grazing-grounds of the Ghilzai Kakar tribes.

These wide plains are intersected here and there by long mountain ranges of no great height above the level of the plains, but some 8000 to 9000 feet above sea-level. Here hill and plain alike are covered thickly with a small bushy plant about 2 feet high, called by natives tirkha, and known to botanists as southernwood, or artimisia. Its pleasant perfume pervades everything, and its forms the staple grazing

* Major Ivar MacIvor, C.I.E., Political Agent, Zhob, traversed a portion of this tract as far as Tirwa in 1892.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005c

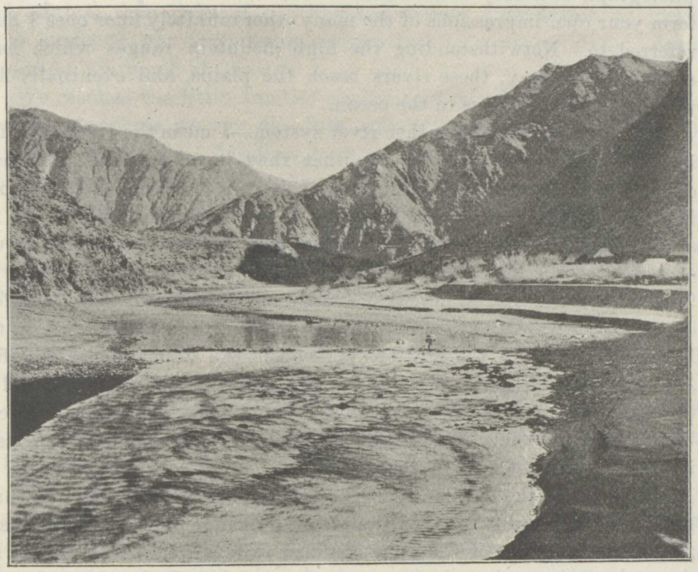
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

food of the huge flocks of camels and sheep which the Ghilzais and Kakars bring up here in the summer months.

We have now reached a tract of more than ordinary interest, as we have ascended to the western watershed of India—I mean the watershed which divides the drainage flowing into India on the south and east from the drainage flowing into Afghanistan on the north and west. You will see, from the map, that all the water that flows from here to the north and west flows into Afghan lakes and rivers, while that to the south and east eventually, by the Gomal and other rivers, joins the great river Indus.

Both these river systems differ widely in character one from the



LORA RIVER AT ITS JUNCTION WITH THE SHIRTO RIVER.

other, and both present very remarkable features seldom to be found elsewhere. If you look at the rivers flowing towards India, you will see that their general direction is at right angles to the lines of mountain ranges which separate them from India, and which they have had to cut through one by one before reaching the lower levels of the Indian plains. In cutting through these ranges these streams have formed deep, narrow gorges, which, in each successive range, become deeper and deeper as the level of the river-bed sinks lower and lower below the level of the crest of the range. Thus, when we come to the last range of mountains, which are commonly known as the Suleiman range, we find the drainage flowing through narrow gorges of almost

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000033

مكتبة قطر الوطنية
Qatar National Library

stupendous depth. It is hard to imagine anything finer than some of these gorges. Some of them, such as those in the Vihowa and Kaha rivers, and especially those in the streams known as the Chuhar Khel, Zao and Gat Dhanas, are really marvellous gorges, wild and gloomy in the extreme. They are so narrow at the bottom that you can often touch both sides with your hands. Their walls of massive limestone rock rise perpendicularly upwards for several thousand feet. In places the sky is seen through a small slit, as it were, overhead; in other places, the walls overhang and so nearly meet overhead, that the sky is invisible from below. It is naturally impossible to give any real idea of one of these stupendous gorges in a photograph, but I will now show you a photograph of a very much smaller one, from which you can perhaps form your own impressions of the many other infinitely finer ones I have referred to. Notwithstanding the high mountain ranges which have stood in their way, these rivers reach the plains, and eventually find their way by the Indus to the ocean.

Now let us look at the other river system—I mean the rivers flowing into Afghanistan. You will see that they have not had the same difficulties to contend with in finding their way to lower levels, as they flow parallel, and not at right angles, to the mountain ranges. So far all has gone well with them, but not for long. All well-conducted rivers should reach the sea; none of these ever do. Those to the north get no further than the Ab-i-Stada lake, a wide sheet of water over 7000 feet above sea-level. Others meet a similar fate, but at a lower level, in the Lora Hamun; while the greater number join the Helmand, which, after a long journey, deserving a better ending, comes at last to a standstill in the lakes and swamps of Seistan. All these lakes are as salt as salt can be, and many of them, like the Ab-i-Stada and God-i-zirreh, are enclosed in wide margins of solid dry salt.

To revert to the highlands of Khorassan. We reached there in June, 1894, and thoroughly enjoyed the pleasing change of these cool breezy plains after the heat of the deep confined valleys we had been in. By the end of September, however, we began to find that the pleasant coolness of the summer had changed to severe cold. Our nomad friends the Kakars and Ghilzais had all departed east and west towards their warmer winter quarters, and none but the few resident Lowanas were left, and we ourselves were glad to leave. The winter cold in these parts is very severe, and the wide plains are swept by a cold wind, which, if the natives are to be believed, is death to the unwary traveller who may be caught by it away from shelter. The large heaps of whitened bones we found here and there near the marks of old Lowana encampments marked the places where whole flocks of sheep and goats had been frozen to death during the exceptionally severe snowfall of the preceding winter.

Descending from these highlands by various deep river valleys, and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000006

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

passing from the country of the Ghilzais and Kakars into that of the Atchakzai and other Durani tribes, we got into the Kadanai valley. It was now late in December, the cold was very severe, and our thermometers registered as low as 8° below zero. It became a serious question whether we would be able to get over the high Toba mountains which lay between us and the Chaman plain before the heavy winter snow set in, and snowed us up for the winter. As it was, we ran it rather fine, for we only succeeded in getting our camp over the high Kanjasu pass the evening before heavy snow set in and entirely closed the passes we had just used. The following night, although we were encamped in a deep, narrow sheltered valley, the cold was intense, and no less than eight of our baggage camels were frozen to death. This hastened our movements, and we lost no time in getting down into the plain north of Chaman.

We reached the little frontier cantonment of Chaman on Christmas Eve, 1894, where we saw the first new white faces we had seen for exactly nine months. Needless to say, our Christmas was made a very pleasant one by the kind hospitality of the Chaman garrison.

Those who visit Chaman generally think they have reached the end of the world, and can hardly realize the feelings with which we viewed that dreary little station. To us it seemed, after our wanderings in the wilds, a veritable metropolis of civilization.

The Afghan commissioner, Sardar Gul Mahommad Khan, was now succeeded by Sardar Mahommad Umar Khan, the chief of the great Nurzai Durani tribe.

Proceeding southwards from Chaman, we completed boundary demarcation by June, 1895, as far as Ghwazha. From Domandi to Ghwazha a boundary-line of some 360 miles had now been demarcated.

The summer heat put a stop to any attempt to do further boundary work in the deserts beyond. Work was suspended, and the mission temporarily dispersed. We met again in the following January, 1896. Many changes had taken place in the composition of the British mission, and our party now consisted of Captain H. F. Walters (24th Baluches) and Lieut. F. C. Webb Ware (7th Bombay Lancers), who were in command of the infantry and cavalry portions respectively of our escort. Surgeon-Captain F. F. Maynard came as our medical officer, zoologist, geologist, botanist, and meteorologist. Mr. G. P. Tate, a Fellow of this Society, took Captain Mackenzie's place as survey officer. With survey establishment's escort, tribal headmen, and followers, we numbered altogether some 650 men, with 750 camels and 100 horses. The Afghan commissioner and his camp were the same in numbers and composition as before.

By the end of February, notwithstanding a heavy snowfall on the mountains, we had finished boundary work along the Khwaja Amran and Sarlat ranges to the south of Shorawak, and entered near Nushki

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the vast plain which fringes the Baluchistan desert. As far as this point from Domandi, the tribes concerned on both sides of our boundary-line had been Pathan and Afghan tribes. Beyond this point the tribes on both sides are Baluches and Brahuis. Before going further, I must say a few words about a very curious physical feature in this neighbourhood, which may be of interest to you. To explain it, I must refer to a severe earthquake shock which, on December 20, 1892, was felt over a large area of Baluchistan, during which the railway line between Quetta and Chaman, at a place near the Chaman end of the great Khojak tunnel, but fortunately outside that tunnel, was very curiously damaged. The rails were distorted, and, to put the matter briefly, the distance between Chaman and Quetta was lessened by no less than 2½ feet. A fissure in the ground was found to run across the railway line at this place, and this fissure, running along a depression in the ground along the foot of the Khwaja Arman range, was then traced to a short distance on either side of the railway line.

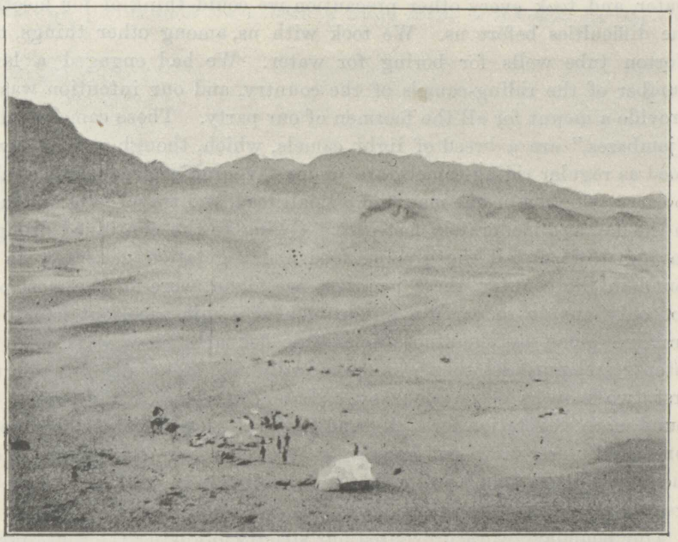
It so happened that, when our boundary work made us more carefully examine this country, we found that a well-marked line of depression or indentation in the ground was traceable at the edge of the plain near Murghachaman, some 18 miles north of Chaman. Following this line, or, as I may call it, this earthquake crack, we found it to run some 18 miles in a well-defined line to the very place where the earthquake fissure had damaged the railway line in 1892. Thence it ran on, gradually ascending diagonally the slopes of the Khwaja Amran range until it actually cut the crest of the main range near its highest peak. Descending again into the Spintizha valley, it began again to ascend diagonally the slopes of a continuation of the Khwaja Amran range. Cutting this range in a similar manner, it descended to the Lora river, and, crossing that river, ran along the whole length of the foot of the Sarlat range to Nushki. Beyond this point we were unable to follow it. The total length of this wonderful earthquake crack, which we carefully surveyed, was no less than 120 miles. It is a well-defined broad line of deep indentation, in places as clearly defined as a deep railway cutting. Along the whole course of it are to be found springs of water, cropping up here and there. Both from the presence of water and from its forming a short cut across mountain spurs, this crack is largely used as a thoroughfare. We found that the old greybeards of the tribes residing in the neighbourhood all knew of its existence. They told us that during their lifetime, on some three occasions after severe earthquake shocks, deep fissures had appeared along this line, and that they had had similar accounts handed down to them by their fathers. After one of these occurrences, the water-supply of the springs along the crack had, they said, largely increased. I have roughly marked the position of this crack on the sketch-map. I may note that if the tunnel through the Khwaja Amran range had been bored, as first proposed,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000038

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

at a point considerably south of the Khojak, this earthquake crack would have cut through it near the centre, thus enabling many valuable but possibly expensive observations to be made. This crack seems to mark the line of a gigantic geological fault. All the rocks on the east appear to be sedimentary, while those on the west appear to be igneous. In fact, as far as the Persian border on the west of it, we found nothing but igneous rocks. I am told the length of this fault-line exceeds that of any fault-line as yet discovered on this Earth. Whatever it may be, this earthquake crack or fault-line, whichever you prefer to call it, is a very



SAND DESERT NEAR AMIR SHOH.

remarkable phenomenon, and deserves the serious notice of geologists and seismologists.

As I have mentioned before, we found ourselves at the end of February, 1896, near Nushki, with the vast Baluchistan desert before us. The prospect was not reassuring. It was difficult to obtain any reliable recent information about the country before us, and the only opinion we could get from natives who pretended to know something of the country, was that it was late in the year to attempt to cross the desert, and that there was even less water there than usual owing to the total absence of rain for upwards of a year and a half. The Afghan Boundary Commission which delimitated the Russian Afghan boundary, had marched from Nushki in 1884 by the route shown in the small sketch-map to the Helmand river *viâ* Kani and Galichah, and a portion of that mission had also returned by much the same route in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000094

مكتبة قطر الوطنية
Qatar National Library

1885.* We had, therefore, information not altogether of a reassuring nature of that particular route; but on both the former occasions the journey had been done in the winter months, and it was possible, as we indeed sometimes found to be the case, that such information was not to be relied upon as applicable in the hot weather. Regarding the country west of the route taken by that mission, we had little or no information, as the greater portion of the actual country the boundary-line runs through had never before been traversed by Europeans. We had supplied ourselves with a large number of leather skins for carrying water, and took every other precaution we could think of for meeting the difficulties before us. We took with us, among other things, two Norton tube wells for boring for water. We had engaged a large number of the riding-camels of the country, and our intention was to provide a mount for all the footmen of our party. These camels, called "jambazes," are a breed of light camels, which, though not nearly so good as regular riding-camels, are under favourable circumstances able to carry two men or one man and a small load, and travel long distances in the day at a moderately fast pace. Owing to the continued drought having dried up all the grazing food and vegetation generally to be found in the country, these jambazes, we found, were for the most part not only unable to carry a single man at a fair pace, but had to be dragged along by their nose-ropes unloaded at a slow walk. To all intents and purposes they were practically useless, at any rate for the first two months of our journey. Later on, on nearing Persia, we found more vegetation for them, and they rallied sufficiently to give us some slight assistance on the way home. The mortality among them and our baggage camels in the desert was very great, and often gave us great cause of serious anxiety.

Our boundary work prevented our strictly following the route taken by the Afghan Boundary Commission of 1884, and we made our way across the desert to Robat as best we could to suit the exigencies of boundary work, marching from one set of known wells to another. As a rule we used to find, on arrival, the wells either filled up with sand or full of a filthy black odoriferous liquid, which had to be first emptied out. However, by digging wells close by existing ones, we used to find water at a moderate depth of from 6 to 10 feet. Chemical analysis often showed this water to be anything but desirable for drinking purposes; but we had to take what we could get, and be thankful. I may as well say here that we made many attempts to use our Norton tube wells, but never with success, as the tubes and pump invariably got choked with fine sand, which prevented them drawing up water.

Let me say a few words about the desert, from Nushki to Robat.

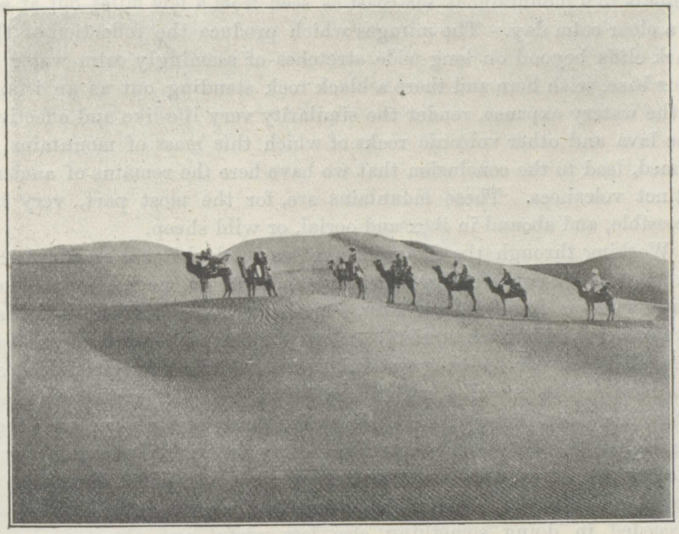
* Surgeon-Major O. T. Duke had also left on record some interesting and valuable information of the country between Nushki and Chagai, collected many years ago when he was a political officer in Baluchistan.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Somehow one generally connects the word "desert" with a flat level country, but it is obviously wrong to suppose that a desert consists of only plains. From Nushki to Chagai we do find a vast level plain, and a plain, moreover, of alluvial soil. You will see that all the drainage from the mountainous country to the east of it, as far as Quetta and Peshin, flows out into this plain by the Lora and other rivers, and that these rivers find their terminus in the Lora Hamun. In flood-time this Hamun is a wide sheet of shallow water, but it soon evaporates, and for most part of the year is like it was when we saw it, a large sheet of dry salt. In old days this whole plain, including all the flat Shorawak plain, must have been a huge lake, to account for all this



MARCHING IN SANDHILLS.

vast expanse of level alluvial soil. All along the north of it stretches the wide sand desert called Registan, a vast sea of billows and billows of sand upwards of 200 feet high, which is slowly but surely advancing year by year, and burying the flat alluvial plains south and east of them. This wilderness of sand stretches northwards as far as the Helmand.

You find on the level plains stunted shrubs of sorts, and all over the sandy portions abundance of a species of tamarisk known as the white tamarisk, and called by the natives taghaz. It grows to some size, but always looks a bleak, starving, neglected sort of tree. It assumes a weird and ghost-like appearance in the moonlight, and somehow always seems to impress a sad, mute protest at the howling sandy wilderness around it.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000ba

مكتبة قطر الوطنية
Qatar National Library

West of Chagai the character of the desert changes; instead of plains we have lofty ranges of desert mountains, upwards of 8000 feet high, and stretching westwards for some hundred miles. North again of these, as far as the Helmand, lie deserts of sandhills interspersed with flat plains of black gravel.

Briefly speaking, we marched along the southern fringe of the sandy Registan desert to the foot of the massive range of mountains west of Chagai. As one first approaches these mountains from the east, they stand out in a grand, high, rugged black mass with jagged peaks, several of which are over 7000 feet high. Crossing the level plains towards them, one cannot fail to be struck with the likeness the scene presents to a mountainous sea-coast as seen from a few miles out at sea on a clear calm day. The mirages which produce the reflection of the black cliffs beyond on long wide stretches of seemingly calm water at their base, with here and there a black rock standing out as an island in the watery expanse, render the similarity very life-like and effective. The lava and other volcanic rocks of which this mass of mountains is formed, lead to the conclusion that we have here the remains of ancient extinct volcanoes. These mountains are, for the most part, very inaccessible, and abound in ibex and oorial, or wild sheep.

Working through the Chagai range, we reached Robat on March 21. Our camels by now were getting very knocked up, not so much from heavy work as from want of food, and the mortality among them had given us cause for much anxiety. The abundant camel-grazing we had been led to expect by every authority who had previously reported on this country had proved a sad failure, as the land was suffering from a severe prolonged drought. All the vegetation was dried up, and even the taghaz, or white tamarisk, which grows all over the country, was dried up even more than usual, and useless as camel food. The warmth of spring had as yet failed to renovate the parched vegetation, but had succeeded in doing something else less useful and pleasant, *i.e.* in bringing out in vast numbers snakes, lizards, spiders, and scorpions of every kind. We used to secure large numbers of specimens daily. These and the ibex and the wild hill sheep appeared to be the only living inhabitants of the country. The few natives of these parts, whether from fear of strangers or from absence of food for their flocks, had fled and deserted the country. We had scoured the country round for miles to find natives, in order to procure sheep and goats from them for food, but without success. This was not reassuring, more especially as we knew that at Robat the real difficulties of the country were only beginning.

As I said before, the Afghan Boundary Commission had traversed the desert as far as Robat in 1884, and the adventurous traveller, Captain Christie, had used much the same route as that mission as far back as 1810. The only two Europeans, however, who had ever visited

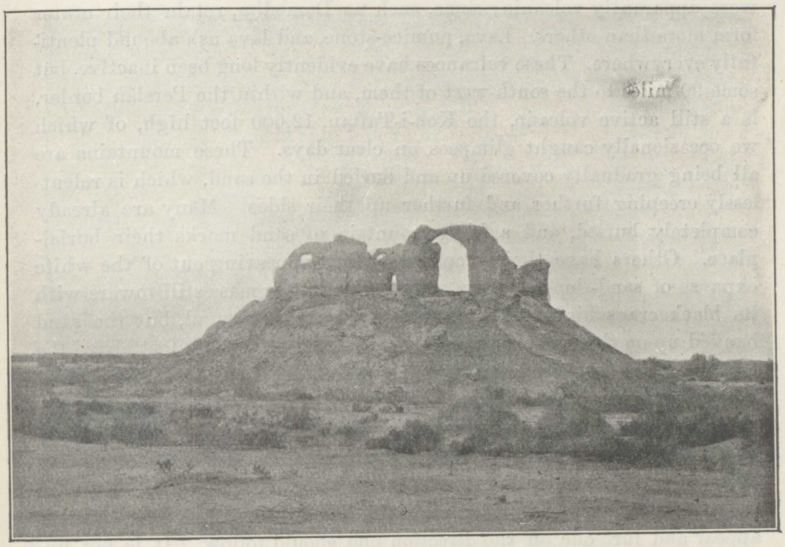
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the deserts west of Robat, were the late Sir Charles MacGregor and Captain Lockwood, who got as far as Godar-i-Shah in the cold weather of 1877, by the route shown in the hand-map issued to-night. The information they then obtained was the only source of reliable information we had to go upon, and it was a serious question whether we would find water in the places where they had found it to exist nineteen years before.

Beyond Robat the desert becomes practically almost a waterless one, and we found that it would be suicidal to attempt to take on our large camps with such feeble camels beyond that place. The British main camp remained at Robat, where there was a good supply of spring water; and the Afghan main camp withdrew to the Helmand river,



RUIN AT GODAR-I-SHAH.

while the Afghan commissioner and myself proceeded onwards along the boundary with a small party of picked men and animals. Our party consisted of Dr. Maynard, Mr. Tate, and myself, with a camp of some hundred and fifty men and two hundred camels. The Afghan party came to about half those numbers. We left Robat on March 26. From near Robat the boundary-line runs for nearly 200 miles in an absolutely waterless desert, without water on or near it. We therefore had to make wide *détours* to obtain water, and had to march, on occasions, from 50 to 70 miles from one watering-place to the next. This meant carrying a water-supply for two or three days for our whole camp with us. The camels, poor creatures, on these occasions had to do without. Even at the watering-places we often found the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000077

مكتبة قطر الوطنية
Qatar National Library

supply, after much hard work in digging new wells, very scanty. It would sometimes take the whole day to water our camp, as the small wells soon were emptied, and took a long time to fill up again. At night the water-skins for carrying on with us used to be filled, and it sometimes took two or three nights to fill up all that were required for the next waterless stage.

Marching *viâ* Darband and Amir Chah, we kept to the north of the Koh-i-Sultan, Damodim, and other mountain ranges. At times our journey lay through wide open level plains covered with black gravel, at others we floundered our weary way through broad expanses of deep sandhills which, near Amir Chah and other places, assumed the proportions of formidable sand-mountains. All the mountains we passed were apparently volcanic; some, such as Damodim, retain their crater form more than others. Lava, pumice-stone, and lava ash abound plentifully everywhere. These volcanoes have evidently long been inactive, but some 90 miles to the south-west of them, and within the Persian border, is a still active volcano, the Koh-i-Taftan, 12,600 feet high, of which we occasionally caught glimpses on clear days. These mountains are all being gradually covered up and buried in the sand, which is relentlessly creeping further and further up their sides. Many are already completely buried, and a high mountain of sand marks their burial-place. Others have their black peaks just appearing out of the white expanse of sand-slopes. Here and there a loftier mass still towers with its black crags high above the devouring waste around, but the sand banked up on their sides in places sometimes 1000 or 2000 feet above the level of their base, foretells a similar fate in store for them. The general effect of the scene they present is weird and unnatural in the extreme.

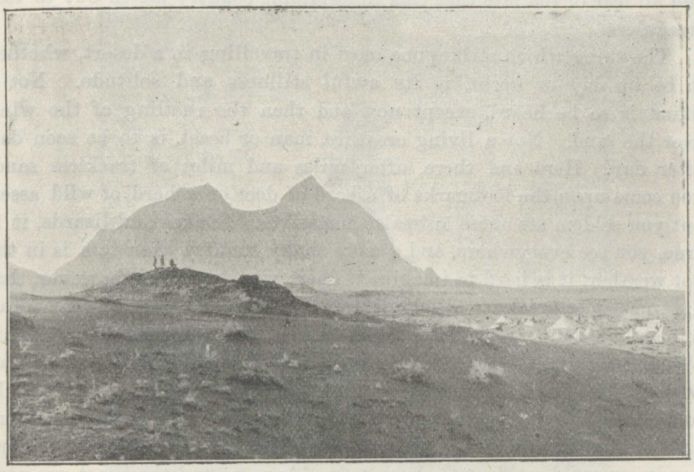
We experienced great difficulty from want of guides. Those few we had were not all good. It is hard to realize the difficulty of finding one's way in a sandy desert even with experienced guides. Even in the vast open stretches of flat plain the same difficulty exists; mirages appear and lure one off the direction one should follow. It is not uncommon for a guide to sit down on the march and refuse to go a foot further, saying he sees nothing but water and trees all round, and that his head is spinning round. At another time a sand-storm may get up, and earth and sky become one moving mass of flying sand. It fares ill at such times with any one who struggle even a few yards from the line of march. Five minutes of a sand-storm would obliterate the deep tracks of an army corps. Some of our party had narrow escapes. On one occasion three of our men were lost in a sand-storm. Two were found in a critical condition after wandering about for two days without water, and the third was found after being three days without food. At another time one of our native surveyors, with a party of seven men, failed to find our camp, and started off in a wrong direction, and their guide deserted them. They fortunately hit upon water, and killed one

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000078

مكتبة قطر الوطنية
Qatar National Library

of their camels for food, but had to live on leaves and roots for five days before they found us again.

The heat had by this time become very severe. The thermometer used to record up to 116° Fahr. inside our tents, and our solar radiation thermometer used to register outside on cloudless days a sun-heat of 205° Fahr. by nine o'clock in the morning. It was not made to register higher than that, or we might have obtained still higher records. As it was, it used to register in places a temperature in the sun equal to that of boiling water at the same place. At any rate, we found it quite hot enough for ordinary comfort, and the heat, combined with a strong hot wind and sand-storm, often made rest during the daytime impossible.



ROBAT, WITH THE MABITE DOKH AND MOUNT.

To those travellers who are tired of the cold of the arctic regions or the damp swamps of Africa, I can thoroughly recommend the genial dry warmth of summer in these deserts as a pleasing change. Owing to the heat, we always had, of course, to make our marches at night. We used to strike camp about sunset, and as a general rule march on by moonlight or starlight all night, arriving at our next halting-place before light in the early morning. At other times, should a sand-storm get up, or the night be an exceptionally dark one, we used to have to come to a stop and lie down wherever we happened to be, until either the moon rose or the day broke, and we could see sufficiently to pick our way. On those occasions we used sometimes to be overtaken by the light and heat of the following day, and then the want of water used to be cruelly felt. On one occasion I remember we got, on a dark night, into a labyrinth of deep ravines, and, after stumbling about

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

nearly all night with incompetent guides, found ourselves at daylight near a place we thought we had passed early the evening before. We did not reach water till the afternoon, and did not get to our intended halting-place till the second morning. Such are the delights of night-marching in unknown country. With a long straggling line of men and transport animals like ours, many precautions had, of course, to be taken to prevent those behind losing their way. Beacon fires used to be lit wherever fuel was available on the march, and a strong rear-guard formed to see that no men or animals were left behind on the road. No amount of severity sufficed to prevent men falling down asleep on the road. Fatigue and drowsiness obliterated all thought of punishment and all fear of the fate that this inhospitable country metes out to lost stragglers.

The thing which strikes one most in travelling in a desert, whether it be by day or night, is its awful stillness and solitude. Not a sound is to be heard, except now and then the rustling of the wind over the sand. Not a living creature, man or beast, is to be seen day after day. Here and there, after miles and miles of trackless sand, you come upon the footmarks of a herd of deer or a herd of wild asses, but you seldom see those animals themselves. Snakes and lizards, it is true, you see everywhere, and a more snaky country than this is in the hot weather, it is hard to imagine. There was one sound, however, that did sometimes break the dead stillness of a night march, and that in an unpleasant manner—that was the deep hiss of the horned viper. This pleasing reptile, of which we came across many, lies during the day with only its head showing above the sand, and it is almost impossible to distinguish it from the sand. At night, however, it used to sit up and hiss loudly whenever any one approached it. If we had a lantern handy, or could set fire to a bush to enable us to find the beast, we used to dismount and kill it; but at other times we all used to make a wide *détour*, and leave it hissing a proud defiance at us as we passed away in the distance.

Some of our party had very narrow escapes from venomous snakes, but fortunately we had no casualties from that cause. One night I saw a venomous snake, an *Echis carinata*, actually strike one of my men on the hand as he was pulling up a small bush to throw on a beacon fire. Luckily, the shot was a bad one, for the snake's head glanced off his hand sideways without the fangs piercing the man's skin. On another occasion, one early morning a very fine specimen of the same viper came out of a small hole in the ground over which I had just been sleeping. A few minutes before he might have caught me napping, but as it was he got up too late, and went to join our zoological collection. We generally looked for a clear spot to lie down and sleep on, but as often as not we were too sleepy and tired on our night marches to bother much about it. One night, as he threw himself

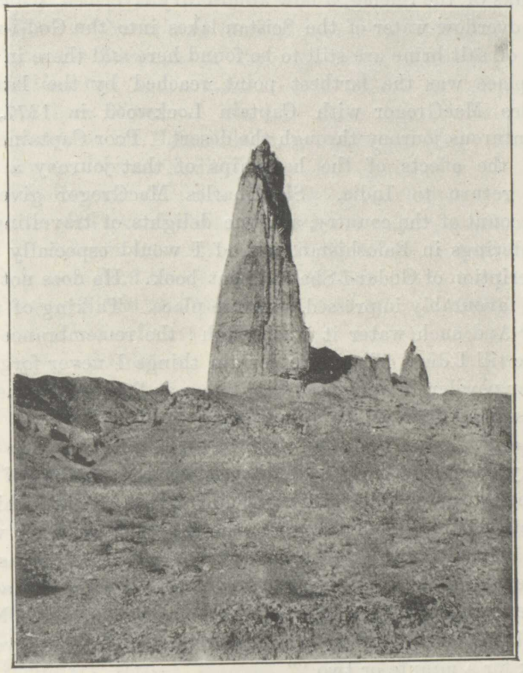
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

down to sleep on the sand not very far from me, Dr. Maynard made some remark about the ground sounding curiously hollow, and in fact kept me awake, as I thought, unnecessarily long propounding theories for this phenomenon. His theories, it turned out, were wrong, and he didn't solve the question until after he had gone to sleep. When I woke next morning he was gone. It appears he had gone to sleep on a huge anthill, and was almost eaten alive.

Striking from Amir Chah across the desert westwards, we reached the Saindak and Kacha range of mountains, which run in a long line



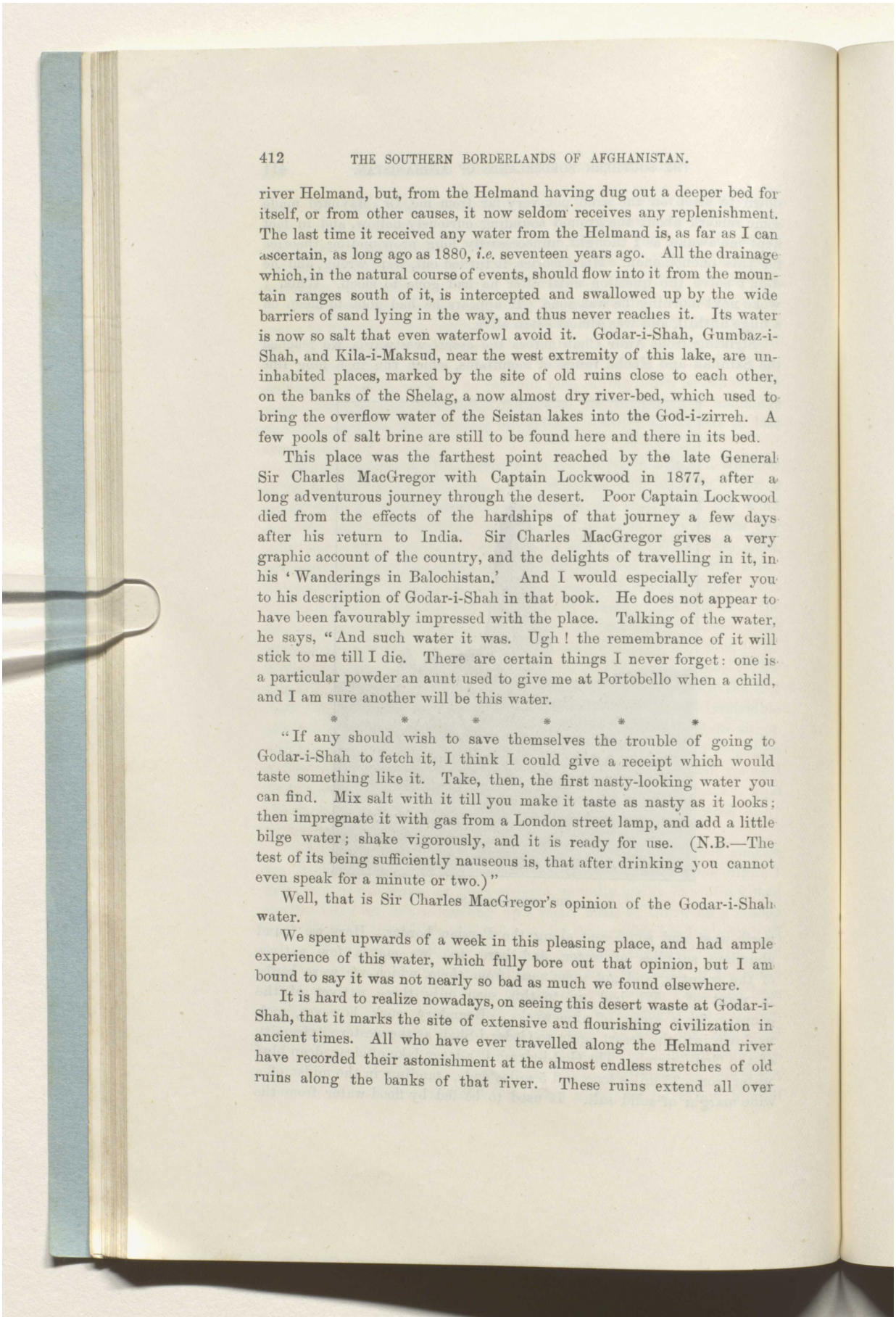
THE NEZA-I-SULTAN.

north-west and south-east along the Persian border. Here we found abundant supplies of water, and here, too, we met a few natives of the country, and got some meat from them, which we were badly in want of. We had up to this seen only three natives of the country for a space of nine weeks. Boundary work, however, took us down into the desert again to Godar-i-Shah, at the western extremity of the God-i-zirreh. The God-i-zirreh is a large lake of clear, deep blue water, some 25 miles long and 5 miles wide, standing in the midst of a wide margin of solid salt. It used to be fed by flood-water from the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



river Helmand, but, from the Helmand having dug out a deeper bed for itself, or from other causes, it now seldom receives any replenishment. The last time it received any water from the Helmand is, as far as I can ascertain, as long ago as 1880, *i.e.* seventeen years ago. All the drainage which, in the natural course of events, should flow into it from the mountain ranges south of it, is intercepted and swallowed up by the wide barriers of sand lying in the way, and thus never reaches it. Its water is now so salt that even waterfowl avoid it. Godar-i-Shah, Gumbaz-i-Shah, and Kila-i-Maksud, near the west extremity of this lake, are uninhabited places, marked by the site of old ruins close to each other, on the banks of the Shelag, a now almost dry river-bed, which used to bring the overflow water of the Seistan lakes into the God-i-zirreh. A few pools of salt brine are still to be found here and there in its bed.

This place was the farthest point reached by the late General Sir Charles MacGregor with Captain Lockwood in 1877, after a long adventurous journey through the desert. Poor Captain Lockwood died from the effects of the hardships of that journey a few days after his return to India. Sir Charles MacGregor gives a very graphic account of the country, and the delights of travelling in it, in his 'Wanderings in Balochistan.' And I would especially refer you to his description of Godar-i-Shah in that book. He does not appear to have been favourably impressed with the place. Talking of the water, he says, "And such water it was. Ugh! the remembrance of it will stick to me till I die. There are certain things I never forget: one is a particular powder an aunt used to give me at Portobello when a child, and I am sure another will be this water.

* * * * * *

"If any should wish to save themselves the trouble of going to Godar-i-Shah to fetch it, I think I could give a receipt which would taste something like it. Take, then, the first nasty-looking water you can find. Mix salt with it till you make it taste as nasty as it looks; then impregnate it with gas from a London street lamp, and add a little bilge water; shake vigorously, and it is ready for use. (N.B.—The test of its being sufficiently nauseous is, that after drinking you cannot even speak for a minute or two.)"

Well, that is Sir Charles MacGregor's opinion of the Godar-i-Shah water.

We spent upwards of a week in this pleasing place, and had ample experience of this water, which fully bore out that opinion, but I am bound to say it was not nearly so bad as much we found elsewhere.

It is hard to realize nowadays, on seeing this desert waste at Godar-i-Shah, that it marks the site of extensive and flourishing civilization in ancient times. All who have ever travelled along the Helmand river have recorded their astonishment at the almost endless stretches of old ruins along the banks of that river. These ruins extend all over

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000087

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Seistan, and here right away down at the very south of Seistan, at Godar-i-Shah, we still find them. They mark the remains of old flourishing towns and cities of past times, and, together with the numerous traces of old canals leading from the Helmand river, prove the existence in some past age of extensive civilization and of a very large population. Who built those cities, and who cultivated this once rich country, one cannot now say. The past history of the country is buried in obscurity. Several have offered opinions on the subject, but only to be contradicted by others. We know that Alexander the Great marched through this country, and found there cities and a civilized people. Zirreh is said to be the modern form of the old name Zarenj, which was the capital of the Zarangae or Darangae tribe mentioned by Arrian. Persian tradition has, again, made Seistan famous as the home of the great Persian hero Rustam. We also know that the Kayani kings ruled in Seistan and the Helmand valley until their final overthrow and extirpation by the Persian Nadir Shah at the beginning of the eighteenth century. Whether the old ruins now existing mark the towns mentioned by the writers of Alexander's times, whether they are connected with the age of Rustam, or as recent only as the latter days of the Kayani kingdom, it is now hard to say. We must leave it to archæologists to decide. They will find this country well worth studying, and it is to be hoped that at some future date careful archæological investigation, which has been impossible up to now, will throw light on the history of what must have been a numerous and civilized people.

Since Sir Charles MacGregor's visit, Godar-i-Shah has been visited by Captain Hon. H. D. Napier and Mr. Merk, C.S.I., but both came there from the Persian side.

We were not sorry to leave Godar-i-Shah, as the heat there was very severe. Proceeding westwards, we reached the foot of the Koh-i-Malik Siah range, and on April 16—a red-letter day in our mission records—we erected our last boundary pillar on the top of Koh-i-Malik Siah, a peak 5500 feet above sea-level, to mark the end of our long boundary-line between Afghanistan and Baluchistan. From this point northwards runs the boundary settled between Persia and Afghanistan by Sir Frederick Goldsmid; and from this same point southwards runs the boundary-line between Persia and Baluchistan, just laid down by Colonel Holdich. The massive stone cairn, some 20 feet high, which we built at the top of this mountain, now marks the point "where three empires meet," for here, at one point, British, Persian, and Afghan territories join. As soon as our camp, both men and animals, had had a few days' rest, and had recruited their strength with the good water we found there and with the food supplies we had obtained from Persian Seistan, we started homewards. The Afghans had had enough of the desert, and preferred to strike across Afghan Seistan to the Helmand, and thence along that river, while we returned to Robat across the desert by much

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000024

مكتبة قطر الوطنية
Qatar National Library

the same route we had come. We agreed to meet each other once more to draw up final deeds, etc., at Robat on May 5.

On the return journey we took the opportunity of exploring the Koh-i-Sultan range, which we had passed on the south of our route on coming. On passing as we did to the north of this range, we were greatly struck by the queer, grotesque shapes of its numerous sharp peaks. And more especially by the appearance of what, as we saw it from a distance, looked like a huge masonry pillar erected on the crest line of the range. This pillar is known as the Neza-i-Sultan, *i.e.* the spear of Sultan. Sir Charles MacGregor saw these mountains from a distance in 1877, and he speaks of them as the oddest-looking mountains he had ever seen. He was greatly struck with the appearance of the Neza-i-Sultan, but neither he nor any other European had ever yet been close up to it. On entering the range our trouble was well rewarded, for a more extraordinary mass of mountains it is almost impossible to conceive. As we rode along in the bright moonlight, we saw high pointed pinnacles and minarets all round us, and here and there steep masses of conglomerate, which formed the peaks, looked exactly like old Gothic cathedrals and churches. Nor did this resemblance fade away in the daylight. The Neza-i-Sultan we found a truly marvellous feature. It is a perpendicular column of hard conglomerate, with straight precipitous sides. The fissures made by rain and weather action down its sides give it a fluted appearance from a distance. We expected to find a high natural pillar, but were not prepared for the stupendous size of the reality. Judging from its width at the base, which is over 100 yards in diameter, the height must be no less than from 500 to 800 feet. You can, therefore, realize the effect of this gigantic column when seen from below. The name Neza-i-Sultan means the spear of Sultan. This Sultan, who also has given his name to the whole range, is an ancient mythical celebrity who is said to have been buried in the vicinity. His full name is Sultan-i-Pir-Khaisar, and he is the patron saint of Baluch robbers. This may account for the Koh-i-Sultan having a very bad reputation as a robber resort. These mountains abound in the assafœtida plant, and in the summer months traders come in numbers from Afghanistan to collect it.

Well, I must hurry on. We reached our main camp at Robat on May 1, and were glad to find them all well and flourishing. We had been nearly six weeks away from them, and, as we had not been able to keep up communication with each other during that time, we found a most welcome supply of letters and news awaiting us. On May 5 the Afghan Commission arrived, and by May 14 our final agreements and maps were prepared and signed, and we were able at last to start homewards. The Afghans returned to the Helmand *en route* for Kandahar, while we followed, as far as Nushki, much the same route as that by which we had come. It was a trying journey, as the heat was very

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002a

مكتبة قطر الوطنية
Qatar National Library

severe, registering 116° Fahr. in our tents. We marched as before, always at night, and now were able to get little or no rest by day, for the "Bad-i-sad-o-bistroz," *i.e.* the wind of 120 days, had now sprung up, and blew with hurricane violence day after day the whole day long, blowing down our tents, and smothering us in sand. This charming wind gets up every year about May, and blows without ceasing from the north-west for four months. While it lasts, it makes life along the Helmand valley and the deserts on either side a perfect purgatory. Right glad were we to at last reach the edge of the desert at Nushki, and ascend out of the hot wind-swept plain into the cool, refreshing air of the high mountains west of Quetta. We reached Quetta safely on May 29, 1896, and there our troubles ceased.

Boundary delimitation and demarcation work was the sole object and aim of the mission whose wanderings I have now described, but in the course of it our energetic survey officers, *i.e.* Captain R. J. Mackenzie, R.E., during the first year, and G. P. Tate, Esq., during the second year of the mission, and their staff, besides carrying out the actual survey work required for boundary delimitation purposes, took excellent advantage of the opportunities afforded of making a careful survey of the whole country through which we passed, on a scale of 2 miles and 4 miles to the inch. I have not the actual figures to refer to, but I believe considerably over 30,000 square miles of country were thus carefully surveyed, much of which was, to all intents and purposes, new country. Much valuable ethnological information was collected, and our scientific work included careful meteorological records, and also large zoological, geological, and botanical collections. Our zoological collection, thanks to the energy of Surgeon-Captain Maynard, is a very large one, including several thousand specimens. As might be expected, from the countless reptiles the desert abounds in, our zoological collection was largely of reptiles. Among them are many rare species and many quite new to science. Our old friend, the horned viper,* turned out to be not only a new species, but a new genus. The zoological and other collections are now being carefully worked out by the officers of the Calcutta and British museums. Besides a few taken by myself, the photographs with which this paper has been illustrated were taken by the following gentlemen, to whom I am much indebted for the loan of them, *i.e.* Lieut. R. A. E. Benn, 5th Bombay Cavalry, for those of the country between Domandi and Chaman, and G. P. Tate, Esq., for those of the country between Chaman and Persia.†

* This snake has been named the *Eristicophis Macmahonii*.

† May I be permitted to mention my Dachshund Donnie, who figured in several of the photographs with which the paper was illustrated. He not only accompanied his owner throughout the wanderings of the Baluch-Afghan Boundary Commission, but also accompanied him in 1893 to Cabul with the Durand mission. He has traversed most of Baluchistan, and almost every portion of India.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000029

مكتبة قطر الوطنية
Qatar National Library

THE PERSO-BALUCH BOUNDARY.*

By Colonel T. H. HOLDICH, R.E., C.B.

South-west and south of the district with which Captain McMahon has been dealing, lies a somewhat remarkable country which has long been a riddle to geographers and ethnographers alike, the mysteries of which have lately been unravelled in connection with boundary demarcation. Captain McMahon has described the watershed which traverses the desert south of the Helmand, shutting off that great river system from the Mashkel lake, or Hamun, district further south. This great basin of Mashkel covers a very large area of varied country, and includes the drainage from those mountains to the west which now form the Persian frontier, as well as that of other mountains to the south, which form the northern outposts of Makrán. About the edge of the Hamun (which is a salt swamp in dry weather and a shoreless sea in times of flood), on the western side of it, are a few scattered date groves, inadequately cultivated, ragged, and unproductive, which from time immemorial have been a bone of contention between the wild and lawless Damani tribes of Eastern Persia and the desert-bred Rekis of Baluchistan. Raids and reprisals, blood feuds, and wayside murders have been hatched and bred in those wretched date-groves, until matters had reached an acute fighting stage, when our Government stepped in and decided to have a Persian boundary as well as an Afghan boundary. Besides the date groves there were other political matters of dispute which had stood over since the historic days of the Seistan Boundary Commission, a quarter of a century ago, and which had proved at the time to be nuts too hard for that Commission to crack. Thus it fell out that whilst Captain McMahon was busy with a section of the Afghan boundary south of the Helmand, I was acting as her Majesty's Commissioner within a few days' ride of him on another and totally distinct Commission, the basis of which was a treaty between the late Shah and our English Foreign Office.

In connection with this treaty there were about 300 miles of boundary to be defined, extending from the Malik Siah Koh in a south-easterly direction to Kohuk, on the Mashkel river, and there were but two or three months in which to define them. The season was well advanced before political negotiations were closed, and it was, in fact, on this very day, February 22, exactly a year ago, that the British and Persian Commissions met on the banks of the Mashkel river, after having travelled, the one from Karachi by sea to Gwadur, and thence across the backbone of Makrán to the Mashkel; and the other from far-off Teheran in the north-west of Persia, in the space of about one month.

* Read at the Royal Geographical Society, February 22, 1897.

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Now you must not allow the desolate blankness of the map of those regions to mislead you. For many years, whilst acting as superintendent of the Baluchistan Surveys, my attention had been directed to this corner of Asia; and chiefly by the agency of well-trained native assistants, not only all Makrán and the borderland in dispute, but very much of Eastern Persia too, had been well reconnoitred and fairly surveyed. I should emphasize the word surveyed. I do not mean that individuals had merely passed along a line of country, contenting themselves with leaving a red trail over a blank white space as the map-record of their travels, but that sound square mapping, with no detail of importance omitted within its limits, was rendered up at the end of the season's work. Thus it happened that we possessed excellent geographical mapping based on triangulation of the whole of this region, and that it was with completed maps in our hands that we entered on boundary negotiations. In my Persian colleague I found a gentleman whose previous connection with the Seistan Commission had given him a most reasonable and delightful confidence in the accuracy of British surveyors. Thus we were able to get the 300 miles of boundary settled and demarcated without any waiting on preliminary survey processes, and by the beginning of May, ere the hot-weather blasts had made that sun-stricken land unbearable, and before the death of the late Shah, we were back again in India with our work complete.

Of the incidents and the strange experiences of that remote commission there is no time now to speak at length; I can only say that the race hatred which exists between the desert-born Baluch and the Persian "gujjer" (as they call him) was strong enough to give us a bad quarter of an hour occasionally, and one could not but feel that the rapid conclusion of negotiations was a merciful dispensation of Providence. One can only look back to the history of the weary Seistan boundary struggle twenty-five years ago, or to the well-remembered experience of the yet more protracted boundary proceedings that were rendered famous at Panjdeh, and note with satisfaction the changes that time has wrought in demarcation procedure—and wrought chiefly by the aid of a better official appreciation of the advantage of correct geographical knowledge.

You will at least understand that my survey assistant, Colonel Wahab (who only very lately had been associated with me in a successful struggle to carry the triangulation of India across the Himalayas into the Pamirs, and thus effected the first scientific junction between Russia and India), found no such scientific achievement ready to his hand in this remote Baluch wilderness. We gathered in little new geography; yet, as the geography of this region is a comparative blank in our maps and must be new to many of you, I will say a few words about it. I must pass over the strange conformation of these western hills, along the watershed of which the Persian boundary now runs, and from which a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

complicated drainage falls into the Mashkel swamps; and I must leave the interest that attaches itself to the gigantic snow-capped volcanic mountain system which flanks these mountains to another day. It may be that Captain Sykes (who, with Captain Kemball, was one of my political assistants) will some day tell you of his first ascent of that extraordinary peak, 13,000 feet high. So remarkable a volcano in so remote a region is a geographical feature strange enough to require a chapter to itself; and you are taking your geography to-night too much compressed for casual descriptions. I will only draw your attention to the general geographical character of those districts which by this recent demarcation now fall within the sphere of British Indian influence, and to their relation both to East and West.

You will see that, flanked as it is by great stretches of desert to the north, and by the sea to the south, this remote Makrán region, in which lately so much of general scientific interest has arisen, forms a natural geographical gateway between Persia and India. This is, indeed, precisely the *rôle* which Makrán has filled in past historic ages; and if it filled that position now, there would be yet this interest to add to all others, that the country would possess great military significance. The key of this gateway has, however, always been held by the predominant power in the Eastern seas; and ever since three small British ships issued out of Pasni harbour, and defeated the last Portuguese squadron that sailed the Arabian sea, that key has been held by us. Before that period (so long before that history does not hold the record) we know now that Dravidian races, driven out of Mesopotamia by Semitic invaders, swarmed through this country to India, leaving behind them curious records in stone of their occupation of the country, and a considerable remnant of their people besides. Then we hear of Alexander's reckless march through this same land three hundred years B.C., when he attempted to force his way by an impossible shore route to Persia, and lost two-thirds of his army in the vain endeavour to support his fleet with his land forces. The description of that retreat, as told by the historian Arrian, is so complete and so graphic, that not only is it comparatively easy to trace out the route followed by Alexander, but from it you may gather a very fair idea of the nature of the country as it exists to-day.

About a thousand years later the Arabs swept through from Syria, and not only conquered all the Indus valley, but set to work to establish a system of roads and irrigation which maintained enormous cities, and turned this Makrán wilderness into a world-famed commercial centre. With Arab reminiscences—the remains of these cities and the remnants of gigantic irrigation schemes—the whole country teems; but the Arabs themselves are only now represented by a powerful confederation of tribes who, indeed, represent the typical Baluch of to-day, but who have hardly a word of Arabic in their language. Then came the great

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000076

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

discovery of a sea route to India and the turn of the Portuguese, and with it the extinction of Makrán as a highway to India, and its lapse into a phase of darkness so profound that twenty years ago about as much was known of it as we know of the darkest forests of Africa. Now again the light has broken on those rugged hills and palm-covered valleys, and most of its dark places have been made plain.

The narrow fringe of sandy unprofitable shore which sets a northern limit to the Arabian sea, is broken here and there by gigantic headlands stretching seawards, and is backed by mountains for its entire length until you approach the Dasht river, where the mountain system becomes broken and recedes northwards. Here is the point where routes into Persia strike inland. Here and there we find harbours formed by the outlying headlands, which give protection to the fishing craft of the coast, and support small townlets which are usually stations of the Persian Gulf telegraph service, and do a considerable trade in dried and salted fish. Of the townlets Gwadur (which is an Arab possession, owning the Sultan of Muskat as sovereign) is the principal; and from Gwadur salt fish is exported to the west coast of India and sharks' fins to China. How such a trade can pay I do not pretend to say.

The fish industry which pervades the coast pervades the atmosphere also. All the Makrán coast stinks of fish, and all the Makráni people live on fish. Dogs, cats, cattle, and even camels, eat fish. The old Ichthyophagai of the Greeks are offensively predominant throughout the coast districts; and, strange to say, after all these centuries, the old mystery of enchantment hangs over that coast still. I have been taken to the enchanted island of Astola, where, even now, there dwells a lovely, but most pernicious, mermaid, who turns men into fish, and where, no doubt, most excellent use has been made of the mysterious envelopment of the island by the pirate Meds, who used to bring the crews of captured vessels here and murder them wholesale.

The roads from the coast inland are few and far between. They are not good roads when you find them, for as they trend northward they cross the axis of all chief ranges and ridges of the country. The hill conformation is very peculiar, though closely allied to that which exists on the frontier from the north-west of India (*i.e* south of Waziristan) to the Arabian sea, and which continues again from Makrán to Western Persia. Close-packed, narrow, knife-edged ridges run parallel to each other and to the coast, sometimes swelling into well-defined mountain systems, sometimes dwindling into a mere display of sharp points, emanating like sharks' fins from the billowy plain, but always offering the sharpest, stoniest, and most aggressive obstruction to the traveller bound northward. It follows that between these ridges running east and west, or following the trend of the coast as the coast itself shapes a new course, there are long narrow valleys offering means of communication as good as that which crosses them is bad.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006a

مكتبة قطر الوطنية
Qatar National Library

It is in these valleys that the wealth of Makrán lies, and it is wealth not to be despised even in these days. Thick groves of date palms occasionally fill up the landscape like a sea, with the white towers of village forts rising above them, as islands break the surface of an inlet; rank luxuriance of cultivation lies under the palms, where wheat-fields enclose fruit orchards, and fair-sized streams are diverted into a network of irrigation channels. There are districts in Makrán where the fierce heat of early spring forbids the existence of any form of life whatsoever, and there are also sweet, well-shaded valleys, the beauty of which is hardly surpassed even in Kashmir. In amongst them all lie the remains of an ancient civilization, such as may be seen in the ruins of old cities, of old forts, of roads, and of canals. These tell a tale which we may hope ere long fairly to unravel.

Old as this Asiatic world may be, it is yet a new world to much of scientific inquiry. Its geography is fairly solved, but its ethnography is still a riddle, and its history, when research and investigation shall unfold it, will fill up many a gap in the stories of the nations, if it can never claim a national character itself. I deeply regret that I have neither photographs nor sketches to illustrate some of the more remarkable corners of this No man's land. It is not that I have neglected to secure such records, but that they are in India, whilst I am here. I can only hope that in calling your attention to this long-forgotten country I have claimed your interest in succeeding records when perchance there may be leisure and opportunity to tell a completer tale.

Before the reading of the paper, the Chairman, Admiral WHARTON, said: I am sorry that Mr. Curzon, who was to have presided here to-night, has been prevented by his public duties. We can understand that at present he has not much time to spare. I am particularly sorry, because I feel a sailor is out of place in the chair when talking about the borders of Afghanistan, of which I know nothing and Mr. Curzon a great deal. I do not think I need do more than introduce to you the lecturer, Captain McMahon, who will now read his paper.

After Captain McMahon's paper, Admiral WHARTON said: While Captain McMahon was tracing his boundary, Colonel Holdich was tracing another boundary, and he has kindly consented to give us a short account of his experiences.

After the reading of the papers, the following discussion took place:—

Admiral WHARTON: I am sorry Sir Frederic Goldsmid is not here; I had a letter this morning from him to say he is unfortunately laid up. He conducted the former delimitation commission between Afghanistan and Persia, and brought it up to the point where Colonel Holdich and Captain McMahon took their surveys. Also Colonel Woodthorpe wished to be here, but I am sorry he has not been able to come. Would Mr. Alcock say something of the collections Captain McMahon brought back?

Mr. ALCOCK: There is very little of general interest I can say about the collections brought back by Captain McMahon and Dr. Maynard. As Captain McMahon has said, its chief interest is reptiles; in fact, judging from that collection, one is quite prepared to understand that Baluchistan is a land of reptiles. Another feature of the collection is the large number of scorpions, spiders, and venomous

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

spider-like creatures. I worked it out and examined the reptiles carefully; there are a good many species, including the viper Captain McMahon spoke of. It is a most interesting form, and we have christened it *Eristicophis*,* on account of its pugnacity: though all vipers are excessively pugnacious. I have not been able to examine the collection of scorpions and spiders and venomous spider-like creatures, which is large and interesting, but I have arranged with Mr. Pocock, of the British Museum, to examine and report on them.

Mr. BLANFORD: Captain McMahon has traversed a tract of Baluchistan quite different from that I crossed with Sir Oliver St. John in 1872. It is exceedingly interesting to hear, both from him and from Colonel Holdich, that the country, previously unknown, has at length been opened up. I can entirely confirm Captain McMahon's account of the abundance of reptile life, as that is exactly what I found in going through the same country.

Sir HENRY BRACKENBURY: I am afraid I can add nothing useful to the geographical aspects of the question which has been brought before you to-night, and certainly nothing as to the geological aspect, and my knowledge of Baluchistan is but very small, for, though I visited Domandi with Captain McMahon when first he saw it, in the winter of 1891, and galloped over the plain of Zarmelan, and visited Chaman with him, I know little of the country in its rougher aspect. But there is one point I should like to say a word on, and that is what may be called the personal aspect of this work, the work as done by the man. I was a member of the Government of India which ordered these boundary expeditions, these delimitation expeditions, and we knew that there was a difficult task before those who had to conduct them. I think Captain McMahon's modesty—one of his characteristics—made very light of these difficulties; he has told us something and left us to gather something of the nature of that country, how most of it is an arid desert. Do you know how the people themselves describe it? They say that the Almighty, when making the world, used all the water, and grass, and flowers, and trees to make other beautiful countries, and when He had used all these, and had nothing left but a heap of rubbish, He threw that down and made Baluchistan; and I have heard others comment upon that and say, "We cannot understand, when He had made Baluchistan, that He took the trouble to make any other hell." That is the country in which Captain McMahon conducted that boundary expedition, a country infinitely desolate, infinitely arid, infinitely drear, and he had not only the difficulties of intense heat and want of water to contend with, but he also had to contend with that human difficulty which few know now so well as he does—the difficulty of dealing with the Afghan. I think it is only those who have dealt with the Afghan that can really know how obstructive a human being can be. Captain McMahon has shown a very charming photograph of his Afghan colleague, and spoke of his winning smile, and told us they didn't often smile both on the same day. From what I know of Captain McMahon, there was a subdued smile on Captain McMahon's face even when an open smile was on the face of his colleague, a smile which occasionally changed to the wrong side of his colleague's face. For these difficulties which Captain McMahon had to contend with were enormous; it is in the nature of Orientals, especially Afghans, to create difficulty in every matter connected with diplomacy. Here a boundary had to be defined. It was apparently a simple thing, because it had been traced upon the map and agreed to by Sir Mortimer Durand and by the Amir at the time of the mission to Kabul, of which Captain McMahon was a member; but it is one thing to trace a boundary on a map, and another thing on the ground. And there were special difficulties connected with such a question, such as watercourses

* ἐριστικός = lover of fighting.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008d

مكتبة قطر الوطنية
Qatar National Library

and irrigation, to whom the rights belonged; these give rise, when both parties are not anxious for a speedy issue, to endless delays and difficulties. Captain McMahon had to contend, first of all, with great physical difficulties; secondly, with these human difficulties, and by neither one nor the other was he ever discouraged; he had that characteristic which is absolutely necessary in dealing with these Eastern peoples, not only perfect courage, but absolutely infinite patience, and it was by these two combined qualities, courage and patience, that these boundary commissions were brought to their thoroughly successful ends. Sir, I think it is a matter of great pride to us as Englishmen, it must be a matter of great pride and constant self-congratulation, that there are always to be found men, young men, possessing these great and these grand qualities—men who, like Captain McMahon and Colonel Holdich, will continue to do for this empire the class of work they have done, and will continue to keep this great empire what it is.

Admiral Wharton: The very eloquent and moving words you have just heard from Sir Henry Brackenbury leave me very little to say. I think, reading between the lines of Captain McMahon's story, we can see there were all these difficulties which Sir Henry has mentioned, of which Captain McMahon said nothing, and the stories we have heard to-night give us an idea of the sort of work that goes on throughout our empire from year to year in a quiet way, in the course of business that no song is made about, that make us proud we are Englishmen. I am sure we shall be only speaking your sentiments in offering our hearty thanks to Captain McMahon and Colonel Holdich for their extremely interesting papers.

Captain McMahon's Map.—This sketch-map was compiled from the Survey of India map of Afghanistan of 1889; from the map published in the *Geographical Journal*, 1896, illustrating Colonel T. H. Holdich's paper on "Ancient and Mediæval Makran;" together with slight additions and alterations made by Colonel T. H. Holdich and Captain A. H. McMahon. The coast-line has been taken from the Admiralty charts.

THE RIVER ODER.*

Amongst the many geographical advantages enjoyed by these islands, one of the least considered is our comparative immunity from great floods. The historical works of Lauder and others, and the later chronicles of the daily newspapers, do indeed contain accounts of destruction done by total inundations, but at the worst the total damage is rarely considerable, and there are few inhabitants of the United Kingdom who regard any of its rivers as a source of real and imminent danger to themselves or their property. Under these circumstances, as might have been expected, we know little about the hydrography of this country in detail, and the production of a work like that before us is impossible.

The Imperial Decree of February 28, 1892, placed two questions before the German Commission charged with the investigation of the

* Der Oderstrom, sein Stromgebiet und seine Wichtigsten Nebenflüsse; herausgegeben vom Bureau des Ausschusses zur Untersuchung der Wasserverhältnisse in den der Ueberschwemmungsgefahr besonders ausgesetzten Fluss-gebieten. Berlin: Dietrich Reimer.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

hydrographic conditions existing in regions liable to inundation: (A) What are the causes of the floods of recent years; is the system of regulation and canalization of the Prussian rivers responsible for the increased danger arising from floods in those regions, and, if so, what changes are to be recommended? (B) What further steps can be taken to diminish the risk to life and property in the future? With a view to answering these questions, the Commission set itself to collect and arrange all the existing observations concerning the physical and economical conditions of the different river-systems, and to fill up the numerous deficiencies by new observations, so as to complete a general survey of the hydrography of each system, and of the river interests and rights which might be affected by any proposed scheme of regulation. This vast undertaking was, in the first place, restricted to the basins of the Oder, the Elbe, and the Vistula, and the work now published forms the report on the first-named. It consists of three substantial volumes of text, a quarto volume of tables and statistics, and an atlas of thirty-six plates. The first volume treats of the general form of the Oder basin, its position, climatic relations, geology, etc.; the second describes in detail the separate secondary basins; and the third is devoted to a careful discussion of the actual streams of the main river and its chief tributaries.

The most important point to be borne in mind, in arriving at a clear understanding of the geographical relations of the rivers of Northern Germany, is the fact that the mountains and high ground forming the water-partings approach nearest to the sea-coast towards the west, while as we go eastwards they recede inland till the triangular North German plain merges almost insensibly into the great Russian depression. The southern border of the Oder basin touches on one side the division of the Carpathians known as the Western Beskids, and on the other the Sudetic mountains, whose north-eastern slope drains to the Oder throughout its whole length. Only the western part of the highland of Poland drains into the Oder—the plateau of Poland and Upper Silesia. But the peculiar distribution of the higher ground makes itself felt far into the plain, for the Bober and the Lausitzer Neisse join the main stream not far above the point where its volume is doubled by the Warthe and Netze, and it is to the latter that the immense area of low-lying plain in the Oder basin chiefly owes its existence; they traverse the belt of depression which extends over into the Vistula basin as far as the Rokitno marshes, and forms the true connecting link between the great Russian plain, with its extreme continental climate, and the diversified surface of Western Europe, where a broken coast-line carries the milder influences of the sea far inland. Hence the Oder occupies, as it were, an intermediate position, the lower parts of its course being subject to conditions similar to those characteristic of Western Europe, though to a modified degree, while the upper basin is in a continental

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003d

مكتبة قطر الوطنية
Qatar National Library

region, the continental characteristics being, however, again modified as compared with such rivers as the Vistula. These circumstances of position, together with the greater elevation of the southern part, give to the Oder basin a climate almost uniform throughout its length.

A remarkable feature of the Oder basin is the absence of the expansion and contraction observed in many rivers. The shape is in effect a somewhat distorted rectangle, the north-western side standing perpendicular to the south-western base-line, and the south-western side forming an acute angle with it. The length of the base is approximately 304 miles, and of the opposite side 245 miles, giving a mean length of 274 miles; the perpendicular distance between these sides is 166 miles. The "centre of gravity" of this figure lies east of Lissa, almost on the watershed between the Bartsch and Obra, and on the line dividing the German and Polish languages. The lowest point of the main watershed is at the Mährische-Pforte, between Bölten and Weisskirchen, where the Oder is separated from the Danube, and the Atlantic from the Mediterranean, by a pass only 1000 feet above sea-level. From the Mährische-Pforte the watershed extends westwards for 682 miles, eastwards for 920 miles; 354 miles in the former case, and 103 miles in the latter, traversing mountains. The eastern part runs through the plateau of Poland and Upper Silesia for 217 miles, and the remaining 328 miles on the left of the main stream, and 600 miles on the right cross the low plains—amounting to 928 miles, 58 per cent. of the whole.

The great extension of the plains of North Germany and Poland towards the east gives the eastern sides of the river-systems an almost independent character: a general south-to-north direction is combined with an east-to-west stream draining the southern side of the rising ground near the coast, and the joint flow carries the waters of the whole eastern and north-eastern plain in each basin towards some point on the lower course of the main stream. Thus the Warthe and Netze in the Oder basin correspond to the Bug and Narew in the Vistula, the Havel and Spree in the Elbe, and the Aller and Leine in the Weser. The eastern tributaries are, therefore, for the most part rivers of the plain, in contrast to those received higher up on the opposite side, which are more frequently rapid mountain streams.

The point of junction with the Warthe accordingly forms, in the case of the Oder, an obvious division between the lower and upper courses of the river. A further division of the upper river is, however, desirable; and between the Warthe and Breslau may be called the middle Oder, the term upper Oder being kept for the part between Breslau and the source. This arrangement has many advantages from the point of view of commerce and navigation, but the formation of the river-valley gives a more scientific division at a point somewhat below Breslau, near the confluence of the Lohe, Weistritz, and Weide with the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

main stream, where it is first deflected from its normal west-north-west direction by a ridge running east and west. The "middle Oder" is itself divided into upper and lower courses at its junction with the Obrzycko, where it enters the great Warsaw-Berlin valley. The upper Oder proper begins at its junction with the Olsa, where the four streams forming the original feeders unite and enter the Silesian plateau. This is also divided into upper and lower courses at the entrance of the Neisse.

Politically, 79 per cent. of the Oder basin lies in Germany, only 0·5 per cent. outside Prussia. The sources of the main stream lie in Austria, and of the Warthe in Russia, giving 6 per cent. of the whole basin to the former country, and 15 per cent. to the latter.

These facts, as stated in the introduction to this report, indicate the nature and extent of the area to be surveyed, and suggest the lines followed in the inquiry itself. Space does not admit of our even naming the thirty-five separate river-basins, each minutely described in the second volume under the five headings, configuration, soil, water-system, cultivation, and forest; still less can we follow the third volume through the detailed accounts of the Oder itself and its main tributaries. This volume is divided into three, the first section describing the bed and the valley of each part of the Oder corresponding to the natural divisions described above, the movements of water and ice in each, and the "Wasserwirthschaft," or artificial element introduced by dams, bridges, and the like. Section II. of this volume deals in a similar manner with the most important tributaries, excepting the Warthe, which, for geographical reasons already mentioned, has a whole division, section III., to itself. Every part of the work has been executed with the most laborious minuteness, and the facts discussed are constantly supported by the statistical tables, and illustrated by the innumerable maps, plans, and sections.

The general geographical interest of the report, apart from its value as a work of reference, centres round the papers on the climate and geology of the Oder basin, in the first volume. The first of these, by Prof. Dr. Kremser, discusses the interesting transitional climate of the region from the data of air-temperature and rainfall, with a sort of appendix on the other less widely observed elements. The variation of temperature with height is rightly regarded as an important factor in the temperature investigations, and special care has been taken in the comparison of the differences of temperature at such pairs of stations as Eichberg and Schneekoppe (1145 and 5260 feet above sea-level), and Eichberg and Wang (2864 feet), under varying conditions of clear and cloudy weather, and the abnormal conditions of the Föhn wind. The mean correction for height for the year comes out about 1° Fahr. in 330 feet, somewhat less than might have been expected, but easily accounted for by the frequent reversal of the temperature gradient in the colder seasons.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000091

مكتبة قطر الوطنية
Qatar National Library

Where a river is concerned, the occurrence and duration of frost is naturally of special importance, and the comparison of Breslau and Stettin gives interesting results. On a mean of forty winters, frosts of less than ten days' duration occur with almost equal frequency, but for longer periods Breslau is higher, continuous frosts of over a month occurring there twice as often as at Stettin. Nevertheless, the longest frost on record (December 17, 1870, to February 16, 1871) lasted exactly the same time at both places. The lustral averages of nine stations for the forty years 1851–90 show temperatures below the general mean from 1851–55 to 1861–65, above it from 1866–70 to 1881–85, and again below it from 1886–90.

The geological work was placed in the hands of Dr. Dathe, who is responsible for the hill and mountain districts, and of Prof. Dr. Wahnschaffe, who surveyed the low-lying plains, the two regions being practically separated by the contour-line of 650 feet (200 metres). No part of the Oder basin rises above the snow-line, so the term "mountain region" is used in the same sense as in the geography of this country, and includes everything more than 1700 to 2000 feet above sea-level, leaving the 600 to 1700 feet belt as "hill country." For geological purposes, the two arrange themselves into (1) the Sudetic mountains, and (2) their subsidiary ranges, (3) the Beskids, and (4) the Upper Silesian plateau; but the Sudetic mountains are understood to extend only from the Lausitzen Pforte to the Mährische Pforte, and to include the Riesengebirge, Eulengebirge, and Altvater groups, characterized by a bed of crystalline schist, which, although the oldest formation here, overlies most of the more recent strata. Special interest attaches to the northern diluvium, which here, as elsewhere in North Germany, occurs up to about 1600 feet above sea-level. The distribution of this deposit has been found to extend over a much wider area in the Sudetic range than was supposed, a point of much importance on account of the different permeability of the soil, and consequent change in the amount of drainage which may be expected to find its way to the various feeding streams.

The low plains of the Oder basin are almost entirely covered with quaternary deposits, but here and there these are so thin that the tertiary strata have become exposed, and the river itself has of course made a number of sections. The tertiary rocks appear most frequently in the neighbourhood of Brieg, to the north of Breslau, south of Liegnitz, and round Posen, but especially in the basin of the Warthe, and they consist chiefly of middle and upper Oligocene and Miocene beds. The quaternary deposits are the diluvium and the alluvium, the former the work of the Russo-Scandinavian ice-sheet, which is now known to have overspread North Germany twice, with an inter-glacial period interpolated, and the latter the result of agencies at work since the total disappearance of the ice-sheet.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE TEACHING OF GEOGRAPHY IN RELATION TO HISTORY.*

By A. W. ANDREWS.

Much has been written about the teaching of geography, but, unfortunately, the improvement in English schools of this subject has been most disappointing. Its educational importance is, however, so great that I may perhaps venture to make a few practical suggestions on a side of the subject which has been somewhat neglected. It is only by systematizing the teaching of geography, especially in its early stages, that we can hope to train future geographers, and obtain for geography in English education the honoured and important position that it holds on the continent.

At present, in most English schools some time is devoted to the teaching of history, and in a few there is a systematized teaching of geography; but, unfortunately, the two subjects are taught in almost complete isolation. At first it seems almost inconceivable that this should be so, and certainly it is not from any lack of theory on the subject. To quote merely one or two names: Ratzel expressly declares that geography is by no means a Hilfswissenschaft, or subordinate branch of history, but that the two sciences need one another and cannot be separated. Herder, again, in an inimitable definition, tells us that history is geography set in motion; and Michelet goes so far as to say, "L'Histoire est d'abord toute Géographie." Finally, to quote Sir A. Geikie, whose admirable book on the teaching of geography should be in the hands of every teacher. "Few observant teachers will refuse to confess that the historical side of political geography is generally in this country either neglected altogether at school or is treated in the most meagre and perfunctory way. . . . The present political limits of a state are too often supposed to have the same kind of stability as if they had been boundaries fixed by nature. When France of the fifteenth century is spoken of, what proportion of readers has any notion of the difference between what *was called France then and what is France now?* Yet surely history cannot be intelligently understood unless such distinctions as this are kept in view.

"It is hardly possible to exaggerate the importance, in geographical teaching, of connecting the present aspect of the country and the present political boundaries and social conditions with those that preceded them, and out of which they have gradually grown. It is only in proportion as we realize what has been that we can properly appreciate what is. And yet how constantly do we see geography taught as if the existing state of things had always been maintained; as if, for instance, the modern limits of countries had the same persistence and fundamental character as geological boundary-lines. Obviously the study of the present must come first, but we should never forget that the result must necessarily be superficial and imperfect, until it has been connected with an inquiry into the past."

One would fancy that a practical people like ourselves would have utilized some of the abundant theory and material that lies within easy reach, but, unfortunately, there is nothing in which we are more conservative than education. Mathew Arnold's famous lines in 'Empedocles' or 'Etna' might have been specially written for educationalists:

> "And so they rubbed through yesterday
> In the hereditary way;
> And they will rub through, if they can,
> To-morrow on the selfsame plan."

* Paper read at the Royal Geographical Society, February 18, 1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000056

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The fact is that all practical teachers are, and rightly so, in great fear of fads and faddists, but it is obviously absurd to carry this conservative and precautious attitude too far. There can be little doubt that, without any radical change, and with a slight addition to the time at present spent on history alone, the study of history and geography in connection with each other would, in the hands of capable teachers, produce a result of almost tenfold value to education. To obtain this, the study of the physical geography of a country must precede and be coextensive with the study of its history.

I think it will be generally admitted that the ideal of history teaching in English schools should be to teach the student to reverence the great deeds of his ancestors, to understand his responsibilities as a citizen of a great empire, and, above all, to appreciate the causes which have contributed to the making of England and Greater Britain. As taught at present, even by the most able teachers, there is what one may call a lack of perspective in the teaching of English history, owing to the neglect of physical geography. It is true that good historians and teachers of history have all, consciously or unconsciously, been geographers. It is perhaps sufficient to allude here to Green's admirable geographical work, especially on the 'Influence of the Forests in checking Invasions,' and they have themselves appreciated the importance of physical factors; but they are apt to forget that the student has not done so, and they consequently relegate what I may call the physical side of history to special text-books or special lessons. There is, therefore, this great difficulty to start with, in trying to obtain an adequate recognition of the place of geography in the teaching of history, that there are no convenient text-books to which the teacher of, for example, English history can refer for information as to the geographical side of his work. He can, of course, obtain this information from geographical text-books, but unless he deliberately takes this trouble—which, unfortunately, seems to most teachers to lead them to work quite outside their province—and can also induce his pupils to study geography, he will of necessity almost entirely neglect the geographical side. Unless the teaching and reading are systematic, they can be of little use.

The few isolated allusions to the physical geography of a country made by history-teachers, or scattered through text-books, are, as a rule, of little practical value, because the student has not sufficient knowledge of the subject to understand their importance. It would be quite as unreasonable to expect any one to have a clear idea of the relative position of peaks in a mountain range of which he has only caught fleeting glimpses through the mist.

It may, perhaps, be objected that historical atlases—and what could be more geographical than an atlas?—are always used by all good teachers in the teaching of history. But if you examine what are usually called historical geographies and historical atlases, you will find that they are almost entirely topographical; that is to say, they deal with the distribution of names and the changes of political boundaries. Some, such as 'Gardiner's Student's Atlas of English History,' are of immense value for the teaching of history, and I can imagine nothing more instructive than to compare the maps of England of about 1400 with those of the present day, and observe how few of the modern manufacturing towns of Lancashire were even marked at the earlier period. But teachers are apt to forget that a topographical map is merely a diagrammatic method of showing statistics referring to the relative positions of names.

It is true that a physical map is also a diagrammatic method of showing the distribution of rivers, mountains, etc., and that it can be used equally badly, but fortunately hardly any student attempts to learn a physical map by heart. To know where places are and their distance apart has a distinct value in the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

intercourse of everyday life, but no one as a rule wishes to know the exact shape of mountain ranges or the position of contour-lines for their own sake, but only for the information given by these symbols with regard to the country. A student, therefore, does not attempt to commit a physical map to memory any more than he does a landscape, but only attends to and remembers those details which help to illustrate his line of thought.

To take a concrete instance: a boy, looking at a topographical map of England, remembers the positions of London and Liverpool from the picture imprinted on his mind of the names London and Liverpool, written in a certain type at opposite corners of the map. He has now got all he wants from the map; that is, the relative positions of the two names representing the towns London and Liverpool, in much the same way and with as little reasoning as he has learnt the position of two benches in his schoolroom. But he can hardly look at a map of India and see the Himalayas with the plain of the Ganges below, or of Switzerland and see the plain of Lombardy between the Alps and Apennines, without thinking of what these lines and dots represent, and reasoning somewhat as to how these mountains and this plain must affect the people who live there.

The above example of the misuse of a topographical atlas is particularly fruitful, because it illustrates an unfortunate tendency to make English history a mere verbal record of statistics, in the way that a topographical atlas is a diagrammatic record of statistics. To understand history, the student should be able to have in his mind at any one epoch (for example, 1380 in English history, at the time of Chaucer), a picture of the state of England, as clear as the student who has studied the present geography of the British Isles has of the whole British Isles and the relation of the different parts to the life of the whole.

But, as a rule, even the best student has no such clear view. He may have studied the growth of English institutions, and be able to understand the development of our complex system of law and custom; or he may know the history of parliament or the foreign policy of different reigns and epochs, or possess a connected idea of the development of English literature and manufacture; but, however thoroughly he may understand each branch (and it must be remembered that I mean a knowledge of English history far more complete than a mere acquaintance with dates and genealogies and great events), he is apt to become confused when he tries to put these different streams together and form a clear picture of life in England at any one time.

In the study of history there must be constant comparison and contrast, and the student has usually no clear idea of any one epoch with which he can constantly compare and contrast others. If, however, he knew something of the present physical geography of the British Isles in conjunction with some of the main ideas of the history of our own times, a knowledge that he would be able *to continually expand from his own experience*, he would possess something certain with which he could compare other epochs.

One of the strongest reasons, therefore, for the study of geography in connection with history, is that it would give the student a firm standpoint. It may also be added that, as the pressure of other subjects in schools often makes it impossible for a student to gain any but a disconnected knowledge of certain periods of history—I know many people who have never got beyond the reign of Queen Anne—if he began with geography, he would at any rate possess some certain and valuable knowledge, in addition to a training in what is, as every one must admit, one method of understanding history, *i.e.* from the geographical side. He would probably in this way make far more use of any scraps of historical information that came in his way in after-life.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000054

مكتبة قطر الوطنية
Qatar National Library

As an example of how one of these epochs might be studied, and how enormously the early training in physical geography would help the student, I will take the times of Chaucer (about 1380). I must first, however, explain what geographical knowledge the student should bring to the study of this epoch. It would, perhaps, be well at this point to answer a possible objection to the study of geography in connection with history, namely, that geography is a science, and should take its place among the sciences. It is quite possible that one of the obstacles that have hindered its introduction into schools has been that the teaching of geography has been confounded with that of the sciences from which it draws its materials, and that in consequence the teaching of geography is considered as simply an extension of science-teaching. It is obviously far more important, to take an instance, that a boy should understand the part that Vienna played in history as one of the outposts of civilization, than that he should know the rainfall of Vienna, and I can understand a teacher who regards geography in this way failing to appreciate its importance for history.

But it must not be forgotten that geography gives us the causes which made Vienna what it was, and that the rainfall was only one, and possibly the least important, of the factors. There is, therefore, a real danger to be avoided in the teaching of geography in English schools, which lies in the manifolding of statistics, whether these consist in diagram maps or lantern slides. This, however, is simply due to a bad selection of the materials, and need not prejudice geographical teaching.

I might here point out, with regard to the admirable lantern-slide maps which have been and are being prepared by the Geographical Association for use in schools, that they are not, as some teachers have thought them, a royal road to geography, but simply a convenient diagrammatic form of showing statistics. It would seem unnecessary to mention this, if I did not know that many teachers have actually shown a series of these maps, comprising population, rainfall, language, physical features, etc., just as they would have shown a series of views. Lantern-slide maps are, however, if properly used, of immense value, as they can be seen by large audiences, and save great labour in the preparation of wall maps.

To return to the consideration of the preliminary study of physical geography in connection with history. This should in no way differ from the training in *observation* which has so often been described by numerous authorities; I need only refer here to "Geographical Education," by A. J. Herbertson, in the *Scottish Geographical Magazine* for August, 1896, and other months. The early training in geography must be partly scientific, and in connection with the sciences, such as meteorology, geology, botany, chemistry, etc.; that is to say, a boy must first be taught to observe the laws of nature and physical conditions that determine the environment of his school and home. It is not, however, necessary for the special purpose in view—the geographical training necessary to understand history—to carry this too far. To take an instance, it is not necessary to be a meteorologist to understand the influence that climate has exerted in the past and does exert in the present on the history of life and race, in Ireland and the west of the British Isles, any more than it is necessary to be a statistician to know something, in the ordinary study of English history, about the increase of population at different epochs. Unfortunately, this training stops short, as a rule, with *observation*, but to be of any use it must go much further, and lead on to the comparison and contrast of the district he knows with the rest of the British Isles, and, in less detail, with Europe and the British Colonies.

The geography of the world must, of course, not be neglected, but it should only come after the study of the countries which are in more intimate relation with his home. In fact, both in the early training in physical geography and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

subsequently, the student should be taught to look out for the relations which subsist between different towns, districts, and countries. These are obviously not determined by distance, *e.g.* if you post luggage from Grindelwald to Brigue in the Rhone valley, a few miles distant, it goes about 60 miles round by Berne, because it can be sent by rail round the great mountain basins. They are even not determined entirely by facilities of communication, as Manchester discovered, when it hoped to tap the ocean trade directly by the ship canal, without unloading at Liverpool. There are many reasons, such as custom, interest, etc., which often bind two towns, districts, or countries together between which the facilities of communication are far less than between either of them and a third.

I have mentioned this because there is a danger, in the teaching of geography, to imagine that it should be taught—in spite of the repeated assertions of many eminent authorities, that to proceed by political divisions, township, country, etc., is to violate the fundamental idea of home geography—beginning from the Home, or Heimatkunde, in the order in which places or districts lie on the map, or even, as some one has pointed out, in the order in which maps are bound in an atlas! I have known many a boy who has studied the geography of North America, and has then been taught South America because it came next, and consequently has never reached India at all. It is surely, however, as unreasonable for any one to do this in geography as it would be in history for an English boy to study first some country like China, whose story is least intimately bound up with that of the British Isles. If, however, geography and history are taught in connection, the order of study presents no difficulty, as the countries of Europe, United States, India, and the colonies will naturally be studied *first*, in connection with the main points of their history.

With this preliminary knowledge of geography, the student would possess a firm standpoint with which to compare and contrast such an epoch as the times of Chaucer (1350 to 1400). I will take three headings, which of course are in no way exhaustive, for the study of that epoch from the geographical side.

A. Causes which led Population to centralize at Different Points.

I will confine myself to one instance.

I. *Point of Exit. Harbours of England.*—This gives an opportunity for a most instructive comparison.

There happens, in the year 1347, to be a record of the number of ships supplied by the different ports to the Calais expedition.

The Cinque Ports supplied about one-seventh of the whole number of ships and men, and the largest vessels were contributed by Yarmouth, Dartmouth, London, Bristol, and Southampton, which is sufficient to show that the populous centres of England were mainly in the south-east and south-west. If the student compares this with the present position of British ports, with which he is already acquainted, he will be able to appreciate the influence of geographical conditions in history, and to understand how the modern port of Liverpool, which sent on that occasion a bark and six men, was able, as the outlet of great coal, iron, and salt mines and populous manufacturing towns, to triumph even over Bristol with its exceptional tidal advantages, its central position and easy communication with the Trent and Thames, and its proximity to the metalliferous ores of Cornwall and the coalfields of Wales.

The history of the Cinque Ports, which were even then past their prime in consequence of the decay of their harbours, presents an exceptionally good object-lesson of the way in which a change of physical conditions has influenced history. The causes which led to the destruction of the harbours of Romney, Rye, Winchelsea,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006a

مكتبة قطر الوطنية
Qatar National Library

and Sandwich, to take the most striking instances, were twofold. Sandwich is particularly worthy of notice, as it was originally one of the old ports of London on the river Wantsum, which separated the Isle of Thanet from Kent; it is also mentioned in Domesday Book as the most useful national port for defence; its importance is further shown by the fact that it was the headquarters of the Danish fleet when they invaded England. The waste of sand which now separates it from the sea was due both to the influence of physical conditions and the influence of man. The physical causes were the south-west winds and flood-tides, which carried with them the sand and gravel procured from the old sea-beaches and from the masses of material washed down from Sussex valleys to the sea, and left them in places where eddies were produced by the meeting of the tides and the consequent slackening of their pace.

This was greatly accelerated by the influence of man, which was shown in the "inning of the marshes," or reclamation of the waste land covered by the tide. In this way the mouths of the rivers and the harbours were gradually choked up by the accumulation of sand which had formerly been spread over a larger area.

The physical changes that have influenced history should be continually kept in mind by the student.

I cannot do more here than mention one or two towns and districts whose position has been completely altered in historical times.

The old Roman port of Rutupiæ, which in Saxon times bore the name of Richborough, was deserted by the sea, and gave place to Sandwich.

Reculvers, or Regulbiæ, the old capital of the Saxon kingdom, was originally at some distance from the sea. The tide, however, has at that point eaten so deeply into the soft cliffs, that it was found necessary to protect the church, which served as a landmark to sailors, by constructing a sea-wall.

Lastly, I might mention the coasts of Norfolk and Suffolk, where the sea gains incessantly from 6 to 15 feet per year, and where churches, as at Eccles by the sea, have been actually buried in the sand. To give one striking instance abroad, the town of Adria, which gave its name to the Adriatic, is now 14 miles from the sea.

I think there can be no doubt that a student, who at this epoch (1350–1400) had some knowledge of the chief physical causes that had influenced and were influencing the growth or decay of towns and populous centres, would be in a far better position to understand history. There would certainly be some difficulty in obtaining what I may call diagrammatic material, for except with regard to political geography, none exists at least in an accessible form.

There exist, however, sufficient details for the preparation of rough maps illustrating the following points at this epoch, to take a few instances, which should be compared and contrasted with similar maps of the present day—

Maps and Diagrams (1350–1400).

A. Causes which led People to centralize at Different Points.

1. The population of the British Isles.
2. The proportion of people in town and country.
3. The British Isles, showing, say in red, where physical changes have taken place from 1350 to the present day, and in blue from our earliest historical records up to 1400.
4. The agricultural, fishing, grazing, and industrial districts.
5. Distribution of forests and swamps and unreclaimed land.
6. Harbours, showing depth and capacity, and arranged in classes according to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000001

مكتبة قطر الوطنية
Qatar National Library

their relative value. In this case 1, 2, 3 should correspond to a similar enumeration at the present day; a first-class harbour at both epochs being marked with 1.

7. The towns which were of most importance at that epoch.

8. The distribution of monasteries, fairs, and the sites to which pilgrimages were made, *e.g.* Walsingham, Norfolk.

I can imagine no more instructive course of study than to take the main towns of importance at this epoch, such as Bristol, York, Yarmouth, etc., and show how their history has been influenced by physical conditions. How far it would be possible to deal with this, except in its broad outline, in teaching the physical geography of the British Isles at the present day would naturally depend on the pupil. At any rate, he should know the physical conditions which have determined the growth or decay of towns in his own neighbourhood, and the meaning of those topographical names which are a clue to the early geography of the district. It may be said that this will entail more work than a student can possibly do, but I think that if the information were systematically arranged in a diagrammatic form for some dozen epochs in English history, separated by from fifty to one hundred years, each of which might be studied in some three or four lessons, that it would give the student a firmer framework on which to build up history than a mere knowledge of dates and great events.

B. My second heading is "Means of Communication." It is difficult to realize the life of a time when goods were brought into London by barges or on a pack-horse by the narrow footway of old London Bridge with its shops on both sides, or the old roads, which were often so bad in winter that Parliament was unable to meet because members were detained a few miles out of London. The student will, however, see this more clearly if he is able to compare that time with the present, with its railways and steamships and canals and all the modern facilities of communication. Under this heading it will be useful to group the main lines of communication of the time both with the British Isles and with other countries; *e.g.* it should be mentioned that, as the Cape route had not yet been discovered, the trade from the East passed largely through the Mediterranean, and was controlled by Venice and other Italian cities, and not by English merchants. I think it must be clear that a knowledge of the main lines and facilities of transport at that epoch and comparison with the present would help enormously to understand its history.

Maps and Diagrams (1350–1400).

B. Means of Communication.

1. Roads and bridges (the maintenance of which was a matter of national importance).

2. Navigable rivers.

3. Sea routes and overland routes of Europe, showing the course of trade, the influence of the Hanseatic league, Venice, etc., and the position of British navigation.

C. The Influence of Geography on Thought.

As a third heading, it would be interesting to take such a subject as the influence of geography on thought, which really embraces two different ideas: (*a*) The influence of geographical knowledge on thought; (*b*) the influence of geographical conditions on thought.

Maps and diagrams under this heading might perhaps consist of—

1. The geographical knowledge of an educated man, such as Chaucer, who had

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000067

مكتبة قطر الوطنية
Qatar National Library

been on a campaign to France and a diplomatic mission to Genoa, and whose characters in the 'Canterbury Tales,' such as the Wife of Bath, who had been in Palestine, and the Knight in Lithuania, fighting against the pagans, prove that their author possessed a considerable knowledge of European geography. It is in this way that we can approximately estimate the knowledge of foreign countries possessed by the man who acted as Foreign Minister, a consideration of enormous importance in considering the foreign policy of England.

2. It would be interesting, though not so important and more problematical, to estimate the geographical knowledge of the different classes of society who are represented by the characters in Chaucer's 'Canterbury Tales.' I may here mention that the student would already possess maps of the probable geographical knowledge at at least two epochs between 1066 and 1350, showing the influence of the conquest, and the Crusades. Chaucer's Knight must have had many opportunities of seeing foreign lands—

"At Alexandre * he was when it was won;
Full often time he had the board begun †
Aboven allè natïons in Prusse."

It was the custom for knights in the fourteenth century to fight in Prussia for the Teutonic Order against the heathens. He had also been in Lithuania, Russia; in Granada, at the siege of Algezir (1344); in Africa; at Layas in Armenia, and Satalie, the ancient Atalia, both taken by the King of Cyprus, the former in 1367, the latter in 1352; also in the "Greatè Sea" (the Mediterranean), in Anatolia, and in Turkey. Chaucer's Shipman represented the class of sailors and traders who were laying the foundation of England's future greatness. "He was the best pilot from Hull to Carthage," which shows that at least the west of the Mediterranean was open to bold and enterprising mariners—

"He knew well all the havens as they were,
From *Scotland* to the Cape of Finisterre;
And every creek in Bretagne and in Spain."

Scotland is in some editions Gothland. In any case, his range was over the whole of the North Sea and the Atlantic seaboard. In this way it is also possible to connect geography and literature.

In Chaucer we have actual contemporary material, but when that is not available it is quite easy to find modern writings that refer to ancient times, *e.g.* Macaulay's 'Armada,' which should be read in conjunction with a map showing where the places mentioned are situated.

Chaucer's Wife of Bath had been a great traveller; besides that—

"Of cloth-making, she haddè such a haunt (custom),
She passèd them of Ipres and Ghent."

This is most interesting as showing the native woollen manufacture.

"Thriès had she been at Jerusalem
. . . . .
At Rome had she been, and at Bologne,
At Galice, at St. James, and at Cologne."

Other headings might be—

3. The influence of geography on literature.

* Alexandria taken in 1365 by Pierre de Lusignan, King of Cyprus.
† Begun (sat at the head of the table).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

4. The distribution of languages and dialects.

5. The proportion of foreigners in England and of Englishmen abroad; the knowledge of foreign languages in England, and of English by foreigners.

6. The influence of geography on education.

7. The distribution of religious beliefs.

8. Districts of Europe possessing the closest relations with English life, especially the main towns of the Netherlands, *e.g.* Middleburg of Chaucer's merchant: "He would the sea were kept for anything between Middleburg and Orewell." Orewell was the port of Ipswich, and the trade was considerable between these places. Also of France, *e.g.* Bordeaux, which belonged to England, Chaucer's Shipman: "Full many a draught of wine he haddè drawn, from Bordeaux wood while that the chapman sleep."

In this connection it is important to notice that the history of Europe should be studied in its broad outlines at each of these epochs, such as 1350–1400, so far as it is necessary to understand the relations of Europe and the British Isles. The events in the history of France, for instance, which affected the British Isles at that date should be studied at the time when the student is considering the history and geography of that epoch of the British Isles, and not, as is the case now, omitted or left for some future time when he may study the history of France. It will be remembered that this will not entail any great additional work, as the student will already have some knowledge of the geography of France and the main points of its present history. It would, of course, be difficult and even unnecessary to put all these points in a diagrammatic form, but I think that the attempt to do so would give them clearness, and open a student's eyes to many new and instructive problems.

It will possibly be objected that the history of the English people must necessarily be studied as the history of their gradual evolution, and that these periods will overlap so much as to make it difficult to obtain any concise and definite idea of their position at one epoch. If, however, we take the illustration of a child growing up to manhood, we always find change and progress, and yet it is possible to take a photograph or draw a character at one definite epoch in that evolution. Possibly, like the conventional picture of the trotting horse, it may never be *exactly* true, but it will be sufficiently so for ordinary purposes. These periods or epochs selected may be considered as a series of photographs of the life of the English people at different ages, intended to add vividness to the study of history.

A consideration, therefore, of the geographical conditions at this epoch would undoubtedly give the student a standpoint from which to obtain a clear view of the different streams—such as literature, trade, social life, etc.—which make up the history of that time. Every one of them, he will find, was influenced by the geographical conditions, and geography will therefore be seen to form a common bond which unites the threads of history. It is difficult to understand why history and geography have not always been taught in connection, but it may perhaps be due in England to the fact that we have no great physical features that absolutely force themselves on our attention. In countries such as Switzerland the forces of nature are so overwhelming that geography naturally takes an important place; but in England teachers seem to think that a few platitudes—such as our insular position and the influence of the Gulf Stream—constitute all that there is of importance for history. It is, however, only possible for a student to really appreciate history when he understands the great truth, that the widening of the horizon of thought has been, in the main, coextensive with the widening of geographical knowledge.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

Consider for a moment the great geographical discoveries of the two centuries that followed 1400: the discovery of the route round the Cape of Good Hope and of America, which led the way to further explorations, out of which has grown our colonial empire. Take the great invention of the fifteenth century—printing. Would it have exercised the same world-wide influence or thought, at any rate with the same rapidity, if it had not occurred simultaneously with the extension of geographical knowledge? Imagine for a moment the infinite extension of thought that would result by the spread of geographical knowledge in China, if it were only possible to substitute a training in history and geography for the maxims of Confucius. It might be difficult to break through those traditions, which have been the outcome of geographical conditions and centuries of isolation —we know from experience how little the Chinaman abroad differs from the Chinaman at home—but it would certainly, in time, produce an enormous change in the destinies of the East.

In concluding this short paper, in which I have endeavoured rather to enunciate a principle than to set forth a method of teaching geography, I should like to call attention to three of the main advantages of teaching geography in connection with history.

I. A study of the physical geography of the British Isles and of Europe would give the student a firm standpoint for the comparison of the present and past in English history, and for the appreciation of the main lines of the history of Europe which affect the British Isles.

II. It would assist a student to visualize history, *i.e.* to call up in his mind pictures of places and scenes, for he would be learning the history of a country he knew as a whole, not, as at present, of a country of which he knows next to nothing. It might be said without exaggeration that the majority of English boys know as little of the geography of England *as a whole* as they know of France, and, if they were set to learn the history of France instead of England, could hardly be more unfamiliar with the country they were studying.

III. It is the one factor of history that it is impossible to teach in a cut-and-dried method. To take merely the instance of the geographical position of towns, a student who appreciated that such cities as Geneva and Basle were founded on the cross-roads followed by ancient migrations; or like Toulouse, where a river became navigable; or like London, on the limit of a tidal estuary; or Guildford and Dorking, founded at the passes through the northern Downs; or Turin, as the warden town of a valley flanked by the Alps,—could hardly fail to *think*, and so fulfil what is, after all, the main aim of education.

Provisional list of epochs and maps desirable for their study—

1. The home district.

2. The geography and history of the present in its main outlines, especially of the British Isles and Europe.

(This is to be built up from the student's personal observation in the home district, progressing from the known to the unknown.)

3. Epochs of English history and geography.

(To be built up from 2.)

A. Roman Period.

1. B.C. 55. Invasion.

The British Isles.

(1) Tribal divisions and languages.

(2) Degrees of civilization.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008f

مكتبة قطر الوطنية
Qatar National Library

(3) Towns founded before 55 B.C., and names that existed before the Roman conquest. Of Celtic names, Thames, Severn, Tamar, Kent.
(4) Population.
(5) Proportion of people in town and country.
(6) Agriculture, pasture, etc.
(7) Distribution of forests.
(8) Harbours and navigable rivers.
(9) Communication with continent.
(10) Physical map, showing changes before 55 B.C.; after 55 B.C. to 1896.
(11) Geographical knowledge of the time.
(12) Europe.

II. A.D. 100 } Administration.
A.D. 410 } Abandonment.

Most of the above maps should be repeated for this period, to show the effect of the Roman period. To them might be added—

(1) Roman divisions of Britain.
(2) Roman roads and bridges.
(3) Roman stations.
(4) Roman walls.
(5) Areas of resistance to Roman influence.
(6) Population, Roman and native compared.
(7) Roman towns and names in Great Britain, etc.

(These maps can, of course, be added to or omitted. It is advisable that each diagrammatic map should only show *one* set of statistics.)

The teacher will, of course, have to make his own rough maps, as the only easily available map of the period is the first in Gardiner's 'School Atlas of English History.' This is the only map in the atlas which is not solely political. It contains the roads, walls, and Roman stations, and shows the fens, Romney marsh, and the Anderida Silva. It is, therefore, of great value so far as it goes, as it shows the kind of map desirable.

B. The Saxon Period.

A.D. 410–832.

C. The Period of Danish Invasion and Rule.

A.D. 832–1066.

D. The Norman Conquest.

A.D. 1066–1154.

E. A.D. 1154–1327.

F. 1327–1415 A.D. *Times of Chaucer.*

G. 1415–1558 A.D. (Invention of printing, gunpowder, fall of Constantinople, discovery of Cape route, etc.)

H. 1558–1616 A.D. *Shakespeare and discovery.*

I. 1616–1689.

J. 1689–1750.

K. A.D. 1750–1832. (Manufactures.)

L. 1832. (Beginning of railways.)

No stress is laid on any of these periods or dates, because it is strongly inadvisable to attempt to divide history too strictly into periods, each necessarily overlapping the next. There is, however, no doubt that a dozen *photographs* of the geography of the British Isles, in the form of diagrammatic maps, taken for one

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

year in these or similar periods, would be of enormous help to the student, as they could be studied backward as well as forward, and continually compared and contrasted with the present.

Before the reading of the paper, the Chairman (Lieut.-General R. STRACHEY, Vice-President) said: The paper about to be read to you is on a branch of education than which nothing can be more important. Of the many branches of study and education, for the purposes of which a knowledge of geography is desirable, none in which its importance is so great as history. You may say that, for the proper treatment of history, a knowledge of geography is not only desirable but essential. I am not going to give you a lecture on the subject myself, but merely say that I am much impressed with the importance of the subject. I have no doubt it will be well treated of by Mr. Andrews.

After the reading of the paper, the following discussion took place:—

Mr. G. G. CHISHOLM: I came here this evening without any intention of saying anything at all on the subject, but I have listened with great interest, and have not the slightest hesitation in seconding, in the very strongest possible manner, the general views expressed. Of the importance of teaching the physical features of a country with reference to the study of history, I think there can be no doubt whatever. The proper study of physical features is essential in all geography, whether it is studied with a view to history, or commerce, or strategy, or any other purpose, and we are indebted to Mr. Andrews for having brought the matter before us, because, while it is the case that it is highly important that physical geography should be made the basis of all rational teaching of geography, it is equally true, and lamentably true, that it is to a large extent neglected, and I admit that the neglect is peculiarly glaring in the case of historical atlases. Why it should be so, I am unable to say, but, as a matter of fact, the historical atlases usually published contain no physical features whatever, or very scanty features. I will say nothing at all about the interesting illustrations Mr. Andrews has furnished, but I would only add that, while it is very important that in the teaching of history, its relations to geography, the effect geography has had upon it should be clearly brought out, there may be a tendency to go a little too far, and to give, especially young pupils, a feeling that all history may be explained as a deduction from physical features. Of course that is not the case, as Mr. Andrews is very well aware. At all times political and economic, as well as other conditions must be taken into account. Of the importance of keeping political considerations in view, a very good illustration is afforded by the seaport of Antwerp. No one, looking at Antwerp in the best physical map, will be able to understand why it was that Antwerp was so late in becoming an important rival of such places as Bruges, and one cannot understand it without seeing a map of the Low Countries as they existed in past times. But even after the physical conditions had come to tell in favour of Antwerp, the geographical value of that port was entirely destroyed for centuries by political conditions. Before sitting down, if I have not trespassed too much on the time of the audience, I would like to mention one thing in connection with one of Mr. Andrews' last suggestions—that it would be a good thing to have some kind of map giving an idea of what distances were with regard to time in the past. Well, that is a very interesting suggestion, and the French, with their usual ingenuity, which I think they often show, particularly in the construction of diagrams, have illustrated this point by means of concentric maps of their own country. The outermost map shows the time taken, say, one or two hundred years ago, to travel from Paris to Marseilles or Calais, while the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

innermost is on a scale proportioned to the time taken at the present day. They are, I believe, official maps, but the example I have seen is in a book by M. Dubois.*

Mr. J. R. Robinson: I do not know that I can add much to what the lecturer has said. I have long held strong opinions as to the effect of geographical features on the history of a country. Taking the country I know most about—Ireland—the great central plain enabled the Ard Righ, or high king who had his seat at Tara, in the neighbourhood of the district Mr. Andrews has marked as "The Pale," to dominate the sub-kingdoms in the mountainous districts round the coasts; and these mountainous districts prevented the complete conquest of these sub-kingdoms. Even at the present day the physical features affect the politics of districts in Ulster. For example, the only district in County Down which returns a Nationalist is that surrounding the Mourne mountains, where the old race found a refuge. The importance of Belfast arises from its position at the mouth of the river Lagan, where a sandbank (from which Belfast takes its name) allowed communication by a ford between the portions of the old kingdom of Dalraida. We must not, however, carry the influence of geographical features too far. In the case of Belfast, part of its prosperity arose from the fact that in the last century, the Earls of Donegall, who owned Belfast, being in want of money, were compelled to give leases for ever at nominal rents on payment of heavy fines. To show how this acted, a firm of manufacturers, wishing to establish a factory at Lisburn, were unable to obtain a lease of sufficient land there from the Marquis of Hertford except for a short period, and consequently established their works at Belfast, where conditions were more favourable. One important consideration deserves notice: How are we to teach the teachers? The teaching of history lies chiefly in the hands of classical masters, most of whom have a contempt of geography, and, in my experience, strongly advise their boys not to attend any special class in geography. Such teachers cannot appreciate the influence of geographical conditions on history, and unless we can succeed in enlightening them, the teaching of history cannot be effective. I think Mr. Andrews has done a great service to geography by pointing out the absolute necessity of physical geography to the study of history, since it is impossible to properly understand history without it.

Mr. Vaughan Cornish: I hope that in recommending increased attention to the teaching of geography in connection with history, the recommendation will be, in the first place, to the universities and to the colleges which train teachers rather than to the schools, because a great many of the points which Mr. Andrews has mentioned are quite beyond the knowledge of most of the gentlemen who are entrusted with the teaching of history in schools, and I think that more harm than good would be done by inducing this physical teaching of history by the setting of questions at examinations for schools, where the men now in charge of the subject have not an adequate knowledge of physical science. I will illustrate my meaning by one particular case which Mr. Andrews himself has referred to in his address, in order to show how very special is the knowledge required for dealing properly with this subject. If you will look at Map 6, by Liverpool, you will see two curious indentations of the coast, one of which leads up to the formerly important port of Chester, and the other to Liverpool. Now, you will notice that the Chester estuary is a funnel-shaped estuary, the Liverpool estuary bottle-shaped, with the neck next the sea at the mouth. Anciently, of course, Chester was the important town; now Liverpool is the important town. Mr. Andrews referred to the importance of Liverpool as being due

* 'La France et ses Colonies.' Par Marcel Dubois (Paris, 1892), p. 350.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to its position with reference to the plain behind it; that would not explain the change in the relative importance of Chester and of Liverpool. That, I think, is due rather to the circumstance that the Chester estuary has silted up, and the channel at Liverpool has been kept open, owing to the fact that the estuary in one case is funnel-shaped, so that the ebbing tide loses strength as it flows out, whereas in the other case, the estuary being bottle-shaped, the ebb-tide gathers power as it goes, and clears out the channel, as Professor Lodge has pointed out. Now, matters such as that are beyond the physical science which is at the disposal of the average teacher of history in schools, even the highest schools, and until the gentlemen entrusted with the teaching of history (whose education is mainly literary) have received an adequate training in physical science, I think it would be better not to press for any very great development of physical geography in connection with the teaching of history.

Mr. ANDREWS: I am obliged for your kind attention to my paper. I think we have struck the practical question that present historical atlases have not any reference to physical geography. Because we may go too far, because we have not competent men who can teach this, are we for that reason to neglect any opportunity of improving the teaching of geography and history? Is it not rather to be studied by beginning with the most simple things? There are in geography many simple points, such as a knowledge of distances and areas, and the obvious influence of physical factors, such as rivers, mountains, and climate, which are absolutely essential for the appreciation of history, and are not beyond the powers of any teacher. The problem we have before us is to encourage the use of good physical maps in the illustration of history. If we do this, teachers will gradually learn to make a fuller use of their materials, and we shall secure a certain though possibly slow advance. If we consider the excellent atlases used in French schools, and the thorough teaching of, at any rate, the geography of France, I think we shall feel that we are wanting in our duty as citizens of a great empire, if we do not do all we can to help boys and girls to know that empire, and learn the resources and extent of the heritage they will have to maintain.

Lieut.-General STRACHEY: I am sure you will be prepared to express your thanks to Mr. Andrews for his very useful paper. For myself, I, as perhaps you may know, have tried my hand at producing an exposition of the view that should be taken of geography in connection with education in its broadest point of view, and I would say, generally, as regards the remarks that have been made by Mr. Andrews and the other gentlemen who have spoken, that there is no subject larger in its scope than geography. It comes into contact with not only every branch of science, but with every portion of history, going back to the very farthest to which anybody would propose to extend the designation history. The fact is, that the human race essentially depends upon the Earth, on which it has been developed under the influence of the features of its surface and the climate, and, as Mr. Andrews has, I think, usefully pointed out, the physical features of the different countries of the Earth have had most prominent and important effects on all that has happened in the past. As to deciding whether any particular mode of teaching is better than another, I am disposed to say, let each man try to do his best; there are many ways of teaching the subject, and the way to obtain progress in this, as in everything else, is for everybody to do his best to follow the road which to him appears most likely to lead to the result desired.

You will all join with me in thanking Mr. Andrews for his very useful communication.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE MONTHLY RECORD.

EUROPE.

Local Geographical Work in Scotland.—No country in Europe has been less studied from the geographical standpoint than the United Kingdom, and the idea is widely prevalent that geography has no concern with the home country. Any intelligent study of local geographical peculiarities is worthy of being encouraged, and on this account we draw attention to three short papers recently presented to the library of the Society by Mr. David B. Morris, of Stirling, on the Raised Beaches, the Travelled Boulders, and the Glaciation of the Forth Valley. These are not mere compilations from existing writings, but, while recapitulating many facts previously known, they afford evidence of careful study in the field by the author. His point of view is rather geological than geographical, but the facts dealt with are common to the two sciences. It is interesting to note that the author turned his attention to the physical geography of his neighbourhood as a result of the stimulus afforded by a course of University Extension lectures on physiography.

Bibliography of Spain and Portugal.—M. R. Foulché-Delbosc has published (*Revue Hispanique*, 1896) a bibliography of travels in the Iberian peninsula of remarkable completeness and very thorough workmanship. On the principle that no document should be neglected in endeavouring to form a picture of the state of a country at any given time, he has aimed at completeness, not selection. He claims for the records of journeys a more vivid and picturesque truthfulness than is usually to be found in academic works, the labour of years during which primitive impressions have grown dull and facts have often been altered to correspond with new conditions. Thus, while conceding that part of the collected travels is useless, the bibliographer contends that the remainder is of incontestible utility. The numbered bibliography contains the records of 858 journeys from the second century down to 1895, but the editions and translations of these travels which are enumerated amount to 1730. The wideness of research is shown in a table giving the languages of the original editions, all of which, except about 60, were actually seen by the compiler. In French there were 313, in English 229, in German 123, in Spanish 107, in Italian 30, in Portuguese 11, and in ten other languages there were smaller numbers. In addition to a transcript of the title-page of each edition referred to, there are frequently short and interesting personal notes on the author or translator, and in almost every case an itinerary giving the names of the towns visited and the order in which they were passed through. In his preface M. Foulché-Delbosc mentions that he has compelled himself to identify all the place-names which in the originals are almost unrecognizable; he says nothing of the difficulty of the task he thus set himself, or of the great value to geographers and historians studying the past conditions of the peninsula of the assistance thus rendered. Articles in journals are included, as well as independent books. A full index of authors completes the work, to which we are tempted to wish that an index of place-names had also been added. This list must take a high place amongst geographical bibliographies.

ASIA.

A New Work on Mongolia.*—Although Mongolia lies close to the Russian frontier, and there is no lack in Russia of persons well acquainted with the

* 'Mongolia and the Mongols. Results of a journey to Mongolia, made in the years 1892–1893, by A. Pozdnéeff.' Vol. i. St. Petersburg: 1896. Published by the Russian Geographical Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Mongolian dialects, our knowledge of the inner organization of this wide country and the life of its inhabitants remains still very imperfect. The gaps in what is known about Mongolia were especially evident to such a specialist as the St. Petersburg Professor of Mongolian, A. Pozdnéeff, who has spent two years in Mongolia, in 1874–75, with M. Pyasetsky, and has been since teaching the Mongolian language and literature at St. Petersburg, publishing during that time a considerable number of monographs on the history, religious beliefs, and present condition of the Mongols. Consequently, Prof. Pozdnéeff was sent out again, in 1892, to Mongolia, where he spent two more years, visiting Urga, Khobdo, Ulyasutai, Kalgan, Khukhu-khoto, and a great number of monasteries on his way, and studying the inner administrative organization of the Mongolian *khoshuns*, the religion of the Mongols, and their customs and manners of life. He was accompanied during this journey by his wife, Mme. Olga Pozdnéeff, who aided him greatly in collecting all sorts of ethnographical materials, and a young photographer, M. Zedoroff. The Russian Geographical Society proposes now to publish the results of this expedition in seven large quarto volumes, of which the first, containing the diary of the expedition for the year 1892, is now before us. The second volume will contain the diary for the year 1893. The next two volumes, being the results of studies in Chinese archives and Lamaite monasteries, will be given to the administrative organization of Mongolia and Lamaism under its dogmatic and moral aspects. The law which was issued in 1818, for the government of Mongolia, has been entirely modified since under the demands of the Mongolian common law; and as to Buddhism, it also has undergone in Mongolia a deep transformation, so as to totally differ from the Buddhism of Sakia-muni and the "Makhayana," which have lately been so much studied by West European specialists in Eastern Asia. The next two volumes will be given to ethnographical data and to information about Russian trade in Mongolia; and the seventh volume will contain the history of the princely families in Mongolia. The whole work will be illustrated by a great number of very interesting photo-engravings. Starting from Kyakhta, the small party went first to Urga, calling on the way at the Amur-bayaskhulantu monastery, which is situated aside from the highway, and therefore was little known. The stay in Urga, the town of the lamas, permitted M. Pozdnéeff to give a detailed description of the different parts and institutions of this interesting town, where no less than 13,850 lamas are living in the monastery, divided into twenty-nine *aimaks*, their numbers continually increasing (they were 13,200 in 1877). The temples of Urga, one of which has the colossal idol Máidari, 51 feet high, the shops, the lama part of the city, and its Chinese trading part, the beggars, and so on, are described in succession. From Urga the party went to Ulyasutai, and then to Khobdo, and the diary contains all sort of minute information about the organization of the posting-stations and the inner administration of Khalkha and Mongolia, as well as these two cities, which every year acquire more and more importance for trade. Good photographs illustrate the text, and the photographs of the old cemeteries and their stone monuments—especially the so-called "stag stones," that is, stones bearing some sort of wave and circle linear tracings in the stone—are full of interest. From Khobdo the party returned to Urga, visiting the monasteries of Tsain-khuré and Erdeni-tsu, where Prof. Radloff has discovered, as is known, and copied most interesting old Mongolian inscriptions. Khoboo is said to have been founded in 1585, and has witnessed all the chief events—insurrections and grand religious ceremonies—of the history of Khalka Mongolia. Every hillock, every flag-staff, and every temple or chapel of this monastery reminds the Mongol of some event in his country's history, and Prof. Pozdnéeff truly describes it as the Moscow of Mongolia, while Urga—the residence of the representative of Buddhist deity,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the khutukhta, and the seat of the lamas' administration—may be compared to St. Petersburg. The chapter of this volume which will most interest the reader is undoubtedly the chapter given to the subsequent incarnations (*khubilgans*) of the grand priest of Mongolia—the incarnated deity for all the Lamaites—the Urga *Khutukhta*. After having undergone on our planet only fifteen incarnations since Sakia-muni's times (2596 years), the *Khubilgan* began to reappear in Khalkha Mongolia since the year 1635, which was fifty years after the acceptance of Lamaite religion in Northern Mongolia. At the present time, each new *khubilgan* takes place, as is known, in Tibet. After the death of the Urga, *khutukhta* has been duly reported to Pekin, an order is received from the Chinese emperor, enjoining "to elect the new *khubilgan* out of Tibet boys." The election takes place at Budala, in Tibet, in the presence of the Dalai-lama, the Banchen-bogdo, the Khan of Tibet, and a functionary who is sent for that purpose from Pekin. Twelve boys are chosen for that purpose, and out of them three are definitely selected, not without all sorts of intrigues on behalf of their parents and relatives taking place. Their names are written on pieces of paper, which are put in an urn—the three representing a new reappearance of the *bodisatva* in spirit, in word, and in body. The boy upon whose name it falls to represent the re-incarnation of the spirit is sent to be *khutukhta* in Mongolia, while the two others are also consecrated as lamas, but remain in Tibet. Later on, a deputation, which makes a caravan of a thousand camels at the least, and costs Mongolia no less than about 450,000 lans in silver (about £50,000), is dispatched to Tibet to bring home the new divinity. The present *khutukhta* is twenty-two years old, whose photograph and a by no means flattering description are given in the present volume. After a month's stay in Urga, the party continued their journey to Southern Mongolia, and went to Kalgan. This second part of the journey will be described in the next volume.

The Submarine Earthquake of Kamaishi on June 15, 1896.—Prof. Rein, of Bonn, contributes to the February number of *Petermanns Mitteilungen* an account of the effects of this earthquake on the coasts of Japan, based on an official report, on private communications from friends in Japan, and his own knowledge of the scene of the occurrence. The great wave that followed the shock advanced inland at the height of from 20 to 30 feet, in places even 50 feet, and in a few minutes caused the loss of life of about 27,000 human beings, besides injuring 5000 others and destroying about 7600 houses in the kens of Miyáge, Iwáte, and Aómori, the chief centre of destruction being round the bay of Kámaïshi, on the east coast of Honshiu, in 39° 16′ N. Within five minutes this town was almost entirely swept away. At various places some marvellous escapes are recorded. In one case some persons were found alive on an island about 6 miles distant from the point on the coast whence they had been carried away by a wave. A large schooner of more than 200 tons burden was hurled 500 yards from its anchorage and deposited almost uninjured on a field of wheat. On the plate accompanying this communication, containing a map from Hassenstein's atlas of Japan of the region affected, Prof. Rein has added the chart of the self-registering tide-gauge at Ayukawa, a station about 70 miles south of Kámaïshi, for the twenty-four hours from noon on June 15 to noon on June 16, 1896. This shows that wide and rapid oscillations began at that station before half-past eight on June 15, and about noon the next day were beginning to die away. Outside of Japan effects of this shock have been observed at the harbour of Keauhu, in Hawaii, and at the mouth of the Rogue river in Oregon, but on this subject Prof. Rein proposes to send another communication, and asks for information of any unusual marine disturbances on the coasts of the Pacific Ocean between June 15 and 17, 1896.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Ancient Trading Centres of the Persian Gulf.—It should have been stated that the author of the paper in the March Number is Captain A. W. Stiffe.

AFRICA.

Lieut. Hourst's Journey down the Niger.—The full report of Lieut. Hourst's journey has been published in the *Comptes Rendus* of the Paris Geographical Society, 1897, pp. 24 *et seq.* As we have already noted the general outlines of the journey (*ante*, p. 220), it is unnecessary to do more than to refer to some of its more important results in relation to the questions of the present political condition of the countries traversed, and the possibilities of navigation on the middle Niger. The countries of the Tuareg confederation extend over the whole left bank of the Niger from a little east of Timbuktu to Sansan-Aussa, north of Say. The Igwadaren, the first tribe reached from the north-west, inspired little confidence, being inveterate pillagers; but the Awellimiden, under their powerful chief Madidu, proved much easier to deal with. The influence of this chief was constantly manifested until the southern limits of the Tuareg countries were reached, and his friendship for the travellers smoothed over many difficulties. Although showing many defects, the Tuareg, according to Lieut. Hourst, possess two great virtues: they are absolutely true to their word, and they are never thieves (as distinguished from open plunderers). They are devoted to freedom, and in case of attack Madidu could place twenty-five to thirty thousand men in the field, so that the attempt to bring them under direct French control is not to be recommended. The only section of the race whose influence is to be compared with that of Madidu is the tribe of the Kel-es-Suk, who possess a certain religious and intellectual ascendency. The Tuareg tribes are divided into two great classes—the Ihaggaren, resembling the feudal chiefs of the Middle Ages; and the Imrad, who, while occupying a lower rank, are often wealthy and influential. The domestic slaves, captives taken in war, are called Bellate, and form part of the family of their owners. The Aarma, like the Sonrai, are a subject Negro race, and serve as beasts of burden to their masters, but are well treated. Of the Tuareg towns, Gao, with neighbouring villages, has a population of four to five thousand inhabitants; while Sansan Aussa, on the southern frontier of the Tuareg country, is one of the principal markets on the Niger, though lately its trade has declined. South of the Tuareg countries, the empire of Rabba, who has taken Kano, is strong and well organized. Near the Niger a sentiment of independence is spreading, and Ahmadu, now established near Say, has not acquired much influence, albeit he has designs against Sokoto. The difficulties in the way of navigation on the Niger occur in two principal sections, the one extending for some distance above Say, the other occupied by the Bussa rapids. The former may be considered to begin below Gao, at Ansongo, in the territory of the Kel-es-Suk, near which four rocks bar the stream and mark the limit of regular navigation from above. Below this is a succession of rocks and rapids, which were all passed successfully by the expedition, but some with great danger. At the most difficult passage the navigable channel was little over 15 yards wide, with a current of about 8 knots an hour, and even this was partially barred, as it proved, by a concealed rock. The Bussa rapids begin below the town of that name. The river flows through several rocky passes—one of them little over 150 yards wide—with tremendous velocity. The same marvellous fortune which attended the travellers throughout was, however, experienced here, and all were passed in safety.

Mr. Weatherley's Visit to Lake Bangweolo.—The *British Central Africa Gazette* for January 15 contains some further details respecting Mr. Weatherley's journey to Lake Bangweolo (*ante*, p. 325). Owing to the rapid current of the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000022

مكتبة قطر الوطنية
Qatar National Library

Luapula, progress by boat was so slow that the traveller left his crew to pole the *Vigilant* up the stream, and did the greater part of the journey to the lake on foot. The chief Chinyama proved suspicious, and rumours of an impending attack by Mieri-Mieri were circulated, but by showing a firm front this danger was averted, and threats of desertion by the men likewise came to nothing. Bangweolo was circumnavigated in the *Vigilant* with a crew of twenty-five men. Regarding the lake, Mr. Weatherley says, "The existing map is very much out, and the long adjoining lake, Chifunanti, is not inserted at all. A narrow sand embankment, say 400 yards in width, separates the two. . . . I fancy Bemba, or Bangweolo, is a good deal smaller than it is made out to be in maps. It *looks* enormous—a vast expanse of water, looking at it from the east or west coasts, as the land is so low." The character of the lake is that of an overflowing of the country at the base of the Tanganyika plateau by water from the latter. Nowhere was a greater depth than 13 feet and a few inches obtained. No shells were seen. The Chambezi is a small river, the marsh along its course being impassable for even small canoes in the dry season. The whole east side of Bangweolo is nothing but a sea of papyrus. Mr. Weatherley found that the Luongo river, which Mr. Sharpe considered as possibly identical with a channel entering the Luapula in 10° 11′ S., really joins the latter above the Johnston falls.

Johannesburg.—A census of the town and district of Johannesburg was held on July 15 of last year, and the principal results are given in the table below :—

	Europeans and other whites.	Malays.	Indian coolies and Chinese.	Kaffirs.	Mixed races.	Total.	Males.	Females.
Town proper	35,868	500	2098	8,635	1230	**48,331**	34,103	14,228
Sanitary board area ...	39,454	948	4556	14,195	2139	**61,292**	43,729	17,563
Area of enumeration (28 square miles) ...	50,907	952	4807	42,533	2879	**102,078**	79,315	22,763

The town was founded on September 20, 1886; in April, 1887, had a population of 3000; and in January, 1890, 26,300. At the census of 1896, 63 per cent. of the population were between the ages of fifteen and thirty, only 21 per cent. above thirty. The disproportion of the sexes is not so great in the white as in the Kaffir population, 37 per cent. of the whites, only 4 per cent. of the Kaffirs, having been females. The origin of the white population within the area of enumeration, according to the place of birth, is shown in the following table :—

British Empire	34,020	Brought forward	47,556
United Kingdom ...	*16,265*	Netherlands	819
Cape Colony	*15,162*	France	402
Other British possessions	*2,593*	Scandinavia	311
Transvaal	6,205	Italy	206
Orange Free State	1,734	Rest of Europe	889
Russia	3,335	United States	616
Germany	2,262	Other countries	108
Carried forward	47,556	Total ...	50,907

The British element thus made up 67 per cent. of the total. Of the blacks, only 754 were natives of the Transvaal, 27,468 were from British South Africa, 14,085 from Portuguese territories. Of the total population, 93 per cent. was of foreign origin.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000c

مكتبة قطر الوطنية
Qatar National Library

Geography of Africa.*—The latest volume of Macmillan's Geographical Series is a compact little treatise on the geography of Africa by Mr. E. Heawood, whose long study of the geographical literature of Africa specially fits him for the work. While promising to be of great utility as a school-book for the higher forms, it may also serve as a handy summary of the main features of African geography for general reference. It is planned scientifically, so as to treat the continent from the fundamental physical conditions progressively to the present state of each of its great political units. The first chapter is a general survey of the physical geography, and it is followed by chapters on the Races of Man in Africa, Exploration treated historically, and Present Political Relations. The following ten chapters are devoted to the natural regions of the continent, and are treated in the same order as the general part, the physical features and people being first considered, then the political subdivisions and the progress of exploration and commerce, showing how means of communication and town sites have been determined, and the present condition of the country. The importance of such manuals on the continents, written by specialists who have mastered all trustworthy sources of information, cannot be over-estimated.

AMERICA.

The Outline of Cape Cod.—The latest volume (N.S. vol. xxiii.) of the *Proceedings* of the American Academy of Arts and Sciences contains an essay by Prof. W. M. Davis, in which he reconstructs the original outline of Cape Cod by reversing the processes at work on the present outline. He endeavours to trace these processes, and the changes that they have produced, backward to their beginning. A review of previous accounts of the cape is given, a general consideration of the development of seashores is outlined, and the conclusions reached are applied to the problem under consideration. It is thus estimated that the land here once extended at most two or more miles into the sea on the east, and that perhaps three or four thousand years have been required for the retreat of the shore-line to its present position. This period cannot, however, be taken as a full measure of the time since the glacial deposits of the cape were formed, for there is reason to believe that the land stood higher than it is now for an unknown interval between the building of the cape and the assumption of its present altitude with respect to sea-level. The chief interest in the problem discussed turns on the growth of the great sand-spit of the "Provincelands" northwestward from the "mainland" of the cape, and on the protection thus afforded to the old cliffs of High head. A brief account is given of the growth and waste of the Provincelands, and of the changes of the western shore-lines. The essay closes with some practical suggestions regarding the protection of Provincetown harbour, and some speculations concerning the future change of the cape. The encroachment of the sea on the back of the cape is undoubtedly destined to continue until the Truro mainland is all consumed north of Orleans, the "elbow" of the bended arm, which at the present rate of recession will probably require eight or ten thousand years.

Documents relating to the Venezuela and British Guiana Boundary Question.—The courtesy of the Capuchin Fathers at Rome has enabled the Rev. Joseph Strickland, S.J., to publish a series of documents and maps from the archives of that order, which supplement the information given in the English Blue Books on the subject of the extent of territory occupied by the Capuchin missions in Guiana in the eighteenth century. Whilst the general conclusions to be derived

* 'Geography of Africa.' By Edward Heawood, M.A. London: Macmillan & Co. 1896.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000e

مكتبة قطر الوطنية
Qatar National Library

from the new documents merely confirm those already arrived at in the Blue Books, their publication is of value as throwing additional light on the details of the history of the missions, and on the general character of the Spanish colonization in Guiana at the period in question. Of the maps published, the most interesting is No. 3, which gives, by a dotted line, the Spanish view of the limits of the Dutch colony of Essequibo. It was drawn in about 1779 by Friar Carlos de Barcellona, and, although based on the information of men known to be little favourable to the territorial claims of the Dutch, gives to the latter the greater part of the basin of the Essequibo, the frontier cutting the Cuyuni at an almost equal distance from its source and from its mouth. As the line drawn on D'Anville's map may be taken to represent the extreme Dutch claim, Father Strickland points out that the tract between these two lines is the only part of the territory about which there can be any dispute from an historical point of view. In a brief summary of the question, he arrives at the conclusion that, while the ownership of parts of this intervening tract is historically clear—*e.g.* the Dutch unquestionably occupied the whole coast strip between the Orinoco and the Essequibo—there are other parts about which little or nothing can be said from the evidence available.

The Peruvian Territory in the Amazon Basin.—Dr. Sievers contributes to the February number of *Petermanns Mitteilungen* an abstract of a paper on this region read before the Geographical Society of Lima by the prefect of the departments of Loreto and Amazonas. According to it, Iquitos had, in 1893, a population of 5000; Nauta, 500. The latter place is gradually recovering its lost trade. On the Ucayali there are no towns or villages. The inhabitants, about 20,000 in number, live in scattered families on the banks of the river. The mission settlements, even Sarayácu, have disappeared. On the Amazon above the mouth of the Huallaga, Barranquitas has a population of about 200 Indians, engaged in collecting indiarubber. San Antonio is only a trading factory. On the Huallaga, Yurimaguas, the principal trading centre after Iquitos, seat of a sub-prefect, and in the neighbourhood of the richest cattle-pastures, has a population of like number. Moyobamba, with a population of 7000, engaged in the cultivation of coffee, and to a less extent cacao and sugar-cane, lies in a spot quite inaccessible to men on horseback. Tarapoto has 6000 inhabitants, chiefly devoted to the cultivation of tobacco. The population of the region is composed of three sections—natives who live a wandering life in the forests, and who exchange boats, young *slaves*, indiarubber, and copal for firearms, agricultural implements, and spirits; settled Christianized natives; and people of mixed Spanish or other foreign and native Indian origin. The ruling class consciously or unconsciously plunder the natives, and render them completely subject. With the help of the wandering Indians, a path, used chiefly by indiarubber collectors, has been made between the sources of the Rio Tigre and those of the Pastaza. The cacao tree is found growing in immense quantity, especially on the banks of the Rio Cahuapanas, and it is doubtful whether these are indigenous thickets or deserted plantations. Indiarubber trees grow in enormous numbers on the river-banks, and get rapidly replaced when destroyed; but the author believes that better results would be obtained from a rational plantation system than from the present wasteful method of getting the sap from trees growing wild. Steamers take eighteen days to ascend from Pará to Borja, on the Pongo de Manseriche.

The Region round the Headwaters of the Xingú.—The expedition to this region under Dr. Hermann Meyer has proved completely successful, so that the geographical and ethnographical exploration of this river may now be considered as completed in its main points. On his first Xingú expedition Dr. v. d. Steinen had discovered and ascended the middle headwater, the Batovy, and he

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000020

مكتبة قطر الوطنية
Qatar National Library

intended to explore the two others, the Kuluene to the east, and the Ronuro to the west, in his second expedition. Through the ignorance of his guide, however, the expedition was led to a western tributary of the Kuluene, called the Kuliseu. This was explored along with the lower Kuluene, but want of time and provisions prevented the completion of the entire programme. This is what has now been done by Dr. Meyer. On May 11, 1896, he and his companion, Dr. Ranke, started from Cuyabá, and, following with few deviations the route of the first Xingú expedition, reached the Paranatinga, one of the higher tributaries of the Tapajoz, and descended it for a certain distance. The expedition then turned east, and after a three weeks' land journey reached the Ronuro, the western headwater of the Xingú, and ascended and descended it to the confluence with the Batovy, and that with the Kuluene, and made a survey of its course. The Kuluene was now attempted, but its rapid current compelled them to abandon the boat journey; but the whole district between the Kuliseu and the Kuluene was explored during a three weeks' march. The Kuluene proved to be much less important than the Ronuro, which latter is accordingly regarded by the travellers as the true source of the Xingú. The expedition reached Cuyabá again in December, with rich ethnographical and natural history collections and careful topographical surveys.—*Petermanns Mitteilungen*, February, 1897.

The Bolivian Rubber Industry.—A useful summary of the history and present prospects of the Bolivian rubber industry has been published in pamphlet form by Manual V. Ballivian, of La Paz, being a reprint of articles which originally appeared in the journal *El Telégrafo*. As the writer held an official position in the mission sent by the Bolivian government to the north-east territories and the department of Beni, in which the industry is carried on, he is entitled to speak with authority on the subject. He first traces the development of the rubber trade from its small beginnings during the palmy days of the export of chinchona, when the voyages of the bark-collectors into Brazil for the disposal of that commodity first called their attention to the flourishing rubber industry of the Brazilian provinces. This was in about 1864, when the first serious attempt at rubber exploitation in Bolivia was made by Don Santos Mercado, but for some years little success was attained, owing to the superior advantages possessed by the Brazilians, which led to an exodus of population from the Beni into the rubber forests of Brazil. The great impetus to the Bolivian industry was given by the explorations of Dr. Edwin Heath (*Proceedings R.G.S.*, 1883, No. 6) in 1880, which threw open a wider area of rubber-producing country, and led to a rush to the Beni, comparable to that to the Californian goldfields. One of the most enterprising pioneers was Dr. Antonio Vaca Diez, whose writings, together with the information collected by the above-mentioned Don Santos Mercado, have furnished some of the most reliable details on the subject. At the present day, the chief hindrances to the development of the industry arise, firstly, from a want of sufficient organization in the work of collecting the rubber, the population being scanty, and the means of subsistence inadequately provided; and, secondly, from the obstacles to navigation, which make transport difficult. Both these points have received the attention of the Bolivian government, and the road past the cataracts of the Madeira, which has taken the place of the old railway project, was, in 1896, approaching completion. The second part of the pamphlet gives details respecting the mode of collecting the rubber, and statistics of the present state of the industry.

Volcanoes of Salvador and South Eastern Guatemala.—To the January number of *Petermanns Mitteilungen* Dr. K. Sapper contributes an account of the results of his observations in this region in the beginning of 1895, accompanying

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000057

مكتبة قطر الوطنية
Qatar National Library

his account with a map. These observations he regards as only preliminary, for he hopes to continue his studies in future years; but he considers that the journey he has already made is sufficient to make it clear that the volcanic phenomena of the region in question are much less simple than they have hitherto been thought to be. He points out that, while it is established that the main fissure to which recent volcanoes of Central America belong runs through Salvador (as well as Guatemala) in a direction nearly parallel to the Pacific coast, there is a considerable number of recent volcanoes in Salvador and South-Eastern Guatemala which do not belong to this fissure, being well-preserved simple cones, and in that respect different from the other primary volcanoes not belonging to the main fissure, which have been extensively worn away, and belong accordingly to a period geologically remote.

AUSTRALASIA AND OCEANIC ISLANDS.

Sir William Macgregor's Journey across New Guinea.—We have received a copy of the official report of Sir W. Macgregor, dated "Port Moresby, November 2, 1896," which contains the account of his recent journey across New Guinea from the mouth of the Mambare to that of the Vanapa. It acquires additional interest as giving information respecting the gold-mining operations in the upper Mambare district, the scene of the recent massacre by the natives. The Lieutenant-Governor had been preceded in his ascent of the Mambare by the miners, the most enterprising of whom, Mr. Simpson, had cut a good road, with great labour and difficulty, on the north side of the river as far as the junction of its two main branches at the foot of Mount Scratchley. The start was made from Mambare bay on August 6, in two boats towed by a small steam-launch. The river was unusually low at the time, and navigation was difficult in places. After reaching the government station on the Mambare, the journey was continued by land through thick forest, three large tributaries of the main stream being passed. On March 14 "Simpson's Store" on Mount Otovia was reached, 1500 to 1600 feet above the river. Mount Otovia is the Mount Gillies of Sir W. Macgregor's former map (*Proceedings*, 1890, p. 256), the native name for Mount Parkes being Ajula-kujula. The neighbourhood of these mountains, between which the Mambare flows in a deep narrow bed, is exceedingly moist, the trunks of the trees being covered with moss everywhere over 1000 feet, whereas on the Owen Stanley range it is only met with at 5000 to 6000 feet. Game is hardly found at all, and there are no traces of clearings or of native occupation of any kind. The two head streams of the Mambare, the Chirima and Yodda, are separated by the great mass of Mount Scratchley, the Yodda, which is much the larger, coming from the east and south of the mountain. Several miners were found still at work at the foot of Mount Scratchley, but work was about to cease on account of the rains. On the west side of the northern spur of the mountain is the village of Neneba, the chief of whom had visited the north coast, and was returning with Sir W. Macgregor. Numerous details are given with respect to the physical characteristics and habits of the people of Neneba, which are especially interesting on account of the great isolation in which they appear to live. Their colour is a dark bronze, and their hair is without exception frizzled. They showed themselves amiable and peaceable, and the state of their arms indicated that they had not been engaged in any warlike undertaking for years. The route led up to the ridge of Mount Scratchley, a road having to be cut the whole way. The rain, which had begun earlier on the lower grounds, gradually ascended to the higher levels, reaching the highest summits last of all. The highest part of Mount Scratchley, as of the other high peaks, consists of grassy country, broken by bare rocks and clumps

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of trees. The highest peak reaches a height of about 12,850 feet. Sir W. Macgregor thinks that this mountain-top would be a good centre for prospecting operations. It is connected with Mount Albert Edward to the north-west (13,100 feet) by a high range (named Wharton chain by the explorers), and an easy road leads also to the Owen Stanley range. This was the direction taken by the travellers. Mount Victoria was ascended (the party suffering severely from cold), and the route thence to the coast did not deviate to any great extent from that followed in 1889, the old track still existing in places. The natives were most friendly. Latitudes were taken throughout the journey by astronomical observations, and the place of longitudes was supplied by accurate bearings of Mount Victoria and other peaks. Sir W. Macgregor insists on the importance, at least from a surveyor's point of view, of the use of a distinguishing name for the highest summit of the Owen Stanley range.

Mr. Collingridge on the Discovery of Australia.*—Mr. George Collingridge, who for some years has given his attention to the subject of the discovery of Australia, has published a volume in which he brings together the results of his investigations, largely concerned with the evidence supplied by early maps. The fact of his residence in Australia, with few facilities for consulting original records, has placed him somewhat at a disadvantage, and many of the facts recorded are derived from previously published works on historical geography. But as the difficult subject of Australian discovery has never been exhaustively treated, and much new material has been collected since Mr. R. H. Major published his collection of documents for the Hakluyt Society, the mere bringing together from various sources of so large a body of facts will be of use to those interested in the subject. The text is accompanied by numerous copies of early maps by Mr. Collingridge's own hand, and, though wanting the exactness of photographic reproductions, they are apparently faithful representations both of the style and subject-matter of the originals. The conclusions arrived at by the author are in many cases little likely to meet with general acceptance. Without formulating any distinct theory, the general tenor of the book is to suggest that Australia was known to the rest of the world at a much earlier date than has been supposed. The old belief that the circumfluent ocean occupied the equatorial regions, may account, Mr. Collingridge thinks, for portions of the southern hemisphere being wrongly drawn by the ancient geographers *north* of the equator. He holds that Marco Polo's name "Java Major," applied to the modern Java as distinguished from Sumatra (Java Minor), indicates that the Venetian traveller was aware of the existence of a vast land in those regions. He states that in the time of Nicolo de Conti the western coasts of Australia *were known*, though without supporting the statement by argument. And when dealing with the class of maps of which Behaim's globe is one of the best known examples, he deduces a knowledge of the west coast of Australia from the exaggerated southward extension of the Malay peninsula, which happens to fall within the latitudes really occupied by Australia. The numerous representations of a great southern continent in maps subsequent to Magellan's voyage, with their enigmatical legends "Regio Patalis," "Psittacorum terra," etc., are of course dealt with, and a statement of one of them (the Paris wooden globe of about 1535) is adduced as indicating a southern discovery in 1499. With regard to the "Dauphin" map and others of its class, from which the probability of a Portuguese discovery of Australia early in the sixteenth century has been deduced, Mr. Collingridge claims to have proved conclusively, from a study of their nomenclature,

* 'The Discovery of Australia.' By George Collingridge. Sydney: Hayes Brothers. 1895.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000030

مكتبة قطر الوطنية
Qatar National Library

that they are of Portuguese and Spanish origin. He explains the northward extension of Australia on these maps by a desire, for purposes of policy, to represent the seaway as blocked by land in those parts, and quotes a statement of Barros in support of this theory. Perhaps the most useful feature in the book is the facility which it gives for tracing the course of evolution of early maps, although the author's conclusions in this respect too will not always be accepted by the reader.

GENERAL.

Wagner's Geographical Year-book.—The nineteenth volume of this standard work has been published. Following the usual custom, only a portion of the departments into which the survey of geography is divided is dealt with each year. The present issue includes a list of the latitude, longitude, and height above sea-level of 237 astronomical observatories brought together by A. Anwers, and reports of the progress of geography in the department of cartography by Prof. E. Hammer, plant-distribution by Prof. O. Drude, and ethnological research by Prof. G. Gerland. The recent works on the geography of Europe are dealt with by different authorities, the British Isles being reported on by Dr. H. G. Schlichter, but that of Russia is relegated to the next volume. Dr. E. Oberhummer gives a report on the progress of our knowledge of the geography of the ancient world, and Dr. Wolkenhauer contributes a geographical necrology for the years 1893–1895. Prof. Wagner gives a list of professorial chairs of geography, Hauptmann Kollm has compiled a list of geographical societies and serials, while a series of map-indexes of the official surveys shows the present state of publication of the official maps of Europe and India. From the information given, it appears that there are 150 professors or lecturers on geography in 96 universities or colleges, as compared with 126 and 82 in 1891. The greatest progress made during the five years has been in Russia, where geographical professorships have been created in the universities of Kief, Moscow, and Odessa; and in Switzerland, where professors have been elected in the universities of Freiburg, Neuchatel, and Zürich. The list of geographical societies has been corrected by the omission of some purely commercial or political associations formerly included, the deletion of a few that have ceased to exist, and the addition of some new ones. The total number in 1896 was 107 societies, with 38 branches, shared by 22 countries, and situated in 137 towns. The French geographical societies had, together, 16,500 members, the British over 8000, and the German over 6000; the greatest membership is that of the Royal Geographical Society, the Paris Geographical Society coming next with 2000 members. The number of geographical serial publications in 1896 was 153, of which 125 were published by societies. With regard to language, 48 of these are printed in French, 42 in German, and only 15 in English.

The Twelfth German Geographical Congress.—The details of this Congress, which will meet at Jena, as previously announced, in Easter week, have now been arranged. At the first meeting on Wednesday, April 21, Dr. Neumayer will present his report on Antarctic exploration, and papers will be read upon travels in Brazil and Asia-Minor. The afternoon will be devoted to considering the question of geography in schools. On April 22, geophysics, especially the study of earthquakes, will be discussed. On April 23, biological geography, and the report of the committee for the scientific geographical description of Germany, will occupy the time of the meeting. Social gatherings will take place each evening, and geographical excursions to Weimar and also to the Saalthal have been arranged.

A Journal of School Geography.—Mr. Richard E. Dodge, of New York, has commenced with January, 1897, the publication of a new geographical serial of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

unpretentious appearance, but of considerable promise. It is entitled *The Journal of School Geography*, and in its preparation the editor is associated with Prof. W. M. Davis and other practical geographers and teachers. Its aim is to advance the cause of good geography-teaching in schools; in order to do this, special care is to be devoted to the testing of all information before publication, and to the avoidance of "circumlocutions and flowery language." The new journal is stated to be independent of all schools of geography, institutions of learning, and publishers. It should thus be able to perform very important functions in directing the attention of teachers to books and maps which are of real value. The first two numbers show that the editors are able to give effect to their principles. The articles are all short, practical, and to the point; the book notices are critical and impartial; and the notes are well selected, although not free from misprints. These are not, perhaps, very serious, and will doubtless become rarer as time goes on. "The British Steamer Penquin" stands for "H.M.S. *Penguin*;" Dr. Nansen's Christian name is spelt Fridthof, the *London Geographical Journal* is referred to, and some of the transliterations of Russian names are defective. The new paper deserves success, and ought to be found useful by teachers outside the United States as well as inside, The subscription is only one dollar a year, and it is published at 41, North Queen Street, Lancaster, Pennsylvania.

Honours to Dr. Nansen.—The Honorary Degree of Doctor in Science was conferred on Dr. Nansen by the University of Cambridge on March 16. The following is the speech delivered by the Public Orator (Mr. J. E. Sandys) on the occasion: "Scandinaviæ filium intrepidum, oceani septentrionalis exploratorem indefessum, post tot pericula terra marique per tres annos fortiter tolerata, salvum et sospitem reducem salutamus. Quid referam viri indomiti iuventutem primam disciplina severa assidue exercitam, et rerum naturæ studiis feliciter dedicatam? Quid itinera per priora animi et corporis patientiam et fortitudinem spectatam probatamque? Quid itinere in ultimo, adiutoris optimi auxilio, tot observationes sive magneticas sive meteorologicas e regione prius ignota reportatas? Quid dicam de bene ominati nominis nave illa, quae glaciei solidæ in mediis molibus, velut Symplegadum novarum in amplexu, constricta et compressa, ductoris tamen providi vota non fefellit, sed, mobili in glacie immobilis inhærens, ad ulteriora sensim delata est? Navem illam, navisque rectorem, ipsum Vergilium prædixisse crediderim:—

'alter erit tum Tiphys et altera quæ vehat Argo
delectos heroas.'

Quis autem pro rei dignitate laudare poterit par nobile illud comitum, qui, nave ipsa relicta, glaciei asperrimæ per solitudines immensas audacter progressi, in regionem tandem pervenerunt orbis terrarum vertici septentrionali proximam, quo ex ipsa mundi origine nulla hominum vestigia prius umquam penetraverant? Etiam arctoi pelagi tum demum patefacti de navita primo Horati verba licet usurpare:

'illi robur et æs triplex
circa pectus erat qui fragilem truci
commisit pelago ratem.'

Talium virorum exemplo admoniti discimus nihil magnum, nihil memorabile, nisi labore longo curaque infinita posse perfici. Talium virorum in orbe terrarum explorando providentia et fortitudine verba poetæ Romani futura vaticinantis denuo vera reddita sunt:—

'venient annis sæcula seris
quibus oceanus vincula rerum
laxet et ingens pateat tellus,
Tethysque novos detegat orbes
nec sit terris ultima Thule.'

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000001

مكتبة قطر الوطنية
Qatar National Library

Duco ad vos FRIDTJOF NANSEN." On March 18, the Honorary Degree of D.C.L. was conferred on Dr. Nansen by the University of Oxford. On that occasion the Regius Professor of Civil Law (Dr. Goudy) presented Dr. Nansen to the Vice-Chancellor in the following speech: "Insignissime Vice-Cancellarie, vosque egregii Procuratores! Præsento vobis virum egregium e gente Septentrionali oriundum, nautarum matre fœcundissimâ, nautam ipsum impavidum. Præcipuâ vero voluptate consalutare libet ejus generis alumnum quod olim, 'si prima domus repetatur origo,' felicissimo quodam fœdere patriam nostram, oceani potentem, progenie sua ditaverit. Hic vir, juvenili adhuc ætate, per terram illam cui nomen est Greenland—terram vere horrificam qua nusquam diffugiunt nives neque gramina ulla redeunt campis, qua 'semper hiems semper spirantes frigora Cauri'—ab Oriente usque ad mare Occidentale, ingenti labore viam patefecit. Res præclaras ab illo nuperrime sub axe Boreo gestas quisnam ex vobis ignorat, quis non admiratione prosequitur? Patrio ardore instigatus et scientiæ amore rudem et adhuc intentatam Amphitritem imbuere, monstris scatentem pontum irrumpere, glacies, noctem illam longam et intempestivam, ignotas vias, tempestates, Jovem iniquum, animo lætanti pertulit. De quo cum poeta licet dicere 'Solus Hyperboreas glacies, Tanaimque nivalem, Arvaque Rhipæis nunquam viduata pruinis, Lustravit.' Modestiâ singulari, fidelitate in socios, constantiâ mirâ notus est; neque Fortuna audaciæ defuit. Idoneus igitur videtur ille atque adeo dignissimus qui rectis oculis splendores pallidos noctis Septentrionalis aspexerit, qui Oceani Artici profundum tentaverit, jam ad has sapientiæ ædes, periculorum expertem, accedere atque Isidis fontes more tranquillo haurire. Faxit Deus optimus maximus, cui terræ cui maria curæ, ut nobiscum familiaritatis vinculo arctissimo conjunctus regionum ignotarum se exploratorem assiduum præbeat nostramque insulam, tanquam patriam alteram, habere dignetur, unde fructus pulcherrimi ad ipsius simul nostramque gloriam redundent. Hunc igitur præsento

FRIDTJOF NANSEN

philosophiæ doctorem, necnon inter Cantabrigienses scientiæ doctorem honoris causâ nominatum, necnon Societatis Regiæ Geographicæ laureâ ornatum, ut admittatur ad gradum doctoris in jure civili honoris causâ."

OBITUARY.

Sir Thomas Elder, G.C.M.G.

EARLY in March a telegram from Adelaide announced the death of Sir Thomas Elder, the munificent patron of Australian exploration, who, though not himself an explorer, has within the last thirty years done more, perhaps, than any one man to reduce the blank spaces on the map of Australia. The son of Mr. George Elder, of Kirkcaldy, Fifeshire, Sir Thomas Elder was born in 1818. In 1854 he emigrated to South Australia, which thenceforward became his home, although in 1890 he paid a lengthened visit to his native Scotland. Devoting himself to mercantile pursuits, he became in time the senior partner of the firm of Elder, Smith and Co., wool and stock agents, of London and Adelaide. In 1863–68, and again in 1871–78, he was a member of the Legislative Council of South Australia; and in 1874 he contributed a munificent sum towards the endowment of the Adelaide University. He paid special attention to the introduction into the colony of improved breeds of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000029

مكتبة قطر الوطنية
Qatar National Library

cattle, sheep, and horses, from which Australia as a whole has derived much benefit. One of his most important services to Australian exploration was the encouragement which he gave to the introduction of camels into that continent. Although these animals had already been used on exploring expeditions (*e.g.* that of Burke and Wills in 1846), the experiment had met with small success, until in 1861–66 Sir Thomas Elder imported a fresh supply, and a few years later proved their value to explorers during the expedition under Colonel Warburton, of which he was one of the promoters. The important journeys of Ernest Giles were also supported by Sir Thomas, and camels were again used with success. Finally, the great "Elder Exploring Expedition" was fitted out by him in 1891, with a view to removing from the maps the last blank space of any importance on the Australian continent, and although untoward events prevented the expedition from attaining the full measure of success which had been anticipated, it did good work in throwing new light on portions of the interior of West Australia. Sir Thomas Elder joined our Society in 1878. In the same year he received the honour of knighthood, and he became G.C.M.G. in 1887.

CORRESPONDENCE.

On the Formation of Sand-dunes.

In the current month's number of the *Geographical Journal*, I observe that, during the discussion of an elaborate and instructive paper under the above heading, allusion is made to a "curious sound made by certain sandhills" in the desert north of the Helmund.

On referring to my diary of March 21, 1872, I find that my fellow employés in the Perso-Afghan Mission and I, returning from Sistan westwards, passed, on our march of that date, a hill called *Rig-i-Rawán*, or the "moving sand," where our Afghan friends performed *Ziyárat*, or rites of pilgrimage. Should you think the circumstance of the sounds there heard worth recalling, in connection with the recently read paper, it might be well to reprint Major Evan Smith's description given at pp. 327, 328 of 'Eastern Persia,' vol. i. (Macmillan: 1876).

"From Kala'h-i-Kah to the Hárut-Rud there is a distance of 16 miles in a due westerly direction, and at the fifth mile the famous Ziárat of Imam Záïd is passed on the right of the road. This Ziárat, which is called the Rig-i-rawán, or moving sand, is most remarkable and singular. At the extreme west of the range of hills which has been described as lying in a straight line due north of the Kala'h-i-Kah district, is a hill some 600 feet high and half a mile long. The southern face of this hill, to the very summit, is covered with a drift of fine and very deep sand, which has evidently been there for ages, as testified by the number of large plants growing on its surface. None of the adjacent hills have any traces whatever of sand-drift, and the surface of the surrounding desert is hard and pebbly. The westernmost portion of this elevated ground contains the Ziárat, and the natives say, and with reason and truth, that at times the hill gives out a strange startling noise, which they compare to the rolling of drums. Captain Lovett, who was fortunate enough to hear it, describes its effect upon him as like the wailing of an æolian harp, or the sound occasioned by the vibration of several telegraph wires—very fine at first, but increasing every moment in volume and intensity, and the secret strain is said sometimes to last as long as an hour at a time. The face of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the hill is concave, its cavity is filled with the sand, and underneath there appears to be a hard limestone surface. It would be useless, after a summary inspection, to hazard an opinion as to the cause of the remarkable sounds that proceed from the hill; but it is noticeable that they may be produced by any large number of men, at the top, putting the sand in motion. It should be remarked at the same time that the noise is often heard in perfectly still weather, and when nobody is near the hill; and it is singular, also, that the limit of the sand at the bottom seems never to be encroached upon by falling sand from the summit, though the face of the hill and sand-drift is very steep. On watching the sand this morning, at the time he heard the sound, Captain Lovett observed that its vibrations and the movements of the pilgrims who had gone to the summit of the drift, occurred at the same moment. The natives, of course, ascribe miraculous properties to the hill. It is believed to be the grave of the Imam Záïd, the grandson of Husain, the son of Ali. Tradition says that, being pursued by his enemies, he came to this hill for refuge, was covered one night by the miraculous sand-drift, and has never been seen again. They say that the sand, thus miraculously brought by heavenly aid, could be removed by no earthly power, and that were any one impious enough to try it, the sand would return of its own accord. They believe the hill, like the ancient oracles, to give out warning when anything important is going to happen in the district. Thus, in the time when the Túrkmans used to make their forays as far south as this, the hill always gave warning the night before their arrival; and we are assured that the arrival of our mission was heralded by the same sounds. The head of the district told us that the noise could be heard in still weather at a distance of 10 miles; and Sáiyid Núr Muhammad Shah declares he heard it distinctly last night at our camp 5 miles off. Shia'hs and Súnnis alike, unable to contend against the evidence of their ears, come to worship at this miraculous spot, and here find a common ground on which they can meet in amity. Obese Muhammadans do not generally subject themselves to so severe a trial of faith as that of visiting this particular *Ziárat-gáh*. It is a very steep climb for them to the commencement of the band of sand, about 200 feet broad and nearly perpendicular, and as they sink up to the thighs in this at every step, often must they regret that the Imám could not have hid himself in a more accessible spot. The tomb is situated at the top of the sand-ridge, and it is in their descent that the faithful are generally rewarded for the trouble they have voluntarily undergone by hearing the miraculous noise. Sardar Ahmad Khan, all his attendants, and a great number of stalwart Afghans went up the hill, and we observed that they were more than half an hour getting across the sand; our more effeminate Tehran servants did not seem to care to make the attempt. The base of the hill is surrounded by graves of the faithful, who, it is to be hoped, are not disturbed in their last sleep by the unearthly warnings of the object of their devotion. It is probable, after all, that science could give a very simple explanation of the phenomena; but he would be a bold man who tried to explain the same by natural causes within 100 miles of its influence." Another description of the *Rig-i-Rawán* will be found at p. 285 of Dr. Bellew's 'From the Indus to the Tigris' (Trübner: 1874).

F. J. Goldsmid.

March 4, 1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000004

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

MEETINGS OF THE ROYAL GEOGRAPHICAL SOCIETY, SESSION 1896–1897.

Seventh Ordinary Meeting, February 22, 1897.—Admiral W. J. L. Wharton, C.B., F.R.S., Vice-President, in the Chair.

Elections.—*George Lowe Alward; Colonel R. S. S. Baden-Powell, 13th Hussars; Victor Bryce; William Arthur Boord; James William Brooks; Lieut. James Blackburn Bedford; Hon. William E. Cavendish; Wilson Crewdson; John Ernest Cochraine; Charles Calmady Collier; John Talbot Clifton; John E. Champney; Andrew Drummond; Edward Davis; Peter Robert Denny; Harry Ellis; Viscount Encombe; John Scott Fraser; William Henry Forbes; John Halliday; J. Fitzgerald Mahon; Commander Frederic R. W. Morgan, R.N.; Walter Mercer; J. Y. W. MacAlister; Daniel Nicholson; Hon. Seymour Ormsby-Gore; Rev. Edward G. C. Parr; Claud Frederick William Russell; Arthur Henry Sharp; Captain Edward Mabbott Woodward, Leicester Regiment.*

The Paper read was:—

"The Southern Border of Afghanistan." By Captain A. H. McMahon. With "Note on the Perso-Baluch Boundary." By Colonel T. H. Holdich, R.E., C.B.

Eighth Ordinary Meeting, March 8, 1897.—Admiral W. J. L. Wharton, C.B., F.R.S., Vice-President, in the Chair.

Elections.—*Charles George Arbuthnot; Henry Thomas Ashby; Alfred Fowell Buxton; John Cordeaux; J. Law Crawford; Captain The Hon. Asselton Curzon-Howe, C.B., C.M.G., R.N.; Major Neil Douglas Findlay, R.A.; Thomas George Hobbs; Thomas Davies Jones; C. C. Macrae; Frederick William Marten; Richard Ponsonby Maxwell; Norman P. M. de Condray Tronson, late 10th Hussars; Ernest Dent Vaisey; Admiral Thomas Lett Ward.*

The Paper read was:—

"Recent Discoveries South of Hudson Bay." By Dr. Robert Bell, of the Canadian Survey.

GEOGRAPHICAL LITERATURE OF THE MONTH.

Additions to the Library.

By HUGH ROBERT MILL, D.Sc., *Librarian*, R.G.S.

The following abbreviations of nouns and the adjectives derived from them are employed to indicate the source of articles from other publications. Geographical names are in each case written in full:—

A. = Academy, Academie, Akademie.	Mag. = Magazine.
Ann. = Annals, Annales, Annalen.	P. = Proceedings.
B. = Bulletin, Bollettino, Boletim.	R. = Royal.
Com. = Commerce, Commercial.	Rev. = Review, Revue, Revista.
C. Rd. = Comptes Rendus.	S. = Society, Société, Selskab.
Erdk. = Erdkunde.	Sitzb. = Sitzungsbericht.
G. = Geography, Geographie, Geografia.	T. = Transactions.
Ges. = Gesellschaft.	V. = Verein.
I. = Institute, Institution.	Verh. = Verhandlungen.
J. = Journal.	W. = Wissenschaft, and compounds.
M. = Mitteilungen.	Z. = Zeitschrift.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000006

مكتبة قطر الوطنية
Qatar National Library

On account of the ambiguity of the words *octavo*, *quarto*, etc., the size of books in the list below is denoted by the length and breadth of the cover in inches to the nearest half-inch. The size of the *Journal* is 10 × 6½.

EUROPE.

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 171–211. **Blodig and Purtscheller.**
Aus den Bergen der Maurienne und der Tarentaise. (Schluss zum Aufsatz in der "Zeitschrift" 1895.) Von Dr. Karl Blodig und L. Purtscheller. *With Illustrations.*

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 212–233. **Enzensperger.**
Die Höfats im Algäu. Von Joseph Enzensperger. *With Map and Illustrations.*

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 234–276. **Becker.**
Der Gurgler Kamm. Von Gustav Becker. *With Map and Illustrations.*

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 277–319. **Schuster.**
Die Langkofelgruppe. Von Oscar Schuster. *With Illustrations.*

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 320–361. **Hess.**
Wandertage in den Steiner Alpen. Von Heinrich Hess. *With Illustrations.*

Alps. *Z. Deutsch. u. Österr. Alpenvereins* **27** (1896): 140–170. **Euringer.**
Berg- und Gletscherfahrten in der Montblanc-Kette. Von Gustav Euringer. *With Plate.*

Alps—Fluchthorn. *Alpine J.* **18** (1897): 307–324. **Coolidge.**
The Fluchthorn and its Neighbours By W. A. B. Coolidge.

Austria—Bosnia. *Rev. Française* **22** (1897): 87–95. **Kœtschet.**
Les progrès de la Bosnie. Par le Dr. Kœtschet.

Austria—Bukowina. *Aus allen Weltteilen* **28** (1897): 293–298. **Kaindl.**
Die Herkunft der Deutschen in der Bukowina. Von Professor Dr. Raimund Friedrich Kaindl.

Denmark. **Paulsen.**
Institut Météorologique de Danemark. Annales de l'Observatoire Magnétique de Copenhague publiées par Adam Paulsen. Années 1893–94. Livraison I. Copenhague: G.-E.-C. Gad, 1896. Size 13 × 8, pp. 50.

France. **Kerviler.**
Le Canal des Deux-Mers; Mémoire présenté au nom de M. Kerviler par M. Gallet. Congrès National des Sociétés Françaises de Géographie, 16e Session. Bordeaux, Août 1895. Compte Rendu. Bordeaux, 1896. Size 10 × 6½, pp. 208–225.
On the proposed ship canal from the Gironde to the Mediterranean.

France—Census. *Rev. Française* **22** (1897): 96–103. **Lasalle.**
Le recensement Français de 1896 et ses conséquences. Par C. de Lasalle.

France—The Loire. *Ann. G.* **6** (1897): 45–60. **Gallouédec.**
La Loire navigable. Par M. L. Gallouédec.

Holland. *Tijds. R. Ned. Aard. Genoots. Amsterdam* **(2) 13** (1896): 493–507. **Hoekstra.**
De bevolking van de groote middelpunten van bevolking in Nederland op 1 Januari 1890 en 1 Januari 1896. Door Dr. J. F. Hoekstra.
Comparison of the population of the principal towns in Holland at the censuses of 1890 and 1896.

Hungary. **Jekelfalussy.**
The Millennium of Hungary and its People. Issued under the authority of the Royal Hungarian Minister of Commerce, as President of the Millennial National Exhibition Commission. Edited by Dr. Joseph de Jekelfalussy. Budapest, 1897. Size 9½ × 6, pp. vi. and 672. *Presented by the Author.*
An account of the geography, history, and actual conditions of the Hungarian monarchy.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000af

مكتبة قطر الوطنية
Qatar National Library

Iceland and Scandinavia. **Houette and Morache.**

Ann. Hydrographiques (2) (1896): 49–70.

Mission magnétique en Islande et en Scandinavie (1895) de l'aviso-transport La *Manche*. Par M. Houette et M. Morache. *With Diagrams.*

The Bureau de Longitudes having undertaken the production of a map of magnetic conditions over the Earth from French sources for the great exhibition of 1900, the expedition described in this paper was one of those despatched for the purpose of completing observations of the three elements of terrestrial magnetic force.

Italy. *G.Z.* **3** (1897): 1–14. **Hassert.**

Die Abruzzen. Von Kurt Hassert.

Mediterranean—Karpathos. **Stefani, etc.**

Karpathos. Etude géologique, paléontologique et botanique. Par le Professeur Carto de Stefani, le Docteur C. J. Forsyth Major et William Barbey. Avec treize planches par Ch. Cuisin et deux planches en phototypie. Lausanne: G. Bridel & Cie., 1895. Size 13 × 10, pp. 180. *Presented by Dr. C. J. Forsyth-Major.*

A monograph on the plants and palæontology of Karpathos, including a bibliography of the island by Dr. Forsyth-Major. The book contains no map.

Meuse river. *Mouvement G.* **14** (1897): 73–76, 97–99. **Rutot.**

Le cours de la Meuse à travers les âges géologiques d'après une communication faite par M. A. Rutot, à la Société belge de géologie. *With Maps.*

Monaco. *Deutsche Rundschau G.* **19** (1897): 208–215. **March.**

Die kleinsten Staaten der Erde. Eine geographische Plauderei. Von Richard March. *With Illustrations.*

Portugal—Oporto. ———

Relatorio da direcção da Associação Commercial do Porto no Anno de 1896 apresentado á Assembleia Geral, em Sessão de 18 de Janeiro de 1897. Porto, 1897. Size 9 × 6, pp. 170, and 252.

Russia—Riga. *Aus allen Weltteilen* **28** (1897): 307–315. **Schubert.**

Riga. Ein deutsches Städtebild. Von Karl Schubert.

Russia—Runö. *Globus* **71** (1897): 101–107. **Bielenstein.**

Eine Fahrt nach Runö im Rigaschen Meerbusen. Von Dr. A. Bielenstein. Doblén. *With Illustrations.*

Spain—Pyrenees. **Saint-Sand.**

Note sur la cartographie des Pyrénées espagnoles en 1895. Par M. le comte d'Arlot de Saint-Sand.—Congrès National des Sociétés Françaises de Géographie. 16e Session. Bordeaux, Août 1895. Compte Rendu. Bordeaux, 1896. Size 10 × 6½, pp. 315–325.

Spain—Sierra Nevada. *B.S.G. Madrid* **38** (1896): 177–209. **Marin.**

La Suiza andaluza. Crónica de una excursión a la Sierra Nevada. Por Diego Marín.

Sweden—Meteorological Observations. ———

Observations météorologiques suédoises publiées par l'Academie Royale des Sciences de Suéde, exécutées et rédigées sous la direction de l'Institut Central de Météorologie. Vol. 33. 2ième série; vol. 19, 1891. Stockholm, 1895. Size 12½ × 10, pp. viii. and 156.

United Kingdom—England. *P. Philosoph. S. Glasgow* **27** (1896): 57–69. **Lodge.**

Why has England become a Great Manufacturing, Commercial, and Colonizing Country? By Richard Lodge, M.A.

This will be specially noticed.

United Kingdom—England—Yorkshire. **Baddeley.**

Thorough Guide Series. Yorkshire (Part i.), the East Coast, York, and the country between the N.E. Main Line and the Sea, also the Cathedral and Castle of Durham (pp. xvi. and 136); (Part ii.) West and part of North Ridings and all parts of the country west of the N.E. Main Line, also Barnard Castle and Teesdale. By M. J. B. Baddeley, B.A. Second Edition, revised. London: Dulau & Co., 1893. Size 6½ × 4½, pp. xvi. and 148. *Maps and Plans. Price* (two parts in one vol.) 5*s*. *Presented by the Publishers.*

United Kingdom—Ireland. *P.R. Irish A.* (3) **4** (1896): 74–111. **Browne.**

The Ethnography of Ballycroy, co. Mayo. By Charles R. Browne, M.D. *With Plates.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005a

مكتبة قطر الوطنية
Qatar National Library

United Kingdom—Ireland. *P.R. Irish A.* (3) 4 (1896): 112–118. **McArdle.**
Additions to the Hepaticæ of the Hill of Howth, with a Table showing the Geographical Distribution of all the Species known to grow there. By David McArdle.

United Kingdom—Ireland. **Martel.**
Irlande et Cavernes Anglaises. Par E.-A. Martel. Paris: C. Delagrave, 1897. Size 9 × 6, pp. 404. *Plans and Illustrations. Presented by the Author.*
M. Martel writes this book, he says, partly to describe his underground campaign in the caves of England and Ireland, and partly to give expression to his admiration of the natural beauties of Ireland. The work is admirably done, and the illustrations reveal scenery of a kind which few in this country had previously seen.

United Kingdom—Ireland. *P.R. Irish A.* (3) 4 (1896): 30–54. **Praeger.**
Report upon the Raised Beaches of the North-East of Ireland, with special reference to their Fauna. By R. Lloyd Praeger. *With Plate.*

United Kingdom—Ireland. *P.R. Irish A.* (3) 4 (1896): 55–60. **Westropp.**
Magh Adhair, co. Clare, the Place of Inauguration of the Dalcassian Kings. By Thomas Johnson Westropp, B.A. *With Plate.*

United Kingdom—Scotland. **Morris.**
The Raised Beaches of the Forth Valley. By David B. Morris, Stirling. Read to the Stirling Natural History and Archæological Society, November 15, 1892. (Reprinted from the *Stirling Journal and Advertiser*, 1892.) Size 7½ × 5, pp. 34.
The Glaciation of the Forth Valley. By David B. Morris, Stirling. Read to the Stirling Natural History and Archæological Society, February 20, 1894. (Reprinted from the *Stirling Journal and Advertiser*, 1894.) Size 7½ × 5, pp. 18.
The Travelled Boulders of the Forth Valley. By David B. Morris, Stirling. Read to the Stirling Natural History and Archæological Society, November 19, 1895. (Reprinted from the *Stirling Journal and Advertiser*, 1896.) Size 7½ × 5, pp. 18. *Presented by the Author.*

ASIA.

Annam. *Spelunca* 2 (1896): 125–132. **Dégoutin.**
Les Grottes de marbre de Tourane (Annam). Par M. Dégoutin. *With Illustrations.*

Arabia. **Hirsch.**
Leo Hirsch. Reisen in Süd-Arabien, Mahra-Land und Hadramüt. Leiden: E. J. Brill, 1897. Size 10 × 6½, pp. xii. and 332. *Map and Plates. Price* 9*s.*

Asia-Minor—Phrygia. **Ramsay.**
The Cities and Bishopries of Phrygia, being an Essay of the Local History of Phrygia from the Earliest Times to the Turkish Conquest. By W. M. Ramsay, D.C.L., LL.D. Vol. i. Part ii West and West-Central Phrygia. Oxford: The Clarendon Press, 1897. Size 10 × 7, pp. xvi. and 353–792. *Price* 21*s. Presented by the Delegates of the Clarendon Press.*
This important work will be noticed in the *Journal.*

Central Asia—Pamirs. **Poncins.**
Chasses et Explorations dans la Région des Pamirs. Par le Vicomte Edmond de Poncins. Paris: A. Challamel, 1897. Size 10 × 6½, pp. 260. *Map and Illustrations. Presented by the Author.*
A well-illustrated account of M. de Poncins' sporting expedition in the Pamirs.

China. **Ehlers.**
Im Osten Asiens. Von Otto E. Ehlers. Dritte Auflage. Berlin: Allgemeiner Verein für Deutsche Litteratur, 1896. Size 9 × 6½, pp. viii. and 392. *Maps and Illustrations. Price* 6*s.*
This book describes visits to Hongkong, Macao, Canton, various journeys in the interior of China, including a trip into Mongolia, and the narrative of a month's residence in Korea.

China—Mongolia. *P.R. Artillery J.* 24 (1897): 49–59. **Buzzard.**
A two months' trip into Mongolia. By Lieut. C. N. Buzzard.

Eastern Asia. *Contemporary Rev.* 71 (1897): 153–171. **Norman.**
Russia and England: "Down the Long Avenue." By Henry Norman. *With Map.*
Treats of the new Manchurian railway.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000087

مكتبة قطر الوطنية
Qatar National Library

India. **Chattopadhyaya.**

Descriptive Geography of India, with a Detailed Account of Bengal for the use of Schools and Pathasalas. Compiled by Sasi Bhusan Chattopadhyaya. Twentieth Edition. [In Bengali.] Calcutta: B. L. Chakravarti, 1893. Size 7 × 4½. *Maps. Presented by the Author.*

India. *J.S. Arts* **45** (1897): 161–178. **Lee-Warner.**

Moral Advance of the Peoples of India during the Reign of Queen Victoria. By William Lee-Warner, M.A., C.S.I.

India. **Co·ta.**

Quarto Centenario do Descobrimento da India. Contribuições da Sociedade de Geographia de Lisboa. A Viagem da India. Poemeto em dois cantos. Por Fernandes Costa. Lisboa: Imp. Nacional, 1896. Size 10 × 6½, pp. 42.

India—Madras. ———

Report of the Condition and Progress of the G. V. Juggarow Observatory, Vizagapatam. Including the Results of Observations for the year 1895. Published by the General Committee, G. V. Juggarow Observatory, Vizagapatam. Calcutta, 1896. Size 9½ × 6½, pp. 50.

India—Wrecks. **Creagh.**

Return of Wrecks and Casualties in Indian Waters for the year 1895, together with a Chart showing the positions in which they occurred, and a Diagram showing comparative number of the reported maritime casualties, etc., the total tonnage, and the number of lives lost, for the past twenty years. Prepared by B. P. Creagh, Commander R.I.M. Calcutta, 1896. Size 13½ × 8½, pp. 66.

Japan. **Siebold.**

Nippon. Archiv zur Beschreibung von Japan und dessen Neben- und Schutzländern Jezo mit den südlichen Kurilen, Sachalin, Korea und den Liukiu-Inseln. Von Ph. Fr. von Siebold. Herausgegeben von seinen Söhnen. Erster Band. Zweite Auflage. Würzburg und Leipzig: Leo Woerl, 1897. Size 11 × 7½, pp. xxxvi. and 422. *Map and Illustrations. Price* 10*s.*

This re-publication of the standard work describing the state of Japan in the second quarter of the present century, before its opening to European influence, is appropriately prefaced by a short biography of the author.

Japan—Earthquake. *Quarterly J. Geolog. S.* **53** (1897): 1–15. **Davison.**

On the Distribution in Space of the Accessory Shocks of the Great Japanese Earthquake of 1891. By Charles Davison, Sc.D. *With Illustrations.*

Japan—Earthquake at Sea. *Petermanns M.* **43** (1897): 34–37. **Rein.**

Das Seebeben von Kámaïshi am 15 Juni 1896. Von Prof. Dr. J. Rein. *With Map.*

Japan—Formosa. *M.G. Ges. (für Thüringen) Jena* **15** (1897): 1–21. **Mackay.**

Unter den Aboriginalstämmen Formosas. Von Missionar Dr. th. G. L. Mackay in Tamsui.

Japan—Formosa. *B.S.G. Madrid* **38** (1896): 210–277. **Mencarini.**

Formosa. Apuntes para un estudio. Por Dr. Juan Mencarini.

Japan—Kiushiu. *B.S.G. Commerc. Havre* **13** (1896): 185–212. **Lièvre.**

Une éruption volcanique au Japon. Par M. D. Lièvre. *With Maps and Illustrations.*

An account of the eruption of Higashi Kirishima in Kiushiu which occurred on March 15, 1896, at the moment when the author was on the edge of the crater. His guide was killed, and he himself barely escaped with his life. The description of the actual eruption is very graphic.

Japan—Kuril Islands. **Snow.**

Notes on the Kuril Islands. By Captain H. J. Snow. London: John Murray, 1897. Size 8½ × 6, pp. 92. *Charts. Price to Fellows of the Society,* 2*s.*; *to non-Fellows,* 4*s.*

Captain H. J. Snow embodies in this little volume (which is one of the extra publications of the R.G.S.) a vast amount of personal observation on the little-known group of the Kuril islands. The charts are of very great value. They show the correct positions of many of the islands for the first time, and also contain the position of many harbours, rocks, shoals, tide-rips, etc., which had not previously been charted. Prof. John Milne concludes a brief prefatory note thus: "In short, after shipwrecks, risks, and dangers, the escapes from which have often seemed incredible, independently

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b7

مكتبة قطر الوطنية
Qatar National Library

of the geological, natural history, and general scientific notes which have been collected, Captain H. J. Snow, whilst sacrificing by his publications his own professional interests as a hunter, has entitled himself to recognition from all who navigate and patrol the fog-bound shores of the rocky Kurils."

Káfiristán. *Blackwood's Mag.* **161** (1897): 359–366. **Broadfoot.**

Káfiristán and the Káfirs. By Major W. Broadfoot.

This article gives references to the main sources of information regarding Kafiristan from the earliest legends down to Sir George Robertson's book.

Kafiristan. **Robertson.**

The Káfirs of the Hindu-Kush. By Sir George Scott Robertson, K.C.S.I., British Agent, Gilgit. Illustrated by A. D. McCormick. London: Lawrence & Bullen, 1896. Size 10 × 7, pp. xx. and 658. *Map and Illustrations. Price* 31*s.* 6*d.*

A note on this book appeared in the March *Journal*, vol. ix. p. 320.

Malay Archipelago—Bali and Lombok. **Carpenter.**

J R.G.S. Australasia (Sydney) **6** (1896): 45–71.

Islands of Bali and Lombock, Malay Archipelago. By Captain J. B. Carpenter.

Descriptions of the islands, with special reference to the manners and customs of the people. The author is personally acquainted with all the islands of the Malay Archipelago, and his article is consequently valuable.

Malay Archipelago—Borneo. *Rev. G.* **40** (1897): 117–123. **d'Estrey.**

Sambas. Division occidentale de Bornéo. Exploitation des mines d'or. Cultures. Par le Dr. H. Meyners d'Estrey.

Malay Archipelago—Celebes. **Kruijt.**

M.G. Ges. (für Thüringen) Jena **15** (1897): 41–56.

Beiträge zur Volkskunde der Poso-Alfuren. Von Missionar A. C. Kruijt in Poso (Celebes).

Malay Archipelago—Celebes. **Sarasin.**

A travers le Monde, Tour du Monde (n.s.) **3** (1897): 41–44.

Le Voyage de MM. Sarasin à Célèbes. *With Map and Illustrations.*

Malay Archipelago—Ceram. **Hoëvell.**

Tijds. K. Ned. Aard. Genoots. Amsterdam (2) **13** (1896): 508–532.

Bijschrift bij de Kaarten van Seran (vulgo Ceram). Door G. W. W. C. baron Van Hoëvell. *With Map.*

Malay Archipelago—Java. *G.Z.* **3** (1897): 79–88. **Kronecker.**

Einiges über die Ursachen und die Verbreitung der Malaria auf der Insel Java. Eine tropenhygienische Studie. Von Dr. med. Franz Kronecker.

Russia—Caucasus. **Hahn.**

Kaukasische Reisen und Studien. Neue Beiträge zur Kenntnis des Kaukasischen Landes. Von C. Hahn. Leipzig: Duncker & Humblot, 1896. Size 9 × 6, pp. 300. *Price* 6*s.*

A special note will be given on this book.

Russia—Transcaspian. *Petermanns M.* **43** (1897): 25–34. **Andrussow.**

Der Adschi-darja- oder Karabugas-Busen. Von Prof. Nik. Andrussow. *With Map.*

Turkey—Babylon. *Norske G. Selsk. Aarb.* **7** (1896): 1–10. **Sundberg.**

Babylonien af Dr. med. John C. Sundberg. *With Illustrations.*

AFRICA.

British East Africa—Uganda. *J. Manchester G.S.* **12** (1896): 65–73. **Smith.**

Uganda. By the Rev. F. C. Smith, B.A.

British South and East Africa. **Lucas.**

A Historical Geography of the British Colonies. By C. P. Lucas, B.A. Vol. iv. South and East Africa. Part i. Historical (pp. 350); part ii. Geographical. Oxford: The Clarendon Press, 1897. Size 8 × 5½, pp. 156. *Maps. Price, Part I.,* 6*s.* 6*d.*; *Part II.,* 3*s.* 6*d. Presented by the Delegates of the Press.*

This volume is published in two parts—the first mainly historical, the second mainly geographical. They deal in the graceful and thorough manner characteristic of the work of Mr. Lucas with the chain of events which led to the acquisition and development of the South and East African possessions of the British Crown. A

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007d

مكتبة قطر الوطنية
Qatar National Library

thoroughly impartial standpoint is occupied throughout. The maps, although in the same style which proved satisfactory for the small and rarely mapped island-colonies treated of in earlier volumes, appear rough and poor when compared with the fine large-scale maps of South Africa to which the public has grown accustomed.

Congo State. *Mouvement G.* **14** (1897): 61–63.

Le pays des Wamfumus entre le Pool, le Kassaï et le Kwango. *With Map.*

Congo State. **Cornet.**

Observations sur la géologie du Congo occidental. Par J. Cornet. (Extrait du Bulletin de la Société Belge de Géologie, de Paléontologie et d'Hydrologie, Bruxelles.) 1896. Size 10 × 6½, pp. 10. *Presented by the Author.*

Congo State. *B.S. d'Études colon.* **3** (1896): 187–250. **Pourbaix.**

Le Commerce de l'État indépendant du Congo. Par V. Pourbaix.

Congo State. *Mouvement G.* **14** (1897): 49–53. **Romans.**

La mission Versepuy au lac Albert-Édouard et dans le bassin de l'Aruwimi. Par B. de Romans. *With Illustration.*

Congo State. *Norske G. Selsk. Aarb.* **7** (1896): 40–72. **Scharffenberg.**

Congo af ingeniør Johannes Scharffenberg.

Congo State—Lomami. *Mouvement G.* **13** (1896): 421–424. **Wauters.**

Le Lomami. Par A.-J. Wauters. *With Map.*

Egypt—Sudan. **Knight.**

Letters from the Sudan. By the Special Correspondent of the *Times* (E. F. Knight). Reprinted from the *Times* of April to October, 1896. London: Macmillan & Co., 1897. Size 9½ × 6, pp. 326. *Maps and Illustrations. Price* 8*s.* 6*d. nett. Presented by the Publishers.*

These letters are illustrated by several clear maps and plans and some excellent pictures. They describe the whole course of the last Sudan expedition, from the departure from Assuan to the capture of Dongola.

Egypt—Upper Nile. *Ann. G.* **5** (1896): 506–521; **6** (1897): 61–70. **Martonne.**

La vie des peuples du Haut Nil. Explication de trois cartes anthropogéographiques. Par M. E. de Martonne. *With Maps.*

French West Africa. **Allemann.**

A travers le Monde, Tour du Monde (n.s.) **2** (1896): 321–324.

Souvenirs du Cayor. Par M. Émile Allemann. *With Illustrations.*

Cayor is situated between Senegal and Cape Verde.

Madagascar. *M.G. Ges. (für Thüringen) Jena* **15** (1897): 21–41. **Nilsen-Lund.**

Reisen norwegischer Missionare in Madagaskar. Von G. Kurze. III. Missionar P. Nilsen-Lund's Reise durch das südliche Menabe.

Sahara. **Foureau.**

Fernand Foureau. Au Sahara. Mes deux missions de 1892 et 1893. Le Gassi Touil et le Grand Erg, l'Oudje sud et le Tinghert, Hassi Messeguem et Hassi Imoulay. Réédition du Rapport de Mission publié en juillet 1893. Paris: A. Challamel, 1897. Size 10 × 6½, pp. 192. *Map. Price* 5*s.* 6*d.*

This will be specially referred to.

Somaliland. *Petermanns M.* **43** (1897): 7–15. **Smith.**

Dr. A. Donaldson Smith's Expedition durch das Somâl- und Galla-Land zum Rudolf-See in den Jahren 1894 und 1895. Nebst Bemerkungen zur Karte von Dr. B. Hassenstein. *With Map.*

South Africa. **Worsfold.**

South Africa, a Study in Colonial Administration and Development. By W. Basil Worsfold, M.A. Second Edition, Revised. London: Methuen & Co., 1897. Size 8 × 5½, pp. xii. and 308. *Map. Price* 6*s. Presented by the Publishers.*

This book has been revised and enlarged by the addition of chapters on recent events in South Africa. The map shows the most recent railway advances.

South Africa. **Foa.**

A travers l'Afrique Centrale. Du Cap au Lac Nyassa. Par Edouard Foa. Paris: E. Plon, Nourrit & Co., 1897. Size 7½ × 5, pp. viii. and 382. *Map and Illustrations. Presented by the Author.*

An interesting popular account of a journey from Cape Town to Lake Nyasa, with good illustrations.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000030

مكتبة قطر الوطنية
Qatar National Library

South and Central Africa. **Foa.**

Édouard Foa, Explorateur. Mes grandes chasses dans l'Afrique Centrale. Paris: Firmin-Didot et Cie., 1895. Size 11 × 7½, pp. 340. *Portrait and Illustrations. Presented by the Author.*

M. Foa was very successful as a sportsman, and this story of his exploits in big-game shooting is written with an enthusiasm and a modesty pleasant to meet with. The volume is appropriately dedicated to Mr. Selous, "the valiant lion-killer, the experienced and truthful author."

West Africa. *National G. Mag.* **8** (1897): 1–15. **French.**

The Gold Coast, Ashanti, and Kumassi. By George K. French. *With Illustrations.*

West Africa. **Toutée.**

Commandant Toutée. Dahomé, Niger, Touareg. Récit de voyage. Paris: A. Colin et Cie., 1897. Size 7½ × 5, pp. xxii. and 370. *Map. Price 4 fr. Presented by the Publisher.*

This popular account of M. Toutée's important journey consists in large part of the official letters written by him to the colonial minister in France. The book has a political rather than a geographical complexion.

West Africa—Ashanti Expedition. *J. Manchester G.S.* **12** (1896): 37–54. **Maxwell.**

The Results of the Ashanti Expedition, 1895-96. By His Excellency Sir W. Maxwell, K.C.M.G., Governor of the Gold Coast. *With Map.*

West Africa—Basa Country. **Dobinson.**

Church Miss. Intelligencer (n.s.) **22** (1897): 173–177.

Visits to the Basa Country from Lokoja. By the Ven. Archdeacon Dobinson.

West Africa—Mendi Country. *J. Manchester G.S.* **12** (1896): 1–34. **Vivian.**

The Mendi Country, and some of the Customs and Characteristics of its People. By Rev. William Vivian. *With Map and Illustrations.*

West Africa—Niger. *Mouvement G.* **14** (1897): 85–88. ——

Le cours du Niger et les géographes français du XVIIIe siècle. *With Portrait.*

West Africa—Niger. *Rev. Française* **22** (1897): 76–86. **Hourst.**

La descente du Niger par la mission Hourst. *With Map, Portrait, and Illustrations.*

West Africa—Niger. *J. Manchester G.S.* **12** (1896): 55–59. **Jackson.**

The Niger River and Territories. By Mr J. Hampden Jackson. *With Map.*

NORTH AMERICA.

Canada. *J.S. Arts* **45** (1897): 291–305. **Colmer.**

The Progress of Canada during the Sixty Years of Her Majesty's Reign. By J. G. Colmer.

Canada—Proposed Ottawa Canal. **Ells and Barlow.**

Trans. R.S. Canada (2) **1** (1895): 163–190.

The Physical Features and Geology of the Route of the Proposed Ottawa Canal between the St. Lawrence River and Lake Huron. By R. W. Ells, LL.D., and A. E. Barlow, M.A. *With Map.*

Canada—Sudbury District. *Quarterly J. Geolog. S.* **53** (1897): 49–66. **Walker.**

Geological and Petrographical Studies of the Sudbury Nickel District (Canada). By T. L. Walker, M.A. *With Sketch-map.*

Lake Superior. *Nautical Mag.* **66** (1897): 221–226. **Small.**

Lake Superior and the Canadian "Soo" Canal. By H. B. Small.

The "Soo" Canal is the canal at Sault Ste. Marie.

Mexico. *Aus allen Weltteilen* **28** (1897): 275–278, 299–308. **Lehzen.**

Die Stellung der Deutschen und die Aussichten der deutschen Auswanderung in Mexico. Von Philipp Lehzen.

Mexico. *B. American G.S.* **28** (1896): 327–386. **Romero.**

Mexico. By Matias Romero.

Mexico—Palenque. **Maudslay.**

Biologia Centrali-Americana; or, Contributions to the Knowledge of the Fauna and Flora of Mexico and Central America. Edited by F. Ducane Godman and Osbert

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

Salvin. Archæology. By A. P. Maudslay. [Part vii., September, 1896.] (Vol. iv., pp. 19–26.) London: R. H. Porter and Dulau & Co. Size 13½ × 10½. *Plates* xxv.–xlviii. *separate.* Size 13½ × 20½.

Mexico—Statistics. Peñafiel.

Estadística General de la República Mexicana á cargo del Dr. Antonio Peñafiel. Periódico oficial. Año vii., Núm. 7 (pp. 376); Año viii., Núm. 8 (pp. 332); Año ix., Núm. 9 (pp. 496). Mexico, 1892–94. Size 12 × 8.

Newfoundland—Magnetism. Millet and Schwerer.

Ann. Hydrographiques (2) (1896): 192–195.

Notes sur un champ d'influence magnétique situé à l'entrée du détroit de Belle-Isle (côte nord de Terre Neuve). Par M. Millet.

Note de M. Schwerer, sur les observations de M. Millet.

United States. *B. American G.S.* **28** (1896): 323–326. Gannett.

The Topographic Work of the United States Geological Survey in 1895. By Henry Gannett. *With Map.*

United States—California. *Sierra Club B.* **2** (1897): 17–28. Brown.

Wanderings in the High Sierra between Mount King and Mount Williamson. By Bolton Coit Brown. *With Sketch-maps and Illustrations.*

United States—California. *J. Geology* **5** (1897): 63–76. Fairbanks.

The Geology of the San Francisco Peninsula. By Harold W. Fairbanks.

A paper bringing forward objections to the views of Prof. Lawson on the geology of California.

United States—California. *Blackwood's Mag.* **161** (1897): 172–180. Harraden.

Some Impressions of Southern California. By Beatrice Harraden.

United States—Maine. *National G. Mag.* **8** (1897): 16–24. Gatschet.

All around the Bay of Passamaquoddy. By Albert S. Gatschet.

United States—Massachusetts—Cape Cod. Davis.

P. American A. Arts and Sciences (*n.s.*) **23** (1896): 303–332.

The outline of Cape Cod. By William Morris Davis.

This paper is referred to in a note.

United States—Missouri. Marbut.

Missouri Geological Survey, Charles R. Keyes, State Geologist. The Physical Features of Missouri. By Curtis Fletcher Marbut. [Extracted from Reports of the Missouri Geological Survey, vol. x., 1896.] Jefferson City, 1896. Size 10 × 7, pp. [100.] *Maps and Plates. Presented by the Author.*

CENTRAL AND SOUTH AMERICA.

Argentine—Chile. *A travers le Monde, Tour du Monde* (*n.s.*) **3** (1897): 57–60. Lefaivre.

De Buenos-Aires à Valparaiso par le Cordillère des Andes. Par M. Jules Lefaivre. *With Illustrations.*

Argentine Republic. *Scottish G. Mag.* **13** (1897): 72–86. Hoskold.

Notes upon the Geography of the Argentine Republic. By H. D. Hoskold.

Brazil—Caparao. *Rev. Trim. I. Hist. e G. Brazileiro* **58** (1896): 249–283. Netto.

Terras auriferas do Caperaó pelo Major Joaquim Jozé Gomes da Silva Netto.

Brazil—French Frontier. *Rev. Trim. I. Hist. G. Brazileiro* **58** (1896): 215–223. Mello.

O Oyapock divisa do Brazil com a Guiana Franceza á luz dos documentos historicos. Barão Homem de Mello.

Brazil—Historical. *Rev. Trim. I. Hist. e G. Brazileiro* **58** (1896): 225–248. Taunay.

Estrangeiros illustres e prestimosos que concorreram, com todo o esforço e dedicação, para o engrandecimento intellectual, artistico, moral, militar, litterario, economico, industrial, commercial e material do Brazil, desde os principios deste seculo até 1892. Relação organisada pelo Visconde de Taunay.

Notes on the foreigners who have taken a leading part in the development of Brazil.

Brazil—Petropolis. *Rev. Trim. I. Hist. e G. Brazileiro* **58** (1896): 5–213. Raffard.

Jubileu de Petropolis. Por Henri Raffard.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000033

مكتبة قطر الوطنية
Qatar National Library

British Guiana. *Norske G. Selsk. Aarb.* **7** (1896): 26–39. **Schjander.**
Britisk Guiana af cand. real. Nils Schjander.

Chili—Valparaiso. *Globus* **71** (1897): 122–125. **Brühl.**
Valparaiso und sein Deutschtum. Von Dr. Gustav Brühl. *With Illustration.*

Cuba. **Varona.**
Cuba contre Espagne. Par Enrique-José Varona. Traduit pour la République Cubaine et publié par le Comité Révolutionnaire Cubain de Paris. Troyes: Imp. G. Arbouin, 1896. Size 6½ × 4½, pp. iv. and 52. *Presented by the Author.*

Patagonia. *Globus* **71** (1897): 117–119. **Krüger.**
Westpatagonien und die Expedition zu seiner Erforschung. Von Dr. Paul Krüger. Santiago de Chile.

Patagonia. *Scottish G. Mag.* **13** (1897): 57–71. **Steffen.**
On recent explorations in the Patagonian Andes, south of 41° S. Lat. By Dr. Hans Steffen.

Peru. *B.S.G. Lima* **5** (1896): 461–468. **Basadre.**
Sumersión bajo el Océano y posterior levantamiento de la costa del Perú durante el actual periodo geológico. Por R. Rey y Basadre.

AUSTRALASIA AND OCEANIC ISLANDS.

Australia. *J.R. Colonial I.* **28** (1897): 249–286. **Brassey.**
Studies in Australia in 1896. By the Hon. T. A. Brassey.
The subjects considered are Defence, Irrigation, Colonies, and Railways.

Australian Colonies. **Petherick.**
The Australian Colonies in 1896. Three Letters addressed to an Investor in Australian Securities, describing the Country and its Resources, Population, Public Works, and Finances. With Remarks on Federation, the Funding of Australian Public Debts, Emigration, etc. By Edward A. Petherick. London: Effingham Wilson, 1897. Size 9 × 6, pp. 56. *Price* 1*s.* *Presented by the Author.*
The reputation which Mr. Petherick has made for himself as an authority on the Australian colonies is a guarantee of the usefulness of this pamphlet.

German New Guinea. *Nachrichten Kaiser Wilhelms-Land* (1896): 36–53. **Lauterbach.**
Ergebnisse der Kaiser Wilhelmsland Expedition. Dr. Lauterbach. *With Map.*

New South Wales—Sydney.
Sydney from a commercial aspect. Supplement to the *Sydney Mail*, October 24, 1896. *Illustrations.* Size 18 × 12½.

New Zealand. **Mackenzie.**
Exploration between Dusky Sound and Lake Manapouri, Otago, New Zealand. By T. Mackenzie. Wellington, 1896. Size 13½ × 8½, pp. 2. *Map. Presented by the Author.*

New Zealand—Southern Alps. *Alpine J.* **18** (1897): 335–344. **Freshfield.**
A Note on the "Southern Alps" of New Zealand. By Douglas W. Freshfield.

New Zealand—Western Otago. **Mackenzie and Pillans.**
Explorations in Western Otago, by Thomas Mackenzie and W. S. Pillans, March, 1894. Wellington, 1894. Size 13½ × 8½, pp. 4. *Map. Presented by T. Mackenzie, Esq.*

Polynesia—Funafuti. *Nature* **55** (1897): 373–377. **Sollas.**
Report on the Coral Reef at Funafuti. By Prof. W. J. Sollas, F.R.S. *With Diagrams.*

Queensland. *J. Manchester G.S.* **12** (1896): 82–108. **Norman.**
Queensland. By General Sir Henry W. Norman, G.C.B., etc. *With Maps.*

South Australia—Northern Territory. *Norske G. Selsk. Aarb.* **7** (1896): 73–96. **Dahl.**
Kort oversigt over "Den Dahlske expeditions" arbeide og skisse af Nordaustraliens urfolk af cand. philos. Knut Dahl.

Torres Straits. **Ray and Haddon.**
P.R. Irish A. (3) **2** (1891): 463–616; (3) **4** (1896): 119–278.
A Study of the Languages of Torres Straits, with Vocabularies and Grammatical Notes. By Sidney H. Ray and Alfred C. Haddon.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Victoria. *J.R. Colonial I.* **28** (1896): 46–51. **Dyer.**
The Colony of Victoria: some of its Industries. By E. Jerome Dyer.

POLAR REGIONS.

Ancient Knowledge. *G.Z.* **3** (1897): 88–92. **Berger.**
Die Entstehung der Lehre von den Polarzonen. Von H. Berger.

The growth of knowledge of the polar regions amongst the ancient Greeks is briefly stated.

Antarctic. *Norske G. Selsk. Aarb.* **7** (1896): 11–25. **Borchgrevink and Bull.**
Den sidste antarctiske reise og foreløbig plan for en ny expedition af C. E. Borchgrevink.

Et par billeder med text af Kaptein H. L. Bull.

Arctic. *Blackwood's Mag.* **161** (1897): 238–256. ——
Franklin and the Arctic.

Arctic. *Nineteenth Century* **41** (1897): 250–269. **Kropotkin.**
Recent Science. By Prince Kropotkin.

In pp. 259–269 Prince Kropotkin discusses the voyage of the *Fram* and the geography of the North Polar area.

Arctic—Baffin Land. *J. Geology* **5** (1897): 17–33. **Watson.**
Evidences of Recent Elevation of the Southern Coast of Baffin Land. By Thomas L. Watson.

The results here described were referred to in the *Journal* for December, 1896 (vol. viii. p 643).

Arctic ballooning. *Rev. Scientifique* (4) **7** (1897): 269–271. **Graffigny.**
Les expéditions aérostatiques au Pôle Nord. Par M. Henry de Graffigny.

Arctic—Peary's Expedition. *Science (n.s.)* **5** (1897): 308–310. **Barton.**
Lieutenant Peary's Expedition. By George H. Barton.
A separate copy has been sent by the author.

Greenland. **Douglas.**
Across Greenland's Ice-Fields. The Adventures of Nansen and Peary on the Great Ice-Cap. By M. Douglas. London: T. Nelson & Sons, 1897. Size 7½ × 5½, pp. 218. *Portraits and Illustrations. Presented by the Author.*

Sir Clements Markham writes the preface to Miss Douglas' book, and considers that it is likely to prove "most useful as a means of preserving an interest among us in the exploration of the unknown parts of our globe, and of arousing that spirit of emulation which in the years that are gone built up the greatness of our country."

Greenland. *J. Geology* **4** (1896): 769–810. **Salisbury.**
Salient Points concerning the Glacial Geology of North Greenland. By Rollin D. Salisbury. *With Illustrations.*

Greenland, Northern. **Astrup.**
Eivind Astrup. Blandt Nordpolens Naboer. Med illustrationer af Th. Holmboe, samt Fotografier og Karter. Folkeudgave. Kristiania: H. Aschehong & Co., 1896. Size 9½ × 6½, pp. 208. *Presented by Dr. J. Russell-Jeaffreson.*

PHYSICAL AND BIOLOGICAL GEOGRAPHY.

Barometric Measurement of Height. **Fowler.**
P.R.S. Victoria (n.s.) **8** (1896): 169–179.

Observations with Aneroid and Mercurial Barometers and Boiling Point Thermometers. By Thomas Walker Fowler.

A series of readings made at a fixed station with a standard mercurial barometer, a "mountain mercurial," three different aneroids, and a boiling-point thermometer. The aneroids behaved in a very capricious manner; the mountain mercurial and the thermometer showed nearly constant errors.

Meteorology. *Meteorolog. Z* **14** (1897): 1–8. **Mohn.**
Meteorologische Beobachtungen in Norwegen während der Sonnenfinsterniss am 9 August 1896. Von Professor H. Mohn aus Christiania.

The data for the temperature of the air during the eclipse of August, 1896, are those obtained at Bugönes by Prof. Mohn, South Varanger, Koutokeino, Vadsö, Vardö, Havningberg, and Bodö by other observers.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004e

مكتبة قطر الوطنية
Qatar National Library

Meteorology—Waterspouts. Köppen.
Ann. Hydrographie **24** (1896): 445–458, 493–508, 541–556.
Die Windhose vom 5 Juli 1890 bei Oldenburg und die Gewitterböe vom 10 Juli 1896 in Ostholstein. (Beiträge zur Kenntniss der Böen und Gewitterstürme, vierte Abhandlung.) Von Dr. W. Köppen. *With Maps and Illustrations.*

Mountain-ranges. *Rev. Scientifique* (4) **7** (1897): 264–269. Meunier.
Progrès récents dans l'histoire des chaines de montagnes. Par Stanislas Meunier.

North Atlantic—Soundings. Poncelet and Schwerer.
Ann. Hydrographiques (1896): 301–380.
Sondages effectués par la *Drôme* dans l'Atlantique Nord sous la direction de M. Poncelet. Rapport d'ensemble dressé par MM. les Lieutenants de Vaisseau Poncelet et Schwerer.
Account of the work of sounding for a new French cable between Brest and Cape Cod, with a complete table of soundings.

Ocean Currents. *B.S.G. Lima* **5** (1896): 457–461. Pezet.
La contra-corriente "El Niño," en la costa Norte del Perú. Por Federico Alfonso Pezet.
The Spanish original of the paper published in the Report of the Sixth International Geographical Congress.

Soil Temperature. *Trans. R.S. Canada* (2) **1** (1895): 63–74. Callendar.
Preliminary Results of Observations of Soil Temperatures with Electrical Resistance Thermometers, made at the McDonald Physics Building, McGill University, Montreal. By Hugh L. Callendar, M.A., F.R.S. *With Diagrams.*
Records experiments made down to 9 feet of depth by a series of electric-resistance thermometers, with diagrams showing the march of temperature at various depths.

ANTHROPOGEOGRAPHY AND HISTORICAL GEOGRAPHY.

Colonization. *Aus allen Weltteilen* **28** (1897): 221–228 Hahn.
Siedelungs-kolonien, Plantagenkolonien und Faktorei-Kolonien. Von Dr. Ed. Hahn.

Europeans and Native Races. Viterbo.
Sousa Viterbo. Os Portugueses e o Gentio. Coimbra, 1896. Size 10 × 7, pp. 32.
On the relations maintained by the Portuguese towards native races during the period of great explorations in the fifteenth and sixteenth centuries.

Historical—Atlases. *Z. Ges. Erdk. Berlin* **31** (1896): 352–368. Kretschmer.
Die Atlanten des Battista Agnese. Von Dr. K. Kretschmer.

Historical—Cabot. Winsor.
The Cabot Controversies and the right of England to North America. By Justin Winsor. Reprinted from the *Proceedings of the Massachusetts Historical Society*, 1896. Cambridge: John Wilson & Son, 1896. Size 10 × 6½, pp. 16. *Presented by the Author.*

Historical—Cabot. Winsor.
Cabot and the Transmission of English Power in North America. An Address delivered before the New York Historical Society on its Ninety-second Anniversary, Wednesday, November 18, 1896. By Justin Winsor, LL.D. New York, 1896. Size 10 × 6½, pp. 38.

Historical—Maps of Herodotus. Myres.
An Attempt to reconstruct the Maps used by Herodotus. By John L. Myres, M.A. From the *Geographical Journal* for December, 1896. Size 10 × 6½, pp. [28]. *Maps.*

Historical—Portuguese in India. Cordeiro.
Quarto Centenario do Descobrimento da India. Contribuições da Sociedade de Geographia de Lisboa. Batalhas da India. Como se perdeu ormuz. Processo inedito do seculo XVII. Por Luciano Cordeiro. Lisboa: Imp. Nacional, 1896. Size 10 × 6½, pp. xvi. and 296.

BIOGRAPHY.

Andrée. *Deutsche Rundschau G.* **19** (1897): 231–233. ———
Der Nordpolluftschiffer S. A. Andrée. *With Portrait.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000042

مكتبة قطر الوطنية
Qatar National Library

Astrup. *Norske G. Selsk. Aarb.* **7** (1896): 117–120. **Welhaven.**
Eivind Astrup. Hj. Welhaven. *With Portrait and Illustration.*
A picture is given of the granite obelisk erected in memory of Astrup, on which is carved a large map of Greenland, showing the north coast along which he travelled.

Dupleix. *Rev. Française* **22** (1897): 65–72. **Bonvalot.**
Le deuxième centenaire de Dupleix à la Sorbonne: Discours de M. G. Bonvalot.

Hale. *Science (n.s.)* **5** (1897): 216–217. **Brinton.**
Horatio Hale. By D. G. Brinton.
Mr. Hale was a student of American Ethnography.

Hay. ———
A Memoir of Sir John Drummond Hay, P.C., K.C.B., G.C.M.G., sometime Minister at the Court of Morocco, based on his Journals and Correspondence. With a Preface by Sir Francis W. De Winton, K.C.M.G. London: John Murray, 1896. Size 9½ × 6, pp. xviii. and 408. *Portraits and Illustrations. Price* 16*s. Presented by the Publisher.*
This will be specially noticed.

Hodgson. **Hunter.**
Life of Brian Houghton Hodgson, British Resident at the Court of Nepal. By Sir William Wilson Hunter, K.C.S.I., etc. London: John Murray, 1896. Size 9½ × 6, pp. x. and 390. *Portraits and Illustrations. Price* 14*s. Presented by Mrs. Brian Hodgson.*
This will be referred to in the *Journal.*

Jonge. *Rev. Trim. I. Hist. e G. Brazileiro* **58** (1895): 237–319. **Hygino.**
Relatorios e cartas de Gedeon Morris de Jonge no tempo do dominio Holandez no Brazil. José Hygino.

Knight-Bruce. *Mission Field* **42** (1897): 46-54. ———
Bishop Knight-Bruce. *With Portrait, Maps, and Illustrations.*

Krueger. *Deutsche Rundschau G.* **19** (1896): 134, 135. ———
Adalbert Krueger. *With Portrait.*
Dr. Krueger was the director of the Royal Observatory at Kiel, and died on April 21, 1896. The notice is based on an article in *Himmel und Erde*, viii. (1896), Part 9.

Maler. *Deutsche Rundschau G.* **19** (1896): 85–88. ———
Theobert Maler. *With Portrait.*

Marco Polo. **Cordier.**
Bibliothèque de Voyages Anciens. Centenaire de Marco Polo. Conférence faite à la Société d'Études Italiennes le mercredi 18 décembre 1895 à la Sorbonne. Par Henri Cordier. Paris: E. Leroux, 1896. Size 8½ × 6, pp. 114. *Illustrations. Presented by the Author.*
A paper written on the sixth centenary of the return of the Polos to Venice. It concludes an important bibliography, including editions of Marco Polo's 'Book' in eleven languages, biographies, and geographical commentaries, 156 entries in all.

Mueller. *J.R.G.S. Australasia (Sydney)* **6** (1896): 72–74. ———
Baron von Mueller.

Nansen. ———
Fridtjof Nansen. Leipzig: K. F. Koehler; Kristiania: H. Bigler [1896]. Size 16½ × 13, pp. [16]. *Map, Portraits, and Illustrations.*
The German edition of a handsomely illustrated paper issued at Christiana shortly after the return of the *Fram.*

Necrology of 1893–1895. **Wolkenhauer.**
Geographische Nekrologie für die Jahre 1893, 1894, and 1895. Von Dr. W. Wolkenhauer in Bremen. From *Geographisches Jahrbuch*, xix. Bd. 1897. Pp. [38]. Size 8½ × 6.

Palmieri. *Deutsche Rundschau G.* **19** (1896): 88–89. **Wolkenhauer.**
Luigi Palmieri. Von W. Wolkenhauer. *With Portrait and Illustration.*

Rebeur-Paschwitz. **Gerland.**
Ernst Ludwig August v. Rebeur-Paschwitz. Von G. Gerland.—Beiträge zur Geophysik. Herausgegeben von Prof. Dr. Georg Gerland. III. Band. 1 Heft. Pp. 16–18. Leipzig: W. Engelmann, 1896. Size 9½ × 6.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

Richards. *P.R.S.* **60** (1897): xxxii–xxxv.
Sir George Henry Richards, K.C.B.

GENERAL.

Bibliography—Geology.
Geological Literature added to the Geological Society's Library during the year ended December 31, 1896. Compiled by the Assistant-Librarian and Edited by the Assistant-Secretary. London: Geological Society, 1897. Size 9 × 6, pp. 208. *Price* 2*s*.

Bibliography—Government Publications.
List of Works published on account of Her Majesty's Stationery Office, by Eyre and Spottiswoode; John Menzies & Co.; and Hodges, Figgis & Co., Limited, Dublin, except the Admiralty Hydrographic Publications, which are sold by J. D. Potter, and the Geological and Ordnance Survey Maps, for which E. Stanford is the Agent for England and Wales. January 31, 1896. London, 1896. Size 10½ × 7½, pp. 286.

British Colonial Empire. *J.S. Arts* **45** (1897): 195–210. **Dilke.**
The Progress of the British Colonial Empire during the past Sixty Years of Her Majesty's Reign. By the Right Hon. Sir Charles W. Dilke, Bart., M.P.

Commercial Geography. **Jones.**
The "Shipping World" Year Book: a Desk Manual in Trade, Commerce, and Navigation. Edited by Evan Rowland Jones. With New Map specially prepared by J. G. Bartholomew. 1897. London: "Shipping World" Office, 1897. Size 7½ × 5, pp. 1014. *Presented by the Publishers.*
An invaluable book of reference for details as to all the seaports of the world. Taken in conjunction with the elaborate route-map accompanying the volume, it forms a manual of practical commercial geography of very high value. Full particulars of the tariffs of all countries are included, as well as separate alphabetical lists of British and foreign harbours.

Commercial Geography.
Klassen-Eintheilung des deutschen Exportmusterlagers zu Berlin S. Dresdener-Strasse 34/35. Luisenhof. Berlin: H. Walter, 1897. Size 9½ × 6½, pp. xxxii. *Plate.*

Commercial Geography. **Jannasch.**
Das deutsche Exportmusterlager zu Berlin S. Von Dr. R. Jannasch. Berlin: H. Walter, 1896. Size 9½ × 6½, pp. 30.
On a proposed museum of German industrial products suitable for export.

Educational. *G.Z.* **3** (1897): 14–27. **Geistbeck.**
Ueber Kulturgeographie im Unterrichte. Von Dr. Alois Geistbeck.
On the historical, political, or human side of geography in education.

Educational—Text-book. **Chattopadhyaya.**
Student's Modern Geography in Bengali, with Plates, Diagrams, and Coloured Maps, for the use of Schools. By Sasi Bhusan Chattopadhyaya. Thirteenth Edition. Calcutta: B. L. Chakravarti, 1894. Size 7 × 4½. *Presented by the Author.*

Educational—Text-book. **Chattopadhyaya.**
The Intermediate Modern Geography in Bengali, with Plates, Diagrams, and Coloured Maps. By Sasi Bhusan Chattopadhyaya. Twelfth Edition. Calcutta: B. L. Chakravarti, 1896. Size 7½ × 4½. *Presented by the Author.*

NEW MAPS.

By J. Coles, *Map Curator*, R.G.S.

EUROPE.

England and Wales. **Ordnance Survey.**
Publications issued since February 8, 1897.
1-inch—General Maps:—

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000067

مكتبة قطر الوطنية
Qatar National Library

ENGLAND AND WALES:—258, 285, revised, engraved in outline; 219, 220, 223, 239, 255, 257, 335, revised, hills engraved in black or brown; 247, hills engraved in black or brown, 1*s.* each.

25-inch—Parish Maps:—

ENGLAND AND WALES:—**Durham** (revision), XIV. 10 and 16; XX. 14, 15, 16; XXI. 13, 14, 16; XXIV. 14, 15; XXV. 8, 10; XXVI. 6, 7, 10, 11; XXVII. 1; XXX. 10; XXXII. 2, 5, 3*s.* each. **Essex** (revision), XXXIII. 14; XLIV. 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 16; XLIX. 12, 16; L. 14; LI. 16; LIII. 1, 3, 4, 6, 7, 10, 13, 14, 15, 16; LX. 5; LXI. 4; LXII. 3, 4, 14, 15; LXV. 4; LXVIII. 2, 16; LXIX. 3, 4, 7, 11, 13; LXX. 7, 9, 10; LXXIV. 12; LXXV. 6, 9, 12, 13, 15, 16; LXXVI. 7, 10; LXXVII. 4, 5, 6, 8; LXXXIII. 1, 3, 4, 7, 8, 10; LXXXIV. 2, 4. **Hampshire** (revision), XIII. 1, 14; XLIX. 13; L. 12; LII. 13; LV. 8; LVI. 13, 14; LVII. 13, 15, 16; LIX. 3, 6; LX. 3, 7, 10, 11, 15; LXVI. 15, 16; LXVII. 1, 5, 6, 7, 8, 9, 10, 12, 13, 14; LXVIII. 3, 3*s.* each. **Kent** (revision), X. 9, 10, 13; XII. 1, 2, 6, 7, 10, 11, 14, 15; XVIII. 3, 4, 12, 15; XXVII. 4; XXVIII. 5, 9, 13, 14; XXIX. 1; XXX. 8; XXXIX. 1; XL. 14; XLI. 2, 4; XLIX. 2; L. 10, 11, 14; LI. 1, 2, 3, 4, 6, 8, 10, 12; LX. 2, 3*s.* each. **Middlesex** (revision), III. 13; VI. 16; VII. 13; XII. 8; XIII. 13; XVI. 10, 11, 12, 14, 15, 16; XVII. 1, 2, 5; XVIII. 1, 5, 9; XXI. 1, 5, 3*s.* each. **Northumberland** (revision), LX. 15, 16; LXI. 15, 16; LXII. 6, 7, 9, 11, 13, 14, 15, 16; LXIII. 5, 6, 7, 11, 15; LXVIII. 3, 4; LXIX. 1, 2, 3, 4; LXX. 1, 3, 4; LXXI. 1, 2, 3, 8, 9, 14, 15, 16; LXXVIII. 4, 12; LXXIX. 1, 10; LXXX. 4, 15; LXXXVI. 2; LXXXIX. 3, 7, 10; CIII. 8, 10, 12; CVIII. 4, 8; CXI. 3, 5, 3*s.* each. **Surrey** (revision), XXI. 5, 13, 14; XXVIII. 2; XXXIV. 4, 10, 11, 12, 15; XXXV. 1, 2, 3, 4, 6, 7, 9, 10; XXXIX. 7; XL. 5, 11, 13, 14; XLII. 8, 9; XLIII. 1, 3*s.* each. **Sussex** (revision), II. 14, 15; III. 7, 11, 12, 3*s.* each.
(*E. Stanford, Agent.*)

Europe. **Poole.**
Historical Atlas of Modern Europe from the Decline of the Roman Empire; comprising also maps of parts of Asia and of the New World connected with European History. Edited by Reginald Lane Poole, M.A., PH.D., Lecturer in Diplomatic in the University of Oxford. Part v. Oxford: Clarendon Press; London, Edinburgh, and Glasgow: Henry Frowde; Edinburgh: W. & A. K. Johnston. 1896. *Presented by the Clarendon Press.*

Part V. of this atlas contains the following maps: No. XXI. Anglia Monastica, showing the principal religious houses in the time of Henry VIII., together with the dioceses formed after their suppression, with explanatory letterpress by Miss A. M. Cooke, M.A. No. LI. Scandinavia, 1658–1815, with explanatory letterpress, by R. Nisbit Bain, of the British Museum. No. LXXVII. Western Asia under the Abbasid Caliphs, 780, with explanatory letterpress, by Stanley Lane Poole, M.A.

Hungary. **Hungarian Geological Society.**
Geologische Karte von Ungarn, herausgegeben von der Ungarischen Geologischen Gesellschaft, unter Mitwirkung der königl. ung. geologischen Anstalt und des Herrn A. Semsey von Sense. Buda Pest, 1896. Scale 1 : 1,000,000 or 15·7 stat. miles to an inch.

Italy. **Istituto Cartografico Italiano.**
Carta Idrografica del Fiume Sele. Scala di 1 : 250,000 or 3·9 stat. miles to an inch. Carta Idrografica del Bacino del Fiume Volturno e del litorale fra i Fiumi Garigliano e Tusciano. Scale di 1 : 250,000 or 3·9 stat. miles to an inch. Istituto Cartografico Italiano, Roma. *Presented by the Istituto Cartografico Italiano.*

Italy. **Istituto Cartografico Italiano.**
Carta delle Strade Ferrate Italiane, 1897, pubblicata per cura del R. Ispettorato Generale delle Stratde Ferrate dall' Istituto Cartografico Italiano, Roma. Scale 1 : 1,500,000 or 23·8 stat. miles to an inch. *Presented by the Istituto Cartografico Italiano.*

Rome. **Istituto Cartografico Italiano.**
Pianta di Roma redatta su quella pubblicata per il Comune di Roma dall' Istituto Cartografico Italiano. Edizione 1896 riveduta e corretta. Scala di 1 : 8000 or 7·9 inches to a stat. mile. *Presented by the Istituto Cartografico Italiano.*

Switzerland. **Swiss Federal Staff.**
Topographischer Atlas der Schweiz in Massstab der Original-Aufnahmen nach dem Bundesgesetze vom 18. Dezember 1868 durch das eidg. topogr. Büreau, gemäss den Direktionen von Oberst Siegfried veröffentlicht. XLVI. Lieferung.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000065

مكتبة قطر الوطنية
Qatar National Library

Nr. 51 bis, Hagnau; 64 bis, Vor der Argen; 300, Mont la ville; 365, Jaun; 417, Samnaun; 446 bis, Hermance; 447, Versoix; 448, Meinier; 449, Dardagny; 449 bis, Chancy; 469, l'Étivaz; 502, Vergelette. *Price* 1 *mark each sheet.*

ASIA.

Caspian Sea. **Andrussow.**

Karabugas Kärtchen von Dr. Nic Andrussow. Scale 1 : 60,000 or 0·94 stat. mile to 1 inch. Petermann's 'Geogr. Mitteilungen,' Jahrgang 1897, Tafel 4. Justus Perthes, Gotha, 1897. *Presented by the Publisher.*

Indian Government Surveys. **Surveyor-General's Office, Calcutta.**

Indian Atlas, 4 miles to an inch. Quarter-sheets: 39 s.w., parts of districts Ahmednagar, Kolaba, Poona, Satara, and of Native States Bhor and Phaltan (Bombay Presidency); 125 s.w., parts of districts Mymensingh (Bengal) and Sylhet (Assam).—India, showing railways, corrected up to March 31, 1896, 80 miles to an inch.—Bombay Surveys, 1 inch to a mile, Sheets: No. 209, parts of district Ratnagiri and Savantvadi State, Season 1893–94; No. 210, parts of district Ratnagiri and Savantvadi State, Season 1893–94; No. 278, districts N. Kanara and Dharwar, Seasons 1888–90; No. 310, portion of district Dharwar, Season 1893–94; No. 311, district Dharwar, Season 1893–94.—Bengal Survey, 1 inch to 1 mile, Sheet No. 390, Districts Mymensingh and portions of Sylhet (Assam), Seasons 1854–56 and 1860–62.—Central India and Rajputana Survey, 1 inch to a mile, No. 419, parts of Bijawar, Panna, and Tehri Native States (Central India Agency), Seasons 1860–61–62 and 1870–71.—North-West Provinces and Oudh Survey, 1 inch to a mile, Sheet No. 17, districts Muzaffarnagar and Meerut, Seasons 1878 and 1880.—Upper Burma Survey, 1 inch to a mile, Sheet No. 261, districts Mandalay, Sagaing, and Kyaukse, Season 1893–94.—Lower Burma Survey, 1 inch to a mile, Sheets No. 424, district Amherst, Seasons 1890 to 1895: No. 478, district Amherst, Seasons 1893 to 1895.—South-Eastern Frontier, 1 inch to 8 miles, Sheet No. 2, second edition, parts of districts Akyab and Arakan (Lower Burma), of Minbu, Myingyan, Meiktila, Lower Chindwin, Sagaing, Pakokku, Yamethin, Magwi, and Kyaukse (Upper Burma), and of Chittagong and Chittagong Hill Tracts (Bengal), Seasons 1853 and 1883–93.—South-Western Asia, 1 inch to 4 miles, Sheets Nos. 66 N.W. and 66 S.W., parts of Arabia, Seasons 1891–94.—Route-map for the Western Himalayas, Kashmir, Punjab, and Northern India, with portions of Afghanistan, Baluchistan, etc. (including the former Kashmir Route-map), 1 inch to 32 miles, with additions to railways, 1895.—District of Rawul Pindi, Sheet No. 1 of the Kohistan of the Sind Saugor Doab, 1 mile to an inch; 4 sheets, with additions to railways up to 1895.—District Bhagalpur, Bengal, 1 inch to 16 miles, 1890.—District Chittagong, Bengal, 1 inch to 8 miles, 1889.—District Singhbhum, Bengal, 12 miles to an inch, 1890.—District Fatehpar, N.W. Provinces and Oudh, 8 miles to an inch, 1893.—Bastar Feudatory State, Central Provinces, 16 miles to an inch, 1896.—Punjab, 80 miles to an inch, 1890.—District Cuttack, Lower Provinces, Bengal, 4 miles to an inch, second edition, 1896.—District Faridpur, Lower Provinces, Bengal, 4 miles to an inch, additions and corrections up to March, 1896.—District Jessore, Presidency Division, Lower Provinces, Bengal, 4 miles to an inch, additions and corrections to 1896.—District Khulna, Presidency Division, Lower Provinces, Bengal, 4 miles to an inch, additions and corrections to May, 1893.—District Muzaffarpur, Lower Provinces, Behar, Bengal, 4 miles to an inch, additions and corrections up to April, 1896.—Conventional signs to be used on topographical maps, 1896.—Conventional signs to be used on topographical maps for reduction.
(*Stanford, Agent.*)

Japan. **Rein.**

Das Seebeben von Kámáishi am 15 Juni 1896 von J. Rein. Scale 1 : 1,000,000 or 15·8 stat. miles to 1 inch. Petermann's 'Geogr. Mitteilungen.' Jahrgang 1897, Tafel 5. Justus Perthes, Gotha, 1897. *Presented by the Publisher.*

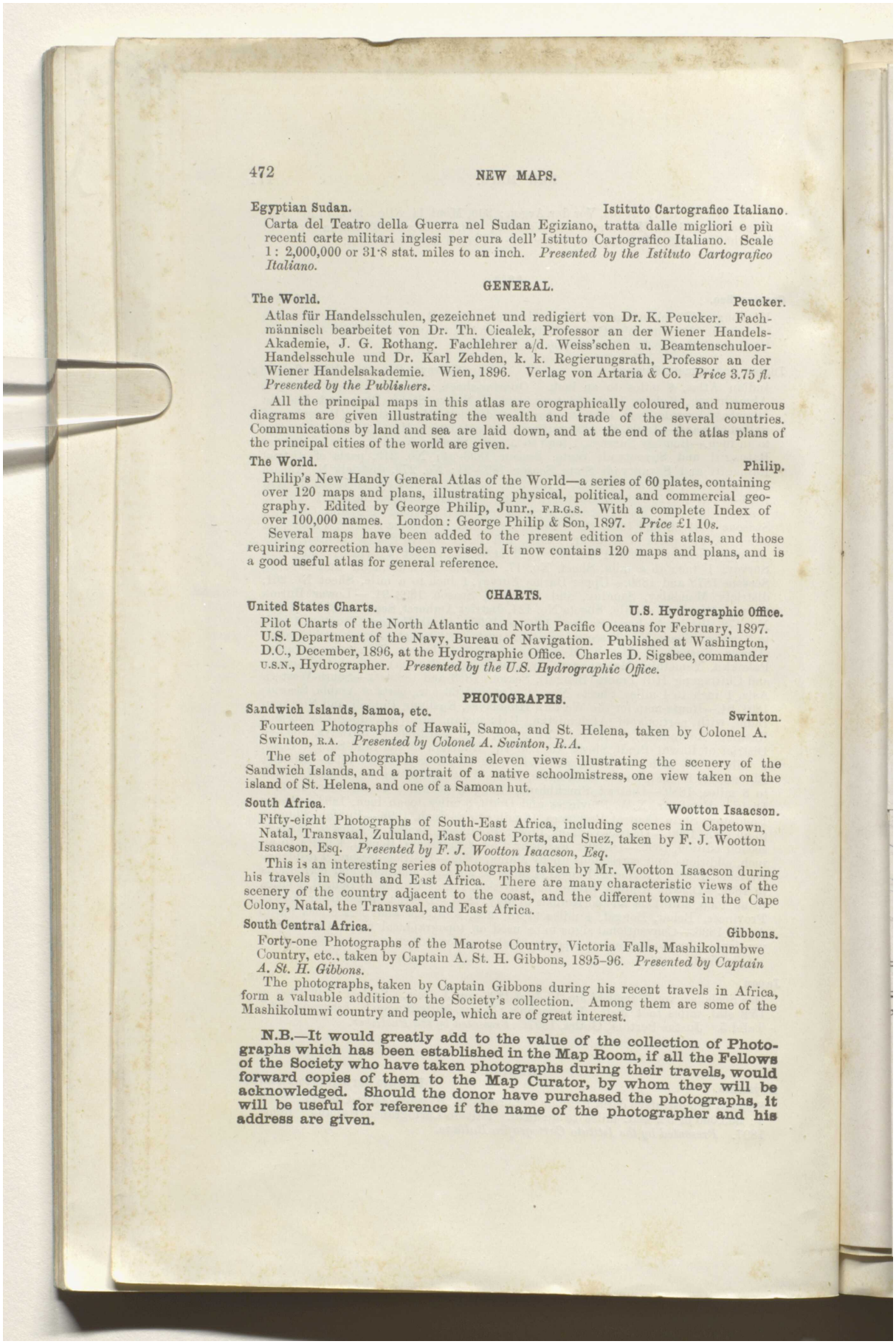
AFRICA.

Abyssinia. **Istituto Cartografico Italiano.**

Schizzo Dimostrativo della Regione compresa tra Massaua-Adua-Cassala. Scale 1 : 333,000 or 5·2 stat. miles to an inch. Istituto Cartografico Italiano. Roma, 1897. *Presented by the Istituto Cartografico Italiano.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000071

مكتبة قطر الوطنية
Qatar National Library



Egyptian Sudan. — **Istituto Cartografico Italiano.**

Carta del Teatro della Guerra nel Sudan Egiziano, tratta dalle migliori e più recenti carte militari inglesi per cura dell' Istituto Cartografico Italiano. Scale 1 : 2,000,000 or 31·8 stat. miles to an inch. *Presented by the Istituto Cartografico Italiano.*

GENERAL.

The World. — **Peucker.**

Atlas für Handelsschulen, gezeichnet und redigiert von Dr. K. Peucker. Fachmännisch bearbeitet von Dr. Th. Cicalek, Professor an der Wiener Handels-Akademie, J. G. Rothang. Fachlehrer a/d. Weiss'schen u. Beamtenschuloer-Handelsschule und Dr. Karl Zehden, k. k. Regierungsrath, Professor an der Wiener Handelsakademie. Wien, 1896. Verlag von Artaria & Co. *Price* 3.75 *fl. Presented by the Publishers.*

All the principal maps in this atlas are orographically coloured, and numerous diagrams are given illustrating the wealth and trade of the several countries. Communications by land and sea are laid down, and at the end of the atlas plans of the principal cities of the world are given.

The World. — **Philip.**

Philip's New Handy General Atlas of the World—a series of 60 plates, containing over 120 maps and plans, illustrating physical, political, and commercial geography. Edited by George Philip, Junr., F.R.G.S. With a complete Index of over 100,000 names. London: George Philip & Son, 1897. *Price* £1 10*s.*

Several maps have been added to the present edition of this atlas, and those requiring correction have been revised. It now contains 120 maps and plans, and is a good useful atlas for general reference.

CHARTS.

United States Charts. — **U.S. Hydrographic Office.**

Pilot Charts of the North Atlantic and North Pacific Oceans for February, 1897. U.S. Department of the Navy, Bureau of Navigation. Published at Washington, D.C., December, 1896, at the Hydrographic Office. Charles D. Sigsbee, commander U.S.N., Hydrographer. *Presented by the U.S. Hydrographic Office.*

PHOTOGRAPHS.

Sandwich Islands, Samoa, etc. — **Swinton.**

Fourteen Photographs of Hawaii, Samoa, and St. Helena, taken by Colonel A. Swinton, R.A. *Presented by Colonel A. Swinton, R.A.*

The set of photographs contains eleven views illustrating the scenery of the Sandwich Islands, and a portrait of a native schoolmistress, one view taken on the island of St. Helena, and one of a Samoan hut.

South Africa. — **Wootton Isaacson.**

Fifty-eight Photographs of South-East Africa, including scenes in Capetown, Natal, Transvaal, Zululand, East Coast Ports, and Suez, taken by F. J. Wootton Isaacson, Esq. *Presented by F. J. Wootton Isaacson, Esq.*

This is an interesting series of photographs taken by Mr. Wootton Isaacson during his travels in South and East Africa. There are many characteristic views of the scenery of the country adjacent to the coast, and the different towns in the Cape Colony, Natal, the Transvaal, and East Africa.

South Central Africa. — **Gibbons.**

Forty-one Photographs of the Marotse Country, Victoria Falls, Mashikolumbwe Country, etc., taken by Captain A. St. H. Gibbons, 1895–96. *Presented by Captain A. St. H. Gibbons.*

The photographs, taken by Captain Gibbons during his recent travels in Africa, form a valuable addition to the Society's collection. Among them are some of the Mashikolumwi country and people, which are of great interest.

N.B.—It would greatly add to the value of the collection of Photographs which has been established in the Map Room, if all the Fellows of the Society who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they will be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

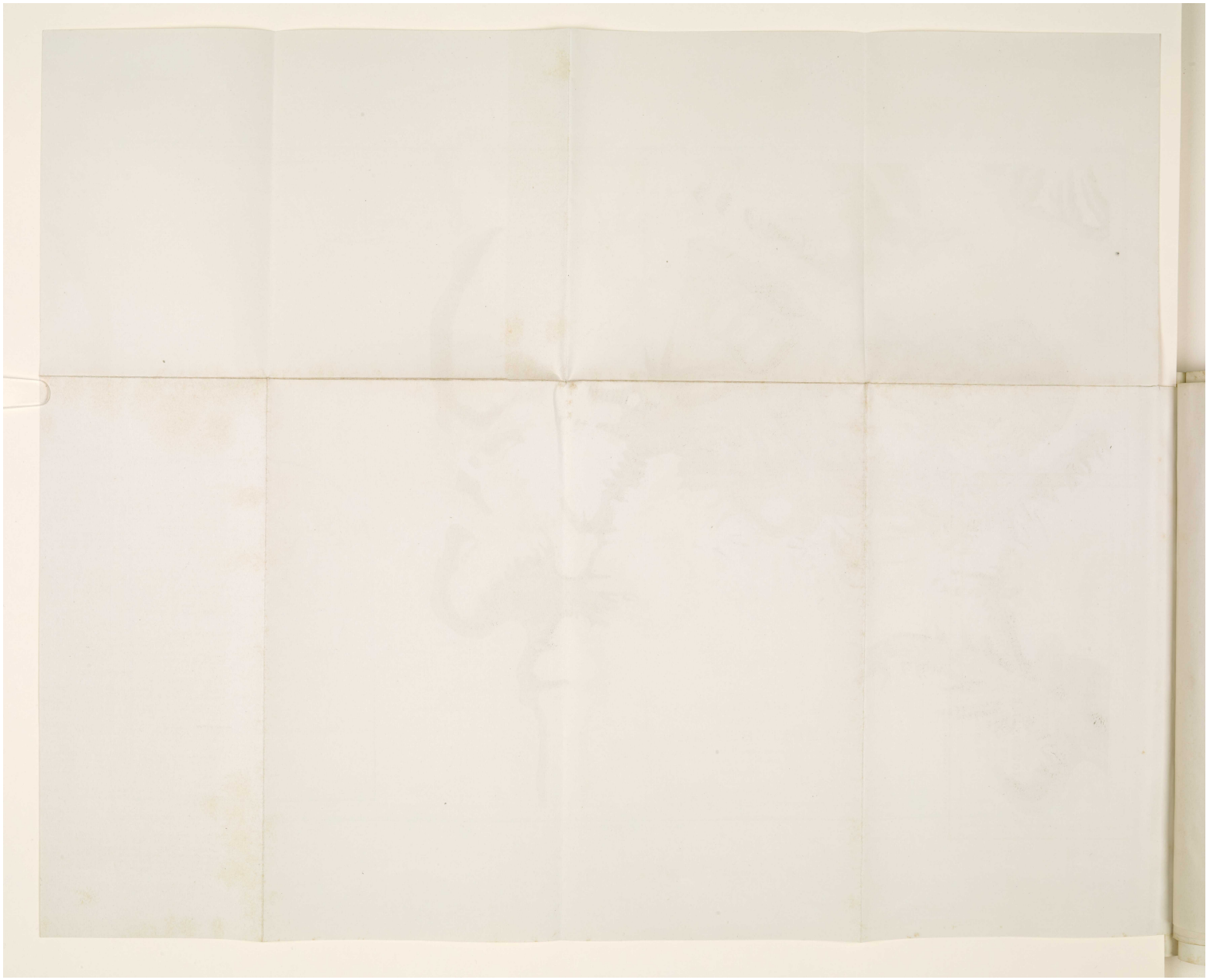
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000099

مكتبة قطر الوطنية
Qatar National Library



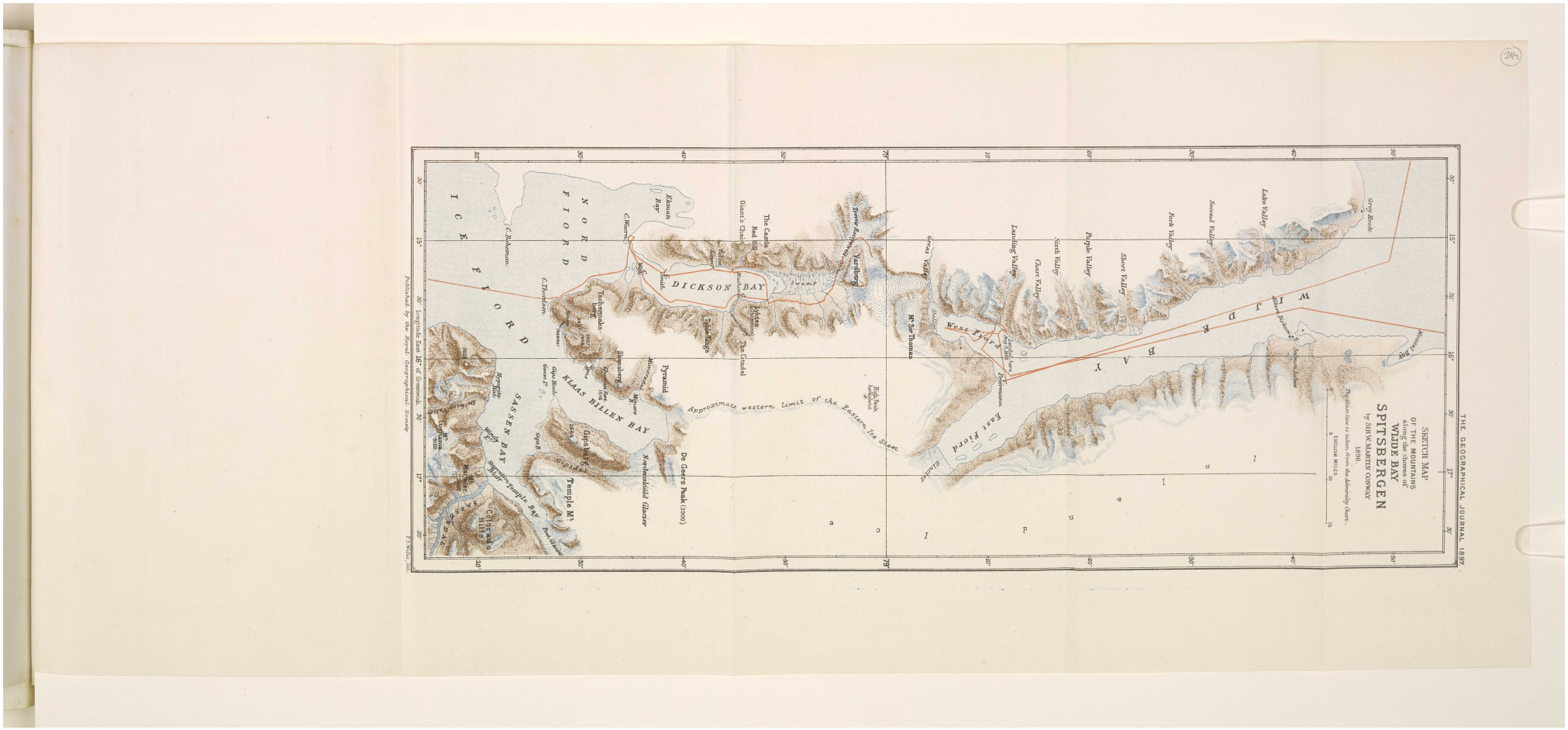
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000012

مكتبة قطر الوطنية
Qatar National Library

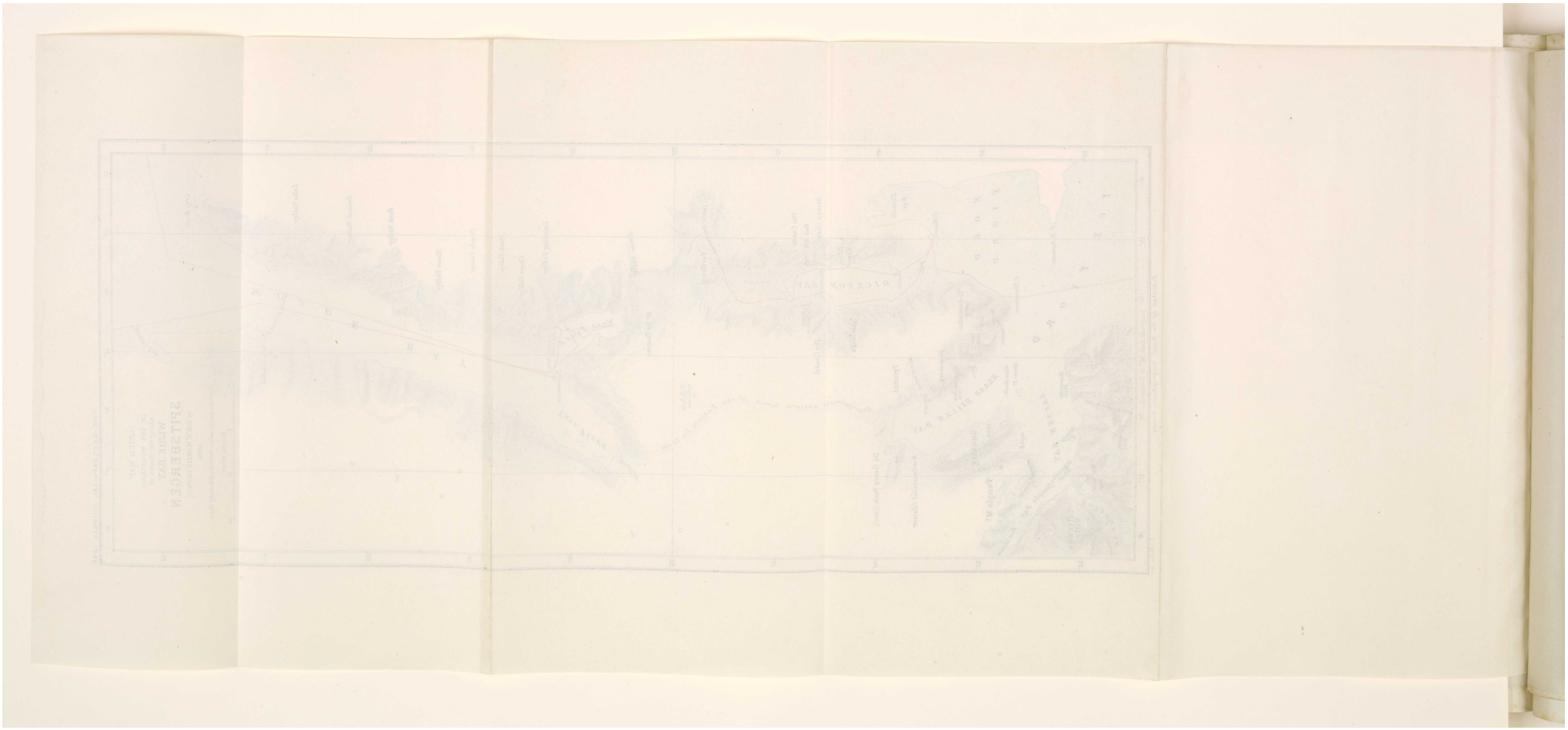


Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006f

مكتبة قطر الوطنية
Qatar National Library


SKETCH MAP
OF THE MOUNTAINS
along the shores of
WIDE BAY
SPITSBERGEN
by SIR W. MARTIN CONWAY
1896
DICKSON BAY
NORD FIORD
ICE FIORD
WIJDE BAY
West Fjord
East Fjord
Glacier
Approximate western limit of the Eastern Ice Sheet
Pyramid
De Geer's Peak (3300)
Temple Mt.
Castle Hill
Red Hill
Giant's Chair
The Citadel
Table Edge
Landing Valley
Chart Valley
Sixth Valley
Purple Valley
Short Valley
Fork Valley
Seaweed Valley
Lake Valley
Grey Brook
Elkman Bay
C. Boheman
C. Thordsen
C. Wrench
Swedish Camp
Swamp
Yarnberg
Mt. Sir Thomas
Russell Bay
Sabine Lake
Temple Bay
Vasen Bay
Elias Billen Bay
Norkenskiold Glacier
Ringdove Glacier
Ringdove Bay
Ringdove Pass
Ringdove Peak
Ringdove Lake
Ringdove Valley
Ringdove Creek
Ringdove Hill
Ringdove Mountain

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000081

مكتبة قطر الوطنية
Qatar National Library

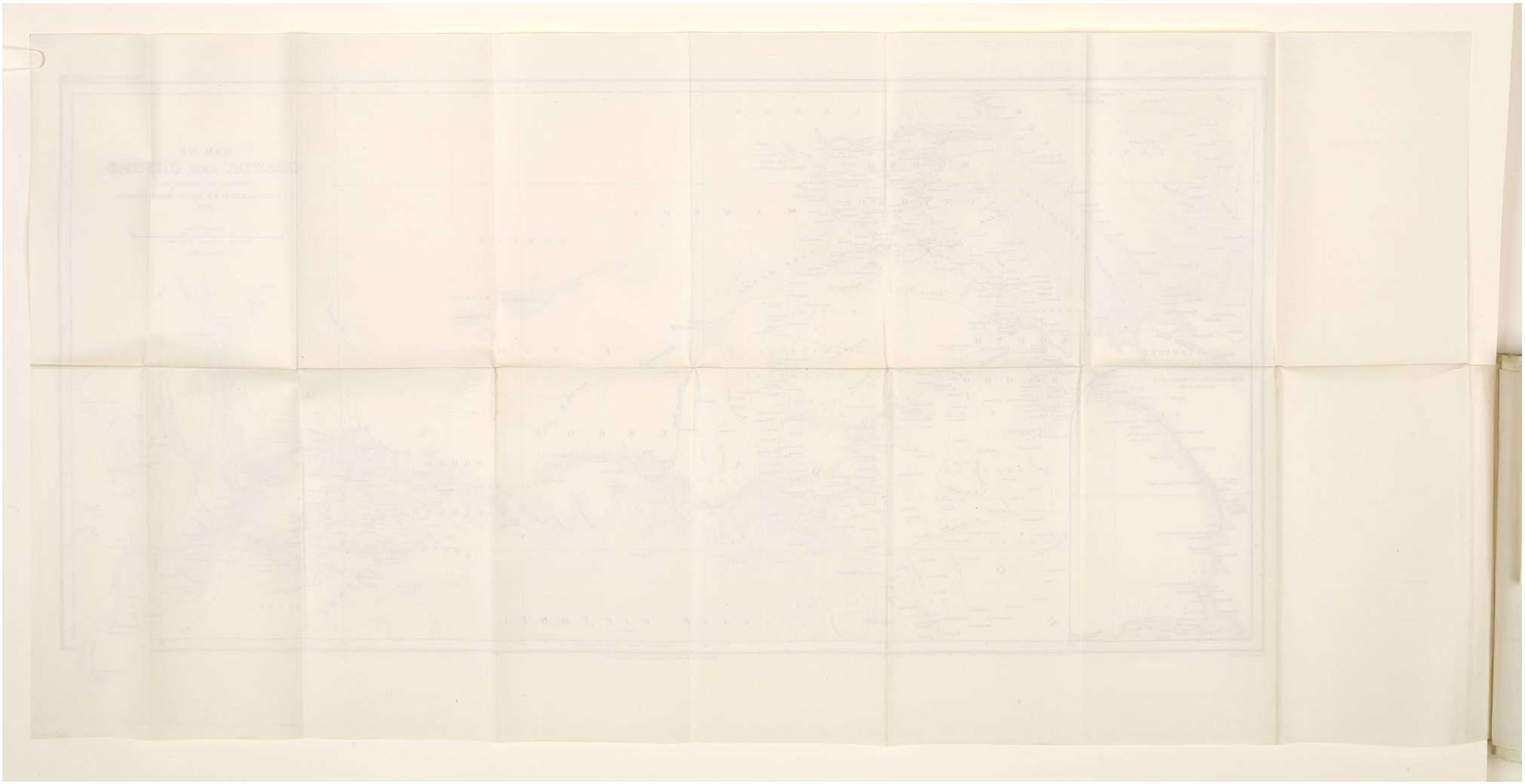
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009d

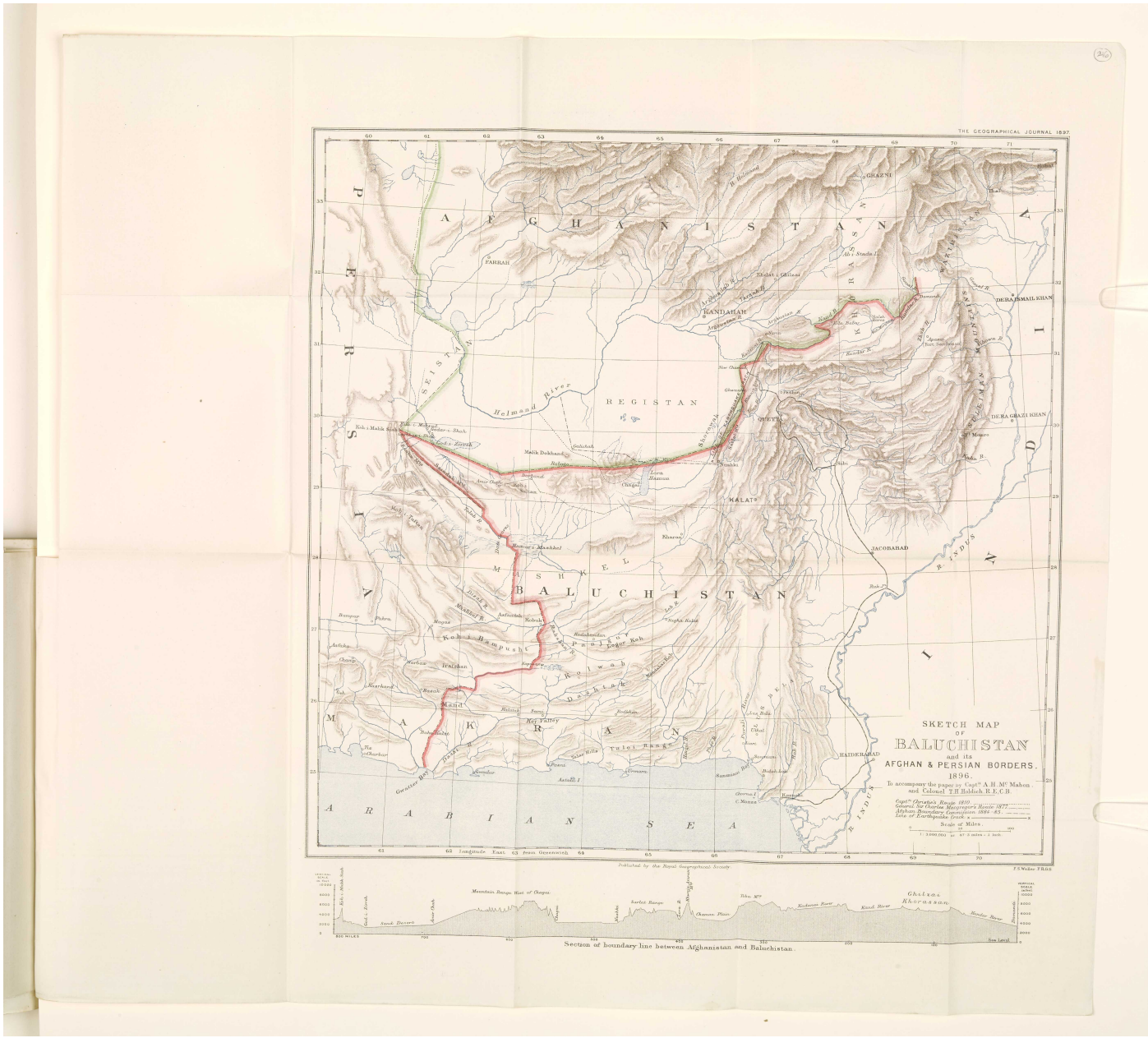
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



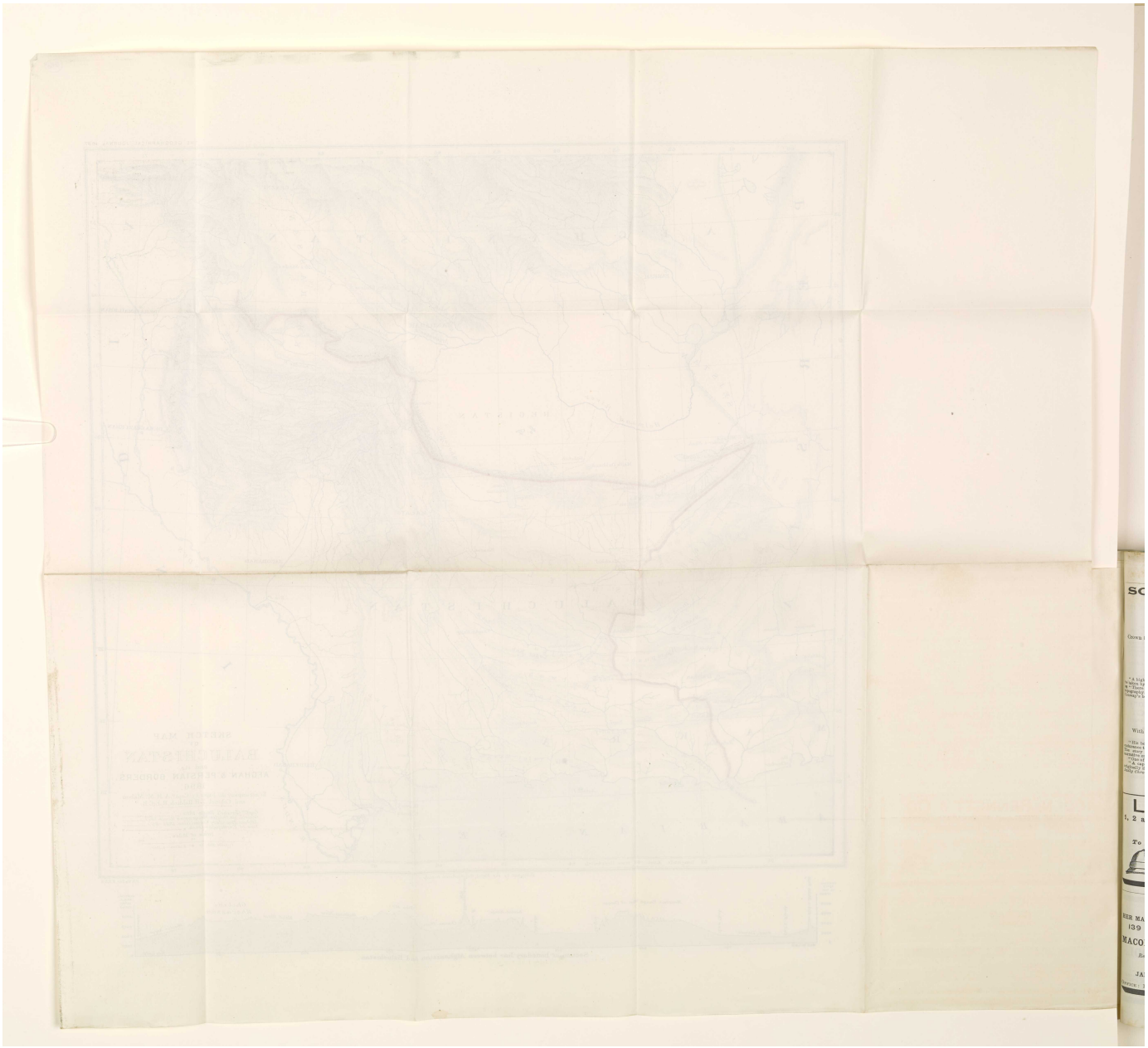
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00007e

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a9

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000c

مكتبة قطر الوطنية
Qatar National Library

SOME BOOKS OF TRAVEL.

New Edition. Profusely Illustrated.

THE WESTERN AVERNUS.

TOIL AND TRAVEL IN FURTHER NORTH AMERICA.

By MORLEY ROBERTS.

Crown 8vo, cloth gilt, with Illustrations by A. D. McCormick, and from Photographs, 7*s.* 6*d.* net.

Second Edition. Large Demy 8vo. Price One Guinea net.

THE ALPS FROM END TO END.

By Sir WILLIAM MARTIN CONWAY.

With 100 full-page Illustrations by A. D. McCormick.

"A high place among these books of climbing which appeal to many who cannot climb, as well as to all who can, will be taken by the very pleasant volume 'The Alps from End to End.'"—*Times.*

"There is, perhaps, not another living Alpinist—unless we except Mr. Coolidge, who contributes a valuable *précis* of the topography—who could have combined the requisite knowledge with physical capability for the task. . . . Sir William Conway's book is as vivid as it is charming."—*Standard.*

Second Edition. Large Demy 8vo, cloth, gilt top. One Guinea net.

ICE-BOUND ON KOLGUEV.

By AUBYN TREVOR-BATTYE, F.L.S., F.Z.S., Etc.

With numerous Illustrations by J. T. Nettleship, Charles Whymper, and Drawings by the Author and Ed. Thornton, and Three Maps.

"His book will take and keep an authoritative position. . . . A modest and unvarnished picture of pluck and endurance that do honour to the English name. Ought to be secure of a welcome from a very large number of readers. . . . The story is told in a delightfully simple and spontaneous manner. . . . Mr. Trevor-Battye's simple and unaffected narrative enables us to learn a good deal."—*The Times.*

"One of the most attractive and readable of recent books of Arctic travel."—*Westminster Gazette.*

"A capital book, as fresh as the flowers and birds and simple people it describes. The book is charmingly and originally illustrated. . . . The book is as attractive to read as this Arctic adventure was risky and original to execute."—*Daily Chronicle.*

ARCHIBALD CONSTABLE & CO., 2, Whitehall Gardens.

LINCOLN, BENNETT & Co.,

1, 2 and 3, SACKVILLE STREET, and 40, PICCADILLY, LONDON, W.

Hat Manufacturers.

BY SPECIAL APPOINTMENT

To T.R.H. THE PRINCE and PRINCESS OF WALES.



PATENT INSULATED HELMETS FOR TROPICAL CLIMATES,



As supplied to Fellows of the Royal Geographical Society.

MACONOCHIE BROTHERS,

Purveyors to HER MAJESTY THE QUEEN.

139 GOLD MEDALS

Purveyors to H.R.H. THE PRINCE OF WALES.

AND FIRST AWARDS.

MANUFACTURERS of all kinds of PRESERVED PROVISIONS.

MACONOCHIE'S PATENT RATIONS. Prepared from Finest Beef or Mutton and Vegetables.

AS SUPPLIED FOR THE ASHANTI & SOUDAN CAMPAIGNS.

Ready for immediate use hot or cold. Indispensable for all Exploring Parties.

Should be in every home for emergencies.

POTTED MEATS, PÂTÉS, AND CAMP PIES a speciality.

JAMS, BOTTLED FRUITS, SOUPS, PICKLES, MARMALADE, SAUCES, FLAVOURING ESSENCES, SAUSAGES, etc., etc.

Office: 131, Leadenhall Street, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000008

مكتبة قطر الوطنية
Qatar National Library

S. SMITH & SON'S Non-Magnetisable Watches.



THE TESTING OF OUR WATCHES BY THE
ADMIRALTY.

Hydrographic Department, Admiralty,
London, S.W., 19th May, 1894.

Sir,—I have much pleasure in returning you the two Non-Magnetisable Watches which you were good enough to send for my inspection. They have successfully passed through a severe test in close proximity to a powerful dynamo, and I believe the Astronomer Royal is in correspondence with you on the subject.

I am, Sir, your obedient Servant,
W. H. WHARTON, Hydrographer.

Messrs. S. Smith & Son, 9, Strand, W.C.

Prize Medal, Electrical Exhibition, 1892, for Non-Magnetisable Chronographs.

Certificate and Warranty with every Watch. Postage Free at our own risk. Old Watches and Jewellery taken in exchange. Send for our Treatise on Watches, Just Issued, 160 pp., 400 Illustrations. Finest Work yet Published.

West Strand Observatory,
9, STRAND, W.C.
MAKERS TO THE ADMIRALTY & KEW OBSERVATORY.

We hold the premier position on the Kew Observatory list of 1895, with a Split Seconds Chronograph, with 82·2 marks out of a possible 100.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.

THE IMPERIAL INSURANCE COMPANY, LIMITED, FIRE.

1, OLD BROAD STREET, and 22, PALL MALL, LONDON.
ESTABLISHED 1803.

Subscribed Capital, £1,200,000. Paid-up, £300,000. Total Invested Funds, £1,500,000.

THE DISTINGUISHING CHARACTERISTICS OF THIS COMPANY ARE:—
Moderate Rates; Undoubted Security; Prompt and Liberal Settlement of Claims.

Every Information and Forms of Proposal can be obtained from the Offices of the Company, or at any of its Agencies at home or abroad.

E. COZENS-SMITH, GENERAL MANAGER.

IMPROVED KEY CAMERA.

Simplest and Best Hand Camera Made. Measures only 8 × 4¾ × 4 ins.

PRICE, QUARTER PLATE, £7 7s. SIZE, 5 × 4 INCHES, £10 10s.

Used by the best Scientific and Artistic Photographers, including
CAPTAIN ABNEY, G. DAVISON, F. HOLLYER, R. KEENE, &c., &c.

Our **FINDER**, *which is the only one that can be used in bright sunshine, can be supplied, if desired, price* **7s. 6d.**

USE PLATINOTYPE

If you wish to gain Medals—If you wish for Permanent Results—If you wish for Artistic Effects—If you seek the Simplest Process.

PRICE LISTS AND FULL INSTRUCTIONS UPON APPLICATION.

THE PLATINOTYPE COMPANY, 22, Bloomsbury St., New Oxford St., London, W.C.

Awarded Gold Medal Liverpool International Exhibition, 1886.
Also Grand Prix (Highest Award) Antwerp, 1894.

ENGLISH MANUFACTURED
SWEETENED TOBACCOS AND CIGARETTES.
RICHMOND CAVENDISH Co., Ltd., LIVERPOOL.

SPECIAL BRANDS:—
"Pioneer" Golden Flake Cut. Twin Clouds. "Richmond Smoking Mixture." Richmond Navy Cut. Superfine Bird's Eye. "Hand it Round," Fine Cigarette Tobacco. Golden Bird's Eye. "Golden Brown" Fine Cut. Bright and Black Plug Cavendish in all usual sizes.

PRICE LISTS ON APPLICATION. ESTABLISHED OVER THIRTY YEARS.

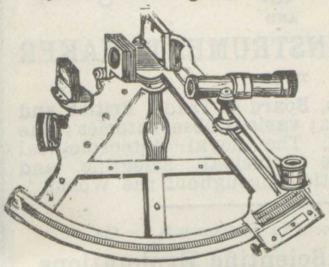
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002e

مكتبة قطر الوطنية
Qatar National Library

CARY'S

TRAVELLING SETS OF SURVEYING INSTRUMENTS,

Cary's Celebrated Edge-Bar Sextant.



ONLY MAKER of Capt. George's Patent Barometers, Artificial Horizons, & Double Sextants.

Consisting of Barometers, Compasses, Sextants, Artificial Horizons, Binocular Glasses, &c., &c., specially made for the Royal Geographical Society, by

H. PORTER

APPRENTICE AND SUCCESSOR TO THE LATE

W. CARY,

Optician by Special Appointment to the Admiralty, War Office, India Office, Trinity House, Swedish, Norwegian, and other Foreign Governments.

7, Pall Mall, London, S.W.

ESTABLISHED OVER 100 YEARS.

GOLD MEDALS AND HIGHEST AWARDS.

POTTER'S BOOK CATALOGUE.

"SPORT AND TRAVEL A SPECIALITY." Issued monthly, and sent post free.

SPORTING WORKS PURCHASED.

WILLIAM POTTER, 30, Exchange Street East, LIVERPOOL.

HERBERT BLOCKLEY, SUCCESSOR TO LUND & BLOCKLEY

(Late VINER, Established 1801.)



Watch & Clock Makers

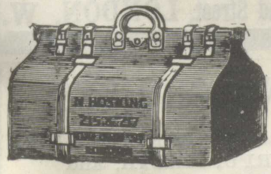


TO

The Queen, the Royal Family, Royal Geographical Society, Admiralty, Foreign and Colonial Offices, &c.

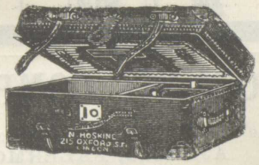
Sole Authorized Makers of the R. G. S. Watertight Half-Chronometer Keyless Fusee Watch. Watches for all Purposes. Marine Chronometers.

41, DUKE STREET, ST. JAMES'S, LONDON.



ESTABLISHED 1750.

As Supplied to Members of the Royal Geographical Society.



N. HOSKING,

Solid Leather Portmanteau, Trunk & Bag Manufacturer,

215 & 217, OXFORD STREET.

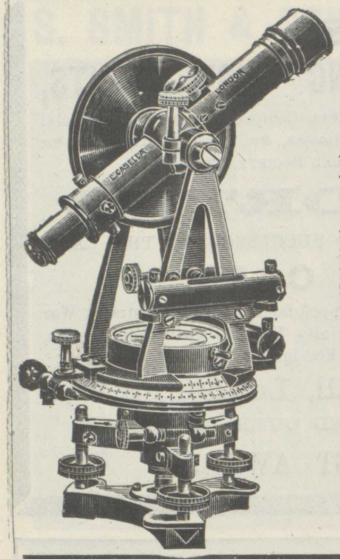
Speciality in Ladies' Light Travelling Dress Baskets and Cabin Trunks.

PURSES, LETTER CASES, AND FANCY LEATHER GOODS, AND ALL KINDS OF LEATHER BAGS

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000059

مكتبة قطر الوطنية
Qatar National Library



L. CASELLA,

Surveying, Mining, Meteorological,

AND

ELECTRICAL INSTRUMENT MAKER

TO THE

Admiralty, Ordnance, Board of Trade, British and Foreign Governments; various Observatories; The Royal Geographical, The Royal Meteorological Societies, and the principal Scientific and Meteorological Societies throughout the World.

Every improvement in Instruments for the

Army, Navy, & Scientific Explorations,

Many of these now being made in Aluminium, for portability.

And special sets of portable and other Instruments as supplied to the Royal Geographical Society and other Explorers.

147, HOLBORN BARS, LONDON, E.C.

Telegraphic Address: "ESCUTCHEON, LONDON."

ADMIRALTY CHARTS. The Latest Editions of Charts, Plans, and Sailing Directions, Published by the Admiralty,

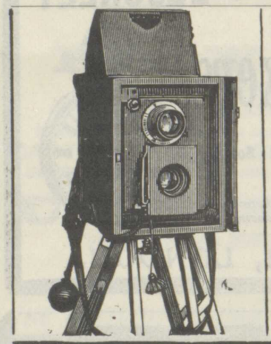
CAN BE OBTAINED FROM

J. D. POTTER,

SOLE AGENT for the Sale of the Admiralty Charts, by appointment of the Lords Commissioners of the Admiralty, and

Publisher of Nautical Books,

31, Poultry, E.C., and 11, King Street, Tower Hill, E., LONDON.



Gold Medals and Highest Awards at all Great Exhibitions

Established 1830. **ROSS.** *Catalogues post-free.*

PHOTOGRAPHIC LENSES AND COMPLETE OUTFITS.

Every requisite supplied. Developing and Printing executed promptly.

TELESCOPES & FIELD GLASSES OF FINEST QUALITY.

Used by Travellers and Sportsmen in all parts of the World.

ANEROID BAROMETERS, COMPASSES, THERMOMETERS, ETC.

Special Sets for Travellers, very Light and Portable.

SURVEYING INSTRUMENTS, SPECTACLES AND EYE-GLASSES, MICROSCOPES AND MAGNIFIERS, ETC., ETC.

ROSS & CO., 111, New Bond Street, LONDON. W.

ORIENT COMPANY'S YACHTING CRUISES.

The "GARONNE," 3901 tons register, leaves London APRIL 21, visiting LISBON, TANGIER, AJACCIO, PALERMO, VENICE, CATTARO, CORFU, MALTA, and GIBRALTAR, arriving at Plymouth MAY 28, and London, MAY 29.

The steamship "LUSITANIA," 3912 tons register, will leave London JUNE 9, visiting the NORWAY FIORDS and NORTH CAPE (for Midnight Sun), returning JULY 6.

String Band, Electric Light, Hot and Cold Baths, High-Class Cuisine.

Managers {F. Green & Co. / Anderson, Anderson & Co.} Head Offices: Fenchurch Avenue.

For passage apply to the latter firm, at 5, Fenchurch Avenue, London, E.C.; or to the West-end Branch Office, 16, Cockspur Street, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000049

مكتبة قطر الوطنية
Qatar National Library

INDIA, CEYLON, JAVA, QUEENSLAND, BURMAH, PERSIA, EAST AFRICA, &c.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED,
BRITISH INDIA ASSOCIATION.

MAIL STEAMERS FROM LONDON TO

CALCUTTA.	BOMBAY.	BRISBANE.
MADRAS.	KURRACHEE.	BATAVIA.
COLOMBO.	BAGHDAD.	ROCKHAMPTON.
RANGOON.	ZANZIBAR.	TOWNSVILLE.
MAURITIUS.	MOMBASSA.	MARYBOROUGH.

For Dates see Daily Advertisements.

Delivering Mails, Passengers, Specie, and Cargo to all the principal Ports of INDIA, BURMAH, EAST AFRICA, QUEENSLAND, and JAVA.

Every comfort for a tropical voyage.

Apply to GRAY, DAWES, & CO., 23, Great Winchester Street, E.C., and Craven House, Northumberland Avenue, W.C.; or to GELLATLY, HANKEY, & CO., Albert Square, Manchester; 51, Pall Mall, and Dock House, Billiter Street, London.

AUSTRALIA, HONOLULU, FIJI, NEW ZEALAND.

NEW SWIFT PASSENGER ROUTE by Swiftest Atlantic Steamers (any line) to Montreal or New York; thence *viâ*

CANADIAN PACIFIC RAILWAY AND VANCOUVER.

Taking in the Grand Scenery of the "Rockies." Many optional Routes, including Niagara and Chicago. Stop-over privileges granted.

THE ROYAL MAIL STEAMSHIPS OF THE CANADIAN-AUSTRALIAN LINE.

Largest, Swiftest, and Finest running from American Continent to Australasia, leave VANCOUVER as follows:—

R.M.S. WARRIMOO—Captain W. E. White, R.N.R. ... ... 8th April, 1897.
R.M.S. MIOWERA—Captain Chas. Wm. Hay ... ... 8th May, 1897.

Calling at VICTORIA, B.C., HONOLULU, and FIJI, en route to SYDNEY.

Electric Light, Hot and Cold Baths, Good Cuisine, Large Cabins. For Descriptive Pamphlets, Tickets, and Berths, apply to Passenger Department, CANADIAN PACIFIC RAILWAY, 67, King William Street, E.C.; 30, Cockspur Street, S.W.; or to the Owner, JAMES HUDDART, 22, Billiter Street, London, E.C.

NORTH GERMAN LLOYD.

FAST MAIL STEAMERS will sail regularly from Southampton, as under:—

NEW YORK.—Direct, Wednesdays. Average passage 7 days. Special train from Waterloo Station on sailing day. Liberal accommodation and high-class cuisine.

CHINA AND JAPAN.—By new Fast Mail Steamers, with all modern improvements, leaving every 28 days, taking passengers for Genoa, Naples, Egypt, Aden, Colombo, Singapore, Hong Kong, Shanghai, and Japan ports.

AUSTRALIA (Albany, Adelaide, Melbourne, and Sydney).—By Steamers of 10,500 tons register, every 28 days.

RIVER PLATE (Monte Video and Buenos Ayres), taking passengers to and from Las Palmas (return tickets). New steamers of good power and exceptional first-class accommodation. Low fares through from London.

Apply to KELLER, WALLIS, & CO., 32, Cockspur-street, Charing Cross; 2, King William-street, E.C. Telephone No. 2012; Telegrams, "Teutonic, London;" and at Manchester and Southampton. Or to Phillips & Graves, Botolph House, Eastcheap, E.C.; or to the North German Lloyd, 2 bis, Rue Scribe, Paris.

Special "Round the World" rates by either of the above lines.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000065

مكتبة قطر الوطنية
Qatar National Library

THE MOST FASHIONABLE
AND
POPULAR HOTEL IN EUROPE.

HOTEL CECIL, LONDON.

SPLENDID SITUATION;
EVERY LUXURY and COMFORT;
UNEQUALLED CUISINE, and
MODERATE CHARGES.

THE
MAGNIFICENT BANQUETING HALLS,
CAPABLE OF SEATING 1500 GUESTS, ARE NOW OPEN FOR
PUBLIC AND REGIMENTAL DINNERS, BALLS, ENTERTAINMENTS,
WEDDING RECEPTIONS, Etc., Etc.

Full Particulars on Application to
G. P. BERTINI, Manager.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006c

مكتبة قطر الوطنية
Qatar National Library

HÔTEL MÉTROPOLE, LONDON

NORTHUMBERLAND AVENUE, TRAFALGAR SQUARE.

The Hôtel Métropole, London, offers unequalled accommodation for real comfort and luxury in every detail.

Numerous single and double Bedrooms, also Bedrooms, with private Bathroom and Lavatory attached; all most comfortably and beautifully furnished.

Suites of Private Apartments varying in accommodation from Bedroom and Sitting-room, with or without private Bath and Dressing-room, to the princely suites comprising Dining, Drawing, and Reception Rooms, with Bedrooms, Dressing-rooms, and Bathrooms.

The Restaurant, well known for its high standard of excellence, is also available for guests not staying in the Hotel. Table d'Hôte Breakfast, Luncheon, and Dinner. Also *à la carte* Service at moderate prices.

THE GORDON HOTELS ARE—

GRAND HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND WHITEHALL ROOMS, } LONDON.
HÔTEL VICTORIA, LONDON.
FIRST AVENUE HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND CLARENCE ROOMS, } BRIGHTON.

BURLINGTON HOTEL, EASTBOURNE.
ROYAL PIER HOTEL, RYDE, I. OF W.
CLIFTONVILLE HOTEL, MARGATE.
LORD WARDEN HOTEL, DOVER.
HÔTEL MÉTROPOLE, MONTE CARLO.
HÔTEL MÉTROPOLE, CANNES.

Proprietors—THE GORDON HOTELS, LIMITED.

QUITO, ECUADOR,
May 8th, 1880.

DEAR SIR,

Both my mountaineers got their feet wet, and one of them was badly frost-bitten in the feet; in consequence he was unable to walk for five weeks afterwards, and this entailed serious loss upon me. I, however, kept my feet perfectly dry, and escaped frost-bite in the feet, though I was slightly bitten in the fingers. I was wearing your thick soled elastic-side boots, and my men wore laced-up boots. This, I think, will be interesting to you. I have long held the opinion that laced-up boots are not so good for high mountaineering as elastic sides, as the former hinder the circulation of the blood more than the latter kind. Frost-bite will scarcely ever arise if the blood is kept well in circulation, but it is to be feared if the circulation is not good.

I am, dear Sir, truly yours,
EDWARD WHYMPER.

To Mr. S. W. NORMAN,
Oakley Corner, Westminster Bridge Road, Lambeth, S.E.
And 3, Belgrave Mansions, Grosvenor Gardens, S.W.

N.B.—The old Boots can be seen.

MINERVA PRINTING OFFICE.



ESTAB. 1790.

DARLING & SON, LIMITED

(Printers to H.M. Stationery Office),

1, 2, 3 & 5, GREAT ST. THOMAS APOSTLE
(Mansion House Station),
AND
31, EASTCHEAP, LONDON, E.C.

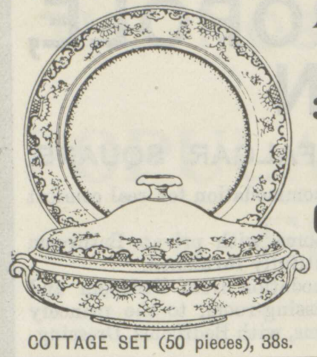
PRINTERS OF BOOKS OF TRAVEL, NEWSPAPERS, MAGAZINES, PERIODICALS, &c.
ENGRAVERS OF BONDS & BANK NOTES.
ACCOUNT BOOK MANUFACTURERS & LITHOGRAPHERS.

ESTIMATES FREE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000019

مكتبة قطر الوطنية
Qatar National Library

THE CHINESE DINNER SET, 38s.



COTTAGE SET (50 pieces), 38s.

ALFRED B. PEARCE,
CHINA & GLASS MANUFACTURER,
39, LUDGATE HILL, LONDON.
(ESTABLISHED 1760.)

CHINA, GLASS, AND EARTHENWARE
FOR HOME AND COLONIAL USE.

First-class Quality. Superior Taste. Moderate Prices.

BROWN & ROWLEY,
WATLING STREET, CITY,
Printers,
Account Book
Manufacturers,
AND
General Stationers.
Contractors to the Royal Geographical Society.

The Practical Scientific Cabinet Makers.
J. T. CROCKETT & SON,
(ESTABLISHED 1847),
Makers of every Description of Cabinets, Cases, Store Boxes, Apparatus and Appliances,
And Dealers in all kinds of Specimens for Entomologists, Botanists, Ornithologists, Geologists, Mineralogists, Numismatists, Conchologists, etc., and for the use of Lecturers, Science Teachers, Colleges, Students, etc.
MUSEUMS FITTED AND ARRANGED.
Birds, Animals, Fish, etc., Preserved and Mounted in Glass Shades, Medallion and Cases (with their most natural surroundings).
ALL BEST WORK. ESTIMATES GIVEN.
All goods at Store Prices. Great Advantages in dealing direct with Makers.
Send for full detailed Price List before ordering elsewhere.
7a, Princes St., Cavendish Square, LONDON, W.
Factories: 34, Riding House Street and Ogle Street, W.

The LANCET says: "Free from reproach."
The JOURNAL OF THE SOCIETY OF ARTS says: "Perfect."
The QUEEN says: "World renowned."
WESTMINSTER BUDGET says: "Savoury dainties for even an Emperor or a Queen."

THE "ORIGINAL" & ONLY GENUINE.
A Delicious Dish at a Moment's Notice.
OF ALL GROCERS.
HALFORD'S



TRADE MARK.
INDIAN CURRIES
Chicken, Rabbit, Mutton, Lobster,
Prawns, Sauce, Powder, Chutnee, Paste.
12, UPPER ST. MARTIN'S LANE, LONDON.

The SKETCH says: "An absolutely genuine article. Perfectly pure."
The GENTLEWOMAN says: "Worthily commend themselves to every household."
WESTMINSTER GAZETTE says: "We know of no preserved goods so pure."

NORMAL POWDER,
For Rifles and Shot Guns.
BEST IN ENGLAND.
SAMPLE CARTRIDGES GRATIS.
The NORMAL POWDER SYNDICATE, Ltd.,
38 & 39, Parliament Street,
LONDON, S.W.

SHEW'S
Eclipse Cameras,
HAND OR STAND.
Fitted with Goerz, Zeiss, and other lenses to order.



IN ALL SIZES.
As supplied to
Fellows of the Royal Geographical Society.
SEE OUR NEW LIST FOR 1897.
J. F. SHEW & CO.,
Newman St., Oxford St., London, W.

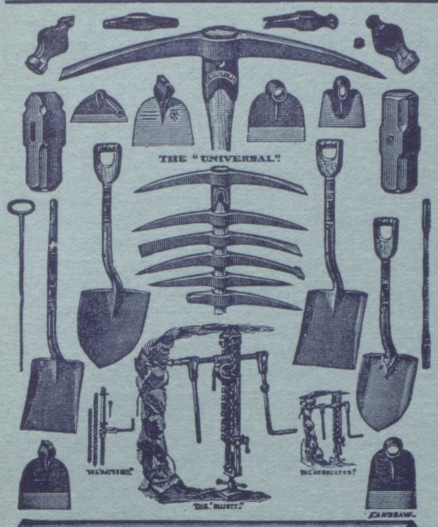
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000053

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

(251)

HIGH-CLASS TOOLS



FOR
MINERS, CONTRACTORS, QUARRYMEN, AND AGRICULTURISTS,
Of all Patterns and for all Markets.
Our Tools are made of the best Sheffield Steel and are Warranted.
They are unequalled in quality and finish.
"UNIVERSAL" AND "ACME" PICKS.
Hand and Power Boring Machines for ROCK and COAL.
PICKS, SHOVELS, SPADES, FORKS, HOES, AXES, HAMMERS, WEDGES, CROWBARS, &c.
Special Tough Drill Steel.
Shear, Cast, and Blister Steel.
Saws, Files, Rasps.
SPECIAL TOUGH MINERS DRILL STEEL.
IMPORTERS OF HICKORY HANDLES.
25 PRIZE MEDALS awarded for Excellence of Quality and Original Designs.
Hardy Patent Pick Co., Ltd., Sheffield, England.

The Military Equipment Stores & "Tortoise" Tents Co., Ltd.,

OFFICES & SHOWROOMS: 7, WATERLOO PLACE, S.W.
Telegraphic Address: "Wagonage, London."

POLAR EXPEDITIONS COMPLETELY FITTED OUT AND PROVISIONED.
☞ If Suitable Notice is given, Arrangements can be made for the Purchase or Hire of a Scotch, Norwegian or American Whaler; also for the Hire for a Summer Sporting Cruise of a completely fitted-out Walrus Sloop, with Crew comprising competent Ice Pilot and Officers.

Siberian Dogs.
Russian Ponies.
Reindeer.
Reindeer Dried Meat.
Russian Log Huts.
Sledges (Dog, Hand, or Reindeer).
Ski.
Finmarken Ski.
Telmarken Ski.
Extra long flat Ski as used by Nansen for smooth ice.
Sails and Masts in bamboo for Sledges.
Fur Malitzas.
Fur Sovike.
Loupthu.
Pimmies.
Reindeer-skin Toboc.
White Blanket Tobogaining Suits.

Fur Dog-skin Gloves (leather-lined).
Watertight Sealskin Boots with leather feet.
Fur-lined Sea Boots.
Reindeer Sleeping Bags.
Sheep-skin Caps for crew.
Cat-skin Stockings.
Loose Tan Reindeer Skins.
Black Swedish Skin Jackets lined with red flannel for crew.
Brown ditto for officers.
Reindeer-skin Finskoo.
Elk-skin Winter Boots.
Lapp Pesks with hood and glove attached.
Young and Old Reindeer Stockings.
Black Leather Ski Boots for Ski-running.

Ice Spikes with straps.
Finn Bindings for Ski.
Ice Sledge Boats.
Walrus or Whale Boats.
Aluminium Boats.
Berthon Boats.
James or Sayce Collapsible Boats.
Arctic Collapsible Huts.
Walrus and Whale Harpoons.
Lines and Lances.
Bottle-nose Whale Lances.
Grindacrooken.
Alpine Rope.
Masts, Sails, and Oars for Ice and Walrus Boats.
Bamboos with flags attached for marking positions in the ice.

All descriptions of Flags, Sledge Covers, Valises, Special Tents, Jackson's Aluminium Stoves, Canteens, Forks, Spoons, &c., &c.
Special Condensed Food for Sledging and Arctic work.
All requirements of Provisions to keep preserved & sweet for a number of years.
Jaeger Vests and Drawers, Ice Axes, Alpen Stocks, Plane Tables, Compasses, Barometers for Altitude, small Registering Thermometers, Wet and Dry Bulbs, and other Instruments.
Guns, Rifles, Harpoon Guns, Revolvers, Ammunition, &c., &c.
Medicine Chests and complete Medical Stores.
Military Equipment Co. Compressed Coffee, Tea, Cocoa, Sugar, Salt, &c., in Tablets.

MILITARY, EXPLORING AND SPORTING EXPEDITIONS COMPLETELY FITTED OUT, AND PROVISIONED TO ALL PARTS OF THE WORLD.

All Applications for Advertisements to be made to—
WALTER JUDD, LTD., 5, QUEEN VICTORIA STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000006

مكتبة قطر الوطنية
Qatar National Library

Mss Eur F.111/393

AUGUST, 1898. VOL. XII. NO. 2.

The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

SUMMARY OF CONTENTS.

(For Details, see over.)

	PAGE
On the Annual Range of Temperature in the Surface Waters of the Ocean, and its Relation to Other Oceanographical Phenomena. By Sir JOHN MURRAY, K.C.B., F.R.S., LL.D., D.Sc.	113
An Exploration in 1897 of Some of the Glaciers of Spitsbergen. By Sir W. MARTIN CONWAY	137
Mr. Frazer's Pausanias. By the Rev. H. F. TOZER	158
Proposal for an Expedition to Sannikoff Land. By Baron E. von TOLL	162
Russian Navigators in the Arctic Ocean in 1895-96. Communicated by Colonel J. SHOKALSKY	172
United States Daily Atmospheric Survey. By WILLIS L. MOORE	176
Persian Gulf Notes. By Captain A. W. STIFFE, R.I.M.	179
Areas of North American and Australian River-basins	182
The Glaciers of Russia in 1896	184
The Monthly Record	186
Obituary	195
Meetings of the Royal Geographical Society, Session 1897-98	201
Geographical Literature of the Month	202
New Maps	221
Maps and Illustrations.	

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.

PUBLISHED MONTHLY.] [To Non-Fellows, Price 2s.

For Notices as to the Society's Meetings and other important matters, see p. iv.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007d

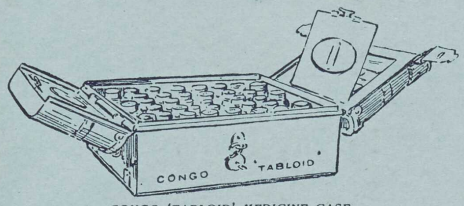
مكتبة قطر الوطنية
Qatar National Library

TRADE MARK 'Tabloid' BRAND
Medicine Cases and Chests



No. 17
'TABLOID' MEDICINE CASE

Fitted with 'Tabloid' Compressed Drugs make the best and most compact medical outfits for travellers and explorers. All sizes are made, from small pocket cases to large caravan chests. 'Tabloid' Medicine Cases have been supplied to Stanley, Jackson, Nansen, and to all the recent leading expeditions.



CONGO 'TABLOID' MEDICINE CASE.

ADVANTAGES OF 'TABLOID' COMPRESSED DRUGS.
Purity of ingredients.
Great saving of space.
No weighing or measuring required.
Accuracy of dosage.
Efficacy in all climates.

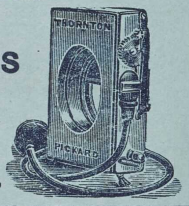
Supplied by all Chemists.

BURROUGHS WELLCOME and CO., Snow Hill Buildings, LONDON.

THORNTON-PICKARD Illustrated Catalogue Free.



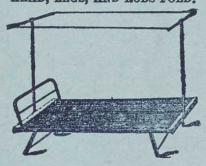
CAMERAS AND SHUTTERS
Are the outcome of practical experience and high-class workmanship.
"AMBER" CAMERA, No. 1, Complete Outfit, £5 3s. 6d.
"RUBY" CAMERA, half-plate Outfit, from £6 18s.
TIME & INSTANTANEOUS SHUTTER, from 18s. 6d.



THORNTON-PICKARD MANUFACTURING CO., Ltd., ALTRINCHAM.

ISAAC CHORLTON & CO.'S PATENT SPRING BEDSTEADS.
17, Blackfriars St., MANCHESTER. Also 149, Queen Victoria St., LONDON.

HEAD, LEGS, AND RODS FOLD.



FOR ALL CLIMATES.

PACKS IN PARTS.



As supplied to the Admiralty, War Office, India Office, etc., and to Members of the Royal Geographical Society.

Supplied by all Furnishers and Shippers.


FOLDS IN CENTRE.

ALL CHORLTON'S GOODS BEAR THIS TRADE MARK.
None other are Genuine.



GREAT VARIETY.

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000003

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000021

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000032

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000040

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000006

مكتبة قطر الوطنية
Qatar National Library

THE GEOGRAPHICAL JOURNAL. To Advertisers.—All communications respecting Advertisements and Bills to be sent to the Advertisement Manager, Mr. Walter Judd, 5, Queen Victoria Street, Mansion House, E.C.

H. SOTHERAN & CO.,

Booksellers, Bookbinders & Publishers.

GENERAL AGENTS FOR PRIVATE BOOKBUYERS & PUBLIC INSTITUTIONS

In India, the Colonies, America, and foreign parts.

A MONTHLY CATALOGUE of SECOND-HAND BOOKS: Specimen No. post free.

LIBRARIES PURCHASED OR VALUED FOR PROBATE.

Telegraphic Address: Bookmen, London. Code in Use: Unicode.

140, STRAND, W.C., & 37, PICCADILLY, W.

BENJAMIN EDGINGTON'S

Tents and Outfits for Africa and the Tropics.

DOUBLE-ROOF RIDGE TENT

As supplied to the Fellows of the Royal Geographical Society.



Made from a Special Canvas, treated by the Copper Rot-Proof Process.

"*December* 3, 1895.

"Dear Sir,

"After four years in East Central Africa, I have no hesitation in saying that, as far as my experience and observation go, your tents are the best that can be procured.

"I have seen other tents, when almost new, torn to pieces after a tropic storm, or giving way after one rainy season, while one of your double-roof tents which I used constantly for two years in Central Africa, is still as strong and sound as ever.

"Yours faithfully,

"R. U. MOFFAT, M.B.,

"Medical Officer, Uganda Protectorate."

H.M. Commissioner Sir Harry H. JOHNSTON writes:—"Nothing could be more serviceable or thoroughly good than those last supplied by yourself, August 16, 1893." (Order for Tents.)

Surgeon-Major PARKE wrote, March 28, 1893:—"I lived under canvas almost continually from 1887 until we emerged from Africa with Emin Pasha in December, 1889. *Unquestionably* yours *are the best Tents made.*"

W. GORDON STABLES, M.D., R.N., says:—"Mr. Edgington's Tents and Cots are the best in the world for comfort in camping out."

For Price Lists and Particulars address—

BENJAMIN EDGINGTON, Ltd., 2, Duke Street (Foot of London Bridge), S.E.

THE TRAVELLER'S WATCH.

This Watch has been Supplied to Members of the Royal Geographical Society.



BENSON'S SPECIAL STRENGTH "FIELD" WATCH.

In massive 18-ct. Gold Cases, £35. In Silver Cases, £21.

Best London make; Half-Chronometer movement; pivoted on rubies and diamonds; strong and safe Keyless work; fine Chronometer Balance; Breguet Balance Spring.

As a high-class, strictly accurate, and reliable Watch, it is unsurpassed for Explorers, Travellers, and Officers on Foreign Service.

In extra strong close-fitting Cases, Hunting, Half-Hunting or crystal-glass, engine-turned or polished, 18-*ct. gold,* £35; *or silver,* £21.

Sent to any part of the World on receipt of drafts (postage and insurance paid by us).

Illustrated Book of Watches, Chronometers, Chronographs, Clocks, and Jewellery sent post free.

J. W. BENSON, LTD., Steam Factory: 62 & 64, Ludgate Hill, E.C.

And at 28, Royal Exchange, E.C., and 25, Old Bond Street, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

For List of Council and Officers, Conditions of Admission to the Fellowship of the Society, and Society Notices, see pages ii. and iv.

The Geographical Journal.

Authors are alone responsible for their respective statements. In MS. communications all new or unfamiliar geographical names should be written in imitation of Roman type.

CONTENTS.—AUGUST.

PAGE

On the Annual Range of Temperature in the Surface Waters of the Ocean, and its Relation to Other Oceanographical Phenomena. By Sir John Murray, K.C.B., F.R.S., LL.D., D.Sc. 113
An Exploration in 1897 of Some of the Glaciers of Spitsbergen. By Sir W. Martin Conway 137
Mr. Frazer's Pausanias. By the Rev. H. F. Tozer 158
Proposal for an Expedition to Sannikoff Land. By Baron E. von Toll 162
Russian Navigators in the Arctic Ocean in 1895-96. Communicated by Colonel J. Shokalsky 172
United States Daily Atmospheric Survey. By Willis L. Moore 176
Persian Gulf Notes. By Captain A. W. Stiffe, R.I.M. 179
Areas of North American and Australian River-basins 182
The Glaciers of Russia in 1896 184
The Monthly Record 186

EUROPE
Caucasus
Limnological Studies in the Tirol
Increase of the Po Delta during the Nineteenth Century

ASIA
Journey in Northern Su-chuan

AFRICA
Surveys in Buddu, Koki, and Ankole
The Sulphur Springs of Amboni, German East Africa
Lieut. Werther's Explorations in German East Africa
Explorations in the Congo Basin
Von Carnap's Expedition from the Cameroons to the Congo

AMERICA
Exploration of the Upper Amazon Tributaries
New Expedition of Dr. Hermann Meyer
Sir Martin Conway's Expedition

AUSTRALASIA AND OCEANIC ISLANDS
Prof. Haddon's Expedition
The Island of Rotuma

POLAR REGIONS
Drift-casks for the Investigation of Polar Currents
Departure of Lieut. Peary's Expedition
Mr. Wellman's Expedition
Australasia and Antarctic Exploration
Mr. Borchgrevink on his Expedition to the Antarctic

Obituary—Major-General R. G. Woodthorpe, C.B., R.E. By Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B. 195
Meetings of the Royal Geographical Society, Session 1897-98 201
Geographical Literature of the Month 202
New Maps 221

MAPS AND ILLUSTRATIONS.

Fig. 1.—South Face of Highway Dome 143
Fig. 2.—Diagram illustrative of Cliff Disintegration 144
Fig. 3.—The Three Crowns, King's Glacier 152
Fig. 4.—The Summit of the King's Highway 153
Fig. 5.—Highway Dome, King James Land 153
Fig. 6.—King's Glacier and Bay . . 154
Fig. 7.—The Last Camp near Mount Che.denius 154
Fig. 8.—Nordenskiöld Glacier Camp . 155
Sketch-Map of Kharag Island . . 180
Tomb of Mir Muhammad . . . 181
Major-General R. G. Woodthorpe, C.B., R.E. 197
Map of the Annual Range of the Surface Temperature of the Ocean . . 224
Map of Central Spitsbergen . . 224
Chart showing Changes of the Coast at the Entrance of the Obi and Yenisei Rivers 224

Sold by

PARIS: Barrère.
VIENNA: Artaria & Co.
HAMBURG: L. Friederichsen & Co.
ST. PETERSBURG: Watkins & Co.
MANCHESTER: John Heywood.
EDINBURGH: Douglas & Foulis.
DUBLIN: Hodges, Foster & Co.
BERLIN: D. Reimer.
LEIPZIG: F. A. Brockhaus.
NEW YORK: International News Co.
MELBOURNE: E. A. Petherick & Co.



SCOTT ADIE, TAILOR TO THE ROYAL FAMILY,
The Royal Scotch Warehouse,
115, 115a, REGENT STREET, LONDON, W.

Norfolk Suits. Walking Gowns.
Travelling Coats. Cycling Gowns.
Stalking Capes. Golf Capes.
Shooting Suits. Travelling Ulsters.
Tartan Plaids. Rugs and Shawls.

ILLUSTRATED CATALOGUE POST FREE.
Telegrams: "SCOTT ADIE, LONDON."
a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000040

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., etc., etc.

Honorary Presidents.

HIS ROYAL HIGHNESS THE DUKE OF SAXE-COBURG-GOTHA, K.G., K.T., G.C.S.I., etc., etc.
HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL.

(ELECTED MAY 23, 1898.)

President.—Sir Clements R. Markham, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Hon. George C. Brodrick.
Right Hon. Sir George D. Taubman Goldie, K.C.M.G.
Admiral Sir F. Leopold McClintock, K.C.B., D.C.L., F.R.S.
General Sir R. Strachey, R.E., G.C.S.I., F.R.S.
Admiral Sir W. J. L. Wharton K.C.B., F.R.S.
General Sir Chas. W. Wilson, R.E., K.C.B., K.C.M.G.

Treasurer—Edward L. Somers Cocks.

Trustees—Right Hon. Sir John Lubbock, Bart., F.R.S., M.P.; Cuthbert E. Peek, F.S.A.

Honorary Secretaries—Major Leonard Darwin, R.E.; James F. Hughes.

Foreign Secretary—Sir John Kirk, K.C.B., G.C.M.G., F.R.S.

Members of Council.

Lord Belhaven and Stenton.
W. T. Blanford, LL.D., F.R.S.
Colonel George Earl Church.
Clinton T. Dent.
Colonel Sir William Everett, K.C.M.G.
Colonel J. Farquharson, C.B., R.E.
Lieut.-Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B.
Admiral Sir Anthony H. Hoskins, G.C.B.
St. George R. Littledale.
Right Hon. Lord Loch, G.C.B., G.C.M.G., etc.
Alfred P. Maudslay.
General Sir H. W. Norman, G.C.B., G.C.M.G.
Surg.-Major Sir George S. Robertson, K.C.S.I.
George S. Mackenzie, C.B.
P. L. Sclater, F.R.S.
Frederick Courtney Selous.
Herbert Warington Smyth.
Lord Stanmore, G.C.M.G.
Colonel Sir Henry R. Thuillier, R.E., K.C.I.E.
Admiral the Hon. W. J. Ward.
Colonel Charles Moore Watson, R.E., C.M.G.

Secretary and Editor of Publications—J. Scott Keltie, LL.D.

Librarian—H. R. Mill, D.Sc.

Map Curator.
John Coles, F.R.A.S.

Chief Clerk.
S. J. Evis.

Bankers—Messrs. Cocks, Biddulph, and Co., 43, Charing Cross.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that—

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his admission fee, and "£2 as his first annual subscription; or he may compound, either at his entrance by one payment of "£35, or at any subsequent period on the following basis:—

Fellows of 20 years' standing and over			... ...	£12 10s.
„ 15 „ „	and under 20		...	£16
„ 10 „ „	„	15	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the Society so long as "he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's Periodical Publications.

Copies of the Year Book, Regulations, and Candidates' Certificates may be had on application at the Society's Office, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000032

مكتبة قطر الوطنية
Qatar National Library

BURBERRYS' GABARDINE

Is the **STRONGEST, COOLEST,** most **WEATHERPROOF,** and **INDESTRUCTIBLE** Cloth

Worn by Officers in the **Matabele, Ashantee, Chitral, Benin, Lagos, Indian Frontier, Dongola,** and other **Military Expeditions**; and amongst many important Private Expeditions may be mentioned—

Dr. NANSEN'S The JACKSON-HARMSWORTH	Polar.
Mr. WELLMAN'S Mr. E. R. FITZGERALD'S Mr. A. HARPER'S	Mountaineering.
Mr. F. J. JACKSON Sir LEWIS MOLESWORTH Mr. G. V. KIRBY	Sporting.



30, HAYMARKET, LONDON; AND BASINGSTOKE.

EXPLORING EXPEDITIONS

Completely Equipped by

S. W. SILVER & CO.

SPECIALITIES for AFRICA, INDIA, &c.

Rot-Proof Canvas Tents, Watertight Boxes, Khaki Suits and Special Clothing, Portable Furniture, Guns, Rifles, Revolvers, &c.

"BEFORE GOING ABROAD, I would recommend Travellers, who desire to spare themselves trouble, as well as time, to consult with Messrs. SILVER & CO., of Cornhill. This firm has supplied travellers, including myself, with their outfit, and know exactly what is needed for every part of the Globe."—*Extract from "Notes on Outfit," by* Sir H. H. JOHNSTON, *late H.M. Commissioner for CENTRAL AFRICA.*

SUN COURT, 67, CORNHILL, LONDON.

Vicordia Flannel



FOR ALL CLIMATES. TRADE MARK. FOR ALL PURPOSES.

GUARANTEED UNSHRINKABLE

FOR

SHIRTS & PYJAMAS.

To be had of Hosiers & Drapers. Wholesale only of YOUNG & ROCHESTER, 3 Love Lane, Wood St. LONDON, E.C.

ENT'S AT STAR HALL

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000069

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

NOTICES.*

Hints to Travellers.—The Seventh, revised, Edition, edited, under a Committee of the Council, by Capt. W. J. L. Wharton, R.N., F.R.S. (Hydrographer to the Admiralty), and Mr. Douglas W. Freshfield, Sec. R.G.S.
Price Eight Shillings; to Fellows at the Office of the Society, Five Shillings.

Instructions for Intending Travellers, under the authority of the Council of the Royal Geographical Society.—Arrangements have been made for the instruction of intending Travellers in the following subjects:—1. Surveying and Mapping. 2. Geology, including practical training in the field. 3. Botany. 4. Zoology. 5. Anthropological Measurements. 6. Photography. 7. What and How to Observe in the Field.
For details apply to the Secretary, 1, Savile Row, W.

Extra Publications.—'The Pamirs and the Source of the Oxus.' By the Right Hon. George N. Curzon, M.P. 83 pp., royal 8vo, with many Illustrations and large new Map of the Pamirs. Price, bound in half-calf, to non-Fellows, 6*s.* nett; to Fellows, 3*s.*—'Map of Persia, with a Memorandum and Index.' By the Right Hon. George N. Curzon, M.P. 8vo. 76 pp., with Maps and Plans. Price, to non-Fellows, 7*s.* 6*d.*; to Fellows, 5*s.* 8*d.*—'The Topography of the Battle of Platæa.' By G. B. Grundy, B.A. Price, bound in half-calf, to non-Fellows, 5*s.*; to Fellows, 2*s.* 6*d.*—'Notes on the Kuril Islands.' By Captain H. J. Snow. 8vo. 88 pp., with two large Charts, revised by Captain Snow. Price, in boards, to non-Fellows, 4*s.* nett; to Fellows, 2*s.*—'Eastern Persian Irak.' By General A. Houtum-Schindler. 8vo. 132 pp., with Map. Price, to Fellows, in boards, 2*s.*; bound in half-calf, 3*s.* 6*d.*; to non-Fellows, in boards, 3*s.* 6*d.*; in half-calf, 5*s.* nett.—'A Journey on the Upper Mekong, Siam.' By H. Warington Smyth. Sixty illustrations and three maps. Price, bound in half-calf, to Fellows, 4*s.*; to non-Fellows, 7*s.* 6*d.* 'British New Guinea: Country and People.' By Sir William Macgregor, K.C.M.G., C.B. Map and Illustrations. 100 pp., 8vo. Price, in boards, to non-Fellows, 4*s.* nett.; to Fellows, 2*s.* 'Supplement to the Bibliography of Algeria, from the earliest time to 1895.' By Sir Lambert Playfair, K.C.M.G. Price to Fellows, 2*s.* 6*d.*; to non-Fellows, 5*s.* Historical Atlas of the Chinese Empire. By E. L. Oxenham. Price to Fellows, 17*s.* 6*d.*; to non-Fellows, 30*s.*

Sir W. Martin Conway's Map of the Karakoram Himalayas.—This Map is now ready in two sheets, with text by Sir W. M. Conway, and may be obtained by Fellows at the Office of the Society for 2*s.* 6*d.*; by the general public for 5*s.*

The New Library Catalogue.—A new Authors' Catalogue of the Library is now ready, embodying all the previous catalogues, and the additions during the thirteen years 1880–93. It is in one large volume, double columns, 833 pages. Price, to Fellows, 2*s.* 6*d.*; to non-Fellows, 5*s.*

General Index to the fourteen volumes of the *Proceedings R.G.S.*, New Series. One volume, Royal 8vo. 250 pp., double columns. Price, to Fellows, 2*s.*; to non-Fellows, 5*s.* Only a few copies now remain.

Any Fellow resident in this country, desiring to have notice of the subjects of papers to be read at the Society's Meetings forwarded to him, can receive such notices by post on payment in advance to the Chief Clerk, at 1, Savile Row, of 2*s.* per session.

The Society's House will remain open for the Convenience of Fellows on the evenings of the Society's ordinary meetings till 8.15. It will be closed from August 15 to September 3 inclusive.

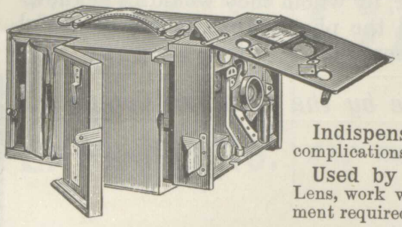
* See also pp. vi. and viii.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

THE
"N. & G." CAMERAS
FOR HAND & TRIPOD.

SEVEN DISTINCT PATTERNS—For Pictures 4¼ × 3¼ in., 9 × 12 centimetres, 5 × 4, 6½ × 4¼, 6½ × 4¾ in., and Stereoscopic, on any Plates or Films.



THE "N. & G." CAMERAS
stand years of constant work in the most trying climate, and never need repairs.
Hundreds in use throughout the World.

Indispensable to Beginners, because free from mechanical complications and extremely simple to work.

Used by the Leading Experts, because they take any Lens, work with any Plates or Films, and provide every adjustment required in Photography.

COMPLETE CATALOGUE, 1s. 3d. Post-free.
Abridged Catalogue, free on application.

NEWMAN & GUARDIA, LTD.,
92, SHAFTESBURY AVENUE, LONDON, W.

(THE ORIGINAL FIRM ESTABLISHED 1810.)

MAPPIN BROTHERS.

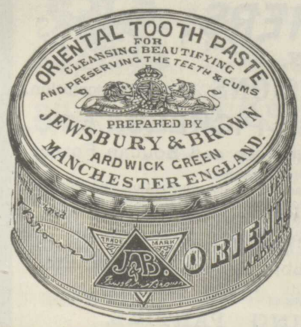
Only London Showrooms: { 220, REGENT STREET, W.
66, CHEAPSIDE, E.C. (Next Sir John Bennett's.)

Manufactory: THE "QUEEN'S" WORKS, SHEFFIELD.

Manufacturers of "QUEEN'S" PLATE AND CUTLERY, SOLID SILVER PLATE, DRESSING BAGS, ETC.

ILLUSTRATED CATALOGUE POST-FREE TO ANY PART OF THE WORLD.

Goods forwarded to the country on approval.



JEWSBURY & BROWN'S
Oriental Tooth Paste.
White, Sound Teeth, Healthy Gums, and Pleasant Breath to Old Age.

CAUTION:—
The only Genuine is JEWSBURY & BROWN'S.
Price 1/6 and 2/6. All Chemists.
Over 70 Years in Use.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001d

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

PHOTOGRAPHS.

ROYAL GEOGRAPHICAL SOCIETY.

It would greatly add to the value of the Collection of Photographs which has been established in the Map Room of the Royal Geographical Society, if all the Fellows who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they would be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

No Camera is a Kodak unless made by the Eastman Company.

The **EASTMAN**

CARTRIDGE FILM SYSTEM **KODAKS**

Can be unloaded and reloaded in daylight, so that the use of

A DARK ROOM IS NOT REQUIRED

for changing the rolls of film on which the pictures are taken. It is done sitting comfortably in a chair. The rolls of film can be sent by post to us or to any dealer to be developed and printed. Photography is thus possible to every tourist or traveller **without any previous experience.**

Pocket, Folding Pocket, Bull's Eye, Bullet, Falcon, and Cartridge Kodaks, £1 1s. to £5 5s.

ILLUSTRATED PRICE LISTS POST FREE.

EASTMAN Photographic Materials Co. Limited,
43 CLERKENWELL ROAD, LONDON, E.C.

Retail Branches: 60 CHEAPSIDE, E.C.; 115–117 OXFORD ST., W.; 171–173 REGENT ST., W.; Also at PARIS, BERLIN, and ROCHESTER, NEW YORK.

MACONOCHIE BROTHERS,
131, LEADENHALL ST., LONDON, E.C.

Manufacturers of **PRESERVED PROVISIONS** of every description.

SOUPS, SAUSAGES, MEATS, JAMS, PICKLES, ETC.

Try our **ARMY RATIONS** as supplied to the Ashantee and Soudan Forces.

The "LANCET," May 2, 1896 (writing on the Ashanti Campaign).

"The bodily health and strength maintaining essentials are one and all represented in its composition, and so nicely blended that many of our invalids out in Africa were not only able to eat, but, what is more essential, digest some of the meat minced up with its gravy and some breadcrumbs, when they could not touch other kinds of diet as served out to them."

MACONOCHIE'S INDIAN CURRIES.
Curried Fowl, Rabbit, Prawns, Lobster, Etc.

Goods carefully packed to suit the requirements of
MINING, TOURING, AND EXPLORING PARTIES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000098

مكتبة قطر الوطنية
Qatar National Library

256

IMPORTANT TO SPORTSMEN AND EXPLORERS.

THE STEREOSCOPIC COMPANY

HAVE THE LARGEST STOCK OF CAMERAS IN LONDON,

And make a Specialité of very portable Outfits for Travellers.

FREE LESSONS TO PURCHASERS.

THE STEREOSCOPIC COMPANY 106 & 108, Regent Street, W.

Within 100 yards of the Royal Geographical Society's Establishment.

BY ROYAL WARRANT OF APPOINTMENT TO "THE QUEEN" AND H.R.H. THE PRINCE OF WALES.

Exclusively supplied to GOODWOOD, Ascot, Sandown Park, Kempton Park, Gatwick, Alexandra Park, Hurst Park, Chester, and Windsor, and all the Leading Hotels, Clubs, and Restaurants throughout the World.

"SCHWEPPES"

SODA, SELTZER, & POTASH WATERS, ETC.

ALWAYS ORDER
WHISKEY AND "SCHWEPPE."
WHISKEY AND "SCHWEPPE."

NOTE.

The Public, when ordering Whiskey and Soda, are strongly recommended to ask for

Whiskey and "Schweppe,"

As common waters are too frequently substituted in place of the genuine.

ALWAYS ORDER
BRANDY AND "SCHWEPPE."
BRANDY AND "SCHWEPPE."

NOTE.

The Public, when ordering Brandy and Soda, are strongly recommended to ask for

Brandy and "Schweppe,"

As common waters are too frequently substituted in place of the genuine.

IMPORTANT NOTICE.

In consequence of the continued IMITATIONS of Schweppes labels, it is found necessary to adopt a DISTINCTIVE MARK, and therefore in future the LABELS will bear A LARGE RED SEAL WITH FOUNTAIN TRADE MARK.

SCHWEPPES LIMITED, Sole Importers of Kronthal Natural Table Water for the United Kingdom.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000085

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

The "PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY," new series, consists of 14 volumes, extending from 1879 to 1892.

Each volume covers on an average 840 pages, the selling price being 18s. per volume.

These volumes not only contain full reports of the papers read at the Royal Geographical Society, by all the great travellers and geographers of the period, but constitute a record of exploration and geographical work in all parts of the world.

Each volume contains numerous maps, all of them original, embodying the results of exploration, and executed in the best style. In the 14 volumes there are some 350 maps, besides numerous illustrations of characteristic scenery in the least-known parts of the world.

It is believed that a complete set of the *Proceedings* would be a valuable addition to public libraries and other institutions, while many private individuals might wish to have the volumes. As it is desired to reduce the stock in hand, the series is now offered, bound in cloth, at £6 per set. Application to be made to the Chief Clerk, Royal Geographical Society, 1, Savile Row, London, W.

In addition to the *Proceedings*, the Society has issued four volumes of "Supplementary Papers," containing a large number of Memoirs and Narratives of considerable length, besides several valuable Bibliographies. These will be sold for half price, £2 for the four volumes. These contain over 30 Maps and numerous Illustrations.

The India Rubber, Gutta Percha, and Telegraph Works Company, Ltd.,

100-106, CANNON STREET, LONDON, E.C.

ELECTRICAL ENGINEERS.

CABLES.

DYNAMOS.

WORKS: { SILVERTOWN, LONDON, E.
PERSAN-BEAUMONT, FRANCE.

Telegraphic Address: Works—"GRAYSILVER, LONDON."

BRANCHES.

MELBOURNE.—586, Collins Street West.
SYDNEY.—283, George Street.
CALCUTTA.—1/1, Fairlie Place.
BUENOS AIRES.—Calle Reconquista, 394 al 396.

THE GOLDSMITHS & SILVERSMITHS COMPANY, LTD.,

Show Rooms: 112, REGENT STREET, LONDON, W.

INVITE INSPECTION OF THEIR LARGE AND CHOICE STOCK OF

Diamond Ornaments, High-Class Jewellery, Silver Plate, and Dressing Bags.

ILLUSTRATED CATALOGUE POST FREE. GOODS FORWARDED ON APPROVAL.

The Goldsmiths' Alliance, Ld. (A. S. Savory & Sons), late of Cornhill, E.C., is transferred to this Company.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000079

مكتبة قطر الوطنية
Qatar National Library

TRAVELLERS, EXPEDITIONS, AND ARMIES ALL THE WORLD OVER CARRY

LIEBIG COMPANY'S

EXTRACT

A perfect tonic; it braces up the system to resist the effect of climate, it keeps the healthy well, and strengthens invalids. It also provides in a portable form the essential features of good cookery—appetising flavour, nourishment and digestibility.



Note this Signature in BLUE on every Jar.

J. Liebig

AVOID INFERIOR SUBSTITUTES.

POULTON & NOEL'S

ENGLISH

PRESERVED PROVISIONS

FOR

Explorers, Travellers, Expeditions, all over the World.

"BELGRAVIAN" ROLLED OX TONGUES.
"BELGRAVIAN" PRESSED BRISKET OF BEEF.
"BELGRAVIAN" POTTED MEATS.
"OXFORD" & "CAMBRIDGE" SAUSAGES.

PRESERVED MEATS and SAUSAGES, of all Kinds.

Sample bottle P. & O. Sauce, 6d. Stamps.

POULTON & NOEL, Belgravian Works, LONDON, N.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001e

مكتبة قطر الوطنية
Qatar National Library

PUBLISHERS' ANNOUNCEMENTS.

The attention of Fellows of the Society is called to the following new books of Travel, etc.

MESSRS. METHUEN'S ANNOUNCEMENTS.

FOUR IMPORTANT TRAVEL BOOKS.

TO BE PUBLISHED IN THE AUTUMN.

NORTHWARD: ACROSS THE GREAT ICE.

By R. E. PEARY. With over 800 Illustrations, Maps, and Diagrams. Two Volumes. Demy 8vo, 32s. net. [*Nearly ready.*

In this important work Lieut. Peary tells the story of his travels and adventures in the Arctic regions. His extraordinary sledge journey and his experiences among the Eskimos are fully described, and this book is a complete record of his Arctic work, for which the Royal Geographical Society has this year awarded him their Gold Medal.

The fact that Lieutenant Peary is about to start on a determined effort to reach the North Pole lends a special interest to this book.

CHITRAL: THE STORY OF A MINOR SIEGE. By Sir G. S. ROBERTSON, K.C.S.I. With numerous Illustrations and Maps. Demy 8vo, 21s. net.

Sir George Robertson, who was at the time British Agent at Gilgit, has written the story of Chitral from the point of view of one actually besieged in the fort. The book is of considerable length, and has an Introductory part explaining the series of events which culminated in the famous siege; also an account of Ross's disaster in the Koragh defile, the heroic defence of Reshun, and Kelly's great march. It has numerous illustrations—plans, pictures, and portraits—and maps, and will give a connected narrative of the stirring episodes on the Chitral frontier in 1895.

THROUGH ASIA. By SVEN HEDIN. With 250 Illustrations by the Author and from Photographs, and 10 Maps. Two Volumes. Royal 8vo, 36s. net.

This book in which Dr. Sven Hedin, the distinguished Swedish explorer, will describe his four years' experiences and his extraordinary adventures in Central Asia, will be in two volumes, with many hundreds of illustrations.

In adventurous interest and substantial results in various departments of knowledge, Dr. Hedin's journey will bear comparison with the travels of the great explorers of the past, from Marco Polo downwards.

The Gold Medals of the Royal Geographical Society and of the Russian Geographical Society have been conferred upon him for this journey.

THE HIGHEST ANDES. By E. A. FITZGERALD. With 40 Illustrations, 10 of which are Photogravures, and a Large Map. Royal 8vo, 30s. net.

Also, a Small Edition on Handmade Paper, limited to 50 Copies. 4to, £5 5s.

A narrative of the highest climb yet accomplished. The illustrations have been reproduced with the greatest care, and the book, in addition to its adventurous interest, contains appendices of great scientific value.

METHUEN & CO., 36, ESSEX STREET, W.C.

ADMIRALTY CHARTS.

The Latest Editions of Charts, Plans, and Sailing Directions, Published by the Admiralty,

CAN BE OBTAINED FROM

J. D. POTTER,

SOLE AGENT for the Sale of the Admiralty Charts, by Appointment of the Lords Commissioners of the Admiralty, and

PUBLISHER OF NAUTICAL BOOKS,

31, Poultry, E.C., & 11, King Street, Tower Hill, E., LONDON.

NOTICE.—For the early information and convenience of Shipowners, Captains, and others, ALL NEW ADMIRALTY CHARTS that may be published from time to time are noted every Monday in the *Shipping Gazette and Lloyd's List* on page 7; in the *Shipping Gazette and Lloyd's List Weekly Summary* every Friday, on page 1; in the *Lloyd's Weekly Shipping Index* every Friday, on page 3 of Cover; in *The Syren and Shipping*; and *The Shipping World* (weekly). The new and corrected Admiralty Charts are also noted in the following Monthly Journals: *The Nautical Magazine, The Geographical Journal, The Steamship, The Mariner, The Imperial Institute Journal.* Copies of the Charts can be obtained by applying to J. D. POTTER.

IF YOU WANT ANY

GOVERNMENT PUBLICATION,

APPLY TO

EYRE & SPOTTISWOODE,

EAST HARDING STREET, LONDON, E.C.

Acts of Parliament, Parliamentary Papers, Bills Under Discussion in Both Houses of Parliament. Military, Naval, and Civil Service Papers, "Challenger" Reports, Geological Memoirs, Record Works, Kew Bulletin, Science and Art, Educational, Ordnance Survey, and Greenwich Observatory Publications, State Trials, Revised Statutes, Statutory Rules and Orders. Board of Trade Journal and Returns, International Customs Journal, Foreign Office Reports, &c., &c.

SUBSCRIPTIONS TAKEN. DEPOSIT ACCOUNTS OPENED. ANY INFORMATION GIVEN.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

WILLESDEN CANVAS for TRAVELLERS' TENTS,

Also GROUND SHEETS, COVERS, VALISES, Etc.

TRADE MARK. REGD. 1860.

(Willesden Rot-proof Brown, Green, or White Canvas.)

Awarded Sixteen Gold and Silver Medals.

Used by the Following amongst others

THE POST OFFICE.
THE ADMIRALTY.
THE INDIA OFFICE.
THE CROWN AGENTS FOR THE COLONIES.
THE EGYPTIAN GOVERNMENT.
THE SOUTH AUSTRALIAN GOVERNMENT.
H.M. THE GERMAN EMPEROR.
MR. HENRY M. STANLEY.
THE JACKSON-HARMSWORTH EXPEDITION.
THE ECLIPSE OF THE SUN EXPEDITION.
THE LATE MR. THEODORE BENT.
MR. VILLIERS (War Correspondent).

And the Principal Travellers during the last quarter of a century. Used also by all the leading Tent Makers.

NOTE. None genuine unless bearing our Registered Trade Mark as above.



NOTE. Intending users should always order Willesden Canvas.

SOLE MANUFACTURERS AND PATENTEES (Green Rot-proof Process)—

Willesden Paper & Canvas Works, Willesden Junction, London, N.W.

Telegrams: "IMPERMEABLE, LONDON." ESTABLISHED 1870.

THE EDITOR OF THE

WIDE WORLD MAGAZINE

Is prepared to consider and pay well for thrilling true stories of adventure and incident, as well as the loan of interesting and remarkable photos taken in remote parts of the world. Great care is taken of MSS., loose photos, and albums, which are safely returned when done with. High prices paid.

Address: 7–12, SOUTHAMPTON STREET, STRAND, W.C.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.

THE IMPERIAL INSURANCE COMPANY, LIMITED, FIRE.

1, OLD BROAD STREET, 22, PALL MALL, and 47, CHANCERY LANE, LONDON.

ESTABLISHED 1803.

Subscribed Capital, £1,200,000. Paid-up, £300,000. Total Invested Funds, over £1,500,000.

THE DISTINGUISHING CHARACTERISTICS OF THIS COMPANY ARE:—

Moderate Rates; Undoubted Security; Prompt and Liberal Settlement of Claims.

Every Information and Forms of Proposal can be obtained from the Offices of the Company, or at any of its Agencies at home or abroad.

E. COZENS-SMITH, GENERAL MANAGER.

BLACK AND SMOKELESS POWDERS.

CURTISS AND HARVEY,

Sole Manufacturers of the World-renowned

"DIAMOND" GRAIN;

ALSO

"AMBERITE"

(Patent Smokeless Sporting, CONTAINS NO NITRO-GLYCERINE).

Manufacturers of every kind of BLASTING, RIFLE, AND SPORTING POWDERS.

"NOTES ON SHOOTING," Testimonials, and full particulars on application to—

74, LOMBARD STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000071

مكتبة قطر الوطنية
Qatar National Library

CLOTHED WITH AIR

CELLULAR UNDERWEAR AND SHIRTS.

THE HEALTHIEST AND MOST ECONOMICAL FOR TRAVELLERS.

Extract from C.T.C. HANDBOOK AND GUIDE, 1896-97, p. 52.

"From the peculiar manner in which CELLULAR CLOTH is woven (forming a network of minute air-cells next the skin), it allows, even more fully than wool, the free evaporation of perspiration on the side next the skin. . . . It is less bulky, and is lighter to carry; it dries much more quickly; it is more easily washed, and its prime cost is much smaller. Last, but not least, it is quite free from that bane of all woollen goods, the liability to shrinkage."

BEST FOR ALL SEASONS AND CLIMATES.

ESTIMATES FOR OUTFITS SUPPLIED ON APPLICATION.

To be obtained in all the principal cities and towns in the United Kingdom, the Colonies, and India.

Illustrated Price List of full range of Cellular goods for Men, Women, and Children, sent Post Free on application.

Full assortment of goods at the following retail houses:—

ROBERT SCOTT, Ltd., 14 and 15, Poultry, London, E.C.

OLIVER BROS., Ltd., 33, New Bond Street, London, W.

" " " 417, Oxford Street, London, W.

WHOLESALE ONLY—

THE CELLULAR CLOTHING CO., Ld.,

72 & 73, FORE STREET, E.C.

DR. J. COLLIS BROWNE'S CHLORODYNE

ONLY GENUINE. ORIGINAL AND



IS THE GREAT SPECIFIC FOR CHOLERA,

COUGHS. COLDS, ASTHMA, BRONCHITIS.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Dr. J. C. BROWNE (late Army Medical Staff) DISCOVERED a REMEDY to denote which he coined the word CHLORODYNE. Dr. Browne is the SOLE INVENTOR, and, as the composition of Chlorodyne cannot possibly be discovered by Analysis (organic substances defying elimination), and since the formula has never been published, it is evident that any statement to the effect that a compound is identical with Dr. Browne's Chlorodyne *must be false.*

This Caution is necessary, as many persons deceive purchasers by false representations.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Vice-Chancellor Sir W. PAGE WOOD stated publicly in Court that Dr. J. COLLIS BROWNE was UNDOUBTEDLY the INVENTOR of CHLORODYNE, that the whole story of the defendant Freeman was deliberately untrue, and he regretted to say it had been sworn to."—See *The Times*, July 13th, 1864.

DIARRHŒA, DYSENTERY. GENERAL BOARD of HEALTH, London, REPORT that it ACTS as a CHARM, one dose generally sufficient. Dr. GIBBON, Army Medical Staff, Calcutta, states: "2 DOSES COMPLETELY CURED ME of DIARRHŒA." *From* SYMES & Co., Pharmaceutical Chemists, Simla. *Jan.* 5, 1880. *To* J. T. DAVENPORT, London. DEAR SIR, — We congratulate you upon the widespread reputation this justly-esteemed medicine has earned for itself all over the East. As a remedy of general utility, we much question whether a better is imported, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances *ad infinitum* of the extraordinary efficacy of DR. COLLIS BROWNE'S CHLORODYNE in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power.

We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best, and also from a sense of duty we owe to the profession and the public, as we are of opinion that the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.—We are, Sir, faithfully yours, SYMES & CO., *Members of the Pharmaceutical Society of Great Britain, His Excellency the Viceroy's Chemists.*

DR. J. COLLIS BROWNE'S CHLORODYNE is the TRUE PALLIATIVE in NEURALGIA, GOUT, CANCER, TOOTHACHE, RHEUMATISM.

DR. J. COLLIS BROWNE'S CHLORODYNE is a liquid medicine which assuages PAIN of EVERY KIND, affords a calm refreshing sleep WITHOUT HEADACHE, and INVIGORATES the nervous system when exhausted.

DR. J. COLLIS BROWNE'S CHLORODYNE rapidly cuts short all attacks of EPILEPSY, SPASMS, COLIC, PALPITATION, HYSTERIA.

IMPORTANT CAUTION. The IMMENSE SALE of this REMEDY has given rise to many UNSCRUPULOUS IMITATIONS. Be careful to observe Trade Mark. Of all Chemists, 1s. 1½d., 2s. 9d., and 4s. 6d.

SOLE MANUFACTURER, J. T. DAVENPORT, 33Gt. Russell St., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

INDEX TO ADVERTISEMENTS.

Where no folio is given, Advertisement does not appear this month.

Admiralty Charts. PAGE
Potter, J. D. 10

Assurance.
Standard Life Assurance Co. 16

Booksellers.
Sotheran & Co. ..... *Cover* 2

Camp Beds.
Chorlton, L., & Co. ..... *Cover* 4

Colour Photography.
Photochromoscope Syndicate, Ltd. 16

Cutlery.
Hill & Son 22

Cycles.
Beeston Engineering Co. .....
Beeston Machinists Co. .....
Birmingham Cycle & Eng. Co. 19
New Mac Gregor Cycle & Eng. Co., Ltd. .....
Robin Hood Cycle Co., Ltd. .....

Draughtsman.
Weller, Edw. 19

Electrical Engineers.
India Rubber, Gutta Percha, & Telegraph Works Co., Ltd. ... 8

Engravers.
Swan Electric Engraving Co. ...
Weller, Edw. 19

Foods for Travellers.
Fromms Extract Co., Ltd. 15
Liebig & Co. 9
Maconochie Bros. 6
Poulton & Noel 9
Spratt's Ship Biscuits 22

Gun Powder.
Curtiss & Harvey 11

Hat Manufacturers.
Lincoln, Bennett & Co., Ltd. 15

Hotels & Restaurants.
Hôtel Cecil .....
Hôtel Métropole 17

Instruments for Travellers. PAGE
Baker, G. .....
Cary's 18
Casella, L. 18

Insurance.
Imperial Insurance Co., Ltd. ... 11

Jewellers.
Goldsmiths' & Silversmiths' Co. Ltd. 8
Mappin Bros. 5

Medicines & Medicine Cases.
Browne, Dr. Collis 12
Burroughs, Wellcome & Co. *Cover* 4
Jewsbury & Brown 5
Keating 22

Mineral Waters.
Aerators, Ltd. 14
Jewsbury & Brown ....
Schweppes Limited 7

Outfitters.
Cellular Clothing Co., Ltd. 12
Hicks & Sons 16
Jaeger's Woollen Co. .....
Scott Adie 1
Silver, S. W., & Co. 3
Thresher & Glenny .....
Young & Rochester 3

Pens.
Mabie, Todd, & Bard 13

Photographic Outfits.
Eastman Photographic Materials Co., Ltd. 6
London Stereoscopic Co. 7
Newman & Guardia 5
Platinotype Co. 19
Ross & Co. 15
Thornton-Pickard Manufacturing Co., Ltd. ..... *Cover* 4

Printers & Account Book Manufacturers.
Brown & Rowley 22
Darling & Son, Ltd. 19

Publishers. PAGE
Eyre & Spottiswoode 10
Methuen & Co. 10
Newnes, G., Ltd. 11

Ship Owners.
British India Steam Navigation Co. 21
North German Lloyd Co. 21
Orient Co. 21

Sporting Outfits.
Burberrys' 3

Stationers, etc.
Brown & Rowley 22

Stores for Expeditions, &c.
Military Equipment 22
Silver, S. W., & Co. 3

Stoves.
Poore, W., & Co. 22

Tea Importers.
Higgs, W. A., & Co. 20

Tents.
Edgington, B., Ltd. ..... *Cover* 2
Edgington, J., & Co. .....
Piggott Bros. & Co. 14
Willesden Paper & Canvas Works 11

Tobacco Manufacturers.
Richmond Cavendish Co., Ltd. 17
Wood & Son 17

Vehicles (Motor).
British Motor Co., Ltd. ... *Cover* 3

Watch & Clock Makers.
Benson, J. W., Ltd. ..... *Cover* 2
Blockley, H. 18

Waterproof Clothing.
Abbotts' 15

Waterproof Roofing.
Willesden Paper & Canvas Works 11



Largely used by Fellows of the Royal Geographical Society.

Adds Immeasurably to Celerity and Comfort in Writing.

INVALUABLE FOR USE BY TRAVELLERS AND EXPLORERS IN ALL LANDS.

THE SWAN FOUNTAIN PEN

IS OF ALL PENS MOST FAMOUS.

Made in 3 sizes at 10/6, 16/6, & 25/-,

up to 18 guineas, post free.

Your Steel Pen and Handwriting only required to select a suitable Pen.

WRITE for Illustrated Catalogue to CHIEF OFFICE—

Mabie, Todd, & Bard, "Dept. E.2," 93, Cheapside, E.C.;

95a, Regent Street, W., LONDON;
and 3, Exchange Street, MANCHESTER.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a4

مكتبة قطر الوطنية
Qatar National Library



TENTS

FOR THE

TRAVELLER

AND

EXPLORER.

Write for our "Red Bound Catalogue" of Tents and Camp Equipment, post free.

THE MOST PERFECT TENT is PIGGOTT BROS. & CO.'S "PROSPECTING TENT." Made double. The inner roof being suspended 12 inches below the ridge, allows of a free circulation of air between the outer and inner roofs. The inner roof has ventilators, protected by mosquito net. *Made from Green Waterproof and Rot-Proof Canvas.*

PIGGOTT BROS. & CO., MANUFACTURERS,
57, 58, 59, Bishopsgate Street Without, LONDON.



For the
Instantaneous and Direct Aeration

Sparklets

by the user of
Water, Still Wines, Milk, and other liquids.

SPARKLETS are small steel receivers containing enough pure liquid carbonic acid gas, when used with our **Special Bottle**, to strongly aerate rather more liquid than is contained in a large size soda-water bottle.

INVALUABLE for Military Service, Shooting, Exploring, Prospecting, and other expeditions, and when Fishing, Yachting, etc.; also for Medical purposes.

A FEW ADVANTAGES.—Purity, Portability, Cleanliness, Simplicity, Economy, Suitability for all Climates, most valuable in Fever Countries.

Supplied by Chemists, Stores, etc.

PRICES.
Special Bottle and Stopper complete 3/-.
Sparklets (in boxes containing 1 dozen) 1/6 per box.

SPECIAL BOTTLE AND STOPPER FOR USE WITH SPARKLETS.

Can be seen in operation at Aerator's Stall, Picturesque England International Universal Exhibition, Earl's Court; 108, Queen Victoria Street, E.C.; Harrod's Stores, Brompton Road, London, S.W.



1 DOZEN SPARKLETS. WEIGHT 4 OZS.

Wholesale from the Patentees—
AERATORS, LIMITED,
8 & 9, BROAD STREET AVENUE,
LONDON, E.C.

TABLETS for making Soda, Potash, Seltzer, Lithia, and other Mineral Waters with the aid of SPARKLETS are also supplied.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The
Geographical Journal.

No. 2. AUGUST, 1898. Vol. XII.

ON THE ANNUAL RANGE OF TEMPERATURE IN THE SURFACE WATERS OF THE OCEAN, AND ITS RELATION TO OTHER OCEANOGRAPHICAL PHENOMENA.*

By Sir JOHN MURRAY, K.C.B., F.R.S., LL.D., D.Sc.

(*Of the "Challenger" Expedition.*)

1. Introductory.

Temperature may be defined as that state of matter on which depends its relative readiness to give or to receive heat. Variations of temperature are intimately associated with all changes in nature, and no investigation is more important or more interesting to the scientific man than the study of these temperature variations, and their relation to other natural phenomena. In the present communication, it is proposed to consider with some detail the temperature variations which take place in the surface waters of the ocean during the course of the year, and to indicate some of the physical and biological phenomena which appear to be directly or indirectly connected therewith.

On the dry land there is often a very wide *daily* range of temperature in the air immediately resting upon the ground. The temperature at the surface of the sandy deserts of the tropics frequently rises during the day to 120° or 140° Fahr., and more rarely to 200° Fahr.; and when these hot particles of dust are lifted into the air by winds, the temperature of the air rises occasionally to 125° Fahr. in the shade, while during the night the temperature sometimes falls below the freezing-point. Rock surfaces in the tropics, which during the day are heated up to 137° Fahr., are cooled so rapidly by radiation at night that, unable to sustain

* Read at the Royal Geographical Society, February 28, 1898. Map, p. 224.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005c

مكتبة قطر الوطنية
Qatar National Library

the strain of contraction, they split, and throw off sharp angular fragments from a few ounces to 100 or 200 lbs. in weight.* Cold rain falling on these sun-heated rocks produces a similar effect.† At Atacama, in South America, a range of temperature amounting to 91° Fahr. has been recorded in four hours.‡

The *annual* range of temperature is likewise very great at some places on the land-surfaces. At Werkojansk, in Siberia, the range of temperature between the mean of the coldest month and the mean of the warmest month is 120° Fahr.; and at this place, in February 1892, the temperature fell to − 93°·6 Fahr., being absolutely the lowest temperature of the air hitherto recorded. The *extreme* range of temperature of the air which may be found upon the land-surfaces as a whole, as distinct from the daily or annual range at any one spot, is known to exceed 220° Fahr.

When we turn to a consideration of the changes of temperature which occur in the surface waters of the ocean, it is found that these are much less rapid, and that the *daily* and *annual* range at any one spot, and the *extreme* range of temperature from equator to pole, are all very much less than on the land-surfaces. This result is due to the great thermal capacity of water, and to the fact that most of the light and heat rays are absorbed on passing through the surface-layers of the water. The high specific heat of water precludes such a rapid rise or fall of temperature as takes place on land. When the temperature of the water is raised, evaporation tends to check the rapidity of the rise; when the temperature falls, condensation of the superincumbent vapour checks the rapidity of the fall, and, when a low temperature is reached, freezing sets in, again retarding the fall.

The mean *daily* range of temperature in the surface-waters of the North Atlantic, as determined from the *Challenger* observations, made on 126 days from March to August, 1873, and in April and May, 1876 (mean lat. 30° N., mean long. 42° W.), was only 0°·8 Fahr.; while the amplitude of the daily variation in the temperature of the air over the sea on the same 126 days was 3°·21 Fahr., or four times greater than that of the sea over which it lies.§ During this time the *Challenger* was near land on 76 days, and on these days the diurnal variation was 4°·38 Fahr., thus showing a larger range in the temperature of the air when near land than when out in the open sea. An examination of the temperatures taken by the *Challenger* in other parts of the globe renders it highly probable that nowhere in the open ocean does the

* Livingstone, 'Zambesi,' pp 492, 516. London: 1865.

† Stanley, *Proc. R. G. S.*, vol. xx. p. 142, 1876.

‡ Viz. from 7° Fahr. at 7 a.m. to 98° Fahr. at 11 a.m. (J. Harding, *Jour. R.G.S.*, 1877, p. 252).

§ See Buchan in Challenger Report: Narrative, vol. i. pp. 998, 999, 1885; also his "Report on Atmospheric Circulation," *Phys. Chem. Chall. Exp.*, part v. pp. 4–8, 1889.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

mean daily fluctuation of the temperature of the surface water amount to 1° Fahr.; hence, the atmosphere over the ocean may be regarded as resting on, or blowing over a surface, the temperature of which is practically uniform at all hours of the day, being thus a striking contrast to what takes place on the dry land.

The *annual* range of surface temperature in the ocean within any particular 2° square, so far as recorded, does not exceed 53° Fahr.: this greatest annual range being found off the Banks of Newfoundland in the Atlantic, and in the Japan seas in the Pacific—at places where the surface is occupied by cold waters coming from polar areas at one season, and by warm waters coming from tropical areas at another season; but we shall presently show that there are large areas, both in the tropics and polar regions, where the annual range does not exceed a few degrees during the course of the year. The *extreme* range of temperature recorded in the ocean is about 70° Fahr.: from the freezing-point of salt water in the polar regions to 96° Fahr., recorded at the head of the Persian Gulf.

The much greater range of temperature on the surface of the continents than in the surface and subsurface waters of the ocean, might lead one to expect that the distribution of land organisms would be more limited by temperature conditions than that of marine organisms. Such—at first sight, at all events—does not, however, appear to be the case. It has long been recognized that the mean annual temperature, or the annual range of temperature, in any area on the land surfaces produces a very marked effect on the character of the fauna and flora; still, zoologists have, as a general rule, considered topographical features as the most important factor in limiting the distribution of species, while botanists, on the other hand, have considered temperature conditions as the most important factor. The various zoological provinces, into which naturalists have divided the land-surfaces, have been laid down chiefly from a study of warm-blooded and air-breathing animals, which are able to maintain a nearly uniform temperature of their bodies under great variations in the external temperature conditions. If we except hybernation, there is even a rise in the temperature of the body, and an increase in metabolism in Mammalia, with a lowering of the external temperature. Topographical features, such as mountain ranges, deserts, and seas, seem therefore to be more important factors in determining the limits of distribution of terrestrial species than mere temperature or climatic conditions.

In the ocean there are very few warm-blooded and air-breathing animals, and we have to deal chiefly with cold-blooded animals, the temperature of whose blood rises and falls with that of the surrounding water; hence temperature conditions—even with the lesser variation in range—appear to be, as with plants, the most important factor in limiting the distribution of marine animals. In this connection, the following may be indicated as one of the many interesting problems

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000065

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [261v] (25/154)

presented to the naturalist. In the tropics a marine animal—a copepod or isopod, for instance—lives constantly in water at a temperature of about 70° Fahr.; in the polar seas, a similar animal lives as constantly in water at a temperature about zero. What is the difference in the rate of metabolism, length of life, rate of reproduction, and general life-history of the two animals? There seems to be little doubt that a satisfactory reply to these questions would explain many of the observed differences between polar and tropical faunas.

The above and some other allied considerations, together with the desirability of having a more precise knowledge of the variations in the range of temperature in different regions of the ocean, induced me some years ago to attempt the preparation of a map showing the annual range of temperature in the surface waters of the ocean within every two-degree square on the water surface of the globe; for it seemed that a comparison of the range of temperature in different places at the surface of the ocean might possibly show an intimate connection with other oceanographic phenomena.

2. Preparation of the Range-Map from Temperature Observations in Every 2° Square.

A first attempt was made by using the Charts showing the surface temperature of the Atlantic, Indian, and Pacific Oceans, published by the Meteorological Council in 1884. In these charts the mean temperature and range are given for the four different months, February, May, August, and November, as recorded within each 2° square throughout the three oceans; in some localities numerous observations made it possible to give the results within smaller areas. In order to arrive at the extreme annual range within each 2° square, the figures were used in the following manner: Taking the map for February, the maximum and minimum temperatures for any particular 2° square in that month were obtained by adding half the given range to the mean temperature for the maximum, and by subtracting half the given range from the mean for the minimum. This operation was repeated with the maps for May, August, and November, and the four maxima and the four minima were entered on specially ruled paper. The extreme range shown by these four sets of figures was laid down on a blank map as the approximate annual range of surface temperature in each 2° square, and lines were drawn for intervals of 10° Fahr. of range of temperature, in the same manner as the lines on the map accompanying this paper.

A map constructed on this principle was exhibited at a lecture, on the structure, origin, and distribution of coral reefs and islands, delivered before the Royal Institution of Great Britain, in London, on March 16, 1888, with special reference to the range of temperature within the coral-reef regions. On careful consideration this map was not published. The method was rejected as unsatisfactory, because the given mean

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

temperature is not the arithmetical mean between the maximum and minimum temperatures observed in any particular 2° square, but the mean of all the observations, and therefore the maximum brought out by this method may be too high, or the minimum may be too low, according as the great majority of the observations were high or low. For example, in the North-West Atlantic (lat. 42°–44° N., long. 48°–52° W.) a mean temperature of 35° Fahr. is given for the month of February, with a range of 27°; deducting half the range from the mean gives a minimum temperature of 21½° Fahr.—an impossible temperature at the surface of the sea.

Subsequently, an application to the Meteorological Office in London resulted in an arrangement being made, whereby the maximum and minimum surface temperatures for each 2° square throughout the great ocean basins were extracted from the records in that office for the two months likely to give the extremes of temperature, viz. February and August.* These maxima and minima were laid down on maps, and the extreme ranges of temperature shown by these figures were placed in geographical position on other maps, lines being drawn enclosing those regions in which

(1)	the recorded range does not exceed 5° Fahr.						
(2)	„	„	is between	5°	and	10°	Fahr.
(3)	„	„	„	10°	„	15°	„
(4)	„	„	„	15°	„	20°	„
(5)	„	„	„	20°	„	25°	„
(6)	„	„	„	25°	„	30°	„
(7)	„	„	„	30°	„	35°	„
(8)	„	„	„	35°	„	40°	„
(9)	„	„	„	40°	„	45°	„
(10)	„	„	„	45°	„	50°	„
(11)	„	„	is over 50° Fahr.				

In this manner the data supplied by the Meteorological Office, supplemented by information from other sources as indicated in the succeeding paragraphs, have been made use of in preparing the map accompanying this paper, which represents very approximately the annual range of temperature in the surface waters of the ocean throughout the world.

The method adopted in making use of the supplementary information referred to, was to extract the maximum and minimum temperatures recorded in any 1° square throughout the world, and to enter them on

* The maximum and minimum effects of temperature appear to take place in the water about a month later than in the atmosphere, so that, after consultation with Dr. Buchan, the months of February and August were chosen as the most suitable for our purpose.

I am much indebted to the members of the Meteorological Council, and to the officers of the Department, for the permission and assistance given in consulting the records in their possession.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000094

مكتبة قطر الوطنية
Qatar National Library

sheets of specially ruled paper. Each sheet was ruled so as to contain in convenient form the maxima and minima within a 10° square, the observations being inserted for each 1° square, while the sheet was subdivided by rulings into 2° squares. Thus, at a glance, the range within any 1° square, or any 2° square, or any 10° square, was available. These sheets have been kept up to date by the inclusion of observations from other sources, and, by including all future observations, they can at any time be made available for the revision and correction of the map. On these sheets, maxima and minima collected from every available source have been entered. We may specially mention the observations of surface temperature in the North Pacific, collected together by Admiral Makaroff in his Report on the voyage of the *Vitiaz* in the North Pacific (published in 1894); the observations published annually in the Admiralty Blue-books (Lists of Oceanic Depths and Temperatures received at the Hydrographic Office); and Prof. Mohn's observations of surface temperature in the Norwegian Sea (published in the Report of the Norwegian North Atlantic Expedition).

In 1895 Dr. Schott published a paper on "Die jährliche Temperaturschwankung des Ozeanwassers" in *Petermann's Mitteilungen* (vol. xli. p. 153), and his map is, so far as we are aware, the only attempt to represent graphically the variation of temperature at the surface of the sea, but it has evidently been prepared from *mean* monthly temperatures, and not from extreme temperatures; the range shown on his map is therefore necessarily less than that shown on the map accompanying this paper.

The total number of observations of surface temperature represented by the figures laid down on our charts is very large, and it is very difficult to arrive at even an approximation; but, with the aid of Makaroff's Tables, an attempt has been made to estimate the minimum number of observations in the North Pacific, as set forth, in zones of 10° of latitude, in the following table:—

NUMBER OF OBSERVATIONS OF SURFACE TEMPERATURE IN THE NORTH PACIFIC, AS RECORDED BY MAKAROFF (1894).

Lat. 0° to 10° N.	... ...	2,557 observations.
„ 10° „ 20° „	... ...	2,866 „
„ 20° „ 30° „	... ...	4,773 „
„ 30° „ 40° „	... ...	7,722 „
„ 40° „ 50° „	... ...	13,970 „
„ 50° „ 60° „	... ...	5,867 „
„ 60° „ 70° „	... ...	1,085 „
„ 70° „ 76° „	... ...	34 „
	Total	38,874

In the above numbers, those cases where observers have given simply a mean for the twenty-fours have been counted as a single

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

observation, though in reality that mean represents several observations. In addition, there are many cases where the number of observations is not recorded, though a maximum or a minimum temperature, or both, are given; these have been counted as one or two observations, according as one or two readings are given. Therefore the numbers in the preceding table are probably considerably below the truth; but, looking upon them as approximately correct, it appears that the number of observations increases from the equator northwards to between 40° and 50° N., where a maximum of nearly 14,000 observations is reached, from whence the number rapidly decreases northward. Northwards of 70° N. only thirty-four observations had been recorded in 1894, and to the north of 76° no observations were recorded.

But a better idea of the amount of material made use of in preparing the accompanying map will be formed from an examination of the table on p. 120, showing (1) the number of 2° squares in which observations are recorded in the two opposite months of February and August, (2) the number of 2° squares in which observations are recorded in the one or the other of these two months, and (3) the number of squares which are blank as regards observations in these two months, between the latitudes of 60° N. and 60° S. in the three great oceans.

From this table it appears that in the 2° squares, which contain water-surfaces, between lat. 60° N. and 60° S., observations are available in considerably more than half of the total number in the two months specified, while in nearly one-fourth of the total number of squares observations are available in only one of these months, and in the remaining one-fifth there are no observations available. To be more exact, of the total number of squares 56 per cent. contain observations in the two opposite months, 23 per cent. contain observations only in one of these months, and 21 per cent. contain no observations in these two months. A fairer estimate would, perhaps, be obtained by excluding the zone between 50° and 60° S., in which zone, more particularly in the Indian and Atlantic oceans, large tracts are blank. Thus, of the total number of 2° squares between the latitudes of 60° N. and 50° S., 59 per cent. contain observations in the two opposite months, 24 per cent. contain observations in only one of these months, and 17 per cent. contain no observations in these two months.

Considering now the figures relating to each of the great oceans, it appears that of the total number of 2° squares which contain water-surfaces in the Indian ocean between 30° N. and 60° S., 70 per cent. contain observations in the two opposite months, 13 per cent. contain observations in one only of the two months, and 17 per cent. contain no observations in these months. The large amount of information regarding the surface temperature of the Indian ocean is prominently brought out by excluding the zone between 50° and 60° S., which is almost a complete blank; for it appears that of the total number of 2°

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

Zone of latitude.	Number of 2° squares in which observations of surface temperature are recorded in two opposite seasons.				Number of 2° squares in which observations of surface temperature are recorded in one season only.				Number of 2° squares in which no observations of surface temperature are recorded.			
	Atlantic.	Indian.	Pacific.	Total.	Atlantic.	Indian	Pacific.	Total.	Atlantic.	Indian.	Pacific.	Total.
60° to 50° N.	83	—	130	213	84	—	34	118	6	—	59	65
50° „ 40° N.	154	—	197	351	26	—	37	63	8	—	23	31
40° „ 30° N.	195	—	151	346	21	—	82	103	7	—	68	75
30° „ 20° N.	174	34	171	379	32	8	94	134	10	5	80	95
20° „ 10° N.	130	110	169	409	42	8	132	182	9	3	105	117
10° „ 0° N.	109	98	156	363	32	29	136	197	4	6	160	170
0° „ 10° S.	73	135	78	286	41	47	132	220	20	15	185	220
10° „ 20° S.	78	156	88	322	36	30	157	223	17	16	146	179
20° „ 30° S.	110	163	124	397	22	41	135	198	12	16	87	115
30° „ 40° S.	147	259	231	637	18	4	106	128	5	—	56	61
40° „ 50° S.	105	249	271	625	39	21	110	170	48	5	34	87
50° „ 60° S.	45	2	230	277	4	43	68	115	151	230	126	507
Total ...	1403	1206	1996	4605	397	231	1223	1851	297	296	1129	1722

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

squares in the Indian ocean, from its northern limits to lat. 50° S., 83 per cent. contain observations in the two months of February and August, 13 per cent. contain observations in one only of these months, while merely 4 per cent. are blank as regards observations in these two months.

Of the total number of 2° squares in the Atlantic ocean between 60° N. and 60° S., 67 per cent. contain observations in the two opposite months, 19 per cent. contain observations in one only of these two months, while 14 per cent. contain no observations in the two months specified. As in the case of the Indian ocean, very few observations of surface temperature are available in the Atlantic south of lat. 50° S. Thus, of the total number of 2° squares in the Atlantic between 60° N. and 50° S., 71 per cent. contain observations in the two opposite months, 21 per cent. contain observations in one only of these months, while merely 8 per cent. are blank as regards observations in these two months.

Of the total number of 2° squares in the Pacific ocean between lat. 60° N. and 60° S., 46 per cent. contain observations in the two opposite months, 28 per cent. contain observations in one only of these months, while 26 per cent. contain no observations in these two months. The zone of latitude from 50° to 60° S. contains relatively many more observations than in the case of the Atlantic and Indian oceans, so that the exclusion of that zone does not alter the proportions in the Pacific to any appreciable extent, the percentages for the Pacific between 60° N. and 50° S. being respectively 45, 29, and 26 as compared with 46, 28, and 26 given above for the Pacific between 60° N. and 60° S.

It will thus be seen that, on the whole, the Pacific basin is the one in which our knowledge of surface temperature is most deficient, and therefore the one in which future observations may be expected to effect the greatest modifications in the map showing the range of temperature. In this ocean the greatest deficiency is within the tropics, the largest number of blank squares occurring between 10° S. and 10° N., from which zone the number of blank squares gradually decreases as far as the 50th parallels north and south; by far the larger proportion of blank squares lie within the six zones between 30° N. and 30° S. On the other hand, in the Atlantic and Indian oceans the number of blank squares is comparatively insignificant, and the blank squares are not grouped together in any particular latitude.

When we consider the recorded temperatures at different seasons of the year towards the arctic and antarctic regions north and south of the 60th parallels, our knowledge is very deficient; still a tolerably correct idea of the range of temperature within the ice-covered seas can be formed, when we remember that the minimum temperature must always be somewhere about 28° Fahr., so that the summer temperatures which have been recorded by explorers may be made use of in arriving at an

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000068

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

approximation of the range of temperature. In the southern hemisphere south of the 60th parallel, our maps are almost a complete blank, the observations being limited to those taken in the summer by Ross and other antarctic explorers. In the northern hemisphere, on the other hand, we have a good deal of information. As already stated, Makaroff records numerous observations north of 60° N., extending as far north as 76° N., in the North Pacific, and in the North Atlantic we have been able, approximately, to estimate the range of temperature as far as 82° N., from the observations and maps published by Mohn in the Norwegian North Atlantic Expedition Report, from Koldewey's observations during the German Arctic Expedition, from Nansen's published observations, and from records brought home by Mr. Bruce, of the Jackson-Harmsworth Expedition, as well as other arctic explorers. From these sources we have observations in no less than 155 squares between lat. 60° and 82° N., and long. 26° W. and 38° E., which are available in estimating the range of temperature.

3. General Features of the Map.

The lines on the map are drawn for intervals of 5° Fahr. of range of temperature, and different shades of colour are used for intervals of 10° Fahr. Broadly speaking, the map shows that the surface of the ocean may be divided into five great zones: firstly, a circumtropical zone with high temperature and small range (coloured deep red on the map); secondly, two circumpolar zones with low temperature and small range (coloured pale red on the map); and lastly, two intermediate zones with large ranges lying between the circumtropical and the two circumpolar zones (coloured in different shades of blue on the map).

The regions indicated as having a range of less than 5° Fahr. are largely hypothetical, more especially in the polar regions and tropical Pacific, though the small areas laid down in the tropical Atlantic and tropical Indian oceans are based upon numerous observations. In the polar regions the line coincides approximately with the line of perpetual ice.

The northern circumpolar band, with a range not exceeding 10° Fahr., borders the northern shores of Asia and America, lying mostly within the arctic circle. It is probable, however, that a wider range will be found off the mouths of many of the rivers flowing into the Arctic ocean from America and the Eurasian continent. The corresponding southern circumpolar band apparently approaches nearer to the tropics, extending northwards, approximately, as far as lat. 50° S., and penetrating to the north of that latitude in the Atlantic, but it may be expected that more extended observations will necessitate the drawing of the line of 10° range much nearer the antarctic circle, probably throughout its whole extent. In these two circumpolar bands, with a range of less than 10° Fahr., observations are meagre, and indicate

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000095

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

a range from about 28° to about 50° Fahr., though not exceeding 10° Fahr. in any single 2° square.

The tropical band of small range (less than 10° Fahr.) marks out approximately the coral-reef regions of the world. It forms an almost continuous belt around the globe, being broken only by the interposition of the continental masses, and for a short distance in the Pacific, off the shores of Central America. Future observations may show it to be completely broken also off the western coast of Africa, where it is now shown as continuous across the whole Atlantic. The Pacific area is the largest, stretching from near the Central American coast across to the East Indian seas and Barrier Reef of Australia (and passing through the Arafura sea into the Indian ocean), confined almost entirely within the tropics of Cancer and Capricorn, but extending beyond the latter tropic in the Central South Pacific. The observations within this Pacific tropical area show a range from 70° to 90° Fahr., though not exceeding 10° Fahr. in any single 2° square; throughout the area, however, a great many of the squares are blank, and future observations may alter the form considerably.

In the Indian ocean a belt of small range (less than 10° Fahr.) stretches across from the east coast of Africa (south of Cape Guardafui and north of Madagascar) to the shores of the Malay peninsula and Sumatra (and passing through the Arafura sea into the Pacific), lying mostly to the north of lat. 10° S., and filling up the greater part of the Arabian sea and of the Bay of Bengal. The observations within this Indian ocean tropical area show a range from 72° to 87° Fahr.

In the Atlantic the belt of small range (less than 10° Fahr.) extends across from the Caribbean sea and the north-east coast of South America to the Liberian coast of Africa, reaching northward in the central part of the ocean to the northern tropic, and southward to a little beyond lat. 20° S. The observations within this Atlantic tropical area show a range from 72° to 85° Fahr. It includes three squares, in which the recorded range just reaches 10° Fahr., all on the parallel of 10° N.

If we now turn our attention to those portions of the map which are coloured blue, where the range exceeds 10° Fahr., it will be observed that the area with a range of temperature between 10° and 20° Fahr. (indicated by the palest shade of blue) is the most extensive on the surface of the ocean. It fills up the intervals between the three bands of small range just described, and encloses in certain positions areas having a greater range. The line of 15° range cuts this pale blue area into two parts, and it will be observed that the area with an annual range exceeding 15° Fahr. lies mostly in the temperate regions between the tropics and the polar circles. The area does not reach the antarctic circle in the south, but it penetrates considerably beyond the arctic circle in the North Atlantic, extending north of the island of Jan Mayen, and in Bering strait it extends just beyond the arctic circle. In the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009a

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [265v] (33/154)

southern hemisphere it forms a band broken only in the centre of the South Pacific, where, however, observations are scarce, so that it may ultimately prove to be a continuous girdle round the globe.

A band with a range of over 20° Fahr. occurs in the southern hemisphere entirely south of the tropics, continuous across the South Atlantic and across the greater part of the South Indian ocean; in addition, there is an area off the south-east of Australia enclosing Tasmania, an area entirely encircling New Zealand, four small areas off the west coast of South America between lat. 10° and 50° S., and a small area off the west coast of Africa, northward of Cape Frio.

In the northern portion of the Indian ocean a range of over 20° Fahr. is found only off Cape Guardafui, extending into the Red sea, where the temperature varies from 59° to 94° Fahr., and in the Persian gulf and entrance thereto, where the temperature varies from 58° to 96° Fahr.

A large part of the North Atlantic has a range of over 20° Fahr., extending across from the Gulf of Mexico and the eastern shores of North America to the western shores of Europe and Africa, and into the Mediterranean. The eastern boundary of this area stretches from lat. 10° N., on the coast of Africa, to lat. 70° N., near the North Cape on the Norwegian coast.

In the North Pacific an extensive area, with a range of over 20° Fahr., extends across from the eastern shores of Asia to the west coast of North America, and into the Bering sea, where it reaches as far northward as lat. 64° N. There is also a small area in the region of the Gulf of California, with a range exceeding 20°, a range of 27° being recorded in the upper half of that gulf.

A range exceeding 25° Fahr. is found in various parts of the ocean, almost entirely outside the tropics, the only positions within the tropics being off Cape Guardafui and in the Red sea, and off the Chinese coast. In the North Atlantic an extensive area lies off the east coast of North America, between lat. 30° and 50° N., extending seawards beyond long. 30° W.; a second area fills the Mediterranean and Black sea; and a third area occurs in the Irish sea, English channel, North sea, Baltic sea, running up the Norwegian coast to 70° N. In the North Pacific a large area lies off the Asiatic coast, between lat. 16° and 58° N., extending seawards to near long. 170° E., with a small isolated area in the central part of the ocean, between lat. 45° and 50° N., and another in the upper half of the Gulf of California (as already indicated). In the Indian ocean a range exceeding 25° has been recorded off Cape Guardafui, in the Red sea, and Persian gulf.

In the southern hemisphere, a considerable area, with a range of over 25°, lies off the east coast of South America, between lat. 24° and 44° S., extending seawards off the mouth of the Rio de la Plata as far as long. 44° W., with a small isolated patch in the centre of the South Atlantic, about lat. 30° S. Another considerable area lies off the Cape of Good

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Hope, extending southwards as far as lat. 46° S., and eastwards on either side of the 40th parallel as far as long. 72° E. An isolated patch occurs to the south of Tasmania, and a larger area off the Sydney coast of Australia.

Considering now those regions of the ocean where a known range of surface temperature exceeding 30° Fahr. occurs, the map shows three small areas in the southern hemisphere, one off the mouth of the Rio de la Plata, and the other two south of the Cape and Madagascar; and in the northern hemisphere two extensive areas, one in the North-West Pacific, the other in the North-West Atlantic; and smaller areas in the Mediterranean and Black sea, in the Baltic, North sea, and English channel, and at the heads of the Red sea and Persian gulf (as already indicated).

In the area off the mouth of the Rio de la Plata the greatest range shown in a single square is 33° (from 42° to 75°), the extreme range within the area being from 40° to 78° Fahr.

In the area laid down to the south of the Cape of Good Hope, the figures supplied by the Meteorological Office show a range of 29° (from 46° to 75° Fahr.) in two different squares, on either side of a square with a range of 28° (45° to 73° Fahr.), surrounded on all sides by squares with ranges of 27° and 26° Fahr., but other records from the same region indicate a range of over 30° Fahr.

In the area in the Southern Indian ocean, south of Madagascar, two adjacent squares show a recorded range of 32° Fahr. (in one case 40° to 72°, in the other 42° to 74°). The temperature within the area ranges from 36° to 74° Fahr.*

The area in the North-West Pacific with a range exceeding 30° lies off the east coast of Asia, between lat. 22° and 56° N., and the observations within the area show a range from 29·8° to 86° Fahr.

The largest area in the North Atlantic basin with a range exceeding 30° lies off the east coast of North America, between lat. 30° and 50° N.; a second area covers the greater part of the Mediterranean and Black sea; and a third small area occurs in the English channel and south-eastern part of the North sea, extending into the Baltic.

At the head of the Red sea ranges of 36° (from 57° to 93°) and of 38° (from 50° to 88°) are recorded, and at the head of the Persian gulf a range of 31° (from 65° to 96°).

A range exceeding 35° Fahr. occurs at the head of the Red Sea, in the eastern Mediterranean, in the north-western part of the Black sea, with large areas in the North-West Atlantic and the North-West Pacific, but there is apparently no region in the southern hemisphere where the records show a range as great as 35° Fahr.

* Off the east coast of Australia, near Sydney, the records show a range in one square of 28° (from 57° to 85°), and in another square of 26° (from 54° to 80°); but future observations may prove that in this locality the range is over 30°.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006c

مكتبة قطر الوطنية
Qatar National Library

A range of surface temperature exceeding 40° Fahr. occurs in the north-western portions of the Atlantic and Pacific oceans, in which positions the greatest range in the surface waters of the globe is found. The observations within the North Atlantic area show a range from 26° to 83°, and within the North Pacific area from 28·8° to 88°. There are indications that in the eastern part of the Mediterranean, near the island of Cyprus, the surface waters have also a range exceeding 40°, while in the north-western part of the Black sea a similar large range occurs.

A range exceeding 45° Fahr. occurs only in the North-West Atlantic and North-West Pacific, each enclosing an area having a range of more than 50° Fahr.

A range of surface temperature exceeding 50° Fahr. is found only in the North-West Atlantic and North-West Pacific. The North Atlantic area is much the larger, extending off the North American coast, to the south of Nova Scotia, seaward to near long. 50° W. The greatest recorded range in a single square is 52° (from 28° to 80°), while the extreme range within the area is from 27° to 83°. The North Pacific area lies off the coast of Asia in the Sea of Japan, in about the same latitude as the Atlantic area (40° N.). The greatest recorded range in a single square is 52·7° (from 28·8° to 81·5°), and the extreme range within the area is from 28·8° to 83·7° Fahr.

From the foregoing discussion it will be seen that the lowest recorded temperature-reading at the surface of the sea is 26° Fahr. in the North Atlantic, eastward of Nova Scotia, and the highest reading in the open ocean is 90° Fahr., recorded in the tropical Pacific both north and south of the equator, though readings of 94° and 96° Fahr. are recorded in the Red sea and Persian gulf respectively. The greatest known range of temperature of the surface waters throughout the whole world is thus 70° Fahr. (from 26° to 96°).*

4. Relation of Range of Temperature to some other Physical Phenomena.

Range of temperature has a very important effect in bringing about a vertical circulation in ocean waters. In the equatorial regions, where there is hardly any variation of surface temperature, the warm water remains at the surface, and there relatively cold water comes nearer to the surface than in those regions in temperate zones where there is a wider daily and annual range. The cooling of the surface layers at night and during winter in temperate regions causes the salter waters of the surface to sink through the underlying layers, carrying with them heat and atmospheric gases to the greater depths. The effect of freezing

* The colours indicated on the map for the bodies of fresh water (such as the North American and Siberian lakes) have been laid down from a study of all accessible information.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

in the polar regions is in the end similar to that of evaporation in warmer latitudes. The lighter ice is separated from the denser mother-liquor, which sinks to the greater depths, leaving the ice on the surface.

These statements as to the effects of range of temperature might be illustrated by reference to many parts of the ocean. It will be sufficient to refer to the most striking example, in the southern hemisphere, where there is a band of large range of temperature right round the world. The warm tropical waters, which are driven southwards along the eastern coasts of South America, Africa, and Australia, into the Great Southern Ocean, there become cooled as they flow to the east before the strong westerly winds. On account of their high salinity, these tropical waters can suffer much dilution with antarctic water, and still be denser than water from these higher latitudes at the same temperature. Here the density observations and the seawater gases indicate that a large part of the cold water found at the greater depths of the ocean probably leaves the surface, and sinks towards the bottom of the Southern Ocean, between the latitudes of 45° and 56° S.

At a depth of 100 fathoms, the temperature in one part of the ocean may differ from that to be found in some other part at the same depth by as much as 42° Fahr.; and at 500 fathoms there may be between one part and another a range of as much as 20° Fahr.; at 1000 fathoms, a range not exceeding 11° Fahr.; and at 1500 fathoms, not exceeding 8° Fahr. A consideration, however, of all the available observations shows that there is no evidence of any annual variation of temperature at any one spot in the ocean at a depth of 100 fathoms; and at a depth of 50 fathoms no annual range greater than 2° Fahr. appears to be indicated. This remark applies especially to the open ocean; but, although we have no direct observations, still it is most probable that along certain coasts a wide range of temperature is occasionally produced at the bottom in depths of 50 and even 100 fathoms, due to the lateral shifting of large bodies of water from different sources. The evidence of movements like these comes especially from regions where polar and equatorial currents meet, or run alongside of each other in different directions, as, for instance, in the case of the Gulf Stream and Labrador current off the eastern coasts of North America,* to which reference will presently be made in connection with the destruction of the tile-fish. Those areas, where currents of different temperatures meet, correspond with the areas of greatest annual range, indicated on the map by the deepest shades of blue, and they become the theatre of some remarkable phenomena, specially interesting to the biologist and geologist.

If a comparison be made between the map accompanying this paper and the maps showing the isobaric lines and prevailing winds for

* W. Libbey, Junr., "The Relations of the Gulf Stream and the Labrador Current," Report Sixth Intern. Geogr. Congress, London, 1895.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000076

مكتبة قطر الوطنية
Qatar National Library

January and July, published in the 'Challenger Report' by Dr. Buchan, it will be seen that there is a general parallelism between the regions marked off by the blue colours and the position of the anticyclonic areas of the ocean. In these intermediate regions, between the equatorial band and the two circumpolar bands of small range, there is probably at all times of the year more insolation, or sunshine, and consequently a greater absence of clouds, than is to be met with in the tropical or polar areas, which may account to some extent for the wide range. It will be noticed that the deepest shades of blue are situated on the polar sides of the anticyclonic areas, and in these positions the greatest cyclonic disturbances are met with; in these regions the strength and direction of the winds and currents vary at different times of the year, owing to the position of the sun in the months of January and July. Currents from widely separated sources are in this way frequently carried over the same position even in the open ocean.

A large range of temperature, due to upwelling, as a result of the action of the winds, is indicated by the blue colours along the west coasts of Africa and South America, and on the east coast of Africa, near Cape Guardafui. The relatively wide range represented by the blue colour which extends from the Gulf of Guinea to the westwards about the equator, and a similar arrangement at the equator off the Gulf of Panama, seem to be due to currents variable in speed but constant in direction, producing greater upwelling at one season than at another, but in currents which are relatively constant in direction and speed a small range of temperature usually occurs.

It is to be noted that in the tropical regions the lines showing the variation spread outwards in the shape of a fan towards the eastern shores of the continents, whereas, on the other hand, in the northern and southern temperate regions they show a tendency to spread out in like manner towards the western shores of the continents; this is especially the case in the Atlantic. This position of the lines is what would be expected from a consideration of the general system of winds and oceanic circulation.

5. Relation of Range of Temperature to Biological Phenomena.

Where cold and warm currents meet at the surface of the ocean there is a rise of temperature for the animals of the cold current, and a fall of temperature for the animals of the warm current, which results in a plentiful destruction of organisms. The tow-net collections during the *Challenger* expedition gave frequent illustrations of this fact by the dead animals collected in such positions off the coast of North America, off the Cape of Good Hope, in the North Pacific, and elsewhere. Dr. O. Fischer records a remarkably large number of bacteria on the borders of such meeting currents. This destruction of life is not limited to minute pelagic organisms, but occasionally affects animals

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

which live at the bottom of the sea. Some remarkable instances of this kind have been observed between depths of 50 and 100 fathoms off the eastern coast of the United States.

Lieut.-Commander Tanner, commanding the United States Fish Commission steamer *Albatross*, reports that "on the morning of July 20, 1884, in lat. 37° 47′ N., long. 74° 15′ W., near the 100-fathom line, we passed numerous dead octopods floating on the surface. This unusual sight attracted immediate notice and no little surprise among those who knew their habits, as it was not suspected at first that they were dead. We lowered a boat and picked up three or four specimens, which we were unable to identify, but in general appearance they resembled *Alloposus mollis* (Verrill) of unusually large size. These dead cephalopods were seen frequently on the 100-fathom line and outside of it, from the position given above to the meridian of Montauk point, a distance of 180 miles. They were less numerous, however, as we went to the northward and eastward. Several dead squid were seen also, and two specimens were picked up with a scoop-net." *

A still more remarkable instance of this kind is furnished in the well-known case of the destruction of the tile-fish in the same locality in the spring of 1882.† In the months of March and April, 1882, vessels arriving at Philadelphia, New York, and Boston reported having passed large numbers of dead or dying fish scattered over an area of many miles, and from descriptions and the occasional specimens brought in, it was evident that the great majority of these were tile-fish. Naturally, these fish were not evenly distributed over all the area in which they were seen, some observers reporting them as scattering, and others as at times so numerous that there would be as many as fifty on the space of a rod square. As one account after another came in, it became apparent that a vast destruction of fish had taken place, for vessels reported having sailed for 40, 50, and 60 miles through floating fish; and, in one case, the schooner *Navarino* sailed for about 150 miles through waters dotted as far as the eye could reach with dying fishes. Computations made by Captain J. W. Collins seem to indicate that an area of from 5000 to 7500 square statute miles was so thickly covered with dead or dying fish that their numbers must have exceeded the enormous number of one billion. Since there were no signs of any disease, and no parasites found on the fish brought in for examination, their death could not have been brought about by either of these causes; and many conjectures were made as to the reason of this wholesale destruction of deep-water fishes, such as would ordinarily be unaffected by conditions prevailing at the surface, submarine volcanoes, heat, cold, and poisonous gases being

* 'Report of the Commissioner for 1884,' p. 32.

† This account is taken from Goode and Bean, 'Oceanic Ichthyology' (*Mem. Mus. Comp. Zoöl.*, vol. xxii. pp. 287, 288).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002e

مكتبة قطر الوطنية
Qatar National Library

variously brought forward to account for the loss of life. Prof. Verrill has noted the occurrence of a strip of water, having a temperature of 48° to 50° Fahr., lying on the border of the Gulf Stream slope, sandwiched between the arctic current on the one hand and the cold depths of the sea on the other. During 1880 and 1881, Prof. Verrill dredged along the Gulf Stream slope, obtaining in this warm belt, as he terms it, many species of invertebrates characteristic of more southern localities. In 1882 the same species were scarce, or totally absent from places where they had previously been abundant; and this, taken in connection with the occurrence of heavy northerly gales and the presence of much inshore ice at the north, leaves little doubt that some unusual lowering of temperature in the warm belt brought immediate death to many of its inhabitants. This is the more probable, as it is a well-known fact that sudden increase of cold will bring many fish to the surface in a benumbed or dying condition, and there are no indications of any shock or earthquake having occurred at the time the dead fish were first noticed.

It has been estimated that the bottom of the ocean in this region must at the time have been covered to the depth of about six feet with the dead bodies of the tile-fish and other marine organisms, and it seems evident, from the subsequent researches of Prof. Libbey, that their destruction was due to the lateral shifting of currents from different sources and of different temperatures, thus producing a wide range of temperature even at depths of 50 and 100 fathoms.

An indirect effect of the range of temperature, and of the destruction of organisms like those above described, can be recognized in the deposits on the floor of the ocean. It is a rather remarkable circumstance that all the places where the *Challenger* discovered a great development of glauconite and phosphatic nodules in the deposits are intimately associated with a wide annual range of temperature at the surface of the ocean—as, for instance, off the eastern coasts of the United States, off the Cape of Good Hope, and off the east coasts of Australia and Japan. The *Blake* and the *Albatross* have dredged from the area where the tile-fish was destroyed, and in the Florida straits, some very large brown-coloured phosphatic nodules weighing many pounds in weight.* These concretions were made up of the remains of pelagic Foraminifera and the other materials composing the deposits, in depths of 200 and 300 fathoms, and contained 23·53 per cent. of phosphoric acid, and 52·15 per cent. of lime. In one of these nodules there were embedded two Lamna teeth, similar to those dredged in large numbers from the greater depths of the Pacific. It is, however, interesting to note that in the shark's teeth embedded in these phosphatic nodules the cartilaginous base is preserved, as in the specimens from the Tertiary deposits

* Agassiz, 'Three Cruises of the *Blake*,' vol. i. pp. 275–276 (*Bull. Mus. Comp. Zoöl.*, vol. xiv.). 1888.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and elsewhere, while in the specimens from the deep sea this base is never present; only the hard shell of dentine remains.*

The long lines of phosphatic nodules which occur, for instance, in the calcareous Miocene and Oligocene beds of the island of Malta† thus possibly indicate the occasional destruction of a large amount of animal life in the surface waters of the Tertiary ocean, owing to changes of temperature, although it might also be due to changes of salinity and other causes.

On the Agulhas bank, the *Challenger* and the *Gazelle* met with very characteristic glauconite deposits in depths between 100 and 150 fathoms, and the phosphatic nodules in these deposits were of a dark-green colour. An analysis of the *Challenger* material gave 19·96 per cent. of phosphoric acid, and 39·41 per cent. of lime; and an analysis of the *Gazelle* material gave 38·88 per cent. of phosphate of lime. In the same region the *Challenger* dredged similar nodules of a lighter colour in 1900 fathoms. It is probable that the phosphate in these nodules was ultimately derived from the fish and other animals killed at the surface, and in shallow depths, by sudden changes in the temperature conditions, this being one of the areas of wide range indicated on the accompanying map.

Still another effect produced in the deposits by sudden changes of temperature at the surface is that the deposits of Globigerina Ooze appear to be much purer beneath those areas where currents from different sources meet at the surface, especially far from coasts. This, in all probability, arises from the more abundant destruction of these pelagic Foraminifera in such situations than in other areas with a more constant temperature. The rain of the carbonate of lime shells would be more rapid and constant, and consequently they would bulk more largely in the formation of the deposit compared with the inorganic materials which are usually present. In this way there may possibly be a more rapid formation of deposits beneath areas with a large annual range than at other places.

It has already been stated that the circum-equatorial zone, with a high temperature and small range, includes the typical coral-reef regions of the world. In the tropical surface waters there is a great development of organisms which secrete carbonate of lime, such as pelagic molluscs and Foraminifera, coccospheres and rhabdospheres, and in the shallow depths around the shores organisms with massive carbonate of lime shells and skeletons are abundant, such as corals, decapod crustaceans, and a great variety of molluscs and calcareous algæ. As we proceed to the colder waters of the north and south the organisms

* Murray, "Report on the *Blake* Deposits" (*Bull. Mus. Comp. Zoöl*, vol. xii. p. 42). 1885.

† Murray, "The Maltese Islands, with Special Reference to their Geological Structure" (*Scott. Geogr. Mag.*, vol. vi. p. 449). 1890.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

with massive shells gradually disappear, or are represented by small dwarfed species. In the cold polar waters the predominant animals belong to the hydroida, holothurioidea, annelida, amphipoda, isopoda, and tunicata, in which there is a feeble development of carbonate of lime.

The secretion by calcareous organisms of the practically insoluble carbonate of lime from the soluble sulphate of lime in sea-water can scarcely be regarded as wholly a direct life process, in so far as it is capable of proof that the reaction results from the decomposition of the calcium sulphate by ammonium or methylamine carbonate, secreted by these organisms in place of urea, as in the Mammalia. Of course, in lime-secreting animals the metabolism gives rise to the formation of either ammonium or methylamine carbonate, or other nitrogenous bodies which quickly decompose and yield ammonium carbonate. It is the waste or effete products of the animal itself which become the sole factor in the building up of the structures known as coral and shell. This point has been satisfactorily investigated by the experiments made by Murray and Irvine at the Granton Marine Station. With regard to the condition of the carbonate of lime so formed, it is an interesting and important fact that it is modified in an extraordinary degree by differences of temperature. For example, if, in imitation of nature, we add to sea-water neutral ammonium or methylamine carbonate in the proportion which will decompose the calcium sulphate present, and expose one portion of the mixture to a temperature of 80° Fahr., so as to represent the heat of equatorial waters, and expose another portion of the mixture to a temperature of 45° Fahr., so as to represent the cold zones of the sea, we find that in the warm water the separation of carbonate of lime begins almost at once, and takes the aragonitic form, whereas in the cold water it begins only after the lapse of a few hours, and is precipitated as well-defined rhombohedral crystals, similar to crystals of calcspar, so that in eight hours the amount of carbonate of lime thrown out of solution in the warm water is about twelve times that in the cold water. When we take into account the increased metabolism of organisms living in water at a temperature of 80° to 90° Fahr., as against the decreased metabolism of those living in colder waters, the abundant secretion of carbonate of lime which takes place in tropical waters, as compared with that in the cold waters of the arctic and antarctic regions, is readily explained. Another interesting circumstance is the greater solubility of lime and some of its salts in cold than in hot water, which fact assists in explaining the increase of calcareous deposition in warm seas over that known to take place in colder regions.*

* Murray and Irvine, "On Coral Reefs and other Carbonate of Lime Formations in Modern Seas" (*Proc. Roy. Soc. Edin.*, vol. xvii. pp. 79–109), 1890.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In those areas where the ocean is occupied by a warm current at one season, and by a cold current at another season, a periodicity can be observed in the deposition of the carbonate of lime in the shells and other calcareous structures of marine organisms, as well as in reproduction. On the other hand, in the polar and equatorial zones, where there is a small range of temperature, periodicity in the deposition of carbonate of lime, or in reproduction, is absent or difficult to recognize.

This comparative absence of massive carbonate of lime shells and corals in the polar waters, when compared with the abundance of these lime-secreting organisms in tropical waters, produces a general resemblance between the marine faunas and floras of the north polar and south polar regions, which is very striking, although this resemblance might have been anticipated from the similarity in the physical conditions, which, with reference to temperature range, is shown on the accompanying map. The resemblance here referred to in the animals of the two polar areas extends frequently to cases of specific and generic identity, the species and genera not now being found in the intermediate tropical area.

In the year 1841, Sir James Clark Ross dredged off the antarctic continent species of animals which he recognized as the same as he had been in the habit of dredging in equally high northern latitudes, and he suggested that they might have passed from one pole to the other by way of the cold water of the deep sea.

When the *Challenger* first reached the great southern ocean, the naturalists of the expedition were much struck with the general likeness of a large number of the organisms captured in the tow nets and trawls to those found on the coasts of Europe and North America. In the reports containing the detailed descriptions of species, the specialists frequently call attention to identical, or nearly identical, species from high southern and high northern latitudes, which appear to be entirely unrepresented in the intervening tropical zones. In many cases, for instance, they have been unable to detect any important differences between specimens from Kerguelen and the coasts of Great Britain, although, from purely geographical considerations, they have given a new specific name to the southern specimens.*

* Thus Stebbing describes a new species from the Southern ocean (*Amphilochus marionis*) which has a great resemblance to *Amphilochus tenuimanus* of European seas, remarking that "altogether the sum of the differences, added to the great distance between the localities at which the specimens occur, makes it unsafe to place the northern and southern examples in one and the same species" (*Zool. Chall. Exp.*, pt. 67, p. 746). Again, Smith describes a new species from the Kerguelen region (*Thracia meridionalis*), which, he says, "is the southern representative of the Greenlandic species, *Thracia truncata*, and, indeed, differs so slightly from it that it is with considerable hesitation I venture to describe it as distinct, being mainly influenced to do so by the difference of locality" (*Zool. Chall. Exp.*, pt. 35, p. 69).

Ortmann, speaking of the Decapod Crustacea, says: "Nach dem Stande unserer jetzigen Kenntniss ist *Keine einzige bipolare Art bekannt*" (Ortmann, *Zoologischen*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Dr. Günther says the most striking character in the distribution of the shore-fishes of the southern temperate zone is the reappearance of types inhabiting the corresponding latitudes of the northern hemisphere, and not found in the intervening tropical zone. This interruption of the continuity in the geographical distribution of shore-fishes is exemplified by species as well as genera; for instance, *Chimæra monstrosa*, *Galeus canis*, *Acanthias vulgaris*, *Acanthias blainvillii*, *Rhina squatina*, *Zeus faber*, *Lophius piscatorius*, *Centriscus scolopax*, *Engraulis encrasicholus*, *Clupea sprattus*, *Conger vulgaris*. Instances of genera are still more numerous: *Cestracion*, *Spinax*, *Pristiophorus*, *Raja*; *Callianthias*, *Polyprion*, *Histiopterus*, *Cantharus*, *Box*, *Girella*, *Pagellus*, *Chilodactylus*, *Sebastes*, *Aploactis*, *Agonus*, *Lepidopus*, *Cyttus*, *Psychrolutidæ*, *Notacanthus*; *Lycodes*, *Merluccius*, *Lotella*, *Phycis*, *Motella*; *Aulopus*; *Urocampus*, *Solenognathus*; *Myxine*.

Many hypotheses have been advanced to account for this bipolarity in the distribution of marine organisms, and altogether the subject is a most interesting one, which will be discussed with greater detail in another communication.

Before the reading of the paper, the PRESIDENT said: I have to welcome here again Dr. John Murray. I may as well mention that the Royal Society last week had a very important meeting, when Dr. Murray read another most interesting paper on the Importance of the Results of Antarctic Exploration, and it was followed by a discussion of great importance and considerable weight, judging from the positions of those who took part in it, and which I believe and hope will have some effect on public opinion. I am sure the meeting will also welcome very heartily the presence this evening of a gallant companion of Dr. Nansen, Lieut. Johansen. He is only here for a few days amongst us, and we are delighted to see him.

After the reading of the paper, the following discussion took place:—

Admiral Sir WM. WHARTON: I suppose the President has called upon me because I have to do with the sea; but my line of investigation is very considerably different from that of Dr. Murray. What Dr. Murray does he does very well,

---

Jahrbüchern, Abth. f. Syst., etc., Bd. ix. p. 585, 1896). Henderson, in his report on the *Challenger* Anomura, in describing *Lithodes murrayi* from the Kerguelen region, says it "is apparently most closely allied to *Lithodes maia*" (from the North Atlantic), "but the latter species is of large size, and the spines on the carapace are more numerous and more uniformly equal in size" (Henderson, *Zool. Chall. Exp.*, pt. 69, p. 44). Henderson writes me that these very slight differences were the only ones he could detect, and it seems evident that had the two specimens been taken from the same haul of the trawl, or from the same locality, they would never have been erected into two distinct species. Henderson writes me further that throughout the entire range of Crustacea there is no better illustration of bipolarity than that furnished by the Lithodidæ. *See* Chun, 'Die Beziehungen zwischen dem arktischen und antarktischen Plankton.' Stuttgart: 1897. Ortmann, 'Grundzüge der marinen Tiergeographie.' Jena: 1896. Pfeffer, 'Die niedere Thierwelt des antarktischen Ufergebietes,' Die Deutschen Expeditionen und ihre Ergebnisse (Die International Polarforschung), Bd. ii. p. 455. Berlin: 1890. Murray, *Summary of Results Chall. Exp*, p. 1459. 1894.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000056

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and he has given us a most admirable lecture to-night. He has certainly enlarged my ideas very much on the effect of the changes of temperature in the water. He has done what has not been done before—constructed this map from extreme ranges. It has been taken in some cases from a small number of observations, but probably represents the main facts. He has shown us what a great effect these changes of temperature may have on life, and he has referred also to the great effect it has on meteorological conditions—the formation of cyclones. It has been well known for a long time that the great birthplace of gales are those areas that he has pointed out, where the changes of temperature are the greatest. I am not at all prepared to follow him in his speculations as to how the animals who live in the arctic and antarctic regions have managed to change their localities; but I think he has given us very good proof that the animals are practically identical, and the question of how that has come about, I suppose, will not be solved quite yet. It is a matter for further investigation. I do not think I shall add anything to your knowledge if I say anything more.

Dr. Buchan: In this communication Dr. Murray has made a notable advance in oceanography. Several attempts have been previously made to show the range of the surface temperature of the ocean. But all these attempts have been simply to represent the difference in temperature between February and August, the coldest and warmest months respectively. It is, however, evident that such a range-temperature map of the surface waters of the oceans of the globe is singularly defective in showing the influence of temperature-changes on the living creatures with which the ocean everywhere teems. To do this it is altogether essential to reveal the absolute extremes of temperature to which these living creatures are exposed in the course of years. This is the problem which Dr. Murray has for years resolutely faced, and the map now hanging on the wall is the outcome of this great undertaking. It shows the difference between the absolutely highest and the absolutely lowest temperatures hitherto observed in each 2° square of the ocean, and the Royal Geographical Society is to be congratulated as being the medium of communicating this important investigation to the scientific world, which has been successfully carried out at no inconsiderable labour, time, and expense.

Mr. W. Leighton Jordan: What we have just heard from Dr. Murray evidently forms an admirable basis for a general discussion on the subject, and that has never yet been held since the *Challenger* returned, so I would suggest that the meeting be adjourned; we need not necessarily meet here, but I move that the meeting be adjourned in order that the discussion may be continued. It is too late now to have the discussion.

Dr. Murray: I should not be able to be present; I shall have to return to Scotland within two days.

Mr. Leighton Jordan: I am afraid it is rather late to start a discussion now—ten o'clock.

Dr. Mill: My only claim to speak is that, of all those in this audience, I am, perhaps, the one who has most enjoyed to-night's meeting. I have been associated with Dr. Murray for several years in practical oceanographical work, and it has been a wonder to me to see the way in which he has been able to fix upon those facts that were capable of the widest possible application, and to pass by others that were merely local. In his paper to-night he has brought up a wealth of material suitable for discussion, but unfortunately there are very few—in fact, I feel there is no one—fully capable of discussing this question at the present time except Dr. Murray himself. That is one of the reasons why it is so desirable that we should have some more information, such as a new oceanographical expedition

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

would collect. Then other people would have an opportunity of knowing something, and possibly of challenging Dr. Murray's opinions in consequence of the acquisition of fresh data.

Mr. GEORGE MURRAY: I can amply confirm the conclusion that Dr. Murray has arrived at with regard to bipolarity of organisms so far as they are concerned with the flora, both the littoral flora (those organisms that we call seaweeds) and also those that live far away from land. There is no doubt this bipolarity is especially striking in these organisms that live far away from land. Quite recently, however, with the help of Miss Barton, I made a minute examination of all the known littoral seaweeds in the arctic and antarctic regions, and we found a very high percentage of species in common; but this, however, is nothing to the community of *type* that exists among those minute organisms that live in the ocean. For example, the polar regions north and south are inhabited characteristically in the open ocean by diatoms, the temperate seas by Peridinieæ and coccospheres, and the tropics by Peridinieæ, coccospheres, rhabdospheres, and other forms. Now, I had my conclusions (which were very likely somewhat cut and dry) a little upset last summer. You know the diatoms are characteristic of the polar sea, and find their finest development there, but yet they are always more abundant near land than they are in the open ocean; in fact, by the use of a tow-net and a microscope, you would know almost as well as with a Thomson sounder when you are coming near land by the increase of the diatoms you get in your tow-net. I found in a traverse of the Atlantic that I made last summer, and from observations made for me for a whole year between the Channel and the Caribbean sea by officers of the Royal Mail Steam Packet Company—I found from those observations that there were very few diatoms as soon as we got away from land, but when we got close to Barbados we got more, and rather more again in the Caribbean sea, and when we got to Panama we got an extraordinary number. The diatoms are abundant in Colon bay from August to February, from the two extremes of temperature (there is very little range of temperature there—from 81° to 83°), and I venture to say they are quite as abundant there as they are in the arctic regions, or as they are in Loch Fyne, which, I believe, holds the record for diatoms in the number to the cubic inch, if I may put it that way. I should like to get an explanation from Dr. Murray; I should like to know whether temperature alone has much to do with this. It is quite true that in a place like Colon bay we have a very stable temperature, just as in the arctic and antarctic we have a very stable temperature. I must say the species we found in Colon bay were inseparable from the species we found in Loch Fyne. I should like to know whether the chemical constitution of the water has not something to do with this. One is rather apt to suspect this from the fact that diatoms are so abundant near land. I should like to know if these other factors have not something to do with this question of distribution, I mean besides temperature. I do not yield even to Dr. Mill in my estimate of the value of the facts brought before us by Dr. Murray; but I do plead for other factors besides temperature being taken into consideration, especially in dealing with such highly complex things as living organisms.

Dr. GREGORY: I am glad of the opportunity as a biologist of expressing gratitude to Dr. Murray for this brilliantly original and suggestive paper, for it is on the researches of physicists that the biologists must rely for the explanation of the riddles of biological distribution. There are many points in the paper, I think, that will help biologists to explain some of those difficulties. During the last few years there has been a strong tendency to attribute all deposition of carbonate of lime from the sea to the direct action of life, but Dr. Murray's experiment of the precipitation of carbonate of lime from sea-water by the addition of ammonium

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

carbonate may account for that inorganic precipitation of carbonate of lime which the microscope shows must take place. There were one or two points in which one could doubt whether Dr. Murray's explanations are of universal application. For example, with regard to the secretion of carbonate of lime either as calcite or as arragonite. We know that among mollusca living together on the same banks, some have shells of calcite and others of arragonite. In conclusion, I can only repeat my gratitude to Dr. Murray for this extremely suggestive paper.

Dr. MURRAY: I think that pelagic organisms which secrete silica are most abundant in those parts of the ocean where there is clayey matter in suspension, as in the arctic and antarctic seas, and in the West Pacific and off the mouths of large rivers. This, it seems to me, is more important than the temperature of the water. In discussing the causes which have led to a similarity in the fauna and flora of the two polar oceans, I may possibly have been rather speculative, and have given my imagination too much rein. The interest of the subject must be my excuse.

The PRESIDENT: I am sure we are all very glad that Dr. Murray has given his imagination a little rein, but you must also have been impressed with the enormous labour that he undertook and has completed in giving the maximum and minimum ranges of temperature of the surface of the ocean all over the world in 2° squares. It represents a great amount of labour, and from what we have heard to-night we know that it has not been labour in vain; that it has led to most interesting conclusions, and has shown the connection that exists between physical phenomena and biological phenomena, and we can have no doubt that Dr. Murray's most valuable chart will be permanently useful in the study of meteorology and of geographical distribution. I have, therefore, every confidence that the vote of thanks I now offer to Dr. Murray will be passed with acclamation.

AN EXPLORATION IN 1897 OF SOME OF THE GLACIERS OF SPITSBERGEN.*

By Sir W. MARTIN CONWAY.

LAST year (January 25) I had the honour of describing to this Society some of the results of an expedition which, in the year 1896, explored certain parts of the interior of the main island of Spitsbergen. Before that journey the interior was practically unknown. Monsieur Rabot had visited the Sassendal in 1892; and Herr Gustaf Nordenskiöld in 1890 had made the traverse over Torell glacier between two of the western bays, from Horn sound to the so-called Recherche bay of Bell sound. The result of our expedition was to show that a belt of the island bounded by Ice fjord on the north and Bell sound on the south, so far from being a region covered with ice, is practically open country, consisting of boggy hillsides and valleys, divided from one another by ranges of hills which have been carved out of a plateau. I was enabled to show, by examples, the various stages in the evolution of these hills, from their beginning in a plateau intersected by cañons to their final completion as sharp-edged, independent peaks. In no mountain region of

* Paper read at the Royal Geographical Society, March 14, 1898. Map, p. 224.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000099

مكتبة قطر الوطنية
Qatar National Library

the world, known to me, can this evolution be so plainly traced as in Spitsbergen.

The expedition of 1897 was made by Mr. E. J. Garwood and myself, with the assistance of two Norwegian seamen, one of whom, Nielsen by name, was as serviceable to us as his fellow was obstructive. Our object was to investigate the interior of parts of the country believed to be covered by so-called "inland ice;" that is to say, by ice-sheets of the Greenland character. We accordingly chose two areas, to which, for convenience' sake, I have been obliged to give names. The first is the area bounded on the north by the bottom of Wijde bay and the Chydenius range of hills, on the east by the sea, on the south by Ice fjord and a line running from Temple bay across to Wiche bay, and on the west by Dickson bay; I have called this region Garwood Land, after my excellent travelling-companion. The second area is bounded by Ice fjord and Dickson bay on the east, by Foreland sound on the west. Its northern limit is approximately a line from the head of Cross bay to West fjord of Wijde bay. To this region, reviving the old English whalers' name for Spitsbergen, I have applied the designation King James Land. For the area between Ice fjord and Bell sound, explored in 1896, the name Adventure Land* is perhaps as suitable as any.

We landed at Advent bay on July 9. The little steamer that was to have met us had not arrived from Norway, so that we seemed to be stranded; but Dr. Lerner, who had taken the *Expres* for the summer, kindly offered to carry us across to Klass Billen bay. On the 10th we visited Skans bay. On the 11th, a fine day with a strong south wind, we rowed up Klaas Billen bay, little thinking that just then Andrée was ascending in his balloon from Danes gat. We landed at the foot of the Nordenskiöld glacier, dragged up our whale-boat, and pitched camp. Next day was wet; we spent it in making final preparations for an expedition up the glacier. Two sledges were loaded and dragged over a boggy and stony flat, and up a high steep moraine on to the ice. On the morning of the 13th we started up the glacier. It proved to be very much crevassed. Progress was slow and difficult. Camp was pitched about 700 feet above sea-level 3 miles inland, in the midst of a labyrinth of crevasses. On the 14th we completed the ascent of the crevassed area, and tugged on up steadily inclined snow-slopes. Fog enveloped us all the latter half of the march, and we had to steer by compass. Camp was pitched about 1500 feet above sea-level, on a little plateau at the east foot of a peak climbed by Baron de Geer in 1882. A howling storm

* In this case, as in others where new names are required, I endeavour to supply them, when possible, by reviving old names fallen into disuse or oblivion. Advent bay is a senseless abbreviation of the former name, Adventure bay. It was called Klaas Billen bay by the old Dutch whalers, but this name has been moved across Ice sound to another bay, to which it is now firmly attached.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000026

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

imprisoned us in this camp for twenty-four hours. We employed the finer intervals in practising with *ski*, by aid of which the remainder of the inland journey had to be accomplished. A brief clearance enabling us to discover the best direction to take over the icy interior, we set forward again through the dense fog. Nothing was visible during the march. The snow was soft, the slope steady; the sledges travelled with difficulty. We camped again in the white wilderness. Next morning there was a short lifting of the fog, which permitted us to see westward for a few minutes, down a broad snowy valley to the line of hills that border Dickson bay on the east. The fog soon returned and blotted everything out. We marched on as before, to the north-east, with nothing visible in any direction. The slope at times steepened so much that we had to take on one sledge at a time, and then return for the other. Late in the day a howling storm burst upon us, and one of our Norwegian seamen broke down from cold, exposure, and fright. He refused to advance further, so camp had to be pitched. We were soon almost snowed under, the sledges being completely buried out of sight.

On the 18th Garwood and I left camp early in the continuing fog, and made a ski expedition to the east and north. On reaching the summit of a snowy dome, we came above the mist, and obtained a clear view to the east, where a broad glacier valley opened at our feet, leading away to the east, and then bending round south. Tributary valleys joined this one on the north. All across the north and east were plateau-fronts or bluffs of rock, with *névé* both below and above them. Garwood set forth down the valley to investigate the rocks of a nunatak; I went north up a higher snow-dome, from the summit of which I had an uninterrupted northward view. In that direction the snow-plateau continued for some distance, cut up by deep glacier valleys, beyond which were several higher mountains. Unfortunately, Wijde bay, all the hills round it, and all the region to the west of me, were buried in cloud. Late in the day we returned to camp, and found the sick man in a feeble condition. He urgently demanded to be taken back to the coast. Accordingly, we packed up camp, and set forth towards the south-east over the highest part of the snow-plateau.

The evening was most beautiful; the scenery superb. High above the clear air that surrounded us was a dark blue roof of cloud, resting on skyey walls of marvellous colours, with streaks of stratus across them, reflecting the golden sunlight. The sun itself was hidden in the north, but beneath it there hung a reticulated web, woven of gold and purple, through which the shafts of tender light drooped like eyelashes upon the snow. All around, the *névé* swept away in gentle curves and domes, greyish-white in some places with purple shadows, bluish-grey in others, here and there strewn with carpets of sunlight. The rocks, too, wherever they appeared, were rich in colour, showing their own ruddy

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003e

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [273v] (49/154)

or orange tints enforced by the lustrous atmosphere. There was none of the sharp contrast of black and white that strikes a superficial observer in high mountain views. This panorama was a glorious mass of colour, harmonious without rift, and rich without monotony. At midnight the cloud-roof opened in the north, and a flood of sunshine poured upon us. Camp was pitched just where the slope began to dip towards the head of the Nordenskiöld glacier.

Next day, in glorious weather, we descended to the foot of a mountain, the Terrier, on the left side of the Nordenskiöld glacier, opposite De Geer's peak. We meant to ascend it next day, but were prevented by regathered clouds. Some hours were accordingly passed investigating glacial phenomena in the neighbourhood, a curious long barrel-vault of ice, and a burst glacier lake which had distributed huge masses of ice over a square mile of glacier. On the 21st we rowed down Klaas Billen bay to the Goose islands, where we spent the night. Early on the 23rd we were back in Advent bay.

On the 24th we sailed in the small steamer *Kvik*, and landed next morning at the south-east angle of King's bay. Some time was spent making observations of the great King's glacier's terminal cliff, climbing a peak in the neighbourhood, and preparing for another journey inland. We started, with two new sledges, up the south side of the King's glacier on the morning of the 27th. For the first two days the humpy and crevassed ice and the great moraines caused us infinite labour. We thus gained the King's Highway, the great south-east tributary of the King's glacier. Here were several miles of water-sodden snow to be traversed, and several broad glacier rivers to be crossed. The third march brought us to near the watershed, and on the morning of the 30th we stood on the actual pass, and could see down the whole length of the glacier we had come up, and of another glacier in the opposite direction leading down to Ice fjord, beyond whose waters Advent bay was clearly visible. For the sake of a wider panorama, we climbed to the top of a neighbouring snowy hill (Highway dome, 3000 feet). The weather was fine, and the view most comprehensive. In all directions were a countless multitude of snowy hills, with a labyrinth of *névés* and glaciers amongst them. The remainder of the day was spent in surveying, the sun being painfully hot in the clear air.

Next day we went south over a snow pass, and down on to the *névé* of the next great glacier, which we supposed would likewise flow into Ice fjord. It is a very large glacier, but it bends round south and then south-west, and empties into the head of St. John's bay. Returning by the pass at the head of this glacier, we went down the southern branch of the Highway glacier, and rejoined our old tracks after a long march.

In the angle between the two great branches of King's glacier—Highway glacier and Crowns glacier—stands the fine mountain-group of the Crowns, well known to the old navigators from their

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

remarkable appearance as seen from King's bay. On August 1 we climbed to the top of a pass over a spur of this group, and next day descended to the left bank of the Crowns glacier, where we encamped at the foot of a dolomite peak, named Pretender (3480 feet), on which we did a day's scrambling, whilst the men returned to the coast for stores. August 4, we moved camp over difficult glacier as far as the foot of the Middle Crown. We climbed the peak (4000 feet), and had a remarkable view, embracing the enormous *névé* of the Crowns glacier, the Cross bay mountains beyond it, the great plateau at its head, cut up into *névé* valleys (like those in Garwood Land) draining south-east towards Ekman bay. South was the irregular mountain region of King James Land. Ice fiord was clear, with the hills of Adventure Land beyond it. In the remote distance we thought that we identified the towering wall of the Hornsunds Tinder.

On the 5th we made an 18-mile *ski* expedition over the *névé*, and climbed a higher peak of the same group, the Diadem (4150 feet). The view was similar to that from the Middle Crown, but more extensive to the north. We climbed the Middle Crown again on the 6th. The 7th and 8th were spent returning down difficult glaciers to our base camp by King's bay. Throughout the whole of this inland expedition we enjoyed the most perfect weather it is possible to imagine. The four days that followed were devoted to boat expeditions in King's bay, but the weather was foggy, and little surveying could be accomplished.

On the 13th we reached and finally quitted Advent bay. We steamed down the west coast, and were dropped in Horn sound on the 14th. Here a week was spent. There was only one fine day (the 18th), on which we climbed to the highest point of Mount Hedgehog, one of the Hornsunds Tinder, though unfortunately not quite the highest point of the range. Mount Hedgehog is the peak the ascent of which was attempted in thick weather by Mr. Garwood and Mr. Trevor Battye in 1896. They reached a high point on the side of the mountain, and then were compelled to descend. Fortune was kinder to us. There was a flat floor of cloud at a level of about 1000 feet, but above that all was clear, and we enjoyed a marvellous and most instructive view, which revealed the geography of all the south part of the island. On the 21st the steamer *Lofoten* called for us on its way to Norway. Landings were made at Bear island and the North cape. Thus an interesting expedition was brought to an agreeable conclusion.

Both Garwood Land and King James Land are described on the chart as covered with "inland ice." Now, if the phrase "inland ice" merely means glaciers, so that it may be correctly applied to the glaciers of any district of snow-mountains, such as the Alps or Caucasus, it is a useless phrase, and ought to be abolished. Most persons of whom I have inquired, receive from it a different impression, and judge it to be descriptive of a complete and continuous icy mantle enveloping a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000078

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

whole country, as Greenland, for instance, is enveloped. The term is used in that sense in the English edition of Nansen's 'Greenland.' "Ice-sheet" is apparently a better descriptive term for such a mantle, and I shall accordingly so employ it. The term "inland ice," being essentially vague, should, I think, be erased from geographical literature, or used only as a non-committal descriptive term to designate the ice covering some unexplored region vaguely known to be glaciated. As long as a flowing body of land-ice is contained within definite watersheds and mountain ranges, it is a glacier and not an ice-sheet. The juxtaposition of no matter how many glaciers does not form an ice-sheet, but merely a glacial area. It is necessary to be thus particular in definition because, as I shall presently show, neither Garwood Land nor King James Land, nor any large part of Spitsbergen, except New Friesland and North-East Land, is covered by an ice-sheet. They are all merely glacial and mountain areas. The discovery of this fact is the principal geographical result of our second expedition. That it is a not unimportant result I now proceed to demonstrate.

The old theory that glaciers excavate their beds to any considerable extent is practically abandoned. Its supporters naturally considered that the larger the mass of ice the more vigorous would be its excavating action. A great arctic ice-sheet was considered to be an extraordinarily powerful excavator. We now know that moving land-ice does not so operate upon its bed, but, beyond polishing the surface of the rock it covers, and cutting down convex excrescences, has mainly a conservative effect upon it. In the case of a country, like the interior of Greenland, wholly buried under ice, the buried land-surface is being modelled to a very slight degree. On the other hand, in the case of a glacial region, where mountains rise above the mean level, and where rock-faces are exposed to the rapid denudation of all snowy regions, great developments of surface-formation are going forward. Under an ice-sheet, the forces acting on the land-surface are conservative; in the case of a glacial region, the acting forces are formative. Hence the immense importance of clearly distinguishing between these two types of ice-bearing country.

In the glacial regions of Spitsbergen are many cliffs of disintegrating rock, such as the one depicted in the accompanying photograph taken by Mr. Garwood on Highway Dome, where there is *névé* or glacier both above and below the cliff. In such a case the cliff, by the action of frost and aërial denudation, continually moves backward. Its exposed face is being constantly peeled off, and the *débris*, falling upon the glacier, is not suffered to accumulate and so to protect the base of the cliff, but is carried away. The cliff thus maintains its existence, but moves continuously backwards, just as the cliff retreats over which Niagara falls.

In the accompanying diagram (Fig. 2), the glacier DE has at its head such a cliff, CD. This cliff, therefore, steadily eats its way

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

backward, possibly enough becoming shorter and shorter in the process. As it moves backward, the catchment area of the glacier's snow-field increases, and the glacier therefore tends to advance at its snout. If CD were the face of a sufficiently thick mountain mass, it would gradually eat its way into that mass, till the precipice had, by continuously shortening, disappeared, and the slope of the glacier reached right up to the top of the mountain mass, as in Fig. 1.

But if CD is the face of a relatively thin rock ridge (as in Fig. 2), the glacier DE will eat its way through that ridge; and if, in the valley on the other side of that ridge, there be a big glacier whose direction of flow is at right angles to that of the glacier DE, the glacier DE,



FIG. 1.—SOUTH FACE OF HIGHWAY DOME.

when it has eaten back through the ridge BCD, will carry away the upper portion of the longitudinal glacier, draining it off down its own side valley, and will establish a col between the former head and the snout of the original longitudinal glacier.

In fact, in such a case it would happen with the glacial drainage as in the Himalayas and elsewhere it has happened with the rivers. When the great Asiatic plateau was elevated, whereof Tibet now alone remains in anything approximating to the original surface condition of the whole, the drainage ran off along the hollows in the line of the crinkling of the surface coinciding with the strike of the strata. Now, however, by the operation of rivers eating their way back into the plateau at right angles to the strike of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

the strata, all the great rivers flow at right angles to their original direction. The Indus was originally a stream no bigger than the Swat river, flowing down the edge of the elevated region. It ate its way through the Nanga Parbat range into the depression which goes on to Gilgit, and thus robbed all the waters of the upper Indus of to-day, which in the remote past, I believe, discharged themselves (over a high

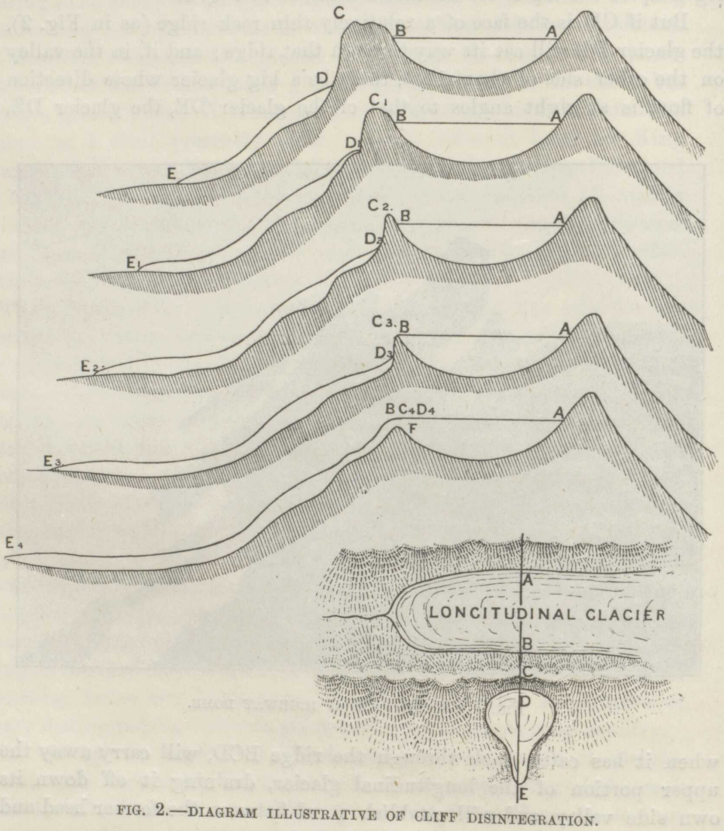


FIG. 2.—DIAGRAM ILLUSTRATIVE OF CLIFF DISINTEGRATION.

region since excavated into mountain ranges) into the Kunar river, and before that into the Oxus. Similarly, a branch of the Gilgit river has eaten back through the Rakipushi range and robbed the Hispar-Hunza river, and a branch of that has eaten back through the Boiohagurdoanas range, and is now cutting through to the Taghdumbash Pamir. It is worth notice that in each case the river has chosen the neighbourhood of the highest point of the range for its transverse gorge, not impro bably (as it seems to me) because there it had a glacier to help it as a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000026

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [276r] (54/154)

BRITISH LIBRARY

carrying agent in cutting through the range. In the case of rivers, this eating-back process is well recognized and understood. I suggest that it is likewise true of glaciers, though of course the phrase "eating back" is used as descriptive of the effect produced, not of the glacier's action. The "eating back" is caused by aërial denudation, not by glacial erosion; but if the glacier were not there to carry away the *débris*, the processes of aërial denudation would be arrested by the accumulation of *débris*.

The best instance I can quote of what seems a clear case of one glacier robbing the *névé* basin of another is in the Karakoram mountains. There the Biafo glacier drains a great snow-field, which appears geographically to belong to the Hispar glacier. When the incredible rapidity of denudation in those regions is remembered, it seems far from impossible that the ridge which bounds the Hispar glacier on the south extended unbroken, and not so very long ago, across the Biafo glacier, and that the gap through which the Biafo glacier now draws off the snow-field behind, is only of recent formation.

Few persons, however, are familiar with the geography of this remote region; it seems, therefore, best to illustrate the theory above propounded, by some possible example nearer home. I cite, but with diffidence, two cases from the Alps, where it seems possible that well-known glaciers may have eaten back a gap through mountain ridges. In both cases, no doubt, the eating back may have been done by water; all that I assert is that, if not done by water, it would have been accomplished by the glaciers which exist on the spot.

My first example is taken from the Mont Blanc range.* I suggest that originally there may have been a glacier with its head near the present summit of Mont Blanc, having for its left bank a ridge (or plateau-edge) now represented by the Aiguille du Midi and other aiguilles, the Aiguille Verte, the Aiguille du Chardonnet, and the Aiguilles Dorées; whilst its right bank was approximately coincident with the modern watershed as far as Mont Dolent, except between Mont Blanc de Courmayeur and the Tour Ronde, where it has been broken away. This ancient drainage system has been broken down, and now the snows of the upper reservoirs are all discharged by such glaciers as the Mer de Glace or the Glacier d'Argentière, which cut across one or other of these old containing ridges or plateau-edges.

Thus too, I suggest, the Upper and Lower Grindelwald glaciers and the Rosenlaui glacier may have invaded the Oberland plateau and crept back into the heart of the mountain mass, isolating as high individual peaks the Wetterhorn and Schreckhorn. Originally they were mere "corrie glaciers," plastered on to the north face of the plateau—just such

* Herr Imfeld's new map is the only one on which this theory can be properly examined.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000043

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [276v] (55/154)

glaciers, in fact, as the Guggi glacier, which lies in the hollow between the Jungfrau and the Mönch. They have crept farther back than it, because for some reason they had the better start, but the Guggi glacier now emulates their former vigorous initiative. The cliffs at its head are being continually broken and worn away by the action of frost. The rocks that fall from them either tumble on to the *névé*, and are carried down by it, or roll into the *bergschrund*, and so get under the ice, where no doubt they are ground to dust, and do some excavating in the process. That, however, can only be in the upper regions; lower down only the waters below the glacier excavate, but not the glacier itself, except, perhaps, at the edge of some subglacial cliff where an icefall is formed. In this way the rocks of the north face of the ridge between the Jungfrau and Mönch are being eaten away, and the ridge itself is not merely being lowered, but its crest is being pushed backward towards the south. Every yard of its movement is made at the expense of the Jungfrau glacier. Let the process go forward for a sufficiently long time, and the area now occupied by the upper basin of the Jungfrau glacier will be occupied by a snow-basin lying at a lower level, and draining northward down the Guggi glacier.

Similar, I suggest, may have been the development of what is now the Great Aletsch glacier. Originally, according to this theory, the Lötschen glacier stretched back to the Finsteraarhorn, and had for its left bank a ridge parallel to, but south of, the range of which the Aletschhorn is now the culminating point. The Aletsch glacier's original head was on the south face of this range, but the glacier ate its way backwards, its head advanced to the north, finally broke its way right through the range and drew off a portion of the ice of the Lötschen glacier.* The snout of the Lötschen glacier was thus disconnected from its former *névé*, and a pass (the Lötschenlücke) was formed between them. The *névé*, at what is now called the Place de la Concorde, flowed as a great icefall over the remnant of the old left bank of the original glacier. It no doubt deepened and widened the breach, and as it did so lowered the level of the snow in the upper reservoir, whose various branches were thus enabled, each in its place, to creep backwards also at the expense of the plateau. Thus were formed the Ewig Schnee Feld, the Jungfrau Firn, and the other *névé* tributaries of the present great glacier. The great icefall gradually diminished in turbulence as the cliff beneath it was broken and rounded away, till now it is merely represented by the crevassed area just below the Concordia Hut.

Whether, in fact, the processes thus suggested took place, or whether water-action forestalled the glaciers by cutting through the ridges in days anterior to the glaciation of the Alps, I am not authority to pronounce. But the position that I do maintain is this—that glaciers

* The Walliser Viescher glacier was similarly employed.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000065

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

would have cut back and produced the mountain and valley forms that we see in these cases, if water did not anticipate them. That glaciers do not excavate their beds to any considerable extent is now practically admitted; but that, by acting as carrying agents, they eat back into the mountain-masses they drain, and thus perform a great function in the processes which go to the shaping of mountains, is a fact which I think has not been sufficiently emphasized. It follows that the distinction I have endeavoured to make between an ice-sheet and a congeries of glaciers is a distinction of the first importance; for under an ice-sheet none of the processes are going forward which are vigorously proceeding in a glacial region. The old idea of Spitsbergen was that its interior consisted of a great ice-sheet, fringed at the edge by a number of boggy valleys and green hillsides. Our explorations have shown the utter falsity of this conception.

Whether at one time the whole island was enveloped in an ice-sheet which was gradually withdrawn from the west towards the east, or whether the west part of the island has merely been longer raised above the sea than the east part, I do not attempt to determine. The fact, at any rate, seems to be that the forces of denudation have been longer at work, or, at any rate, more vigorously at work, all down the west part of the island, and that the resulting mountain formation is most developed in the west, and becomes continually less developed as you proceed toward the east. All down the western region you find highly specialized mountain-forms—peaks and ranges of considerable abruptness and marked individuality. As you advance eastward the mountains become generally more rounded, till the original plateau-form, and even parts of the undenuded plateau itself, are encountered.

Bearing in mind this general structure of the land-surface, it will now be easy to describe the character of different parts of the main island. The whole of the north coast, as might be expected, bears evidence of a more rigorous climate than districts further south. This was specially noticed by us when proceeding down Wijde bay, at whose mouth the snow lay down to sea-level in the month of August, whilst, 20 miles in, the snow-line was almost 1000 feet above sea-level. The northern rim, therefore, may be regarded as a separate geographical division. At the north-west angle of the island is a region of very bold mountains and large glaciers. It is well represented by the beautiful and often described Magdalena bay. Nothing is known about the interior south-east of it, but some old Dutch charts mark a valley leading from the east side of Mauritius bay up to a sequestered lake in the hills. Whether the draughtsman intended his winding valley and river to represent a glacier and the lake a snow-field, or whether a true lake and river existed here in the eighteenth century, can only be settled by an examination of the ground.

Passing southward down the west coast, we come to the seven parallel

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

glaciers ending in the sea, known to the whalers as the Seven Icebergs. These all appear to flow down from a high common snow-field which stretches east toward Wood bay and south almost to the head of Cross bay. South-eastward this high plateau is broken by a series of *névé*-valleys, the chief of which discharge themselves towards Ekman and Dickson bays. Their general direction is south-south-east. South of this plateau region comes the mountainous area of King James Land, whose character is shown on the accompanying map. The main watershed here runs north and south. A series of parallel glaciers drain south-south-east from it to Ice fjord. The valley system on the west is less regular, but the glaciers are equally numerous and fine.

The deep north-and-south depression filled by Wijde bay and Dickson bay is bordered on the west by a range of mountains, a group of which intrude between and divide the bays. Some of these are of striking form, but no one has ever been amongst them or accurately determined their position. East of the two bays comes the plateau region. Its edge is cut up by a few deep valleys, down which the ice-sheet of New Friesland sends glacial tongues to Wijde bay, but east of Dickson bay the marginal valleys are longer, and no glaciers come very far down them. The portion of the plateau between Dickson and Klaas Billen bays is a good deal cut up by deep valleys, such as the Rendal, the Skans valley, and the Mimesdal (all well known to geologists), but there are no large glaciers found upon it. Further east comes a great glaciated area approximating in appearance to an ice-sheet, but with many exposed faces and peaks of rock. From it several large glaciers flow into the sea, namely, the glacier that ends in the head of East fjord of Wijde bay, the glacier that fills a wide valley debouching into Hinloopen strait opposite the South Waiigat islands, some more glaciers that empty into Bismarck strait and that neighbourhood, the series of great glaciers at the head of Wybe Jans water, and the Nordenskiöld glacier (specially explored by us) near the head of Klaas Billen bay. All these glaciers are divided from one another by more or less well-marked watersheds.

The neck of Spitsbergen, which may be defined as bounded on the north by a line from the mouth of Nordenskiöld glacier to Wiche bay, and on the south by the Sassendal and the depression across to Agardh bay, is a district that would well repay exploration, and is easily accessible from the Post glacier at the head of Temple bay. Nowhere are the phenomena of mountain formation by plateau degradation under the action of rivers and glaciers better illustrated than here. In the east there are the remains of an ice-sheet; in the west there are deep and wide glacier and river valleys. Between the two are many mountain ranges, and some peaks of considerable height and abruptness.

A line drawn from the head of Van Keulen (Saardam) bay to Whales bay forms the southern limit of the next region to the south—the region that I call Adventure land. It is a country of boggy valleys, rounded

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

hills, and relatively small glaciers. Originally it was one large plateau, formed of soft, almost horizontally bedded rock, except along its west margin. It has therefore been penetrated by wide valleys radiating in all directions and cut down almost to sea-level. A range of rather fine peaks lies along the west coast, and behind that are some large glaciers descending north into Green harbour and south to the mouth of Low sound. Then the undulating country begins. Several valleys lead inland from Coles bay, whilst from Advent bay starts the Advent dale with its many branches. From Low sound a series of boggy valleys strike in to north and south. At the north angle of its head opens the deep valley of the Shallow river (after the Sassendal the largest valley in Spitsbergen), whose upper part has never been explored. The eastward prolongation of Low sound, which was known to the Dutch as Michiel Rinders bay, is very poorly charted, but we know that at its north angle there is a secluded inner harbour, with a big ramifying valley leading back from it, whilst at its extreme east corner three large glaciers debouch together, one of which probably connects by a high snow-field with the head of Strong glacier descending to Whales bay.

Last comes the south division of the island, over which we had a panoramic view in 1897 from the summit of Mount Hedgehog, one of the Hornsunds Tinder. Unfortunately a roof of cloud covered the glaciers, and we could only see the tops of the mountains rising clear above it. The north-west angle of this region was explored in 1897 by Mr. Victor Gatty, who found it to consist of a ring of snowy mountains surrounding the *névé* of the Fox glacier, which discharges into the so-called Recherche bay. A gap or col, south-east of Dunder bay, separates this group from a range of hills running for some distance south along the coast, and called Roebuck Land. The extremity of these hills abut against the right foot of Torell glacier, one upper bay of which rests against the hills immediately south of Recherche bay, whilst another stretches inland to the east, as far as the main watershed of the island. There are one or two other approximately north and south ranges of hills lying west of this watershed. East of it the plateau-character resumes its predominance. The southernmost part of the island, south of Horn sound, is dignified by the boldest mountain range in the country, that of the Hornsunds Tinder, which lie west of the watershed, and run almost due north and south. East of them are at least two lower parallel ranges, beyond which the ice-covered country seems to dip to the sea.

Of the other islands in the Spitsbergen group, North-East Land is the largest. It is known, from Baron Nordenskiöld's exploration, to be covered with a true ice-sheet, the edge of which descends to the sea all along the south-east coast. The north coast and the small islands off it altogether resemble the northern belt of the west island. The west belt

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000023

مكتبة قطر الوطنية
Qatar National Library

is a low undulating region, from which the ice-sheet has retreated in relatively recent times.

South of North-East Land are two islands, now generally known as Swedish Foreland and King Carl island. These were the "high land," discovered by Giles and Reps in 1707, when they circumnavigated North-East Land, and returned northward by way of Hinloopen strait.* It has generally been supposed that the Wiche Land of Captain Edge was the same pair of islands, but I think that this was not the case. In the years 1616 and 1617 explorations were made to the eastward of Spitsbergen on behalf of the Muscovy Company. Their results are only recorded on Thomas Edge's map, printed in Purchas, and again in Pellham's 'God's Power and Providence,' etc. (of 1631). Edge states (in Purchas) that, in 1617, a ship of sixty tons, with a crew of twenty men, "discovered to the eastward of Greenland [= Spitsbergen] as farre to the northwards as 79 degrees, and an iland which he named Wiches iland,† and divers other ilands." From the map, it is clear that both coasts of Wybe Jans water, right up to its northern extremity,‡ were explored, as well as the north-east coast of Edge Island; but that the eastern extremity of the latter was not reached, still less turned. In fact, the exploration did not extend to any part of the sea east of Edge island. A landing was certainly made on Barents island, for reindeer are marked on it. Doubtless some high point was climbed there on a clear day, and the southern mouth of Hinloopen strait was seen and the extremity of North-East Land, which is marked on the map, "Sir Thomas Smyths Iland." From the same point, no doubt, Swedish Foreland might have been seen, but, if it had been, it could not possibly have been marked as a long north and south coast-line lying between about lat. 76° and 78°, but must have been placed in or above lat. 79°. The *Wiches Lande* of Edge's map, therefore, was not seen from a hill on Barents island; nor was it seen from the sea east of Edge island. But, if seen at all, it must have been seen from some point of land or sea depicted on that map. It was not seen from a hill on Barents island; neither was it seen from the sea east of Edge island, and *à fortiori* not from the sea east of Barents island. Hence it cannot be the same as King Carl's island and Swedish Foreland. In fact, it corresponds to no existing land at all, and doubtless merely represents some bank of fog or other deceptive atmospheric phenomenon.

I have never landed in Barents or Edge islands, though I have seen both from east and from west. Neither possesses an ice-sheet. Both

* See the great chart, "Nieuwe afteekening van het Eyland Spitsbergen op gegeven door de Commandeurs Giles en Outger Rep en in't ligt gebraght en uyt gegeven door Gerard van Keulen Boek en Zeekaart verkooper aan de Nieuwen brug met Previlegie voor 15 Jaaren."

† After Richard Wiche, a governor of the Moscovy Company.

‡ Which is in 78° 40′, but is marked by Edge as extending to about 79° 15′.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

279

Nearly Ready, in Two Volumes, 1242 pp.,
with Maps, Diagrams, and about Eight Hundred Illustrations,
Demy 8vo, Price 32s. net.

NORTHWARD
OVER THE GREAT ICE

BY

ROBERT E. PEARY

CIVIL ENGINEER, U.S.N.

MESSRS METHUEN have much pleasure in announcing that they will very shortly publish the above important work. It will contain the narrative of Lieut. Peary's seven expeditions in the years 1886 and 1891-1897, and its publication at the present moment is particularly interesting in view of the author's forthcoming attempt to reach the North Pole.

That he is likely to succeed in this hitherto impossible task seems probable, and experts of the highest authority have declared that his plans are more practical than those of any other explorer. Dr Nansen has just stated that if anybody reaches the Pole it will be Peary, and he believes that he will succeed.

Mr Peary has lately delivered a lecture before the Royal Geographical Society, and all who heard

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000056

مكتبة قطر الوطنية
Qatar National Library

him declared that the lecture was the most interesting one delivered there within the memory of living man. The Council has recently awarded him one of its Gold Medals for his extraordinary sledge journey. His brilliant success has roused the greatest enthusiasm and the warmest interest both in this book and in the perilous task which he will undertake in June.

The publishers believe that "Northward" may be worthily compared with Dr Nansen's well-known book, both in value and in interest. But in substance it will differ from it, for, while Nansen traversed the sea, Peary passed over the ice and snow, climbing over the dreaded Ice Cap at an elevation of thousands of feet above the sea level, discovering and mapping Northern Greenland in different expeditions covering long periods of time.

The narrative abounds in infinite variety, dealing as it does with perils on land and sea, terrific snow storms, and the pursuit of big game on water and land, while the explorer has collected a mass of interesting information regarding the strange people with whom he lived so long, the Arctic Highlanders, who live further north than all other human beings.

The book will be produced with great care, in two volumes of over 600 pages each. It will contain about 800 illustrations, 100 of which are full-page ones, together with a large number of maps and diagrams. It is printed in large readable type.

On the next page will be found Lieut. Peary's Preface, which describes the scope and contents of his book.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

PREFACE

THIS narrative has been written to supply a complete authentic record of my Arctic work,—a record which I owed it to my family, my friends, and myself, to put in permanent form. It is my first and only book, and it covers all my Arctic work.

It contains the cream of my Arctic material, literary and pictorial. The reader will find no padding. My constant aim has been condensation. The reader will find neither résumés of previous work, nor constant reference to other explorers. This is not because I do not appreciate their magnificent achievements, and have not profited by the experience of Kane, Hayes, Hall, Greeley, Melville, and the long list of my gallant countrymen, as well as those of other[1] countries, my predecessors, but because I have no room or right to rehash their experiences and results. The interested reader can go to their original narratives, and there learn, in their own words, as much or as little of their work as he pleases. As to constant comparisons with the work of others, the cursory reader will not care for these. The specialist can make them himself.

The constant incentive in my work has been an ineradicable feeling that I saw something before me

[1] Lest my omission of the name of Nansen should give rise to erroneous impressions, it is to be borne in mind that though Nansen's books precede this narrative my *work* antedates his.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000004

مكتبة قطر الوطنية
Qatar National Library

worthy and possible of accomplishment, and that I could never have content until it was done, or I had satisfied myself that I was not the one to do it.

While it is hoped the narrative itself will not be lacking in attractiveness, yet I feel, outside of this, that it and the accurate and profuse illustrations, most of which are not only "pictures," but typical studies of the features and objects which they represent, will prove of pronounced educational value in showing what the Arctic regions, with their inhabitants and the phases of life there, are really like.

While I have endeavoured in these pages to carefully sum up the general aspects and results of my work, I desire it to be clearly understood that I have made no attempt to have the data I accumulated set forth with scientific fulness and detail.

It has been my aim to make this book worthy of, and adapted for, the most general reading, yet at the same time, to give it a character that may, I trust, secure for it the attention of Arctic students and scientific specialists.

My expeditions have gathered valuable scientific material in ethnology, meteorology, geography, and natural history. This material has not as yet been digested and collated by experts. When it has, it will be presented in monograph form.

Dependent upon the results of my coming expedition, this book will clear the field for something further, or will form the complete record of my Arctic work.

R. E. PEARY

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

are practically devoid of glaciers down their west coast, and have large glaciers in the east. The whole of the south-east of Edge island is occupied by a great glacier ending in the sea. Barents Land has several sharply pointed peaks, but the Edge island hills are mainly flat-topped, like those along the east coast of the main island.

Prince Charles Foreland now alone remains to be considered. It is very badly represented on the existing chart. At its southern extremity is an isolated hill. Then comes a very flat plain of about 50 square miles, raised but a few feet above sea-level. Next comes a mountain range consisting of fine, sharp snow-peaks. It is cut off on the north by a deep depression, running in a south-west direction from Seehonde bay, which, though marked south of St. John's bay on the chart, lies some miles north of it. North of Seehonde bay and valley the mountain range is continued, but the peaks, though fine in form, are not so high as those of the south group, but they send down eastward an almost uninterrupted series of glaciers into Foreland sound. Further north are yet lower snowy hills, which end in the bold headland called Bird's cape or Fair Foreland.

Before the reading of the paper, the CHAIRMAN (Sir Charles Wilson, Vice-President) said: I am sorry to say that our President is confined to his house by a bad cold, and he begged me to make his excuses for not being here this evening.

Sir Martin Conway is so well known to you all, that it is quite unnecessary for me to say any words of introduction, and I will ask him at once to commence his lecture on "An Exploration in 1897 of some of the Glaciers of Spitsbergen," which I am sure will be very interesting.

After the reading of the paper, the following discussion took place:—

The CHAIRMAN: There are several gentlemen here who I think we should like to hear this evening, and I will first of all call upon Mr. Garwood, who was with Sir Martin Conway in his last expedition.

Mr. E. J. GARWOOD: In deference to the request of our Chairman, I rise to say a few words, although I am afraid the time is getting late. I must ask you to make allowance for my feelings, labouring as I am under the novel sensation of possessing, for the first time in my life, some real territory of my own. Having been told before the meeting that you might like to hear a word or two about the geological features of the country which we explored this year, I have purloined one or two of my slides from Sir Martin's box with which to illustrate the subject.

The first point to which I should like to allude is the height of the snow-line in Spitsbergen. Many of you may be under the impression that in Spitsbergen the snow-line comes down to the sea-level. Before my visit two years ago, I imagined that the typical scenery so characteristic of our own climate was totally absent from the arctic regions; that is to say, that curious denudation curve, that logarithmic curve, so characteristic of a humid climate like our own, and so well seen in the valleys of Scotland and the lake district in Cumberland. I was surprised, however, to find that in the low valleys, where unoccupied by glaciers, this was not the case. We have there true denudation curves produced even up to a height of 1200 to 1500 feet on the western coast of Spitsbergen. This is well seen in photographs of the northern slope of the Trident, in the Sassendal, where the beautiful curve and the wonderfully symmetrical gullies are evidently the work of running water acting during the short summer months.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005f

مكتبة قطر الوطنية
Qatar National Library

In our explorations in the more glaciated district further to the north last summer, about which Sir Martin has told you to-night, we found scenery of a markedly different type.

Rising as they do through the inland ice system, whose surface in the interior of King James Land stands at a height of upwards of 3000 feet, the mountain ridges stand out with sharp and cleanly cut contours. These nunataks show a marked absence of the denudation curve alluded to above, and their bold and precipitous outlines are evidently the work of frost alone. This is especially apparent in the range of peaks of which the Three Crowns form the most westerly outliers (Fig. 3).

Without entering into the detailed geology of the district, it is interesting to note the influence exerted by the geological structure on scenery sculptured by frost alone. This influence is much more marked here than it is in a humid climate, where the surface features have been carved by the action of water.



FIG. 3.—THE THREE CROWNS, KING'S GLACIER.

The terminal pyramids of the Three Crowns are composed of carboniferous dolomite, lying nearly horizontally, and traversed by well-marked vertical joints. It is along these planes that the action of frost is most marked, resulting in the production of perpendicular cliffs, frequently quite inaccessible. A sharp line can, however, be drawn at the base of this formation, where it rests on the purple Devonian (Silurian?) shales. In the latter formation, the absence of joints and the friable nature of the shales has resulted in the formation of gentle scree slopes, forming an angle of some 140° with the limestone cliff above. It is thus that we have produced the characteristic rock forms to which the name of the Three Crowns has been so aptly applied. The clean-cut diadems of golden dolomite cushioned on the purple folds of their Devonian pedestals stand like silent monuments of vanished empires.

It is always pleasant to meet old friends, and the fossils enclosed in the limestones recalled days spent on the slopes of Ingelboro', while the fish remains entombed in the Devonian shales had close affinities with the classical collections from the Old Red Sandstone of our own islands.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Here and there, as at the base of the Pretender, rise islets of an earlier age, lifting their heads through their icy covering, and I am proud to state that my patrimony to the East also dates from these Archæan times.



FIG. 4.—THE SUMMIT OF THE KING'S HIGHWAY.



FIG. 5.—HIGHWAY DOME, KING JAMES LAND.

The position of these carboniferous rocks to the north of Highway glacier requires a word of explanation. Their occurrence here appears to be due to a vast

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000055

مكتبة قطر الوطنية
Qatar National Library

dislocation or thrust running south-west from King's bay, which has brought up the older schists on the south side, and let down the whole of the carboniferous area

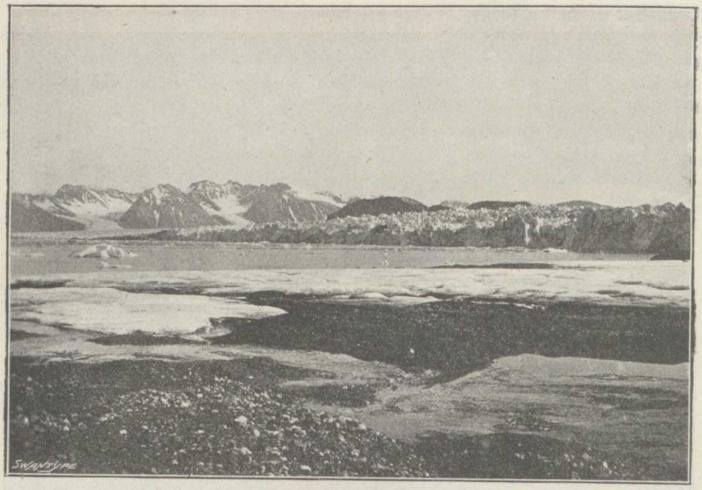


FIG. 6.—KING'S GLACIER AND BAY.



FIG. 7.—THE LAST CAMP NEAR MOUNT CHEIDENIUS.

on the north, for we find patches of carboniferous rocks let in against the schists on the south side of Highway pass. The disturbance curves somewhat on the south

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000051

مكتبة قطر الوطنية
Qatar National Library

shore of King's bay, causing the carboniferous beds to be tilted on end, and run as a broken ridge across the entrance of Ice fjord and Bell sound, in which latter bay the ridge forms the interesting little Axel island.

I would call your attention to some novel and somewhat interesting structures which we met with this year. They occurred both on the ice of Nordenskiöld glacier, and also on the King's glacier at the foot of the Pretender. They consisted of long arched tunnels running in parallel rows on the surface of the ice, and rising from 3 to 8 feet in height above the general level of the glacier. When we first saw these tunnels on Nordenskiöld glacier, we were inclined to attribute them to surface streams frozen in winter and arched by expansion into their present forms, but after a careful examination of those at the foot of the Pretender, I have come to the conclusion that they result from the snow bridges which here, as in Switzerland, span the crevassed portions of the ice, but which here, owing to the rapid melting and intense frosts, are converted into ice. On reaching smoother and more

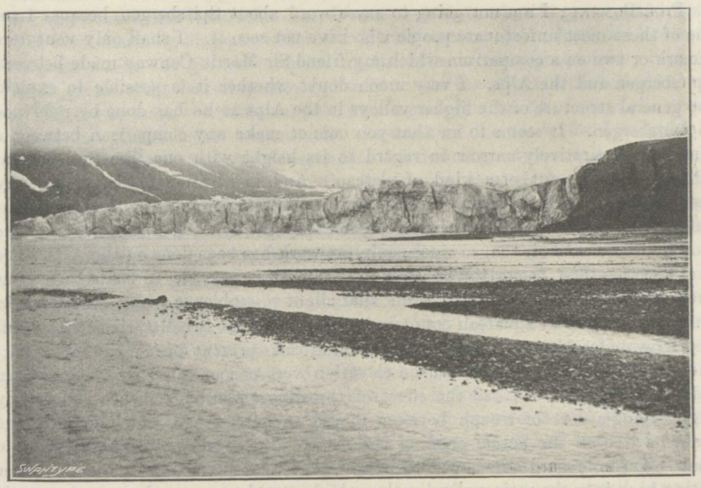


FIG. 8.—NORDENSKIÖLD GLACIER CAMP.

level reaches of the valley, the walls of the crevasses close up, and the bridges are thus forced up into these arched tunnels by lateral compression.

An interesting result of river-action which we came across this year on the ice consisted of horizontal tunnels excavated, not on the surface of the glacier, but in the heart of the ice. One of these, which occurs on the left bank of Highway glacier, had a diameter of 12 to 15 feet, and was nearly circular in section. It was evidently produced by the discharge of a lake which formed between the ice and mountain range to the south, along the line of the thrust-plane described above. This lake would be dammed up every spring by the winter snow, but in summer it would empty itself almost instantaneously as soon as the barrier was broken through. In rushing through the ice-tunnel it carried with it innumerable fragments of rock, which it deposited all over the floor of its channel. This channel ran at right angles to the direction of Highway glacier, and we have here an instance of one possible origin of the gravelly ridges known in our own country as *kames*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and *eskers*; for on the retreat of the ice now occupying Highway valley, this material will be deposited on the floor of the valley, forming a ridge of gravel containing glaciated and water-worn fragments running at right angles to the final drainage-line of the district.

If we examine photographs taken from Mount Nielson, and looking south-east across the island, it will be seen how little was known of the interior previous to our visit; for instead of the "High inland ice" which appears written across the chart at this place, we find, as shown by the photographs, ranges of mountains stretching across the island to North fiord (Figs. 4 and 5).

I cannot resume my seat without attempting to bring home to you something of the beauty and delicacy of the colouring, which is such a characteristic feature of midnight scenery on the coast (Figs. 6 and 7). The photograph (Fig. 6) was taken about 1 a.m., while cruising along the shore of King's bay, threading our way in the whale-boats through the countless icebergs broken off from the front of the King's glacier.

Prof. BONNEY: I am not going to say a word about Spitsbergen, because I am one of those most unfortunate people who have not seen it. I shall only venture a remark or two on a comparison which my friend Sir Martin Conway made between Spitsbergen and the Alps. I very much doubt whether it is possible to explain the general structure of the higher valleys in the Alps as he has done by reference to Spitsbergen. It seems to me that you cannot make any comparison between a district comparatively narrow in regard to its height with one like Spitsbergen, which is carved out of a kind of plateau. And, in addition to that, I may say that the present Alpine valleys seem to me to follow the ordinary lines of denudation, and resemble valleys that have been excavated by water in most parts of the world. But the fact is that so much sculpture work has been done on the Alps since the time they first began to rise that it is almost impossible to conjecture what their original structure was. I think that slight resemblance which he detects in one or two places to a plateau country, is the effect of the two disturbances the central Alps underwent while they were assuming their present form. In that district the great disturbances of the second elevation were concentrated on the northern side, and this no doubt had the effect of throwing that range rather abnormally high, giving a sort of trough between it and an outer range, which may at one time have been the actual crest of the ridge. But I do not think it possible that we can regard the lower Aletsch glacier as made by a small glacier eating back into the main upland valley which once, he presumed, drained towards the Rhone. Because of this—the structure of the Alpine valleys is certainly preglacial; that you can see in every part. You may notice it in the Pontresina district, and in the Val Bedretto. You can see in those very hard rocks that the glaciers have been down in that narrow V-shaped valley almost in the water's edge. Well, in addition to that, when you come to look at the cirques in the limestone districts, one cannot see how those can have been eaten back very appreciably if their beds were filled with *névé*, and further, it is evident from the way they are connected with the valleys, that if the valleys themselves were occupied down to their present beds by ice, so too the beds of the cirques must be occupied. But it may be said, perhaps, there were glaciers before the days of the great ice-age. No doubt, but still, were they glaciers of much importance? When the Alps were first upheaved, the temperature of Switzerland must have been at least 16° higher than it is at present. The effect of that would be to change the position of the snow-line, and, assuming the Alps to be at their present elevation, if the mean temperature were 16° higher than it is at present, you would practically have no glaciers at all, because the snow-line would be about 13,000 feet. With

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000004

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

that it would be impossible to talk of this cutting. No doubt the temperature fell steadily to the ice-age, but my point is that, putting the two things together, namely, the valleys having existed before the ice, and the improbability of there having been any great masses of ice, it is very improbable that material changes, such as the tapping of that upland valley by ice now forming the lower portion of the Aletsch glacier, ever would have occurred. I think, therefore, my friend Sir Martin Conway has really tried to stretch a truth to rather more than it will bear. He has, no doubt, spoken of what is a true cause in modifying the heads of glaciers, but I do think we cannot call it more than a secondary cause, and, at any rate, whatever may be its effect in Spitsbergen—and I cannot say anything about that, because I have not been there—I do not think it has produced any material effect in modifying the structure of the Alps.

Mr. Marr: I have, in the first place, to thank the lecturer for his very able and interesting paper. Geologists are apt to state that geology is the geography of past times. Of course, you may at once retort that shows geologists are geographers not up to date. As it is rather late, I want to refer to one thing only, and that is that very charming diagram which Sir Martin Conway showed on the screen, the diagram where the glacier extended up the hillside, and was gradually robbing a larger glacier; the tear-drop extended until at last the whole of the hillside seemed to dissolve in tears. I would suggest, from a geological point of view, the robbery would have been better without the extension of the tears, for I believe that, although the glacier is largely responsible for draining off one valley system into another, the process is not due to the upper extension of the glacier, but to the action of the weather on the solid rock. The glacier is simply responsible for clearing away the *débris* which the weather has brought down, so that I fancy Sir Martin would make his case better if he did not put that upward extension in.

Sir Erasmus Ommanney: As an old arctic navigator, I wish to express my admiration of what has been accomplished by this expedition. We are extremely indebted, I am sure, to Sir Martin Conway for striking out a new line of exploration in the arctic regions. Whatever we have done hitherto has been by coast navigation; he has had the courage to undertake the inland exploration, and to bring before us the physical features of the interior of Spitsbergen. Sir Martin Conway's experience as an alpine traveller has been able to provide us with the information he has brought us to-night. I believe that we have rarely had a traveller who has brought before us so vividly and so graphically all that he has seen. He has derived a vast amount of glacier information with such a very small party, from the highest elevations as yet attained in Spitsbergen.

Dr. J. W. Gregory: I have listened to the paper to-night with very great pleasure. It was my privilege two years ago to accompany Sir Martin Conway on the expedition to which the one just described was the sequel. Of the country which has been so graphically described by Sir Martin Conway, and which has been so beautifully illustrated by Mr. Garwood's lovely photographs, we caught occasional glimpses in 1896; in that year, as in 1897, the district appeared to be always bathed in sunshine, which was very tantalizing to us then, as we were nearly always wrapped in fogs. But last year Sir Martin Conway and Mr. Garwood had the benefit of the sunshine, and we have had the benefit of it to-night in the photographs which it enabled them to take. In regard to the geological theory in Sir Martin Conway's paper, I agree with the views expressed by Prof. Bonney, and I feel considerable doubt as to how far the agency invoked has been a valuable factor. No doubt it is a true cause, and must have some influence, but the question is whether it is the secondary or the primary cause of changes. The Alpine valley system in the main dates from pre-glacial times, and it is almost impossible

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to ascertain how far the system has been modified by post-glacial changes. I heartily congratulate Sir Martin Conway and Mr. Garwood on their perseverance in returning to the country, and on the valuable results they have brought back.

Sir HENRY HOWORTH, M.P.: I have little to say except to emphasize what has been said so well already. I should like to add, however, that, being a member of Parliament, I have been delighted at the number of graceful adjectives these gentlemen have at command. In regard to the theoretical part of the issue raised by my friend Prof. Bonney and my friend Sir Martin Conway, there is this advantage—that what they have had to put forward is at all events consistent with the laws of physics and with the laws of ice-movement. Occasionally we have had to deal with some terrible theories which have been consistent with neither. The first paper I ever read in my life was when I was seventeen, when I read a paper before this Society on the areas of land that are rising round the two poles, which I mapped out and showed to be fairly continuous. One of the interesting points about Spitsbergen is this—that the evidence shows plainly that very recently the Spitsbergen archipelago has risen from the sea to a very considerable extent, and in that way its climate has been altered very much for the worse. Baron Nordenskiöld showed me some wonderful post-Tertiary shells he had found in Spitsbergen, and pointed out that those shells are not found in Spitsbergen now, but prevail in Southern Norway. This is another strong proof of the same fact. Just as the case of Greenland, where we have the same recent change in climate attested by the fact of the land having risen in the first place, and secondly by the occurrence of similar shells. Possibly the most arctic conditions that ever existed in these islands are not in periods that have gone by long ago, but in the current period; and that while we were suffering from tremendous glaciers in the old days, it would appear—and that is the view of more than one recent Danish explorer in Greenland—that the climate and the temperature were very much more moderate than they are at present in these high latitudes. I must, in conclusion, again repeat how delighted we have all been, both at the graceful discourse and the photographs, and I would say, that if ever I travel in these regions, there is no person other than my wife with whom I would rather travel than with one or other of these two graceful persons.

The CHAIRMAN: I think, at this late hour of the evening, it is almost time to close the meeting. I therefore ask you to allow me to return thanks to Sir Martin Conway for his eloquent lecture. We must all admire the way in which he attacked Spitsbergen, and he has brought the results of his journey before us in a very pleasant manner. I hope you will allow me to include in the vote of thanks Mr. Garwood, whose photographs have given us better pictures of the country than we have ever seen before; in fact, I think they are amongst the best photographs of arctic scenery that I have ever seen at the Society's lectures.

MR. FRAZER'S PAUSANIAS.*

By the Rev. H. F. TOZER.

A NEW edition of Pausanias' 'Description of Greece,' in which that work should be illustrated by the light which modern discovery has thrown on the subjects with which it deals, has long been a *desideratum* among

* Pausanias' 'Description of Greece.' Translated with a commentary, by J. G. Frazer. In six volumes. London: Macmillan & Co. 1898.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

scholars and classical archæologists, but the greatness of the task has hitherto discouraged the boldest spirits from attempting it. For Pausanias' book is in its way unique in literature. Nowhere else can we find so complete an account of an ancient country, especially in respect of the buildings and works of art which it contained. And the period at which it was composed was eminently suitable for such a task, for at no time, in all probability, had the monuments of Greece been so numerous and in so good preservation as they were in the middle of the second century of our era when Pausanias wrote. In places, indeed, decay had then already begun, but this was compensated by the work of restoration which shortly before that date had been promoted by the Emperor Hadrian. But, in addition to remarkable industry in observing these objects, and carefulness in noting down their details, Pausanias was possessed by an extraordinary curiosity concerning the legends and superstitious beliefs which were attached both to the sacred relics preserved in the temples and to natural features of the ground, such as fountains and groves; and stories connected with these are of constant occurrence in his narrative. Now, in respect of both the subjects by which the old archæologist was thus attracted, an extraordinary advance in knowledge has been made during the last half-century. This has been pre-eminently the age of excavation in Greece, so that, in the course of it, one after another of the most famous ancient sites in that country have been exposed to view, and it has thus been possible to verify the statements of Pausanias on the spot, through the discovery of the buildings and statues which he saw, or of inscriptions relating to them. Again, during this period there has been a remarkable development of the study of folklore, and of the branches of anthropology which are akin to it; so that in numerous instances the portents and marvellous stories which Pausanias records can be paralleled by tales and customs which have been discovered in distant parts of the world, and, instead of being regarded as mere curiosities, can, to some extent, be classified. It is clear that the competent editor of Pausanias should be one who is well versed in both the studies which have just been mentioned.

Such an editor has been found in Mr. Frazer, and the six handsome volumes which compose the present edition furnish ample evidence of his competency for the task. The first of these contains Mr. Frazer's introduction, and his translation of Pausanias' work, by means of which it is brought within the reach of other than classical students; and with the same object in view Mr. Frazer has avoided the use of technical phraseology in his notes, as far as is compatible with a scientific treatment of his subject. The English of the translation is clear and good, and, when the style of Pausanias admits of it—as, for instance, in the history of the Messenian wars—it rises to more than average excellence. The last volume comprises the two indexes, the larger of which, a very

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008b

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [285v] (73/154)

complete one, is devoted to the work itself, the smaller to the notes. The four intermediate volumes contain Mr. Frazer's commentary, which is his most important contribution to the subject. In this the statements of Pausanias are throughout made the starting-points for discussions of theories and for the introduction of fresh information; but to describe it as a body of notes explanatory of that author would give an entirely erroneous view of its contents, especially as regards its archæological side. In reality, it contains a full account of the discoveries that have been made in Greece up to the present time, together with summaries of the views which have been held concerning the identification of localities and buildings and works of art. The labour which this task represents is enormous, and its value to the student is correspondingly great, because the material from which the information is drawn is largely to be found in foreign periodicals and books in various languages, many of which are not easily accessible. Mr. Frazer has also shown great penetration and a well-balanced judgment in deciding between the conflicting opinions, to which, as might be expected, these discoveries have given birth. In addition to this, he has himself travelled extensively in Greece, and has described a large number of the most important sites from his own observation; by which means the notices of the localities mentioned are rendered more lifelike, and the severity of the scientific treatment of the subject is modified by the introduction of personal impressions. Mr. Frazer's learning is not less conspicuous in those parts of his commentary which deal with folk-lore, a study with which he had previously shown himself thoroughly conversant in his book, 'The Golden Bough.'

It is no easy matter to give the reader even an approximate idea of the contents of a work of such magnitude as this; it must suffice, by way of illustration, to mention a few instances of what is to be found in it under various heads. As might be expected, the largest amount of space has been devoted to those places where excavations have been carried out on the greatest scale. Thus to Olympia, the ruins of which were laid bare at the expense of the German Government, 153 pages are allotted; and this allowance does not appear excessive, when we consider that Pausanias devoted the greater part of two out of his ten books to that place. It includes also Prof. Treu's restorations of the gables of the temple of Zeus, and Mr. Stuart Jones's conjectural reproduction of the chest of Cypselus from Pausanias' description. To Delphi, the scene of the latest operations of the French School of Athens, 151 pages are assigned; and in this part will be found an account of the serpent column that supported the tripod commemorative of the battle of Platæa, which was dedicated at Delphi, but was removed thence by Constantine the Great to Constantinople, where the column is still standing in the Atmeidan, or hippodrome. In like manner, the work of the British School at Megalopolis, that of the American School

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [286r] (74/154)

at the Heræum of Argos, and that of the Greek Archæological Society at Eleusis, and at the Hieron of Epidaurus, receive their due share of attention. Mycenæ, too, is well described, and the important questions connected with it—the date and origin of the Mycenæan civilization, the relation which it bore to that which is described in the Homeric poems, and the race to which the Mycenæan people belonged—are discussed with excellent judgment. Mr. Frazer's opinion is that the Mycenæan art was of native development on the shores of the Ægean, though certain elements in it came from Egypt and Syria; that the forms of that civilization which are found in Crete represent an earlier, the Argolic forms a later, stage in its development; and that the Homeric period was somewhat posterior to that which is represented at Mycenæ.

As regards the geographical features of Greece, perhaps the most important notices which are met with in this work are those which treat of the underground passages, which form the only outlets of the water that collects in many of the inland valleys of that country. The most remarkable instance of this phenomenon is found in the basin of the Copaic lake, and this is especially interesting at the present time, because that piece of water has quite recently been drained by the construction of artificial passages to carry off its waters, and the area which it previously covered is now a cultivable plain. Mr. Frazer has given us an account, mainly derived from his own observation, both of the modern system of drainage by which this change has been effected, and of similar attempts which were made in antiquity, for of these latter conspicuous traces remain. The corresponding features which are found in the lakes of Pheneus and Stymphalus in Arcadia, and the periodical disappearances of those pieces of water arising from the opening of the subterranean passages which drain them, are also interestingly described. An equal tribute of praise must be given to the discussions of the arguments relating to certain localities which are disputed at the present day. Conspicuous among these is the question of the position of the fountain of Enneacrunus at Athens. Pausanias' description of this has long been a standing puzzle, for he evidently conceived of it as lying in the valley between the hills of the Pnyx and the Areopagus; and Dr. Dörpfeld, who has recently excavated this neighbourhood, has with great, though somewhat over-subtle, ingenuity maintained the correctness of this view. Mr. Frazer, however, is so strongly impressed with the waterless character of this site, and with the almost unanimous testimony of ancient writers in favour of the traditional position of that fountain in the neighbourhood of the bed of the Ilissus, that he decides unhesitatingly against his author and his modern champion. In respect of another disputed point in Athenian topography—the position of the river Eridanus—Mr. Frazer is at one with Dr. Dörpfeld. This stream has usually been identified with the one which rises at the monastery of Kæsariani, on the side of Mount Hymettus, and joins the Ilissus on

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000002

مكتبة قطر الوطنية
Qatar National Library

its left bank, and this view was still maintained by Ernst Curtius in his latest work, 'Stadtgeschichte von Athen' (1891). But Dr. Dörpfeld, relying on the statements of ancient writers concerning the objects which are in its neighbourhood, and especially on the remark of Callimachus, that in his time its water was so foul that cattle would not drink of it, concludes that the Eridanus flowed from the south-western slopes of Mount Lycabettus, and passed through the northern part of Athens, in doing which it would easily be converted into a public sewer; and these arguments appear to Mr. Frazer to be conclusive.

The maps and plans which accompany these volumes are of great service in elucidating the text, and the numerous illustrations will be invaluable to students of Greek sculpture. Altogether, Mr. Frazer is to be congratulated on having produced a monumental work, which is a storehouse of learning and research.

PROPOSAL FOR AN EXPEDITION TO SANNIKOFF LAND.

By Baron E. von TOLL.

On the oldest map of the New Siberia islands, dating from the year 1811, the outlines of two lands are marked, and they bear the inscription, "Land sighted by Sannikoff." One of these stretches on the map from the meridian of the northern point of the Fadeyev island to the longitude of the "High Cape" of the New Siberia island, while the other is marked in the north-west of the island Kotelnyi.

Jacob Sannikoff was a Yakutsk merchant,* who undertook a series of bold journeys to the New Siberia islands from 1805 to 1811, and was first a *promyshlennik* (hunter) in the service of Syrovatski, who had then the monopoly of exploitation of mammoth-tusks in the Liakhov islands; later on he accompanied Mathias Hedenström in his journeys. Sannikoff was one of the discoverers of the New Siberia islands, and we are indebted to him for some very important information concerning the peculiar nature of the islands, which information was transmitted to the world through Hedenström's writings. The first, although unsatisfactory, topographical survey of the islands was made by the topographer Pshenitsyn. Sannikoff was also the first to spend a full summer on the northern island of the New Siberia archipelago. During that stay, he had the opportunity of sighting with his sharp eyes, on clear summer days, those two lands situated the north of the islands, Kotelnyi, Fadeyev and New Siberia, and their supposed outlines were marked on the above-mentioned map according to his indications. His and Hedenström's attempts to reach those lands in sledges drawn by dogs were, however, unsuccessful, because open spaces amidst the ice (*polynias*) soon compelled both explorers to return.

Ten years after the completion of the Hedenström and Sannikoff's journeys, the Imperial Russian Ministry of the Navy sent out the well-known expedition of Lieut. Anjou, which had to settle the topography of the New Siberia Islands, as well as the question relative to the existence of the lands sighted by Sannikoff. After two unsuccessful attempts, made in 1821 and 1822, to overcome with dog-sledges the obstacles offered by the *torosses* (ice-heaps) and *polynias*, Lieut. Anjou declared, in a report addressed to the authorities in 1822, that he was ready to renew the attempt in a boat, starting from the island Kotelnyi, or Fadeyev, but

* More correctly a burger (*myeschanin*) of Zyryan origin, as his descendants said.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003c

مكتبة قطر الوطنية
Qatar National Library

that it was impossible to attain those lands in dog-sledges. However, his proposal was not accepted, on account of the considerable danger which it offered, and Anjou returned in 1823, after having made his last sledge-journey along the coasts of the New Siberia Islands, with the full conviction that, "within the distance which could be attained with the means at hand, there was no land in the north of the islands, Kotelnyi, Fadeyev, and New Siberia."

On the authority of Anjou, the "lands sighted by Sannikoff" disappeared from the maps, until full sixty years later, *i.e.* in 1881, the tragical expedition of De Long confirmed, by the discovery of Bennet Land, the existence of the land sighted by Sannikoff from the "High Cape" of New Siberia. This discovery gave support to the idea that the other land, which Sannikoff saw from the Kotelnyi island, but of the existence of which Anjou was doubtful, was not merely an optical mistake, and consequently a dotted shore-line reappeared on the maps, with the name of "Sannikoff Land."*

In the mean time, the tradition about the existence of the land that Sannikoff saw in the north of Kotelnyi island was maintained amidst the *promyshlenniki* (hunters), because those of them who had visited the Kotelnyi island confirmed Sannikoff's statements. In reality, I could convince myself of the exactitude of this affirmation in 1886, during the expedition which was sent out by the Imperial Academy of Sciences, under the leadership of Dr. A. Bunge. On August 13th I saw, during quite clear weather, from the mouth of the Mogur river ("Sannikoff river" on Anjou's map), under 79° N. lat. and 139° E. long., in the direction N. 14° to 18° E.,† the sharp outlines of four truncated cones like table mountains, from which a low foreland extended towards the east. At that time I had no possibility of making an attempt to reach that land. A solid ice-crust seemed to stretch from Kotelnyi island to Sannikoff Land. Perhaps the *polynia* was at that time closed by floating ice, or it opens only during the cold season and after strong storms. At any rate, in order to cover the distance of about 200 kilometres (130 miles) to Sannikoff Land, both dog-sledges and a good boat would have been required, while I had at my disposal only ten worn-out reindeer, with which I had undertaken to make the round of the island. I was bound to return southwards to my headquarters, the winter hut at Uranalakh, where my dogs recovered their forces for the return journey to the mainland. True that a boat had been made there in the mean time out of driftwood, with the aid of a keel and ribs which had been brought from the mainland. But, "uneven-bowed and leaky" as that boat was, it could only be used on August 23 to 25 for a few trips along the coast amidst the ice-floes; it was impossible then to think of a dash towards Sannikoff Land.

In the year 1893 I once more put my foot on the Kotelnyi island, during a rapidly organized excursion, which lasted from May 2 to June 8, and which I made on dog-sledges, but having no boat with me. My main working field was at that time further west, on the Anábar. While I was there, in August and September, the *Fram* sailed along the coast of Siberia towards the New Siberia islands, and passed by Sannikoff Land. Fridtjof Nansen's diary has, under the date of September 20,

* This was done, first, at the proposal made by A. Grigoriev, in his paper, "Sannikoff Land," in connection with the discovery of the expedition of the *Jeannette* (*Izvestia* of the Russian Geogr. Soc., vol. xviii. (1882), fasc. 4, pp. 264–267); also Fr. Schmidt, "Remarks concerning Nordenskjöld's 'Circumnavigation of Asia on board the *Vega*,'" in *Beiträge zur Kenntniss des Russischen Reiches*, II. series, vol. vi. (1883), pp. 355–356.

† Anjou determined the position of the mouth of Sannikoff river as 76° 2′ 3″ and 136° 33′ E. of Paris. His magnetical constants are 16° 40′ E. and 82° 57·7′. Consequently, the mountains of Sannikoff Land ought to have been marked on the map due north of the northern extremity of Kotelnyi island.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000046

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the following inscription: "We now held (in lat. 77° 44′ N.) north-west along the edge of the ice. It seemed to me as if there might be land at no great distance; we saw a remarkable number of birds of various kinds. A flock of snipes or wading birds met us, followed us for a time, and then took their way south. They were probably on their passage from some land to the north of us. We could see nothing, as the fog lay persistently over the ice. Again, later, we saw flocks of small snipe, indicating the possible proximity of land. Next day the weather was clearer, but still there was no land in sight. We were now a good way north of the spot where Baron von Toll has mapped the south coast of Sannikoff Land, but in about the same longitude. So it is probably only a small island, and in any case cannot extend far north" ('Farthest North,' I. p. 203).

It appears to me, from Nansen's words, that in his opinion the *Fram* was on that day on the north of Sannikoff Land, and that the birds which he saw were returning from some other unknown land. I believe, however, that the flocks of snipes must have been flying from Sannikoff Land, and that the *Fram* probably was at that moment south of that land. I myself am, to some extent, the cause of that mistake—if mistake there is—because Nansen based himself on my preliminary sketch-map, upon which I had roughly traced the southern extremity of Sannikoff Land in the year 1887. I think, however, for reasons which will be better understood from the following, that in reality Sannikoff Land is situated further north than where I had traced it on the said sketch-map. If it be so, the considerations which made Nansen conclude that that land is but a small island are removed.

The mountains of Sannikoff Land, which I saw through the telescope, very much reminded me by their shapes of the basalt cones of the Svyatoi Nos, as they appear to the eye from the southern shore of the great Liakhov island. The forms of the mountains of the Sannikoff Land thus authorize us to believe that these mountains consist of basalts, like the mountains of Bennet island, the southern point of which (Cape Emma) is said to consist of the same rock, according to the diary of De Long. As to the distance between Sannikoff Land and the Kotelnyi island, we may estimate it as follows:—

When we take into account that the height of the trap, or basalt mountains, in Arctic Siberia altogether is subject to but small oscillations, and, at any rate, seldom exceeds 1200 feet, and that the mountains of the Svyatoi Nos, looked at from the south coast of the Liakhov island, at a distance of about 45 miles, appear to be twice or thrice as high as the mountains of Sannikoff Land, we may conclude that the distance between Kotelnyi and Sannikoff Land is twice or thrice as great as the above—that is, from 100 to 125 miles, or from $1\frac{1}{2}$ to 2 degrees. I conclude, accordingly, that the south coast of Sannikoff Land must be located under about the 78th degree of northern latitude.

As to the probable extension of Sannikoff Land, and the question whether there are to be expected other islands besides those which have been discovered by De Long,—the Bennet, Henrietta, and Jeannette islands—we have, in my opinion, some established points, which permit us to express, with due caution, the following suppositions:—

1. It must be remembered that the traps, which have a wide extension in Siberia, always appear in massives not far apart from each other. Their distribution answers to certain tectonic lines, along which they pierce the sedimentary rocks, whether the latter, being horizontal, build up plateaus, or whether they take the shape of folded series of parallel ridges. The trap mountains are volcanic mantles which spread over the sedimentary deposits; occasionally they have maintained the forms of volcanoes with well-determined craters. Bennet island seems also

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to contain, besides the basalts, beds of lignite, which may be considered with great probability as a continuation of the tertiary lignite beds of New Siberia which appear under the same longitude, and are known as the "Wood mountains." The similarity of structure between New Siberia and Bennet island is thus evident, and it is permissible to suppose that Sannikoff Land and Bennet island represent only parts of a trap region having a certain extension.

2. De Long found on Bennet island the antlers of a reindeer, about which he was not certain whether they belonged to a recent or to a fossil individual. In the first case, we could admit either that Bennet island has such a climate as permits reindeer to sojourn there—which would naturally seem highly improbable—or we should be bound to admit that the antlers belonged to an animal which came from New Siberia, and would have been killed in the island, which also seems to me a rather forced explanation. But if these antlers were fossil, then the other contemporaries of the reindeer, the mammoth, the rhinoceros, the musk-ox, etc., whose remains are so characteristic of the New Siberia islands, must also have lived in Bennet island. We should then expect to find in Bennet island and Sannikoff Land the same geological features as in New Siberia. Further, we should then have to conclude that the coast-line of the Post-pliocene Siberian continent not only included the New Siberia islands—which has been firmly established by the two last expeditions of the Academy of Science—but that this old coast-line must be traced still further northwards. How far this old continent—which, like New Siberia, is now broken into an archipelago—stretched northwards, and whether it ended at the spot where Nansen found, in 79° N. lat. and 140° E. long., a depth of 1050 feet, or whether it stretched further to the north and the north-east of the course of the *Fram*, is precisely a most interesting geographical question.

3. One of the results of Nansen's *Fram* expedition is the highly important fact that the drift of the *Fram* was not a continuation of the drift of the *Jeannette*, but, although both had the same origin, the latter was to the north of the former.* What is there producing this bifurcation of the current? I cannot answer this question otherwise than by the supposition that there are lands lying in the north of the New Siberia islands, which lands need not stretch, of course, as far as the pole, but must have a sufficient size to produce the said bifurcation of the current.

4. In the drift course of the *Fram*, as well as along the route followed by Nansen and Johansen, it appeared that floating ice always drifted with a greater facility northwards, while it was mostly blocked when it was pushed south-eastwards—that is, in the direction of the archipelago which I suspect to exist.

If these considerations relative to the probable extension of Sannikoff Land and its belonging to an undiscovered archipelago be true, the whole matter is, of course, only about such masses of land as may have the size of Franz Josef's Land, but hardly the size of Spitsbergen or Greenland. *But even if the archipelago consisted only of Bennet island and Sannikoff Land, the urgency, from a scientific point of view, of an exploration of these two islands would not be smaller than if we expected there the presence of larger extensions of land.*

I will mention briefly the scientific aims of an expedition to Sannikoff Land.

It would be needless to bring further proof for the assertion that such an expedition, made with a ship, would have to solve a series of *oceanographic problems*, of which the first would be the investigation of the dependence, so unexpectedly found by Nansen, of the Atlantic ocean on the polar basin.

The *topographical* and *geographical* questions which the expedition would have

* Cf. also A. Supan, "Die Norwegische Polarexpedition, 1893-96," in *Petermanns Mitteilungen*, Band. xliii., 1897, pp. 130 *seq.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to solve, are already indicated in what has just been said. It need only be added that the working field of such an expedition would touch part of the unknown, *i.e.* never yet visited polar regions which reach the lowest latitudes in the eastern hemisphere.*

Among the physico-geographical researches, *geological* problems stand foremost. Some remarks on this subject have already been made in the exposition of the reasons which make one believe in the existence of an undiscovered archipelago in the north of the New Siberia islands. I will only add what solutions may be found in this region for most important questions relative to the latest periods of the history of our globe.

In the study of the Tertiary sediments which, as already said, must be expected to be found at Cape Emma, on Bennet Island, as a direct continuation of the New Siberia deposits, we meet with one of the most interesting problems, namely, How could sub-tropical plants thrive so near the pole under the present position of the Earth's axis of rotation? It is well known that in Greenland, Grinnell Land, Spitsbergen, and New Siberia, there are Tertiary deposits (Miocene?) which contain impressions of leaves and fruit-cones of several species of *Sequoia*, *Dammara*, and so on, as also large leaves of poplars and other trees which belong partly to a sub-tropical flora. Basing himself upon the words of Schiaparelli, who thinks that astronomy has nothing to object to a change in the position of the Earth's axis of rotation, if geologists prove the necessity of such an admission, Neumayer attempted to explain the, in his opinion, abnormal grouping of the Tertiary floras round the pole by the supposition of the pole having moved since the Tertiary age ten degrees from Northern Asia in the meridian of Ferro. In such case the pole of the Tertiary age would have been situated in the latitude of 80°, where this parallel passes through the archipelago which it is now proposed to explore. However, Nathorst, who has further worked out this theory, thinks that the pole ought to have been situated ten degrees southwards in the direction of North Asia, in which case, what was then the 80th degree of latitude would have passed, as it passed now, through the same archipelago.

The flora of the Tertiary "Wood Mountains" of New Siberia, which is now situated under the 75th degree of latitude, tells, in my opinion, against the theory of Neumayer and Nathorst. But Nathorst remarked that the fossil plants which I brought home in the year 1886, and which represent only fifteen species, are not sufficient to settle the point at issue. In that year I had but a few days for the exploration of the island of New Siberia and its "Wood Mountains," and I had but two dogs to transport my collection, my food supplies, and my baggage. How much better could the Tertiary deposits be explored during a year's stay in Bennet island, and how much more could be collected from the "Wood Mountains" if the collectors had a ship at their disposal for the home journey! I have no doubt that this new expedition would definitively settle the above question.

Another equally important problem is the Quarternary age. The original characteristics of the deposits belonging to that period have long since been explained for Europe and North America by the admission of a wide glaciation during the glacial period. As regards Asia, Prince Kropotkin was till lately alone in maintaining that parts of Asia, and especially middle Siberia, were also glaciated during the Quaternary period; but Northern Asia was considered till quite recently as having not been glaciated at all during the age when the Ice-period prevailed in the two other parts of the globe. Only my observations in the New Siberian islands in the year 1886, and at the mouth of the Anábar in 1893, and the testimony of

* Cf. A. Supan's 'Map of the Limits of the Unknown Polar Regions,' in *Petermanns Mitteilungen*, Bd. xliii., 1897, p. 15, plate 3rd.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005c

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [289r] (80/154)

BRITISH LIBRARY

Nansen about moraines and glacial striæ on the Taimyr peninsula gave positive evidence for the acceptance of glaciation in Northern Asia.* However, the observed facts seem to offer certain peculiarities, and to somewhat differ from the well-known traces of glaciation in Europe, so that a strict verification is required in order to levy *all* doubts. On the New Siberia island it is the "rock-ice," or the fossil glaciers as I have described them, which can be considered as the last vestiges of a former glaciation. The points of comparison between these fossil masses of ice and the present glaciers of the arctic regions cannot easily be found—the more so as the latter have been but insufficiently studied. Only the detailed investigations of E. von Drygalski, whose beautiful work has just been published, contain the basis upon which "rock-ice" can be better investigated.

If the rock-ice of New Siberia be a remnant of the old continental glaciation, as Drygalski is also inclined to accept with me, we may expect to find, on the islands farther north, the centre of radiation of that glaciation. A number of observations indicate that the motion of the continental ice-mass must have taken place in the New Siberia islands in a meridional direction. The exploration of the archipelago on the north of New Siberia will show whether this movement was directed from the north or not. Moreover, it will show whether I am right in my supposition that the Quaternary mammals of New Siberia inhabited a continent which had once a wide extension towards the north and the east, possibly being connected with America, and only gradually was cut into an archipelago. The sum total of the geological exploration of that archipelago, in connection with the comparative study of arctic literature of other regions, must finally throw new light upon the question whether the arctic islands altogether, with the exception of the New Siberia islands, which are undoubtedly continental islands—are remains of a broken up continent or not.

Going hand-in-hand with the geological observations, the *zoological* and *botanical* investigations will give further information concerning the just-mentioned question relative to the origin of these islands. It will appear whether their sweet-water fauna and flora are akin to the flora and fauna of the Asiatic continent only, or also contain an admixture of American species, or of such species as are characteristic of all other arctic lands. An equally great interest must be offered by *the study of the marine fauna*, and a still greater interest by the study of *the micro-organisms* in the snow flora and fauna, and especially in the fossil masses of ice.

The *meteorological* observations which would be made at a spot situated as far as possible north of the Siberian coasts would be of the greatest importance. They would give, so to say, a basis for the highly interesting meteorological observations which were made during the drift of the *Fram*, and consequently related, like all other travelling observations, to some new spot nearly every day.

As to the importance and necessity of observations on *terrestrial magnetism*, I permit myself to give, in connection with the subject, the following quotation only:—

"For our knowledge of the magnetic conditions of the Earth, the observations which we may make in the course of ten years cannot be a substitute for those observations which we lose the opportunity to make. What has not been done to-day is lost for ever; and the absence of these data will remain for ever a gap and a hindrance. Later on, but only after a long interval of time, it will, perhaps, be possible some day to reconstitute the present conditions in a theoretical way. But the perfection of the theory, which will be required for that end, will only

* Subsequently Vysotsky, who explored the lower Ob in 1896, and Inn. Lopatin, in the diary of his journey of 1866, which was only published in 1898, brought further proofs in favour of the glaciation of these regions.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

then be attained when we shall have made for a long time consecutive observations over the whole surface of the Earth." *

I now will pass from these theoretical considerations to the practical question, *How can Sannikoff Land be reached?* The attempts of Sannikoff in 1806–1811, and of Lieut. Anjou in 1821–1823, have shown that with dog-sledges the land lying in the north of the New Siberia islands cannot be reached, on account of the *polynias* (open spaces). On the other side this can easily be done in summer, in a boat, as has been proved by De Long, on his return journey from Bennet island to New Siberia. However, a serious scientific exploration of those lands would be impossible under such conditions. For science' sake, it would be necessary to winter on Sannikoff Land, and in such case the shipping of the necessary provisions on sledges or in boats would evidently be impossible.

The only appropriate way to reach Sannikoff Land would be to make the passage in a ship—from the mouth of Lena, as will presently be shown. As might have been expected, the *Fram* expedition has proved that it is possible to attain the latitude of 78°—that is, the latitude of Sannikoff Land—in a few days by simply following the ice-free drift of the waters of the Lena.† True that in this latitude the *Fram* was frozen, and the famous drift of the unconquerable ship began therefrom. But it must not be forgotten that the *Fram* was very much belated, and that it was frozen on September 25. To avoid such an issue, which would be quite undesirable, it is evident that the journey should be made earlier in the season, and this can only be accomplished with certainty if the ship starts from the mouth of the Lena. That this last is quite free of ice in August is proved, besides many other testimonies, by my boat journey in the delta of the Lena in the year 1893.

There would also be another reason for taking the mouth of the Lena as the starting-point for an expedition to Sannikoff Land; namely, the possibility of providing the explorers with the necessary number of dogs, and the provisions for them. The best draught dogs in Siberia, and in the whole world, are found in the delta of the Lena. So that, if it were intended to reach Sannikoff Land in the course of one summer by starting from a European port, it would still be necessary to call at the mouth of the Lena to take the dogs, or at least (for the sake of saving time) at the mouth of the Olenek, where the dogs would have been prepared in advance. It is self-evident that in such case there would be the risk of missing that part of the season which would be best suited for reaching Sannikoff Land. It would thus be necessary, in order to be sure to attain the aim and to be well equipped, to spend two summers—not to mention that the ship which will next sail past Cape Chelyuskin may be less lucky than its three predecessors, the *Vega*, the *Lena*, and the *Fram*—and in such case may be compelled to winter at Cape Chelyuskin, and then spend a third summer on the way.

Consequently, it seems to me that the surest way would be to charter for the expedition a ship which would lie at anchor in the Lena the winter before. The steamer *Lena* is still there, but she is hardly in a state which would allow her to sail in the polar sea. It would thus be necessary to have another new ship. In case the available means would not allow of building or buying a new vessel, it seems to me reasonable to follow the example of the *Lena* of 1878, that is, to send a ship to the mouth of the Lena for purely commercial purposes. Such an enterprise, especially if a customs-free entrance of the goods at Yakutsk be granted, would be without doubt highly profitable; and it hardly would be advisable that such

* A. Schmidt, "The Geographical Problems of the Exploration of Terrestrial Magnetism," in *Verhandlungen des XII-ten Deutschen Geographentages*, 1897, p. 127.

† The *Fram* passed the mouth of the Olenek on September 15, and on September 20 she was in the supposed latitude of Sannikoff Land.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

a ship should attempt to return the same summer with a cargo of goods exported from Siberia. Besides, the visit to the mouth of the Lena by a strong ice-resisting ship, under the guidance of an experienced Norwegian walrus-hunting captain, and the experience which would be thus won in the navigation of the Arctic sea in the waters surrounding New Siberia, would be an epoch-making fact. A successful navigation of the New Siberia waters would mean, on the one side, the beginning of a solid scientific exploration, and of a systematic study of the mammoth tusks wealth of these islands; and on the other side, it would be a prelude to the navigation eastwards of the Lena, to the mouth of the Kolyma, which would answer to a most pressing need of the population settled along this river. As an illustration of this need, it may be mentioned that, in consequence of the difficulties of transport by land, along the nearly 670 miles' long road from Yakutsk, across the 5000-feet-high Takulan pass of the Verkhoyansk range, the *pud* (36 lbs.) of rye-flour costs the Government 7 roubles 57 copeks (15*s.* 4*d.*) at Verkhoyansk; and from this last place the flour has to be taken nearly another 670 miles, until it reaches Kolymsk. What is the price of a *pud* of rye-flour at Nijni-Kolymsk, I don't know,* while the price of flour at Verkhoyansk is taken from an official communication which was made to me, in the year 1893, by the governor of the province of Yakutsk. It is evident that if the flour were sent every year on board ship from the mouth of the Lena, along the coast, to the mouth of the Kolyma, as also of the Indigirka, the Government would find in this mode of transport a great benefit.

As for the sale of European goods, if such be shipped from Europe, they would find, first, the Yakutsk market, and then the market of the gold-mines scattered on the large tributaries of the Lena. The returns of the Yakutsk fair, which takes place in summer, from July to the end of August, attain, according to official data, the figure of 2,000,000 roubles (£200,000), of which one-half represents the value of imports—chiefly cotton and woollen goods, china and earthenware, various colonial produce (excepting tea), and different chemical produce, while the other half represents the exports of fur goods and mammoth tusks.

As to the gold-mines, they are situated chiefly on the tributaries of the Vitim and the Olekma, and lately have been spread to those of the Aldan. The administrations of the two former regions spent, in 1889, the sum of 4,174,150 roubles (£417,415) for goods sold to the workers only. As to the needs of the gold-mines for technical purposes, it will be sufficient to name only dynamite, of which about 900 *puds* (about 33,000 lbs.) were used in 1889. It is certain that the orders for goods from one single of the larger gold-mines would be sufficient to richly pay the journey of a steamer *viâ* the polar sea to the mouth of the Lena.

The idea of a navigation between the mouths of the Lena and the Kolyma is so little new that Baron A. E. Nordenskjöld, more than twenty years ago, made the proposal to open a regular navigation between the Lena and Bering strait, and soon after that proved the possibility of realizing his scheme by his *Vega* journey. I was brought to the idea of the Lena and Kolyma navigation partly through my own knowledge of part of these regions, and partly directly by a considerable Siberian export firm, Gromoff & Co., and their representative, M. Pikhtin. This shows that there is already a demand for that navigation. My proposal is certainly not meant to be opposed to Nordenskjöld's plan, but, on the contrary, I consider its realization as equally desirable and practical.

* According to the testimony of a gold medallist of the Russian Geographical Society, who stayed at Kolymsk for four years and wrote a book about those regions, signed "Dioneo," the price of a *pud* of rye-flour is 14 roubles 70 copecs (£1 10*s.*). As to salt, its price raises to 1 rouble (2*s.*) the pound in the spring, and none is to be had at any price. All fish is eaten frozen and raw, for want of salt. (*Note of the translator.*)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000025

مكتبة قطر الوطنية
Qatar National Library

The *realization of the expedition* would be, in short words, as follows:—

1. Next summer, in 1899, the ship—a good sea-going Norwegian walrus-hunter—ought to try to make its way *viâ* to Kara sea and past Cape Chelyuskin, to the mouth of the Lena. If the ship succeeds, as was the case with the *Lena* in 1878, to make its way through one of the arms of the mouth of the Lena, it must go up the river to Yakutsk, and, after having unloaded its cargo of goods, winter at Yakutsk or above that town in the Lena. If, however, no passage which would be suitable for the draught of the ship could be found in the delta of the Lena, the ship would find a good anchorage on the west coast of the Borkhaya bay. With the establishment of the winter, the goods could be easily carried by reindeer over the usual commercial road, about 67 miles long, and over the 1500-feet-high pass, across the 250-feet-high Kharaulakh mountains, to Bulun on to Lena, and from this depôt they would be carried further on on board the steamer *Lena*.

2. Next summer the expedition would start, after having provided itself at the mouth of the Lena with a number of the best dogs and reindeer, and previously, with a few Yakut ponies and with the necessary provisions for the animals. In August, taking advantage of the favourable Lena drift, the expedition could easily call at the New Siberia islands in order to establish there depôts. Then, judging from the experience of the *Fram*, it could reach the coast of Sannikoff Land in a few days. It would be desirable, if open water permits it, to penetrate as far north as possible, and to stop at one of the farthest northern spots of the discovered archipelago, or at the north end of Bennet island, in case the latter has a greater extension towards the north than Sannikoff Land.

3. Here the expedition would land, and the ship return to the mouth of the Lena. One part of the expedition would begin then the building of the house which they would bring with them, for establishing their winter quarters, and begin at once the meteorological and magnetical observations which would have to be carried on for a full year. In the mean time, the other part of the expedition may carry on the topographical and geological survey of the archipelago, so long as weather permits this to be done. In the spring and the summer the same work would be continued, so long as the ship does not come to take the expedition home.

4. On the return journey it is desirable to enlarge the field of observations by taking some other course, such as along the eastern coast of New Siberia, in which case a landing at the "Wood Mountains" would be most necessary in order to widely explore them and to make collections.

5. As to the composition of the expedition, it would be sufficient for me to have three collaborators,—an astronomer, a meteorologist, and a topographer. Besides, I would choose among the best *promyshlenniki* (hunters) a few Yakuts or Tunguses to act as hunters and dog-drivers.

Note by the Translator.

The translator of Baron Toll's admirable paper asks the author's permission to add the following considerations. If five-and-twenty years ago the necessity of exploring the flora of the Tertiary deposits *as near to the pole as possible* was considered as a weighty argument in favour of arctic exploration, the force of this argument is only the greater now. Four important sets of facts have been brought to bear since upon the solution of the question indicated by Baron Toll. On the one side, it has lately been maintained that the Tertiary vegetation which was discovered in polar regions may not have been so much sub-tropical as it had been supposed to be. But making full allowance for possible exaggeration of the amount of sun-heat (though not of *light*) that would be required by the Tertiary plants to grow in high latitudes, and fully admitting that these plants may have grown in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000060

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

a northern temperate climate, the fact still remains that no imaginable redistributions of seas and sea-currents would account for the growth of even temperate-zone trees and shrubs in those high latitudes, especially when those latitudes were occupied by a large arctic continent. More fossil material from the highest latitudes is therefore required now, even much more than it was required when the remarkable conclusion of Oswald Heer as regards Tertiary vegetation became first known. The great question raised by Heer—and there is no other question of equal importance in the whole domain of Tertiary and Quaternary geology—will remain unsettled so long as we have not more fossil Tertiary plants from very high latitudes, in order to determine the true character of the sub-arctic Tertiary flora.

The latest discoveries relative to the changes of position of the Earth's axis of rotation have given new support to the hypothesis mentioned by Baron Toll, according to which hypothesis the pole may have been situated in Tertiary times several degrees southwards from its present position. The curve which the pole has described within the last few years is—we now know—a spiral, not a closed circle. But, with all that, the distribution of the tertiary vegetation round the pole seems to indicate that the climate was warmer in *all* directions from the pole. A change in the position of the axis may thus be insufficient to explain the facts relative to the Tertiary flora when these become known in their totality. We *must* therefore know the Tertiary flora of high latitudes *in its entirety*; otherwise we are bound to float in incertitude amidst the different hypotheses.

A third set of facts which have lately been discovered, especially due to the latest investigations in the southern hemisphere, is the astounding similarity of the Tertiary flora all over the surface of the globe. These researches are far yet from being complete, but already they seem to indicate that during the Tertiary age the distinctions between the different zones of the Earth were not so sharp as they are now; the climate on the surface of the globe seems to have been more equal than it is at the present time. If this be true, if the sharp climatic distinctions which we now see between the different zones did not exist in Tertiary times to the same extent and with the same sharpness as they do exist now, a great question arises; namely, was not that relative uniformity of climate due to a different composition of the atmosphere of our globe? And this question, of highest importance for geology, can only be solved by getting considerable quantities of fossil Tertiary plants from both the arctic and antarctic regions.

And fourth, a new hypothesis, which assumes, indeed, a change in the composition of the atmosphere, has been brought to the front by the great physicist, Arrhenius, and has been further developed by one of the greatest authorities on the recent geological history of the globe, Prof. Chamberlin, of Chicago. According to this hypothesis, the immense change in the climate of the globe, which took place between the Tertiary times and the Glacial period, may have had its cause in an increase of percentage of carbonic acid in our atmosphere. The volcanic eruptions which took place on an immense scale at the close of the Tertiary age in America, and in the arctic regions (and I will add, in the antarctic regions as well, and on the immense Vitim plateau and its border-ridges in Siberia), may have thrown into our atmosphere considerable quantities of carbonic acid; and Arrhenius has shown that even a very small addition of this gas to the atmosphere would considerably reduce its transparency for the heat-rays of the sun. Besides, one is naturally brought to the suggestion that the gases newly discovered in our atmosphere may also have varied in quantity at different geological epochs, the more so, as one of them, helium, is known to appear in a relatively great proportion in the waters of mineral springs, such springs being closely connected with volcanic outbreaks. In short, the variable constitution of the atmosphere may have been

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the cause of changes of climate all over our globe, and one of the most vital geological questions is now to ascertain what was the real composition of the Tertiary flora, not only in the temperate zone, but especially in the arctic and antarctic regions. What was the extent of change in climate which we are bound to admit?

Let me also add that, since botanists have so well proved lately that the flora of each separate region of the globe is a direct descendant, and bears the stamp of the flora which clothed that same region in Tertiary times, the thorough and full knowledge of the Tertiary flora, in all the parts of the globe, becomes a matter of first importance for the evolutional botanist.

Taking everything into consideration, it is no exaggeration to say that, once there is a hope of discovering new beds of Tertiary plants in Sannikoff Land and Bennet islands, *this hope alone*, apart from all other geographical and oceanographical considerations so well indicated by Baron Toll, *would be a sufficient reason for sending out an expedition for the exploration of these Tertiary deposits.*

The same applies in full, and even much more, to the necessity of sending out an antarctic expedition to explore the Tertiary plants, the presence of which has been indicated by both Carlsen and Borchgrevink.

P. KROPOTKIN.

RUSSIAN NAVIGATORS IN THE ARCTIC OCEAN IN 1895-96.*

Communicated by Colonel J. SHOKALSKY.†

THE special expedition organized by the Ministry of Marine in 1894 to explore the estuaries of the Obi and Yenisei and part of the Kara sea, wintered at Yeniseisk, and on the approach of spring was engaged in repairing the vessels—the s.s. *Lieut. Ovtsin* and sailing barge *Lieut. Skuratov*, the former drawing 8½ feet of water.

In the previous year (1894) they had made a successful trial of the coal obtained from the Alexander Nevsky mine, near one of the right tributaries of the Yenisei—the Dudiuka, and, finding its quality to be not inferior to that of English coal, decided on making exclusive use of it for the future.

While these preparations were being made, the commander of the expedition, Lieut.-Colonel A. J. Vilkitsky, together with Lieut. K. V. Ivanov, determined by telegraph the difference in longitude between Yeniseisk and Krasnoyarsk, the former serving as the base for the astronomical work of the expedition. Vilkitsky also conducted, in 1894 and 1896, a series of observations with an apparatus of reversible pendulums by Repsold belonging to the Imperial Russian Geographical Society, by whose desire these observations were undertaken.

On June 15 the expedition left the town of Yeniseisk by the river, and on their way down fixed the position of the village of Gelahino, and observed the magnetic elements at this place and at Dudinsk, where they also took pendulum observations. On July 17 they reached the estuary of the river, and entered the sea to the west of Sibiriakov island. Finding, however, the Gulf of Yeniseisk still

* Map, p. 224.

† Colonel Shokalsky, who has obligingly forwarded this report containing data from unpublished sources, and three charts of this northern navigation, corrected according to recent observations, besides the sketch-map alluded to hereafter, is the Secretary of the Physical Section of the Imperial Russian Geographical Society. He was one of the Russian delegates and a Vice-President at the International Geographical Congress held in London in 1895, at which he communicated a paper on the "Maritime Route to Siberia" (see 'Report of the Sixth International Geographical Congress,' p. 239).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

obstructed by ice, they turned back, and spent a week in surveying the Korsakov group of islands and the south coast of the gulf. They also succeeded in fixing a position on the south coast of Sibiriakov island, and carried out magnetic observations there. On the conclusion of this work, they made a second attempt to enter the open sea near Mateh Saleh, but were once more obliged to retire southwards on account of the ice. They accordingly went to an anchorage at Zverevo, near the entrance to the Gulf of Yeniseisk, situated on the west coast. Here they experienced a storm of three days' duration, and then again put to sea, but were caught in a second storm off Sibiriakov island, which caused them no further damage than the loss of an anchor, though they were in some peril of being wrecked on the sand-banks off this island. On August 9 they resumed their voyage, meeting with two floes of rotten ice drifting northward from Lake bay. Forcing their way through these, they stood towards that part of the peninsula of Mateh Saleh visited the previous year by the *Lieut. Ovtsin*. Finding a depth of only 15 feet near the cape, they went north and then east to get more sea-room. Here they met with a large sandy island, which they rounded by keeping to the 5-fathom limit, having the ice-belt in sight to the northward the whole way. They coasted along this island for 30 miles, fixed its position on the chart, and discovered that its southern extremity, ending in a steep cape, bore a complete resemblance to the land seen and described by Lieut. Schwede of the s.s. *Lieut. Malygin* in 1893.

They now set their course for Biely island, intending to fix its position, but thick weather and the arduous work they had before them of surveying the almost unknown Gulf of Obi rendered further delay inexpedient; so, without waiting for fair weather, they turned southwards and entered the wide Gulf of Obi, stretching along the meridian for 400 miles. The navigation here was not difficult, the depth throughout being 10 to 12 fathoms, and no ice being met with. While at anchor off Cape Three Points, at the entrance of Tazov bay, they rode out a storm with the loss of only one cable.

Astronomical observations proved that the whole of the east coast of the gulf was incorrectly placed on the chart, and required shifting 40 miles to the westward, while the position of Cape Three Points was incorrect to the extent of 55 miles.

On reaching the southern part of the bay, they attempted to approach the mouth of the river Nyda or Nadim, but found this impossible owing to shallows, the south wind which had blown persistently for three weeks having driven the water to the northward, and lowered the depth on the bar of the Obi. Four days were spent in discovering the channel, and it was August 24 before they entered the so-called Hamanelsky Obi, the northern channel of the delta, having previously fixed the position of Entrance island and Cape Hamanelsky. On August 30 they arrived at Obdorsk after a successful season's navigation in the Arctic ocean and Gulf of Obi.

The results obtained include accurate positions and definitions of the coasts of the Gulf of Yeniseisk, Sibiriakov island, and the east side of the Gulf of Obi; astronomical positions along the rivers Yenisei and Obi; and a continuous series of magnetic observations from Yeniseisk to Port Dickson and along the Obi. It was found that both sides of the Gulf of Yeniseisk, east and west of Sibiriakov island, were equally deep and free from all hidden dangers. The west coast is more sheltered than the east, but not so accessible, except in clear weather, because Sibiriakov island, which has to be passed at a distance of 8 miles, lies low and cannot be sighted in hazy weather, and is, moreover, surrounded by shoals. By going east, navigators may run a straight course from Cape Mateh Saleh to the North-eastern islands, and from these may pass Sibiriakov island in any weather. The North-eastern islands, being about 200 feet above water and very steep, are

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

easily approachable. The island discovered by the expedition to the north of Cape Mateh Saleh may be passed in clear weather at a distance of one or even half a mile; but in fog a more northerly course should be held, in soundings of not less than 7 to 8 fathoms.

Neither is the navigation of the Gulf of Obi dangerous. Keeping the east coast in sight from Cape Droviany, they had even soundings gradually diminishing as they went south, and it is only on the west coast off the Hamanelsky Obi, opposite the Yada, that shoals are frequent. The navigation of this gulf is, moreover, facilitated by the fact of the bottom being soft mud, and only sand on the banks. These too begin gradually, so that when the soil brought up by the lead is gritty, precautionary measures have to be taken. There are no rocks either in the gulf or the river Obi.

The navigation of the Yenisei as far as the town of Yeniseisk showed a depth throughout of 4 fathoms. The channel discovered in 1894 off Cape Gostinny was definitively surveyed in 1895, and found to have a depth of not less than 4 fathoms near Cape Doroféyev. Hence it is superior in every way to the older channel, which has only 15 feet of water, and the Lukovaia arm forms a natural harbour accessible to ocean steamers.

Meteorological and hydrographical observations of tides and currents were systematically undertaken, and a variety of notes and collections relating to natural history, anthropology, etc., were made by Midshipman Botkin, M.D. The length of the seconds pendulum was observed in four places, the northernmost of these being on the North-eastern islands in lat. 73½° (Port Dickson).

In 1896 the expedition left the city of Tobolsk on June 4, and entered the Gulf of Obi on the 24th of this month. By August 11 they had completed their survey of the southern part of this gulf and proceeded northwards; on August 22 they entered Yugor strait, and on September 16 arrived at Archangel.

Descending the Obi, they fixed the positions of the village of Elizarovo, the town of Beriosovsk, and the village of Obdorsk, filled in soundings on existing charts, and corrected shore-lines, changes having taken place at the river-bends owing to spring floods. The lesser Obi was navigated from Beriosovsk, the maps of the greater Obi having been corrected the previous year.

The river entrances were carefully examined, but none were found deeper than 9 feet towards the left coast. Crossing to the right, they ran a line of soundings along the bar, and found a depth of 12 feet under the right coast, all other parts averaging 9 to 10 feet. This proves that vessels drawing 12 feet and upwards cannot enter the Obi. Hence it became necessary to discover a sheltered bay where large steamers might safely discharge their cargoes, and thus secure the importance to commerce of the mighty Obi system. Such a harbour was discovered about 20 miles north of Cape Yam Saleh, with 17 feet of water, only exposed to light rollers with a wind from the opposite right shore. This bay, named "Nahodka" (Discovery) bay, has been surveyed in 1897 by an officer of the hydrographical service specially sent for the purpose.

Having completed their survey of the bar, they sketched in the left coast of the gulf and the southern part of the right coast. Numerous sandbanks were found along the former, but none near the latter. Neither were there serious inaccuracies in former charts to correct, as was the case in the previous year's survey of the east coast. Only here and there was it found necessary to shift the coast-line a little to the west. This result might have been anticipated, owing to the circumstance of the survey of the west coast having been corrected in the second decade of the present century, while that of the right or east coast refers back to the Great North Russia expedition about the year 1730.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In rounding Biely island fog interrupted the survey, and no good positions could be fixed, but the soundings led to the belief that existing charts of this part are fairly accurate.

There is now nothing to hinder this northern navigation, and no systematic survey will have to be undertaken in the future; occasional corrections may be made as the opportunity occurs, and next summer it would be advisable to send an officer overland to examine in detail the bay near the bar of the Obi river.

Four astronomical positions were fixed on the coast of the gulf, besides numerous observations from the deck of the vessel; the position of the church in Yugor strait was also fixed, and the magnetic elements ascertained in seven places. In Tobolsk itself, as well as in Beriozovsk, Obdorsk, and Yugor strait, observations with the pendulum were also made. Meteorological and hydrographical observations were continued every four hours. The weather was altogether unfavourable, and on entering the Kara sea the two vessels, the s.s. *Lieut. Ovtsin* and the barge in tow, were for four days exposed to a violent storm from the north, south-west, south, and north-west, accompanied by fog and rain. The steamer ran short of coal, and had it not been for their adopting the novel expedient of coaling by slinging the sacks on the tow-rope and hauling them by means of a block and pulley from the barge to the steamer, it might have fared badly with them. By dint of incessant exertion on the part of officers and men the furnaces were kept supplied, and the little steamer with her charge weathered the storm.

The incidents of this storm are told by Colonel Shokalsky, but we are obliged, for want of space, to curtail his narrative.

When the weather at last moderated, and they were so fortunate as to enter Yugor shar or strait, one of the steamer's screws was disabled, the stock of coal was reduced to one sack and a half, and the officers and crews of both vessels were in a state of exhaustion. In Yugor strait they met with two English steamers at anchor, waiting the arrival of Captain Wiggins. At the request of the English, they were supplied with the Russian maps, and it was probably due to these (though we are not told so) that these English vessels accomplished their voyage to the Yenisei so satisfactorily—one proceeded up the river, the other discharged cargo and returned safely to Norway. Acts of courtesy such as these deserve to be recorded, because they may help to allay that feeling of irritation which characterizes the relations of their respective governments in other parts of the world.

The sketch-map accompanying this paper is compiled from charts kindly supplied by Colonel Shokalsky.

Besides the above surveys, the *Jigit* cruiser, sent to the Glacial ocean in 1895 to protect the Russian fisheries in those seas, took out officers of the Hydrographical Department—Denisobransky and Jdanko—by whom the following surveys were made:—

1. A sketch-map of—
   - (*a*) The southern part of Pechenga bay (Varanger fiord).
   - (*b*) Cape Sétinsky and Volokov bay at the entrance to Kola bay.
   - (*c*) The southern part of the Kola bay.
   - (*d*) The straits of Kildyn.
   - (*e*) Major station and Voroniye Ludki.
   - (*f*) The southern part of Catherine harbour.
2. Boat soundings of—
   - (*a*) Pechenga bay (Varanger fiord).
   - (*b*) Waida bay.
   - (*c*) Kola bay.
   - (*d*) Teribersky bay.
   - (*e*) Part of the roadstead beyond the Yokan islands.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000072

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

3. One hundred and seventy-one marine soundings.

4. Two hundred and seventy observations on the temperature and density of the surface water, and twenty-one series at different depths.

5. The entrances to Kola bay and Yokanka were buoyed.

6. Magnetic observations of all three elements at Kolguev island, Matochkin shar, Lesser Karmakul, Mushroom bay, and Catherine harbour.

7. Triangulation of church and station of Karmakul.

8. Astronomical positions of Mushroom bay in Novaya Zemlia and Kolguev island.

This last piece of work gave a particularly interesting result. The observations were made near the mouth of the Goose river on the north-west coast of the island. Its position on Russian charts was lat. 69° 27′ 30″, long. 48° 32′ 0″; on English charts (Imray) the position given is lat. 69° 27′ 30″, long. 48° 43′ 0″, or 11′ east of the position assigned on Russian charts. According to Jdanko, it should be lat. 69° 28′ 56″, long. 48° 51′ 9″, *i.e.* nearly 19′ of arc to the east of the Russian position, and 7′ east of the English.

A third expedition for hydrographic work has now been sent to the Kara sea by the Russian Admiralty, also under the command of Colonel Vilkitsky, on a new steamer, the *Pakhtusoff*, constructed at Middleborough, England.

UNITED STATES DAILY ATMOSPHERIC SURVEY.*

By WILLIS L. MOORE.

The United States Weather Service has been in existence twenty-seven years. During the past twenty-five years the daily synoptic charts of the service have shown the most comprehensive atmospheric survey ever presented to the forecaster, or to the broad investigator of the fundamental principles of storms. The vast region now brought under the dominion of twice-daily synchronous observations embraces an area extending 2000 miles north and south, 3000 miles east and west, and so fortunately located in the interest of the meteorologist as to cut an important arc from the circum-polar thoroughfare of storms of the northern hemisphere. The extreme points of observation are Edmonton, in the Canadian province of Alberta, on the north-west; St. John's, Newfoundland, on the north-east; Key West, on the south-east; and San Diego, on the south-west. And arrangements are now complete for a co-operation with Mexico similar to that in operation with Canada, and which will in a few months extend the area of observation southward over Mexico and Yucatan.

A wonderful panoramic picture of atmospheric conditions is, by the aid of simultaneous measurements and the electro-magnetic telegraph joining the places of observation by a magic touch, thus presented to the trained eye of the forecaster. Each twelve hours the kaleidoscope changes, and a new graphic picture of actual conditions is shown. Where else can the meteorologist find such opportunity to study storms and atmospheric changes?

In the middle of the eighteenth century Franklin detected the rotary and progressive motions of storms; early in the nineteenth century Redfield and Espy contended over rival theories as to the mechanical principle involved in the rotation of storms; and a little later Maury studied the winds of the Atlantic ocean; still

---

* Paper read in Section E (Geography) at the Toronto Meeting of the British Association, August, 1897.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

later, Loomis, Dové, and Ferrel reviewed these theories and added much to our knowledge; but at this late date no one has been able to satisfactorily co-ordinate the forces operative in cyclones, or to assign quantitative values to the horizontal temperature and pressure gradients, to the surface resistances and internal frictions of convection, to the latent heat of condensation, and to the effect of hemispherical circulation. Probably the only components of cyclonic force that are well understood and accurately computed are the centrifugence and the deflection due to the earth's rotation.

Our early investigators studied only the storms of low levels and humid airs, where convection only needed to carry the moist air-currents to a slightly higher elevation, when cooling by expansion produced condensation, and an immediate acceleration of the cyclone by the liberation of latent heat. They had never seen the whirling cyclones of the arid northern Rocky mountain plateau dash down upon our great lakes with rapidly increasing energy, notwithstanding the fact that there was little or no condensation, and hence no addition of the latent heat which Espy supposed was absolutely essential to a continuation of storms.

The great diversity in elevation, topography, temperature, and aridity of the broad region under our observation, constitute conditions unequalled anywhere in the world for the advantages which they present to the physicist to study the mechanical phases of storm development and progression, or, at least, so far as they can be profitably studied by means of observations taken only at the bottom of the great aërial ocean surrounding the Earth.

Here we see summer cyclones formed under the intense insolation which beats down through a cloudless atmosphere upon the arid waste of the Rocky mountain plateau; or winter cyclones, which, if they form in the northern part of the plateau region, move eastward to our lakes, and thence to the St. Lawrence, with scant rainfall; cyclones which, if they have their origin farther south, on the warmer plains of Colorado, move into the Ohio valley, and thence into New England, with considerably more precipitation; and cyclones which, if they have their inception on the high plains of Arizona and New Mexico, can always be expected to give abundant rainfall when they reach the Lower Mississippi valley, and later, as they pass over the Middle Atlantic states. All of these conditions can be studied during their inception at an average altitude of 5000 feet above sea-level, and under conditions of extreme aridity; they can be viewed later, as they come down nearly to sea-level in the Mississippi valley and reach a more humid atmosphere, 1000 miles from the place of their birth; and, finally, they are seen as they reach the extremely humid air of the Atlantic ocean, 1500 miles farther east.

The great winter cyclones, which originate south of the Japanese islands and cross the Pacific ocean, come under our vision as they successfully surmount the formidable Rocky mountain barriers with but little diminution of energy, sweep across our continent with increasing force and heavy precipitation, and, within three days, pass beyond our meteorological horizon at the Atlantic seaboard, only to be heard from three days later as borean ravishers of Northern Europe.

The great anti-cyclones, or high-pressure eddies, which constitute the American cold-waves, drift into our territory from the Canadian North-West Provinces, and, by means of our charts, are studied under rapidly changing conditions during 3000 miles of their course. The high-pressure eddy, with all the convectional principles of the cyclone reversed, may be said not to depend upon the land of its birth for the cold it brings; for a strong vortical and anti-cyclonic motion at the centre is continually drawing down the cold air from above. In the cold wave it must be conceded that the loss of heat by radiation to a cloudless sky is much greater than that dynamically gained by compression, or else it must be assumed that the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

atmosphere possesses such intense cold at the elevation from which the air is drawn that, notwithstanding the heat gained by compression in its descent, it is still far below the normal temperature at the surface of the Earth.

The West Indian hurricanes, always at sea-level and in humid air, and which are the most violent of all American storms, intrude themselves into the domain of the United States weather-map at the bend of their parabolic course, at about latitude 30°. They have for years furnished a fruitful theme for the thoughts of the investigator.

For twenty-seven years the forecasters of the Weather Bureau have studied the inception, development, and progression of these different classes of atmospheric disturbances. From a knowledge personally gained by many years' service as an official forecaster, I do not hesitate to express the opinion that we long since reached the highest degree of accuracy in the making of forecasts possible to be attained with surface readings. It is patent that we are extremely ignorant of the mechanics of the storm, of the operations of those vast yet subtle forces in free air which give inception to the disturbance, and which supply the energy necessary to continue the same. Long having realized this, I determined at once, on coming to the control of the United States Weather Bureau, to systematically attack the problem of upper-air exploration, with the hope ultimately of being able to construct a daily synoptic weather-chart from simultaneous readings taken in free air at an altitude of not less than 1 mile above the earth. Prof. Marvin was assigned to the difficult task of devising appliances and making instruments, and I am pleased to say that we have improved on kite-flying to such an extent that apparatus is now easily sent up to a height of 1 mile in only a moderate wind. We have made an automatic instrument which, while weighing less than two pounds, will record temperature, pressure, and wind-velocity. By January next we hope to have not less than twenty stations placed between the Rocky mountains and the Atlantic ocean, taking daily readings at an elevation of 1 mile or more.

We shall then construct a chart from the high-level readings obtained at these twenty stations, and study the same in connection with the surface chart made at the same moment; being thus able to map out the vertical gradients of temperature, pressure, and wind-velocity, as well as the horizontal distribution of these forces, it is hoped to better understand the development of storms and cold-waves, and eventually improve the forecasts of their future course, extent, and rate of movement.

In exceptional cases we have flown the kites to a height of $1\frac{3}{4}$ mile. From daily readings at only one kite station, at Washington, we have derived information as to the force and direction of the wind above the 1-mile level, which has greatly assisted us in estimating the future direction of a storm-centre when our surface chart gave but negative indications. It will be a fascinating study to note the progress of cold-waves at this high level, and to determine if the changes in temperature do not first begin above. The readings at Washington indicate that contending equatorial and polar winds may be more potent in the formation of storm-eddies than heated and ascending convectional currents.

I am anxious to know the difference in temperature between the surface and the upper stratum in the four quadrants of the cyclone and in the four quadrants of the anti-cyclone, especially when the storm and cold-wave conditions are intense. At an elevation of 5 miles but little effect remains of diurnal temperature variation. At this altitude the atmosphere is free from the disturbing influence of immediate surface radiation, and consequently there is but little change between the temperature of midday and midnight. The vertical distribution of temperature in the several quadrants of the cold-wave or rain-storm areas may give a clue to the future

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000059

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

direction of the storm—to the little aberrations in direction which cause the forecaster to fail in his predictions for considerable areas. When we are able to construct isobaric gradients at the 1-mile level, it may be discovered that the storm-centre at that elevation will not always coincide with the geographica location of the storm-centre at the surface of the Earth. The displacement of this centre may possibly give some indication of the future direction of the storm. In other words, there are many interesting problems to be solved by this investigation.

PERSIAN GULF NOTES.

KHARAG ISLAND.

By Captain A. W. STIFFE, R.I.M.

A FEW notes on this island may be of interest, there being ancient remains as well as more recent ones of the time of the Dutch settlement. Kharag is 4 miles long, and 3 miles broad at the northern end, being roughly triangular in shape, and lies off the Persian coast 31 miles north-west by west from Bushire.* It is hilly, except the north-east corner, and the ground very broken and rocky. The hills are capped with a thin bed of nearly horizontal calcareous breccia of tertiary age, under which is a great thickness of softer beds, which are being gradually removed by rain and wind, when the upper crust breaks up and falls in large slabs and masses, and presents a curious picture of desolation. The highest part is 284 feet above the sea, and is occupied by a small tomb. The village on the low north-east point is inhabited by fishermen. It was for many years the home of the pilots for the river (the Shat-el-Arab), and all vessels bound to Basrah had to call here for their pilot for the river.

The population at the time of the survey was estimated at 400 men, mostly fishermen, with a few Persian soldiers. Much of the plain and many of the valleys were cultivated, with date plantations and gardens, and there were flocks and herds among the hills. A few antelope were to be found, mostly on the north-west side. There are several short kanâts, or underground channels, to convey water from the hills to the lower ground.

The most ancient of the remains found here, are certain small caverns hollowed out of the soft rock, and coffin-like troughs excavated in the surface of the rock, all apparently for burial-places. The largest of the caves we entered was about 15 feet square, and 8 high inside, the roof being slightly domed. They have been ornamented internally with carved mouldings, and externally, the face of the rock scarped vertically and worked into tracery of pillars and arches, well preserved where not exposed to the weather. The interior of some of them has arched recesses, and has been subdivided by thin vertical partitions of the live rock left when hewing out the caves. In these are horizontal grooves, apparently for sliding shelves, from their size adapted for the reception of the dead. Unfortunately, the vertical party-walls have been in great part destroyed, the caves being used as cattle-pens, but the grooves were still perfect, about 1½ feet apart, and in four tiers.

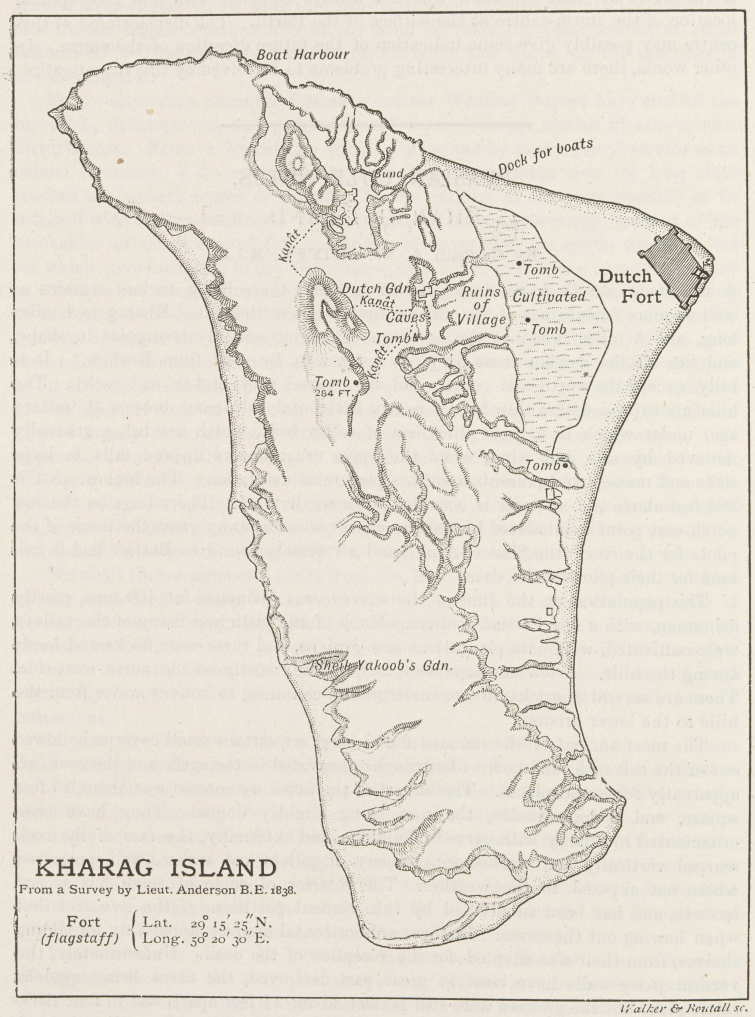
Of later remains, the principal is a tomb with a spire (sketch) standing behind these caves, higher up the hillside. It is said to be of Mir Muhammad, a son of

* Properly Abu-Shahar, but the English corruption is so general that it seems impossible now to establish the correct name (see map of island reduced from Lieut. Anderson, R.E.).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000011

مكتبة قطر الوطنية
Qatar National Library

Ali, and has an inscription stating it was rebuilt nearly six hundred years ago. It is still a place of pilgrimage.* There are several other shrines; in one is shown a mark in the rock, said to be the impression of the hand of the prophet el-Khizr.



There is also a tomb 40 ells in length, called Chehil-gazah, of a saint said by tradition to have been of that stature.

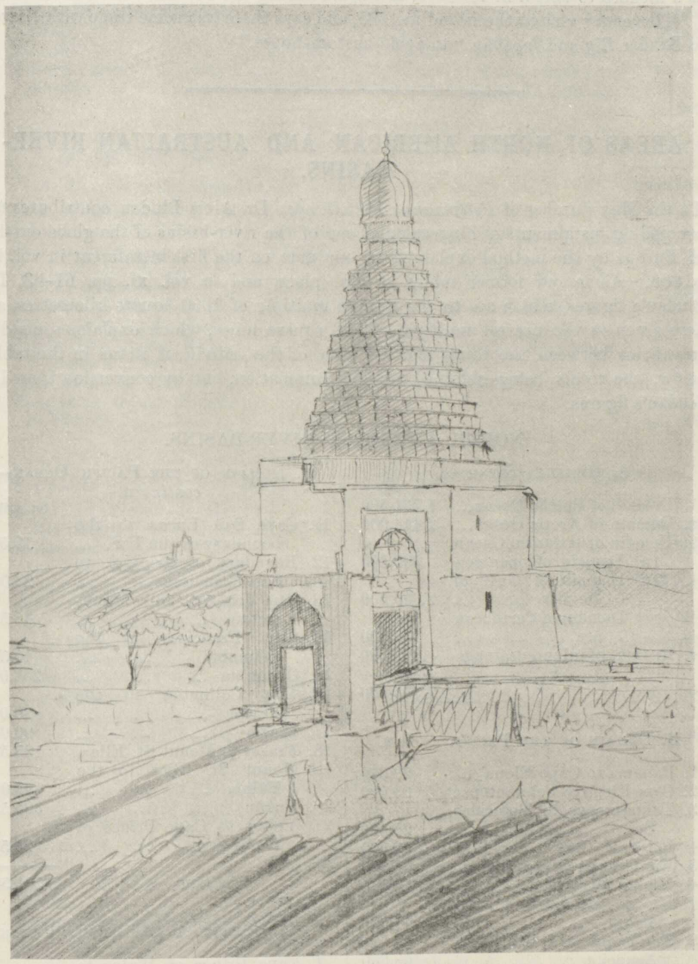
* The island is referred to as a place of pilgrimage by Yakút, 1218, who visited it on his way to Kis ('Dict. Geogr. de la Perse from Yagout.' By C. Barbier de Meynard. Paris: 1861).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

On the low north-east point stands the old fort erected by the Dutch in 1754, after they had abandoned Bandar Abbas, and had been compelled to leave Basrah.* They established themselves here in order to command the trade with that place, and it quickly rose to some importance under its founder, Baron Knyphausen, a



TOMB OF MIR MUHAMMAD.

man of genius. It encloses a large space of ground within a bastioned wall, now utterly ruinous, except the citadel at the north-east corner which is occupied by a small Persian garrison. Under the Baron's successor, in 1765, it was taken from the Dutch, one account says by treachery, by Mir Muhannah, the pirate chief of

* In 1748, during the Afghan invasion of Persia, when their factories were plundered.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000009

مكتبة قطر الوطنية
Qatar National Library

Bandar Ríg,* a small port on the main, and they do not seem to have attempted to re-establish themselves either here or at any other place in the gulf.

I do not find any reference to the early history of the place in any of the old geographers, it being only mentioned by name. The British occupied the island as a menace to Persia in 1838–42, and again during the Persian war of 1856–7.

Thevenot† visited the island in 1665, and says there was some trade with Basrah to Bandar Ríg and Ispahán "to avoid custom-house."

AREAS OF NORTH AMERICAN AND AUSTRALIAN RIVER-BASINS.

To the May number of *Petermanns Mitteilungen* Dr. Alois Bludau contributes the concluding instalments of his recalculations of the river-basins of the globe outside of Europe by the method explained in our note on the first instalment in vol. ix. p. 666. As in our former tables at that place, and in vol. xi. pp. 61–63, Dr. Bludau's figures, which are to the nearest multiple of 1000 square kilometres, are here given to the nearest multiple of 500 square miles, which explains some discrepancies between the totals and the sum of the individual items in the tables below, the totals being obtained, not by summation, but by conversion from Dr. Bludau's figures.

NORTH AMERICAN RIVER-BASINS.

A. General Synopsis.

	Sq. miles.
1. Domain of Pacific Ocean...	1,731,500
2. Domain of Arctic Ocean...	2,444,000
3. Domain of Atlantic Ocean	
(*a*) Domain of open sea	992,500
(*b*) Domain of Gulf of Mexico	2,009,500
(*c*) Domain of Caribbean Sea	131,000
4. Regions of inland drainage	393,500
	7,701,500

B. Domain of the Pacific Ocean.

1. Panama to Cape Elena ...	23,000
2. Cape Elena to Tehuantepec	35,000
3. Tehuantepec to Petacalco Bay	28,500
4. Petacalco Bay to San Blas	68,500
5. Rio Grande de Santiago ...	50,000
6. Rio de Mesquital ...	19,000
7. Rio de Mesquital to Rio Yaqui	51,500
8. Rio Yaqui and Rio de la Asuncion	68,500
9. Rio Colorado	228,000
10. Rio Colorado to Cape San Lucas	6,000

B. Domain of the Pacific Ocean—*continued.*

	Sq. miles.
11. Cape San Lucas to the boundary of the U.S. ...	17,500
12. Boundary of the U.S. to San Francisco	22,000
13. San Joaquin and Sacramento	48,500
14. San Francisco to the Columbia	40,500
15. Columbia	253,000
16. The Columbia to the Frazer	20,000
17. Frazer	90,000
18. Frazer to Mount St. Elias	123,500
19. Mount St. Elias to the Yukon	197,000
20. Yukon	305,500
21. Yukon to Cape Prince of Wales	25,500
	1,731,500

C. Domain of the Arctic Ocean.

1. Cape Prince of Wales to Mackenzie river ...	160,000
2. Mackenzie...	641,000
3. Mackenzie to Repulse bay	276,000

* Niebuhr, 'Travels in Arabia in 1762,' refers to this potentate as a "detestable monster."

† 'The Travels of M. de Thevenot into the Levant.' London: 1687. Newly done out of French.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006e

مكتبة قطر الوطنية
Qatar National Library

C. Domain of the Arctic Ocean—*continued.*

	Sq. miles.
4. Repulse bay to Churchill river	177,500
5. Churchill	158,500
6. Churchill river to Nelson river	7,500
7. Nelson	417,000
8. Nelson river to Cape Chidley	606,000
	2,444,000

D. Atlantic Domain.

A. Domain of the Open Sea.

1. Cape Chidley to the St. Lawrence	169,000
2. St. Lawrence	482,000
3. St. Lawrence to the St. Croix inclusive	67,500
4. St. Croix to Cape Cod	32,000
5. Cape Cod to Sandy Hook	35,000
6. Sandy Hook to Cape Henry (Chesapeake bay)	84,500
7. Cape Henry to Charleston	75,500
8. Charleston to the Straits of Florida	47,000
	992,500

B. Domain of the Gulf of Mexico.

9. Straits of Florida to the Mississippi	149,000
10. Mississippi—	
(*a*) Left bank from the mouth to Cairo	32,000
(*b*) Ohio	204,500
(*c*) Left bank from Cairo to the source	120,000
(*d*) Right bank from the source to St. Louis	84,000
(*e*) Missouri	519,500
(*f*) Arkansas, Red river, and rest of right bank	293,500

D. Atlantic Domain—*continued.*

	Sq. miles.
11. Mississippi to Rio Grande del Norte	193,000
12. Rio Grande del Norte	220,000
13. Rio Grande del Norte to Rio Panuco	21,000
14. Panuco	38,000
15. Tampico to Santa Anna (isth. of Tehuantepec)	46,500
16. Santa Anna to Laguna de Terminos	62,000
17. Laguna de Terminos to Cape Catoche	25,000
	2,009,500

C. Domain of the Caribbean Sea.

18. Cape Catoche to False cape	74,000
19. False cape to Monkey point (Pta. Gorda)	30,000
20. Monkey point to Ochoa (Greytown)	18,000
21. Ochoa to Colon	9,000
	131,000

E. Regions of Inland Drainage.

1. Great Basin and Mohave desert	208,500
2. Tulare lake	14,500
3. Gila desert south of the Rio Gila	13,500
4. Colorado desert and interior of Lower California	36,500
5. Sierra Madre plateau	34,000
6. Mexico between San Luis Potosi and Rio Grande del Norte	87,000
	393,500

AUSTRALIAN RIVER-BASINS.

A. General Synopsis.

1. Domain of the Pacific Ocean	240,500
2. Domain of the Indian Ocean	1,127,000
3. Regions of Inland Drainage	1,567,500
	2,935,000

B. Domain of the Pacific Ocean.

1. Cape Wilson to Mount Lindsay	67,000
2. Mount Lindsay to Keppel bay	31,000

B. Domain of the Pacific Ocean—*continued.*

3. Fitzroy	54,500
4. Keppel bay to Trinity bay	68,000
5. Trinity bay to Cape York	20,500
	240,500

C. Domain of the Indian Ocean.

A. Cape York to the North-west Cape.

1. Cape York to Melville bay (Gulf of Carpentaria)	235,500
2. Melville bay to Roebuck bay	201,000
3. Larrey point to North-west cape	87,500
	524,000

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

C. Domain of the Indian Ocean—*continued.*

B. North-west Cape to Point D'Entrecasteaux.

	Sq. miles.
4. North-west cape to Steep point	52,000
5. Steep point to Mount Peron (30° S.)	60,000
6. Mount Peron to Point D'Entrecasteaux ...	44,500
	156,500

C. Point D'Entrecasteaux to Cape Wilson.

7. Point D'Entrecasteaux to Wattle camp (Culver point)	23,000
8. Wattle Camp to Point Bell (Denial bay)	8,000
9. Point Bell to Port Augusta (Eyria peninsula) ...	25,500
10. Port Augusta to Murray ...	11,000

C. Domain of the Indian Ocean—*continued.*

	Sq. miles.
11. Murray	351,500
12. Murray river to Cape Wilson	27,000
	446,500

Whole domain of the Indian Ocean, 1,127,000 square miles.

D. Regions of Inland Drainage.

1. Paroo and Bulloo river ...	62,000
2. Lake Eyre basin	417,000
3. Basin of Lakes Torrens and Gairdner	39,500
4. Lake Frome basin ...	45,500
5. Wimmera	34,000
6. Remainder of South and West Australia and Alexandra Land ...	969,000
	1,567,500

THE GLACIERS OF RUSSIA IN 1896.

Owing to the initiative of Prof. Mushketoff, regular observations on the growth and decrease of glaciers in various parts of the Russian empire began to be made a few years ago, and we have now (*Izvestia* of the Russian Geographical Society, 1897, iv.) the results of the measurements and the new discoveries which were made in 1896.

I. The Caucasus.—Thirteen glaciers were visited in the Caucasus: eleven on the northern slope of the Central, the North-Western, and the South-Eastern Caucasus, and two on the southern slope. All thirteen glaciers continued to decrease in length, the averages (some of them based upon eight to ten years' averages) being on the northern slope—15·4 metres for the Central Caucasus, 23·2 for the North-Western Caucasus, and 38·8 for the South-Eastern Caucasus; and 24 to 26 metres on the southern slope. The general averages may be taken as follows: northern slope, 22 metres; southern slope, 25 metres.

Some glaciers which have been measured for the last eight to eleven years gave the following results:—

8.	Glacier Tzeiski, decrease in 10 years				184 metres.
9.	„	Rekomski	„	10 „	95 „
16.	„	Kalaki	„	10 „	160 „
21.	„	Chacha	„	8 „	170 „
24.	„	Khakel (sources of N. Klukhor), decrease in 8 years			192 „
26.	„	Chapchakhi, decrease in 11 years			286 „
33.	„	Khakel (sources of S. Klukhor), decrease in 8 years			264 „
38.	„	Osukako, decrease in 11 years			488 „

On the Kabish glacier the *névé* masses have shown an increase in height of 3·2 metres (1·4 metre since 1895).

Besides, two explorers, N. A. Bush and N. N. Schukin, who were sent out by the Society for botanical investigations, have visited about forty glaciers, several of which were not known before. All the glaciers visited are in a phase of decrease, as was already known from Rossikoff's and Mushketoff's work.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

II. Turkestan.—MM. Lipskiy and Barschevskiy have discovered in the Hissar range a number of glaciers formerly unsuspected; namely—

1. Glacier of Severtsoff in the Khazret Sultan mountain group; the end of the glacier lies at an altitude of about 10,500 feet.

2. System of Zigdi (affluent of Varzob, tributary of Kafirnagan). The Zigdi range has on its northern slope the glaciers Zigdi, Sangal, and Buzlyuk, all buried in snow.

3. System of Yagnob: (*a*) On the Barzenga river (chief headwaters of the Yagnob) three great glaciers, the largest of which is immense; it has received the name of Count Rostovtseff; its end is at the altitude of 11,200 feet; top, 13,000 feet; nearly all covered with snow. (*b*) Three glaciers belonging to the system of the Sangdarà river; the largest flows towards north-north-east, and its end attains the 12,500-feet level; and (*c*) the small glaciers Rivut, Tavastvin, Karg, and Kavosang in the Zerafshan range, on the right-bank tributaries of the Yagnob.

4. A small glacier, Kalta-kul.

5. Two big glaciers, one of them reaching the 11,000-feet level (Sokoloff's) on the Tash-kuvat, tributary of Sorbo.

6. A group of big glaciers at the headings of the Namrut river (Mushketoff's, Namrut, Dibarar, Galaist, Galagan), having big circuses, and reaching by their lower ends various levels of from 10,500 to 11,500 feet.

7. Several glaciers, one of them a big one, on the Pakshif, Susob, and Kamarau rivers.

8. A group of large glaciers, Muraka.

9. Several glaciers are also mentioned on the upper tributaries of the Kabud.

Summing up the observations of the expedition, M. Lipskiy writes that most glaciers lie on the northern slope, in groups, especially in the upper parts of the Yagnob. They are mostly buried in snow, and most of them are of easy access. Large moraines, which are seen below the ends of the present glaciers, and large accumulations of morainic *débris*, show that all the glaciers are in a phase of decrease.

M. Maslovskiy's photographs of the lower end of the great Zerafshan glacier show that it has decreased since 1881.

III. Siberia.—The chief interest belongs to the Altai glaciers of the Byelukha, which were visited in 1896 by Prof. Sapozhnikoff ('In the Altai,' Tomsk, 1897), and have, as it now appears, a much greater extension than they were supposed to possess. Thus, the Katuñ glacier consists of two branches, attaining respectively the lengths of $3\frac{1}{2}$ and $4\frac{3}{4}$ miles, while it was supposed to be only $1\frac{1}{2}$ mile long. Close by it lies the Black glacier, 2 miles long. They are all fed by the snows of the Byelukha peak, and are quite separate from the Berel glacier, which also consists of two branches, 2 miles, and about $1\frac{1}{3}$ mile long. The lower ends of the Altai glaciers attain the 6500-feet level. All the glaciers are now much smaller than they have been once.

Other glaciers have been seen at the sources of the Kapchal, and three new ones were discovered by Dr. Tronoff at the head of the Bukhtarma, namely, the Bukhtarma glacier, consisting of two branches, and reaching the 8000 feet level; the Ukok glacier, 5 miles to the east of the former, and about $1\frac{1}{2}$ mile long; and the Alakha glacier, about $2\frac{1}{2}$ miles long, and reaching the 8000 feet level. All are in decrease, as shown by their large abandoned moraines.

M. Soboleff has made some good photographs of the Katuñ glacier (*Zemle-vyedeïne*, 1896, part iv.), as also a relief of the Katuñ mountains.

M. Ignatoff (same periodical, 1897, parts i. and ii.) has discovered a new glacier in the Kimas mountains, at the head of the Bukhtarma, in the South Altai range.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000083

مكتبة قطر الوطنية
Qatar National Library

THE MONTHLY RECORD.

EUROPE.

Caucasus.—The nineteenth volume of the *Memoirs* of the Caucasian branch of the Russian Geographical Society is full of most valuable papers. The first paper, "The Alpine Plants of Central Caucasus," by M. Akinfieff, is the result of seven years' work. Being unable at present to publish a further instalment of his 'Flora of Central Caucasus' (Kharkoff, 1894), the author now gives a list of the Alpine plants, 270 species, which were found at altitudes of 9000 feet and more. We have next three papers containing geographical descriptions and full statistical data relative to the Zakataly district and the provinces of Stavropol and Terek, as also a historical sketch of the Terek Cossacks and the towns of the Terek province. These four papers are real mines of information, and one of them is accompanied, moreover, by a map of the province of Stavropol (20 miles to an inch), showing the distribution of landed property among the peasants, the Crown, the domains, and private property. N. Vinnikoff gives next two most valuable lists of all trigonometrically determined points in the government of Kutais (446 points) and in the province of Terek (151 points). Their latitudes, longitudes, and altitudes are given, as well as an alphabetical list of the same points for purposes of reference. V.V. Markovich contributes an interesting paper on the forests of Ichkeria (in Daghestan), which well depicts the forests from the forestry point of view, their utilization, and their inhabitants. Colonel Kartseff contributes a paper on the Kurds—their numbers, their geographical distribution, their language, religion, and division into branches, their institutions, and their present conditions. A most valuable map of Kurdistan (33½ miles to the inch), showing the distribution of the Kurds, the Sunnites, the Kizil-bashs, and the Yezids separately, as also the Armenians and Nestorians, accompanies the paper. The most interesting map of this volume is certainly a map of Trans-Caucasia on a large scale, 13 miles to an inch, showing the division of the country into provinces, districts, cantons, and villages, as also, in different colours, the religions of the population in each village. The appendix contains a masterly paper, by N. Y. Dinnik, on the upper parts of the Urushten and Byelaya rivers, accompanied by a map of the region, on the scale of 3½ miles to the inch, and most valuable "Notes on Suanetia," by Raph. Eristoff (111 pages), which deals with the common law of the Suanes, the children's plays, the legends, the demonology, the beliefs and superstitions, the dwellings, and so on. On the whole, this is one of the best volumes of this remarkably good collection. The twentieth volume of the same publication again contains a work of great value. It is occupied entirely by a first instalment of a large work by Colonel V. Y. Lisovskiy, "Transcaucasia." This first instalment contains the physico-geographical description of the country—the mountains and plateaus; the rivers, lowlands, lakes, seas, climate, vegetation, and animals; a sketch of the origin of the Caucasus isthmus, and its mineral resources. An excellent map of the Caucasus, on the scale of 27 miles to the inch, in which special attention seems to have been devoted to orography, accompanies the very valuable work of Colonel Lisovskiy.

Limnological Studies in the Tirol.—Dr. Halbfass has lately contributed to *Globus* (vol. 73, p. 216; vol. 74, p. 18) some notes on recent studies of the lakes of the Tirol, taken chiefly from articles by G. B. Trener and E. C. Battisti in a new Italian serial published at Trient under the name "Tridentum." They relate chiefly to the lake of Terlago, which, as recently examined by the above-mentioned authors, seems in course of extinction, the maximum depth being now only 9·3 metres (30·5 feet), as compared with 13·8 metres (45·2 feet) recorded by

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Damian in 1887 (cf. *Journal*, vol. i. p. 351), while other measurements show a similar decrease. This is due to the fact that the loss by the subterranean outlet (the lake lying in a *Karst* region) more than balances the supply of water by streams. It has been proved by the use of fluorescent liquids that the Ischia Podetti, a small stream which empties itself into the Adige, derives its water from a subterranean outlet of the lake. The results of soundings, temperature determinations, etc., are also given by Battisti with regard to the small lakes of the Fersina district, the most noteworthy point being the phenomenon observed in the Lago delle Valle di Fornace and the Lago Santo, of warmer water in the lower layers than at the surface, in spite of the fact that the lakes were frozen over. Battisti's explanation that this is due to hot springs can hardly, Dr. Halbfass thinks, hold good of the former lakes, where the warmer zone takes up the greater part of the lake.

Increase of the Po Delta during the Nineteenth Century.—Prof. Marinelli discusses the question of the progressive increase of the area of the Po delta in the *Revista Geografica Italiana* (1898, Nos. 1–3). Having, by a comparison of the Austrian map of about 1823 with the result of modern surveys carried out in 1893, arrived at the conclusion that the mean annual increase during those seventy years has been about ·762 sq. kilom. (·293 sq. miles), the author compares this result with those obtained earlier in the century by De Prony and Lombardini, the only observers who had previously studied the question in detail. This comparison leads at first sight to the conclusion that the rate of increase has varied greatly within the period for which data are available, Lombardini's estimate for the interval 1600–1830 having given an annual increase of no less than 1·35 sq. kilom. (·518 sq. miles). Of the causes which might be appealed to as an explanation of such variation, Prof. Marinelli rejects those connected with changes in the amount of rainfall, deforestation, etc. He is more inclined to give weight to such factors as the increased depth of the sea, and its more powerful degrading influence in proportion to the advance of the coast-line, or a possible subsidence, owing to the effects of sedimentation. But an examination of the data on which the estimates respecting the earlier periods are based, shows that no implicit reliance can be placed on these, for a very slight displacement of the position assigned to the coast at an early epoch would materially alter the proportionate increase before and after such date. Taking the mean of the rates of increase given by Lombardini for the periods before and after 1599, a result is obtained which differs but little from that arrived at by Marinelli for the present century, the slight decrease observable in the latter being easily accounted for by the causes above alluded to. The estimated total increase during six centuries amounts to 516 sq. kilom. (198 sq. miles), which means that, by the action of one river alone, Italy has in that period gained no less than $\frac{1}{600}$ of its previous area, while recent surveys show that the increase is actively maintained at the present day. At the end of his article, Prof. Marinelli gives some notes on the length of time which would probably be required to fill up the whole of the Northern Adriatic above 44° 45′ N. lat. The disposition now displayed by the mouths of the Po to bend in the direction of the axis of the gulf introduces a special element of uncertainty, but the writer considers that the time required would certainly exceed 100 centuries, and would probably be more than 120.

ASIA.

Journey in Northern Su-chuan.—A recently issued Consular Report, by Mr. G. J. L. Litton (Miscellaneous Series, No. 457), is of special value, as containing the account of a journey through some of the least-known parts of Northern

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Su-chuan, with abundant details on the physical and commercial geography of the country traversed. Mr. Litton's route touched in places those of Count Széchenyi, Mrs. Bishop, and Captain Gill, but for considerable distances it led through entirely new country. Starting from Chungking, the traveller proceeded northwards by the "lesser north road" up the valley of the Kialing river. Beyond Ho Chau, the great treeless sandstone basin of Su-chuan was reached; it is subject to a tremendous heat, and has a poor soil, rice being grown only in the low gullies, yet the population is swarming, every inch of available ground being cultivated. The country to the east of the Kialing was the scene of the famine of 1896–97, and Mr. Litton remarks that these districts are so over-populated that even a slight failure of crops will in future entail widespread distress. The estimate of 50,000,000 for the whole of Su-chuan is, in his opinion, quite a possible one. Beyond Paoning (visited by Mrs. Bishop), the hilly country of North-Eastern Su-chuan, inhabited by a maize and wheat-eating population, begins. Low ranges branch off from the main range which divides Su-chuan from the provinces to the north-east, traversing the country from north-west to south-east, and the country produces little except the teas of Tai Ping and the salt of Ta Ning. At Kwang Yuen, situated on the Kialing, in a hollow among the mountains, the main Peking-Chengtu road, followed in part by Széchenyi, was struck. This place does an important trade with Kansu, a second road leading hence to Chin Chau and Lan Chau. The chief object of commerce is the "water" or Lan Chau tobacco, but fine sheepskins also come down from Chin Chau, one of the most important centres for this trade in China. Fifteen miles west * of Kwang Yuen the Pai Shui or Pi Kau joins the Kialing, and up its valley, hitherto, we believe, undescribed by Europeans, Mr. Litton proceeded. On entering the gorge of Shi Kuan Tsu—the first of a series which extends beyond the market town of Pi Kau, a limestone region is reached; the stream is little more than a mountain torrent, and traffic is carried on chiefly by a rough and narrow track through a wild and thinly peopled region. Pi Kau derives its importance from the medicine trade, standing at the junction of several mountain tracks from the north and west. It is in Kansu, the southern parts of which might, if immigration were encouraged, supply greatly increased quantities of wheat, hides, medicines, etc. Mr. Litton was prevented by illness from making an extended tour into that province, turning instead south-west towards Lung An. Before re-entering Su-chuan, the central mountain range has to be crossed by the Ta Tao Ling pass (6150 feet), the ascent to which is rough and difficult. On the Su-chuan side the cultivation is entirely maize. At Lung An Mr. Litton struck Captain Gill's route, skirting the great mountain system of North-West Su-chuan to Sungpan on the upper Min river, and then proceeding southwards down the valley of the latter. He speaks with enthusiasm of the scenery and the attractions which the country has for the naturalist, and gives useful details of the trade of Sungpan, and the non-Chinese population of its neighbourhood. The mountain region to the south of the Lung An—Sungpan road is inhabited by Chinese or Chinese-speaking Man Tsu. The population is, however, sparse and of recent origin, and large patches of virgin forest still remain. At Mao Chau Gill's route was left, and the south of the hill country crossed by a track leading to Chungpa and the Chengtu road. Here again Mr. Litton was on new ground, and his observations on the country and people are of much value. His report concludes with notes on the Chengtu plain and its irrigation, on the prospects of foreigners in Su-chuan, and on silk production.

* The direction is given on Kreitner's map (Széchenyi Expedition) as S.S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

AFRICA.

Surveys in Buddu, Koki, and Ankole.—In a letter dated Buddu, April 18, 1898, Lieut. Hobart, one of the officers on military duty in Uganda, gives some details respecting surveys carried out by him in the districts to the south-west of that country, accompanied by a map. His routes have intersected Buddu and Koki in all directions, and many minor corrections and additions have resulted. The most important is the insertion of a new Lake, some 14 miles by 3, which drains to the Victoria Nyanza by the Kibale or Kiwale river, just north of the Kagera. The lake lies due north and south, and is named by the natives Kachera, but its discoverer has named it Hobart. A lake, Kanyete or Kachera, was shown by Lugard, who, however, did not visit it, and according to Lieut. Hobart there are two distinct lakes of those names, as well as one named Kajanabátola (Villiers), which means "It comes as you look at it," and refers to the sudden rise and fall of its level, due apparently to subterranean action. Lieut. Hobart says that the Germans have since 1894 occupied the district of Kibumbiro, part of which lies north of 1° south, and therefore properly falls outside their sphere. He urges that the Kagira (Kagera) is the natural boundary of Uganda, and speaks of a current said to set across the Victoria Nyanza from its mouth towards the Victoria Nile. It is known to the natives as Kiira, practically identical with the name of the river.

The Sulphur Springs of Amboni, German East Africa.—In the *Deutsches Kolonialblatt* for May 16, Herr Bornhardt gives a short account of the sulphur springs which have been discovered on the banks of the Sigi, a small river debouching into Tanga bay, and which have been thought capable of utilization as a curative agent. The writer describes the geological features of the neighbourhood, and discusses the probable origin of the springs and the means which might be employed to make use of them for baths. At the point where they occur, the Sigi has cut itself a deep channel through the limestone rock, which ends here as an eastward-facing escarpment. The most copious spring occurs on the left bank at the mouth of the gorge, issuing from a field of piled-up blocks at the foot of the cliff. The level of the river varies considerably, according to the season and the state of the tide, the fresh water being impounded at high tide, though no salt water reaches the spot. The springs are situated at about mean water-level, being completely covered at times. Herr Bornhardt considers that the spring water is collected by the limestone and overlying strata of sandy clay, but is of opinion that the sulphur is obtained from other strata of Jurassic age (marls, clay-slate, etc.), which come to light on a tributary of the Sigi, and have been found to contain concretions of iron pyrites. The broken nature of the limestone formation will render doubtful the success of any efforts to raise the level of the spring-water by dams. At low water, however, it might be utilized at its present level by the excavation of a basin, while at high water it would have to be raised by pumping. A sketch, showing the position of the springs, accompanies the article.

Lieut. Werther's Explorations in German East Africa.—The expedition carried out by Lieut. Werther in 1896–97 to the northern parts of German East Africa, between Masailand and Unyamwezi, has already been briefly alluded to in our pages. The cartographical results have now been published in *Petermanns Mitteilungen* (1898, No. 4) on the scale of 1 : 750,000, accompanied by a general description of the country traversed; and as Lieut. Werther's routes (including those of his former journey in 1893) have intersected the country in all directions, he is able to give, from personal knowledge, a very complete account of its orographical and other features. The Nguru, Usagara, and Rubeho mountains form, in his opinion, a connected system, almost all the streams from which belong

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000033

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to the basin of the Wami. On the east side of the mountains rain falls throughout the year, so that the streams never dry up; but the western side, as is the case with other mountain groups in this region, is much dryer. The Wami or Makata plain to the south has quite a different character from the country to the north, though both often go by the name of steppe. The former is quite level, and is in great part overflowed during the rains, while the latter—the Masai steppe—has an undulating and broken surface largely covered with grass. Another mountain system is that of Irangi, which formed the primary objective of the expedition. Its general direction is north-east, and it is drained by tributaries of the Bubu, which finally loses itself in a salt swamp in the west of Ugogo. The streams have wide sandy beds, dry at the surface except after rain. Further west we come to the long line of escarpment which constitutes the western edge of the great East African trough. The eastern edge seems to be by no means well marked in these latitudes, and the character of a trough is not always preserved. Besides Lake Manyara, a large number of brackish lakes and swamps occur near the foot of the escarpment; one of them, named Balangidda (about 8 miles by 3½), had not been visited by any other European. Their depth even in the rainy season seems hardly ever to exceed 6 feet, whilst in the dry season they leave a crust of salt mixed with soda. In the centre of Ufiome rises the three-peaked Gijeda-sen, apparently an extinct volcano; both the mountain itself and the whole volcanic district round abound in iron. Further south, and closer to the escarpment, lies the old volcano Gijeda-hanang, or Gurui, which Lieut. Werther ascended. It has a vast crater in the form of a horseshoe, the sides of which slope very steeply both outwards and inwards. West of the escarpment lies the high plateau of Turu, Ussure, and Iramba, in great part covered with bush-forest, and to this succeeds the Wembere steppe, a longitudinal depression running from south to north and north-east, and generally bounded by well-marked walls. Besides Lake Nyarasa (the Eiassi of Baumann) in the north, there is an extensive swamp, filled in the rains, towards the south. In about 4° S. lat. the steppe sends out a wide bay to the west, while to the east rise the much-rifted Isanzu mountains. Still another trough occurs between Lakes Nyarasa and Manyara, or Laua-ya-Mueri. This is the depression in which lies Lake Hohenlohe, discovered by Lieut. Werther in 1893, and which proves to be not a circular hollow, as he then thought it. The bordering heights increase in altitude towards the north-east, those on the eastern edge being the higher; they have a heavy rainfall, and some primeval forest occurs in clefts on their sides. In the wooded region between Lakes Hohenlohe and Nyarasa dwell the Watindiga, a hunting tribe.

Explorations in the Congo Basin.—Although no very important discovery remains to be made in the Congo basin, minor additions to our knowledge continue to be made in various parts. The results of some of the latest explorations in the basin of the Kasai and its affluents are embodied in Sheet ix. of M. Wauters' map of the Congo State, given with the *Mouvement Géographique* for April 24 (No. 17, 1898). A short account of the explorations appears in No. 16 of the same journal. Early in 1897, M. Stache explored the lower course of the Loange, which joins the Kasai from the south, a little below the mouth of the Sankuru. Report had it that the stream was inaccessible owing to its sandbanks and violent current, but M. Stache found that the difficulties had been much exaggerated. It is a fine stream with deep water and a mean breadth of 200 to 250 yards, with wider reaches exceeding 600 yards. It has a very rapid current in places, but is navigable for large steamers. Its banks are comparatively high, without forests, but generally sprinkled with wine-palms. The Kancha, which enters the Kasai some 80 miles lower down, flows through low plains, and its waters are black, deep, and easily

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

navigated. The population of its banks seems extremely dense. The sixteenth number of the *Mouvement* also contains the first of a series of articles by Lieut. Gustin, who was attached to Van Kerchhoven's expedition of 1891–93 to the upper Welle, accompanied by a map of that river, on which his various routes are laid down. In the seventeenth number, M. Wauters makes some remarks on the hydrography of the region between the Mobangi and the Shari. On the publication of the results of M. Clozel's journey, M. Wauters expressed a doubt as to the connection of the Wom, discovered by him, with the Shari basin. He now points to a recent exploration by M. Perdrizet, as tending to prove that the Wom is identical with the Ombela, a tributary of the Mobangi. In the *Comptes Rendus* of the Paris Geographical Society, however (1898, p. 241), Dr. Herr, M. Clozel's second in command, contests this theory, pointing out that the Wom, after flowing south-east for a short distance, was found by M. Perdrizet to resume its easterly course, and probably turns to the north after reaching the end of the Kare range, supposed by M. Wauters to form part of the Congo-Shari water-parting. The Ombela, Dr. Herr shows, was found by Porel and Brunache to be quite a small river. Finally, it may be noted that since last September commercial enterprise has been initiated on the Lomami, hitherto the most neglected of the Congo tributaries. Factories have been founded on the lower part of the river by M. Langheld, who reports that the population is far more dense than was previously stated, the natives being of an unusually fine type, and well-disposed to Europeans. A company has been formed to open up the region to trade.

Von Carnap's Expedition from the Cameroons to the Congo.—A letter from Lieut. von Carnap, published in the *Deutsches Kolonialblatt* for May 16, supplements to some extent the account of his journey given by the *Mouvement Géographique* (*Journal*, vol. xi. p. 551). The exact route of the expedition cannot, however, as yet be followed on the map. From Yaunde, Von Carnap made his way first towards the north-east to the town of Yoko, in Southern Tibati, proceeding thence south-east in order to visit the important trade centre of Wuchaba. His further route seems to have led along the upper Sanaga, almost to the latitude of Ngaundere, before again bending southwards. The reason for this northerly *détour* was the difficult nature of the country south-east of Yaunde, which is said to consist of an extensive primeval forest. Even on the route followed great hardships were experienced, the native porters suffering especially from the cold. A little later in the year the south of Adamawa would have been impassable, on account of the amount of water. Hausa caravans traverse this region from Yola in the north, and from French Congo in the east, proceeding by various routes to Yoko and Wuchaba already mentioned. Arrived at the French post of Carnotville, on the Mambere, Lieut. von Carnap sent back the greater part of his force by a more direct route to Yaunde, under sub-officers Staadt and Zampa, while he himself proceeded to the south-east corner of the German territory, at the junction of the Ngoko and Sanga. The Dutch and Belgian trading-stations on the Ngoko lie at present on the right bank, but the chief trade is done with German territory, owing to the immense amount of ivory supplied by the forest region between 2° and 4° N. lat. The supply will probably last for a number of years, but Lieut. von Carnap urges that attention should be paid to rubber, which he observed everywhere in large quantities. Some further details respecting the earlier stages of the expedition appear in the issue of the *Kolonialblatt* for June 15.

AMERICA.

Exploration of the Upper Amazon Tributaries.—Dr. A. Rimbach contributes to the *Zeitschrift* of the Berlin Geographical Society (1897, No. 6) a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

detailed account of a journey made by him in 1894, accompanied by his brother, Carl Rimbach, to the upper Amazon, for the purpose of studying the physical features, and especially the vegetation, of some of the less known parts of that region. Starting from Cuenca, between the two main chains of the Andes of Ecuador, the travellers first proceeded northward to Riobamba, near the headwaters of the Pastaza, it being their object to descend this little known stream to its confluence with the Marañon. Between the basin of Cuenca and that of Riobamba, the Azuay range (14,700 feet, andesite) had to be crossed, and Dr. Rimbach gives some interesting notes on the character of the vegetation at different altitudes, and on the varying aspect of the Andean ranges visible during the journey. The route to the Marañon *viâ* the Pastaza was used by the missionaries of Quito in De la Condamine's time, and was even followed by Madame Godin in 1769 on her adventurous journey to join her husband, one of the French astronomers who took part in the measurement of the degree in the equatorial regions of South America. It appears to have fallen into disuse of late years, and the path to Canelos, a mission station on the Bobonaza, was so indistinct as to be missed even by Dr. Rimbach's guide, who had often traversed it before. The passage of the eastern cordillera is made by a deep cleft at the northern foot of the volcano of Tunguragua, on the slopes of which the travellers could distinguish the lava stream due to the eruption of 1886. At the village of Baños, within the pass, the travellers found the inhabitants much exercised in mind on account of the Peruvian encroachments, and were taken for spies of that nation. Soon after passing this the vegetation characteristic of the Sierra was replaced by forest, which, however, did not at once assume the moist tropical character typical of the lower regions. The numerous tributaries of the Pastaza mostly emptied themselves into the main stream by waterfalls from small plateaux, which are chosen as the sites of settlements. At Canelos, the travellers were detained some weeks by swelling and ulceration of the feet, due to the long marches through the forest. The route was continued by canoe down the Bobonaza and Pastaza amid incessant rain, which caused the river to rise rapidly, flooding its low-lying banks, and bringing down trunks of trees in dangerous quantities. Below the village of Andoas, at the mouth of the Bobonaza, the banks of the Pastaza were quite uninhabited, except at two spots where Peruvian rubber collectors had settled. One of the Indians of the party having been bitten by a poisonous snake, Dr. Rimbach allowed his escort to return, while he and his brother continued the canoe voyage alone, finally reaching the Marañon, and continuing down that stream to the station of Parinari. A compass survey of the Pastaza was carried out, and its course as given by Dr. Rimbach, differs considerably from that shown on the maps. A sketch of the complete river system of the northern tributaries of the Marañon, based on Dr. Rimbach's observations and inquiries, accompanies the paper. The Marañon, too, was found to be much swollen at the end of May, the chief period of high water lasting from February to May, while a smaller rise takes place in October and November. After exploring the banks of the Samiria, a small stream which enters the Marañon just below Parinari, the travellers proceeded by steamer to Yurimaguas, on the Huallaga, and thence by land to the coast *viâ* Moyobamba, Chachapoyas, and Cajamarca. This route involved the crossing of five high ranges, and gave many opportunities of studying the varying aspects of climate and vegetation in Northern Peru. The forest region which had continued without intermission since the descent from the highlands of Ecuador ceased near Moyobamba, the western slopes of the cordillera east of that place showing a tendency to a xerophytic character. On both branches of the central cordillera the contrast between the moist vegetation of the eastern, and the dry vegetation of the western slopes is most marked, while on both branches of the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000034

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [302r] (106/154)

western or coast cordillera the dry predominates. The peculiar character of this dry vegetation, consisting largely of cacti, was especially noticeable on the sides of the upper Marañon valley. The descent down the heated, waterless, slope occupied nearly a whole day, after the stream had been first sighted.

New Expedition of Dr. Hermann Meyer.—Like his brother, Dr. Hans Meyer, Dr. Hermann Meyer has lately undertaken a new expedition to the scene of his former explorations. It is announced in *Globus* (vol. lxxiv. p. 20) that he is to start during August for South America, where he hopes to explore the Atelchu, one of the Xingu headstreams, discovered by him two years ago. There are still unvisited tribes of Indians on this river, and Dr. Meyer hopes to obtain valuable ethnological results. Three other Europeans are to accompany the traveller.

Sir Martin Conway's Expedition.—Sir Martin Conway has left for Bolivia for the purpose of exploring the high group of the Andes, containing the peaks Illimani and Illampu (Sorate).

AUSTRALASIA AND OCEANIC ISLANDS.

Prof. Haddon's Expedition.—According to news received at Cambridge from Prof. Haddon, the expedition which went out under his leadership to study the anthropology of Torres Straits and other parts of the Eastern Archipelago arrived at Thursday island on April 23. A week later a start was made for Murray island, which was, however, only reached after a week's trying navigation. The expedition took up its quarters on Murray island in a deserted mission house, and work had begun in earnest. Preparations are being made by Rajah Brooke to afford the party every possible assistance on their intended visit to Borneo.

The Island of Rotuma.—Mr. J. Stanley Gardiner in his paper on the "Geology of Rotuma" (*Quarterly Journal of the Geological Society*, vol. liv. part i.), treats at some length on the topography of the island. The author's notes were made during his visit to the island in the months September to December, 1896. The island of Rotuma is situated in lat. 12° 30′ S. and long. 177° 1′ E. It appears to lie on a great submarine plateau which includes the Tongan and Fijian groups, and which has a northward extension of 4° to 5° of latitude, with a depth not greater than 1500 fathoms in a general depth of 2000 to 3000 fathoms. The breadth of this plateau north of, and including Tonga, is about 10°, while in lat. 9° to 13° S., it has a westward extension to join the plateau on which the Santa Cruz and Solomon groups lie. Rotuma consists of two parts joined together by a narrow neck of sand. The eastern end is about 5 miles long by 2½ broad, and the heights of its hills, which are volcanic in character, vary up to 860 feet. On their outer faces, towards the sea, are extensive beach-sand deposits. The western end is very sharply separated from the beach-sand flat at the isthmus by steep cliffs of 70 to 100 feet, surrounding the base of Kugoi, while the same hill continues to the south into Kiliga, but to the north has a sharp drop into a valley, from which Sororoa rises to the height of about 850 feet. A remarkable cavern in the lava of Sol Mafiri, with lava stalactites is described, as also a similar cavern in An Hufhuf. The total annual rainfall of the island is estimated at from 150 to 250 inches. The author is of opinion that Rotuma was first formed of a kind of basaltic rock, such as is found in Kugoi now. This rock he believes to have extended along the whole island as it now runs, but to have been broken up by that great eruption, or series of eruptions, which formed the central U-shaped range of hills of the eastern end. By this eruption he believes that this basaltic rock was in places loosely piled up, and then, by disintegration and admixture with lava, formed the hills and islands of volcanic ash. The last stage is the washing away of these, and the formation of the coral-reef and the beach-sand flats.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

POLAR REGIONS.

Drift-casks for the Investigation of Polar Currents.—In the *Bulletin* of the Geographical Society of Philadelphia (vol. ii. No. 3), Commodore G. W. Melville, well known from his participation in the ill-fated *Jeannette* expedition, develops his plans for an investigation of the circumpolar currents by means of drift-casks. His proposal is that a number of oaken casks of a special design shall be constructed and set adrift to the north of Bering strait in sets of five. The shape suggested is that of parabolic spindles, conical at the ends, the material to be of sufficient strength to withstand heavy pressures. They would be provided with the ordinary bung-hole and bung, the intention being to place within each a tightly corked bottle for the preservation of records in various languages, giving details regarding the exact position in which the casks were abandoned, and requesting the finder to communicate with the hydrographical office of the country to which he may belong. The first five casks might be set adrift at or near Herald island, and the rest successively to the northward, along the eastern edge of the polar pack, until about lat. 75° N., long. 170° W. were reached. A map is added showing the probable lines of drift across the polar basin, one, in Commodore Melville's opinion, probably bending to the east, towards the American archipelago.

Departure of Lieut. Peary's Expedition.—The departure of the *Windward* from New York for the North Polar region took place on July 2. On July 9 the ship reached Cape Breton, where Lieut. Peary had arranged to embark, and at once proceeded to coal. An early start northward was expected to be made, the ice in those regions being reported unusually favourable for the time of year. The *Hope*, with coal and other supplies, had sailed previously, and was to meet the *Windward* in the north of Baffin's bay. In accordance with the programme already made public, Lieut. Peary will probably be landed at Sherard Osborn fiord, the ship then returning home if not caught in the ice. In the case of favourable ice-conditions, however, it is possible that he may steam still farther northward before landing. He hopes to reach the northernmost point of Greenland early in the summer of 1899, and to push on for the pole with a small and compact party during the same season.

Mr. Wellman's Expedition.—Mr. Wellman writes to us from Archangel under date July 4, announcing the immediate departure of his expedition for the north. The *personnel* consists of nine in all, four from America, and five from Norway, whilst eighty-three Siberian dogs have been taken on board. A Reuter telegram from Vardo, dated July 15, announces the return thither of Mr. Wellman after a preliminary cruise to the north, heavy pack-ice having been found to bar the way in 77° N. A renewed start was to be made on the 17th. The unfavourable ice-conditions this summer in the Spitsbergen seas are also referred to in *Globus* (vol. 74, p. 18).

Australasia and Antarctic Exploration.—With a view to arousing interest in antarctic exploration in the Australasian colonies, the Hon. C. C. Bowen, who, as a member of the New Zealand Legislature, was present at the Antarctic Conference held last summer at the Society's rooms, has written an article on the subject, which has been published in the *Press* of Christchurch, New Zealand (May 16, 1898). After recounting the various attempts which have been made within the last ten years to set on foot a British expedition to the Antarctic, and lamenting the apathy shown by the Australasian colonies, Mr. Bowen proceeds to sketch the past history of south polar research, as he believes that ignorance of what has been done so far, and of the important problems awaiting solution, is the real cause of the little interest displayed by the colonial public in the matter. Some effect seems to have been produced already by Mr. Bowen's article, which has been reproduced, in whole or in part, in other colonial papers.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000af

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Mr. Borchgrevink on his Expedition to the Antarctic.—At the closing meeting of the session Mr. Borchgrevink spoke a few valedictory words on the eve of his departure for the Antarctic, and gave some details as to the composition and objects of his expedition, the funds for which, as is well known, have been provided by Sir George Newnes. Mr. Borchgrevink is accompanied by a strong scientific staff, including Captain Kolbeck and Mr. Louis Bernacchi as magnetic observers, the latter being also an expert photographer; Herr H. Klövstad, M.D., M.A., of Christiania University, as medical officer; and Messrs. N. Hansen and Hugh Evans as zoologists. His ship, the *Southern Cross*, is commanded by Captain Bernherd Jensen, who has already sailed in the antarctic seas, and there are two mates and a crew of twenty-four. Mr. Borchgrevink expressed his sense of the honour which has devolved upon him in being permitted to continue the work of the illustrious Sir James Clark Ross, and his satisfaction that any prospective results will be achieved under the British flag. He expects to return in 1900.

OBITUARY.

Major-General R. G. Woodthorpe, C.B., R.E.

By Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B.

Robert Gosset Woodthorpe, second son of Captain John Bolton Woodthorpe, R.N., was born at Purfleet, in Essex, on September 22, 1844, and was educated at Mr. John Taylor's school at Woolwich, preparatory to entering the Royal Military Academy as a cadet. He obtained his commission in the Royal Engineers on June 22, 1865, and very early in his career he elected for service in India. He "heard the East a-calling," as many others have done, and he responded to that call with the service of a lifetime, finishing his career as Deputy Surveyor-General at Calcutta, and taking his last long leave on May 26.

Nature intended Robert Woodthorpe to be one of the world's explorers. He was gifted with a short, square figure and sturdy frame, immense capacity for endurance, and a courage that no combination of difficulties and dangers could depress. Thus, when the Indian Survey Department pointed the way to geographical distinction, he accepted the chance with alacrity, and was speedily drafted off to some of the wildest and most inaccessible districts of the Indian borderland on survey duty.

His first surveys were carried through the Khasia and Naga highlands, and it was here that he found himself face to face with a people so exceptional in their physical characteristics, and so entirely aboriginal in their manners and customs, that he at once fell into the habit, which never after left him, of illustrating his wanderings with his pencil. As an amateur artist he was of far above average capacity, and his pictorial records of the Eastern frontier must be considered unique in value, not only for the extent of them, but for their minute accuracy, and the patient, painstaking care with which comparatively small ethnographical traits and distinctions are preserved in them. It was a life of adventure and danger that he led, even in those early days. He was with Butler when that intrepid officer was killed by a spear launched from the jungle, which was apparently intended for Woodthorpe himself. Indeed, his records of the Khasia survey alone would fill a book with stories of adventure; but survey officers in India have little time for book-writing, and the world hears little about them. In 1871–72 he was called to accompany the Lushai expedition, which was carried through districts much akin to those of the Khasia community. Here again his

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XII, No. 2 [303v] (109/154)

pencil came freely into play, and of this particular expedition he did publish an account, which is well worth study.* Here, too, he first made the acquaintance of an officer who had been appointed quarter-master general of the force—Colonel Roberts, v.c.—and the friendship thus inaugurated lasted unbroken until Colonel Roberts became commander-in-chief of the Indian army, under a much more imposing title.

Not long after the Lushai expedition (in the late autumn of 1878), the outbreak of war with Afghanistan gave Woodthorpe another opportunity of exhibiting his peculiar qualifications, not only as an explorer and surveyor, but as a hard fighting and determined soldier.

Captain Woodthorpe was placed in charge of the survey party attached to the Kuram column under General Roberts. The geography of Afghanistan was in those days mostly an unravelled mystery, and the art of carrying on a systematic survey with a moving force in the field was an art which was then in its infancy. Woodthorpe effected on the line of the Kuram what Tanner and others accomplished on the Khyber. The field work which fell to him was both incessant and rough, demanding all the physique of a trained mountaineer, added to the skill of a trained triangulator. On one occasion I remember that there was question of reaching the highest peak of the Sufed Koh range (Sikarám) from a position near the Shutar Gardan pass, in time to admit of a day's work with the theodolite before descending again to camp ere night fell, on a short winter's day. The ascent was one of about 7000 feet, four hours were barely sufficient for the observations, and the descent had still to be included in the ten or twelve hours of daylight that was all that could be reckoned on. At the first attempt Woodthorpe was up to time, but his carriers were not; he had found the way up, but they could not follow him. He punished them all for laziness, and started again with the same men a little earlier next day. This time he scored a complete success. In those days he was occasionally accompanied by another enthusiastic mountaineer, one who was kind enough to assist him in keeping the record of his observations. I lately found some pages of his "angle books" signed by "George White, Major 92nd Highlanders." In fulness of time this gallant officer and most capable climber of high places succeeded Lord Roberts as commander-in-chief in India. But Captain Woodthorpe had his turn of fighting too. He was acting as aide-de-camp to General Roberts during the memorable Peiwar Kotal action, when he unwittingly made a most risky mistake. In taking a short cut back to the staff from some remote corner of the field, he jumped straight into an Afghan sungur, under the impression that it was held by our own troops. Fortunately, he was himself wearing our Afghan pugri at the time, and he recognized his error just a second or two before the Afghan defenders recognized the quality of their casual visitor. Those few seconds gave him a few yards' start out of the sungur again; but a shot at close quarters caught him in the back, broke his revolver, travelled round his ribs, and bowled him over as he retired hastily down the hill "like a rabbit," as he said. But he was none the worse for it! He lost his rifle, but recovered it again a few days afterwards, during the general Afghan retreat. His work in the Kuram earned him a brevet majority, and when the second phase of the war broke out after Cavagnari's massacre, he was again to the front on the same line of advance, and under the same general. This time we worked together (I had previously been on the Kandahar line) after we had joined our respective surveys at a point on the Bala Hissar hill, overlooking the city of Kabul. During the memorable winter which followed Woodthorpe and I shared our quarters in

* 'Account of the Lushai Expedition, 1871–72.' Hurst & Blackett.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the "72nd" gate at Sherpur with a brave soldier (Stratton), who was subsequently killed in action; and it was whilst the siege of Sherpur lasted that I had the opportunity of watching and admiring the unfailing cheeriness and unflagging



GENERAL R. G. WOODTHORPE, C.B., R.E.

determination that Woodthorpe evinced in his laudable efforts to "keep things going." Whether they were things professional, theatrical, or social; whether there were amusements to be promoted amongst the men, or conviviality to be shared amongst their officers, Woodthorpe was in the thick of them all.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

I have referred to his undaunted pluck. If the quality of courage is one that admits of many varieties, then I can say with confidence that Woodthorpe possessed them all. He was of the stuff that makes V.C. heroes, though he never won that distinction. I watched him once when he was within a measurable distance of it, but on that occasion the race was to the swift, and he just failed to win. It happened thus. I had taken a powerful survey telescope to the top of that Sherpur gateway on which General Roberts was watching the progress of the fighting on the Asmai hills before him. The distance was too great to distinguish the different regiments with the naked eye, but near enough to admit of recognizing individuals with a good telescope. So I reported progress, whilst the general walked up and down the narrow space of the roof. I watched a cloud of skirmishers (72nd and Guides) struggle up the heights held by the enemy, till they appeared on the sky-line, where they broke right and left to clear the ridge. I knew that Woodthorpe was with them, and was certain that he would be in the first flight. On the left, balanced on the very apex of the mountain, was a stone-built sungur, from which the plucky defenders declined to move. I could watch them waiting and reserving their fire to the last, meaning to die (as they did die), every man of them, where they stood. In front of the sungur, flat against the sky-line, was 50 yards or so of open sward; at the end of this a rocky bit of cover. Gradually behind the cover a little band collected, and I waited, with intense expectancy, to see who would be first over the flat and into that sungur. It was a gallant corporal of the 72nd who first broke away from the cover of the rocks. He was speedily followed by a small group, headed by the easily recognized figure of my chum. But he was a second or two too late this time. Corporal Sellar was not to be caught. He reached the foot of the sungur first; and then there appeared on the crest of it a figure which seemed gigantic, as, with flowing robes streaming in the wind, and uplifted arms, he dashed down a heavy stone on to the luckless corporal, and sent him, doubled up in a heap, many yards down the hillside. What followed I did not see; but every Afghan died a soldier's death, whilst Corporal Sellar picked himself up and won a soldier's reward—the Victoria cross. More than once have I discussed this little episode with Woodthorpe, and he admitted that for once he was thoroughly exhausted. During the fighting that took place round Kabul, whilst that never-to-be-forgotten December dragged on, Woodthorpe was always to the front, and once had his clothes torn by a bullet and was again slightly wounded, but he was never ill, and never lost that contagious cheeriness which lightened those gloomy days like sunshine. A well-deserved brevet lieut.-colonelcy rewarded him for his share in the second phase of the Afghan campaign.

There are people who maintain that physical courage in action is a useful idiosyncrasy much to be encouraged amongst soldiers, but that it fails to prove the existence of any moral force of character; so I will add another little story.

Woodthorpe was alone this time—alone and deserted by most of his servants in a pestiferous jungle—when cholera gripped his camp. There was no sustaining excitement now, and he feared cholera personally with a deadly fear. There was no doctor, and he could get no assistance, so he worked by himself amongst his dying coolies; and if he could not stay the terrible enemy, he waited till the end, and then sewed the bodies up in coarse sackcloth *with his own hands*, and buried them. Dead or alive, he would not desert his coolies, and yet it is not too much to say that they were drawn from the scum of Assam. He "funked" the cholera, as he said, and of course he got it. Having got it, he told me that he funked it no longer—and he got over it.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

It is impossible to write the life-history of a man whose whole career was one of incident and adventure within the short limits that are suitable to this journal; but I must include an account that has been sent me by Colonel Macgregor, C.B., D.S.O., referring chiefly to Woodthorpe's work on the Assam and Burmese frontier. Colonel MacGregor writes as follows: "Early in 1875 we were associated together in the expedition against the Eastern Nagas, to the south of Jeypore, on the left hand of the Brahmaputra river. These hill men had treacherously attacked a survey party under Captain Badgely and Lieut. Holcombe, killing the latter, and severely injuring the former. In this expedition Woodthorpe was ever to the fore, fighting, reconnoitring, and engineering, and in the taking of the enemy's position at Ninu Niau and Sannoa, was of the greatest assistance to the commander of the expedition (the late General Sir J. M. Nuttall, K.C.B.). I well remember how ready he was to share the contents of his water-bottle with me (when I had finished mine) in many a steep climb, and in this, as in numerous other ways, he showed his unselfishness and kindness of heart. In the cold season of 1883–84 Woodthorpe was employed in the Aka expedition to the north of Tezpur, on the right bank of the Brahmaputra, and was of the greatest service to General R. Sale-Hill, C.B., who acknowledged his indebtedness very handsomely in his despatches. On one occasion I remember seeing Woodthorpe cross over, by himself, the Maj Boreli river by means of an Aka cane cradle bridge in order that he might reconnoitre the opposite bank. It was a most risky thing to do, but "little Woodthorpe" never paused to count the cost before executing any deed of daring. In the Aka expedition I had the pleasure of accompanying him in all his reconnaissances, and we had very exciting experiences. Once (it was New Year's Day) we had two Gurkhas with us, and one had been shot in the neck by an (aconite) poisoned arrow. Woodthorpe scooped out the place with his pocket-knife and sucked the wound, and said, 'We will see the wounded man through the business' (after a hand-grip we heard the Akas yelling in the wood round us, and thought it was nearly 'all up'). Woodthorpe disposed our little party of four behind two trees, and we awaited the expected attack; luckily for us probably, the hill men thought better of it and dispersed. On another occasion Colonel H. St. P. Maxwell, C.S.I. (the political officer), Woodthorpe, and I were ascending a hill in single file, when we heard Akas above us cutting away at the canes and creepers which held together a 'shoot' of rocks. Woodthorpe dashed by me up the mountain-side with the view of stopping the cutting and saving our party, and he succeeded in doing so. In the winter of 1884–85 Woodthorpe explored the country to the south-east of Sadya, in the Upper Assam, and I had the good fortune to accompany him. We followed the course of the Noa Dihing, and then struck across the mountains (where, at an altitude of nearly 10,000 feet, we had to wade through snow), and, descending with four Gurkhas into the fertile valley inhabited by the Bor Kamptis, finally reached the Namkiu (the western branch of the Irrawadi), and Woodthorpe practically settled the much-vexed question of the source of the Irrawadi river (though some of the admirers of the intrepid traveller Prince Henri of Orleans afterwards gave the prince the entire credit of discovering the source, because he had crossed the eastern branch of the river). Woodthorpe's party eventually returned to Assam over the Patkoi range to the north-east of the Hukong valley, after many privations and hardships. Woodthorpe was ever cheery and hearty, and difficulties with him disappeared as if by magic almost as soon as they arose. On one occasion we were 'brought up' sharp by a swollen river running deep and rapid. Under Woodthorpe's supervision, we made a raft of plantain trees with creepers to lash the raft together (the only material available), and crossed over our little party without loss, though the Gurkha soldiers and Khasiâ coolies

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000088

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

were weak and faint (having had no food for nearly two days!). Woodthorpe took the raft across himself every trip (only one passenger could go at a time, as the plantain trees were so heavy and sunk more than a foot under water), and, as usual, worked like a Trojan. On another occasion he made us fell a tree across a deep and rushing mountain torrent, and, rigging up a hand-rail of cane, we crossed safely. Once we were very hard up for food, and saw no prospect of obtaining any. Woodthorpe recollected he had a few dynamite cartridges, so he went on a river in a little Berthon boat, and, exploding the cartridges by the aid of some Bickford's fuses, obtained a plentiful supply of fish, and so saved the situation. I could quote very many instances of the skill, readiness, pluck, and resource of my friend, and it gives me now the greatest pleasure to look back upon the happy and exciting times we have had together.

Colonel H. Godwin-Austen, F.R.S., in his paper read before the British Association at Aberdeen in 1885, on Woodthorpe's expedition from Assam to the Irrawadi, said, "Colonel Woodthorpe possesses all the qualifications that make the successful explorer. Great powers of endurance and observation, zeal for his work, brave but cautious, a talented draughtsman, and last, but not least, the tact to make himself liked by the people of the country." Colonel Sir H. Yule, in the discussion that followed the reading of my paper in 1886 on Woodthorpe's expedition before the Royal Geographical Society, said, "I am delighted to hear the testimony which Major Macgregor has borne with regard to his fellow-traveller, Colonel Woodthorpe, an officer with whose remarkable enterprises I have been much impressed for the last seven or eight years. Colonel Woodthorpe has made several remarkable journeys to the north-east of India; but his explorations have not been confined to that region. He has just returned from a journey in the extreme north-west beyond the British frontier, through passes which have never before been trodden by any European (exploration beyond Gilghit with General Sir William Lockhart). Colonel Woodthorpe has been an explorer in the regions of the sources of the Irrawadi and of the Oxus." On the same occasion, General J. T. Walker (late Surveyor-General of India) said, "Colonel Woodthorpe is one of the ablest and best officers in a department which contains many and excellent men."

In 1885–86 he followed the fortunes of an officer (Sir William Lockhart, who will shortly return to India as the third commander-in-chief, whose friendship and regard Woodthorpe had the good fortune to win) in the hazardous opening-up of friendly tribal relations, and the exploration of routes north of Chitral during the progress of the Afghan Boundary Commission under Sir Peter Lumsden. Sir William Lockhart knows well what his services were on that occasion; his patient, untiring devotion to duty as surveyor of the expedition in face of difficulties that would have paralyzed the courage and swamped the endurance of any ordinary man. Years afterwards, under very different circumstances, the opportunity occurred of testing the accuracy of the work so accomplished by more rigorous methods which the general advance of scientific surveys in these regions rendered feasible. I can only say that I have never ceased to marvel at the completeness and thoroughness of Woodthorpe's results, knowing well what he had to face in order to secure them.

On February 15, 1889, he was appointed by Lord Roberts chief of the Intelligence Branch of the Q.M.G.'s Department in India. No better selection could apparently have been made. The Indian Intelligence system is entirely different to that of England. In England, Intelligence officers can always work on the assured basis of sound maps. In India, both sound topography and general ethnological information have first to be secured by the Survey Department before

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000060

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the Intelligence officer can graft his theories thereon; and thus the appointment of a survey officer of Colonel Woodthorpe's experience was entirely *apropos* to the requirements of the office. But the close daily routine of office life was not altogether congenial to his adventurous spirit, and he doubtless grew rather impatient of a system which kept him chained to a desk, and in which (as he said) he was the last officer to learn anything new. Independence of opinion is not always welcome in India, and Woodthorpe's views failed to accord with those of his military superiors. A reduction in the status of the office sent Woodthorpe back to his old love and his old life in the Survey. The change might have been altogether for his happiness, but that he accepted it as a reflection on his official capacity. There is no doubt that it affected him greatly, and to his many friends there certainly seemed to have been a want of appreciation of his brilliant services in the nature of those proceedings by which his retransfer was effected.

In the autumn of last year he was appointed Deputy Surveyor-General, which appointment he retained to the day of his death.

If there was one of his characteristics more than another which appealed to his friends, it was his unfailing spirit of genial good-fellowship. His was a cheeriness which spread in ripples around him, and influenced all who fell within its reach. No man could feel "sorry for himself" long in Woodthorpe's company. Such a spirit as this makes more for the final sum of the world's happiness, perhaps, than many of the arts and graces which adorn it. Not that Woodthorpe was insensible to the arts and graces either, for his love of painting amounted almost to devotion, and his accumulated store of life-illustrations is a legacy of which his family must be proud. But he was essentially a man of warm-hearted impulses, and nothing was too much for his generosity—no sacrifice too great for him to make in the interests of a friend.

The world is the poorer for his loss—as much the poorer as generous, true-hearted spirits like his are rare. What the loss to his relations must be it is not for me to say. Woodthorpe never married. He devoted himself with a single-hearted purpose to the interests of those dear to him, who, less happy than he, were not so well able to help themselves. May he rest in peace! He has left many behind who will ever keep his memory green, for we feel that, "taking him for all in all, we ne'er shall look upon his like again."

MEETINGS OF THE ROYAL GEOGRAPHICAL SOCIETY, SESSION 1897-1898.

Afternoon Technical Meeting, Monday, June 27, *at* 4.30 *p.m.*—Sir CLEMENTS MARKHAM, K.C.B., President, in the Chair.

The Paper read was:—

"On a proposed Great Globe on a scale of 1:500,000." By Prof. Elisée Reclus.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000032

مكتبة قطر الوطنية
Qatar National Library

GEOGRAPHICAL LITERATURE OF THE MONTH.

Additions to the Library.

By HUGH ROBERT MILL, D.Sc., *Librarian*, R.G.S.

THE following abbreviations of nouns and the adjectives derived from them are employed to indicate the source of articles from other publications. Geographical names are in each case written in full:—

A. = Academy, Academie, Akademie.
Ann. = Annals, Annales, Annalen.
B. = Bulletin, Bollettino, Boletim.
Com. = Commerce, Commercial.
C. Rd. = Comptes Rendus.
Erdk. = Erdkunde.
G. = Geography, Geographie, Geografia.
Ges. = Gesellschaft.
I. = Institute, Institution.
Iz. = Izvestiya.
J. = Journal.
M. = Mitteilungen.
Mag. = Magazine.
P. = Proceedings.
R. = Royal.
Rev. = Review, Revue, Revista.
S. = Society, Société, Selskab.
Sitzb. = Sitzungsbericht.
T. = Transactions.
V. = Verein.
Verh. = Verhandlungen.
W. = Wissenschaft, and compounds.
Z. = Zeitschrift.
Zap. = Zapiski.

On account of the ambiguity of the words *octavo*, *quarto*, etc., the size of books in the list below is denoted by the length and breadth of the cover in inches to the nearest half-inch. The size of the *Journal* is 10 × 6½.

EUROPE.

Sweden—Lake Mälar. *Ymer* (1897): 281–291. **Nerman.**

Några anteckningar om Mälaren och dess vattenstånd. Af Gustaf Nerman.

Sweden— Norrland. **Andersson.**

Den inre omflyttningen. I. Norrland-Akademisk Afhandling . . . af Theophil Andersson. Malmö, 1897. Size 9½ × 6½, pp. 60 and xxv. *Presented by the University of Upsala.*

On the movements of population in Norrland.

Sweden—Upsala. *Meteorolog. Z.* **14** (1897): 393–405. **Westman.**

Die Luftströmungen an der Erdoberfläche zu Upsala, 1891–1895. Von Dr. J. Westman.

On the winds at Upsala, discussed in all the bearings of meteorology.

Switzerland. *Globus* **73** (1898): 277–278. **Halbfass.**

Die Gemeinde Obersaxen, eine deutsche Sprachinsel im romanischen Vorderrheinthal. Von Dr. Halbfass.

Obersaxen is a German-speaking commune in the canton of Graubünden, in the midst of the Romanch-speaking districts.

Switzerland. ——

Les inondations et le reboisement de nos montagnes. La Société des forestiers suisses aux autorités fédérales, cantonales et communales. (Traduction.) Berne: Imp. Michel & Buckler, 1898. Size 9 × 6½, pp. 20. *Illustrations.*

Switzerland. *Rev. G.* **42** (1898): 284–287. **Corcelle.**

Le tunnel du Simplon. Par J. Corcelle.

The effect of the St. Gothard tunnel is said to have been a serious loss to France by the diversion of continental traffic from Marseilles to Genoa. The Simplon tunnel now in progress is anticipated to have a similar result.

Switzerland—Valais. *Rev. Scientifique* **9** (1898): 143–144. **Regnault.**

La langue française dans le Valais. Par M. Félix Regnault.

Turkey and Greece—Boundary. *Deutsche Rundschau G.* **20** (1898): 225–226. ——

Die neue Grenze zwischen der Türkei und Griechenland. *With Map.*

The map is remarkably clear, showing distinctly the areas ceded by Greece to Turkey.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000002

مكتبة قطر الوطنية
Qatar National Library

United Kingdom. *J.R. Statistical S.* **61** (1898): 49–82. **Cannan.**

Demographic Statistics of the United Kingdom: their want of Correlation and other Defects. By Edward Cannan, M.A.

This paper deals critically with the movement of populations as expressed in the Registrar-General's returns, the composition of the population by nationality as dealt with in the immigration and emigration returns, and internal migration as dealt with in the census reports.

United Kingdom—England. **Phillimore and Whitear.**

Historical Collections relating to Chiswick. Edited by W. P. W. Phillimore and W. H. Whitear. London: Phillimore & Co., 1897. Size 8½ × 6, pp. 306. *Illustrations and Map.*

This book touches upon the meaning and origin of the place-names in the neighbourhood of Chiswick.

United Kingdom—England. **Reed.**

A Handbook to the Geology of Cambridgeshire, for the use of Students. By F. R. Cowper Reed, M.A. Cambridge: The University Press, 1897. Size 7½ × 5½, pp. xii. and 276. *Sections. Price 7s. 6d. Presented by the Publishers.*

This is an admirable exposition of the geology of the country around Cambridge, prefaced by a short account of the physical geography of the locality, which will be referred to in the Monthly Record.

United Kingdom—England. **Williams, Eliot, Meade-King.**

P.I. Civil Engineers **131** (1898): 14–99.

The Manchester Ship-Canal. By Sir E. L. Williams. *Five Plates.* Ditto: Mersey Estuary Embankments.—Eastham Division. By W. Eliot. Ditto: Mersey Estuary Embankments and other Works.—Runcorn Division. By Sir E. L. Williams. Ditto: Irlam Division. By W. O. E. Meade-King. Discussion and Correspondence on ditto. *Three Cuts.*

United Kingdom—England. **Hay and Fitzmaurice.**

P.I. Civil Engineers **130** (1897): 50–98.

The Blackwall Tunnel. By David Hay and Maurice Fitzmaurice. *With Plans.*

A tunnel to connect Tilbury with Gravesend was commenced in 1798, and one between Limehouse and Rotherhithe in 1805, but both were abandoned. Brunel's brick tunnel under the Thames between Wapping and Rotherhithe was commenced in 1825 and finished in 1842. The only other tunnel beneath the Thames below London Bridge was the Tower sub-way, opened in 1869. The Blackwall tunnel Act was obtained in 1887, work was commenced in 1891, and the tunnel from Blackwall to Greenwich, of a total length of 6200 feet (1200 feet of which are under the river), was opened for foot passengers and vehicles in 1897. The tunnel in one place is only 5 feet below the bed of the river. It is lined throughout with white glazed bricks, and lighted by electricity.

United Kingdom—England. **Inglis.**

The "Contour" Road Book of England (Northern Division). A Series of Elevation Plans of the Roads, with Measurements and Descriptive Letterpress. By Harry R. G. Inglis. London: Gall & Inglis, 1897. Size 6½ × 4, pp. xxx. and 240. *Maps and Diagrams. Price 3s. 6d. Presented by the Publishers.*

A clear and serviceable guide to cyclists, showing the "ups and downs" of the principal roads in the north of England. The book is very compact and light, so as to be easily carried in the pocket.

United Kingdom—England. **Graham.**

The English Township. By T. H. B. Graham. From the *Gentleman's Magazine*, March, 1898, pp. 252–268. London: Chatto & Windus. Size 9 × 6.

A note on the district of Ditmarsh, between the Elbe and Eider, followed by a history of the origin of the English townships from the early Teutonic village lands.

United Kingdom—England. *Nineteenth Century* **43** (1898): 431–447. **Jessopp.**

Parish Life in England before the Great Pillage. By the Rev. Dr. A. Jessopp.

United Kingdom—England. *Quarterly J.R. Meteorolog. S.* **24** (1898): 42–50. **Marriott.**

The Rainfall of Seathwaite, Borrowdale, Cumberland. By William Marriott. *With Map and Illustrations.*

A note on this paper was given in the Monthly Record for June, vol. xi. p. 663.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000014

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

United Kingdom—England. *Quarterly J.R. Meteorolog. S.* **24** (1898): 31–41. **Mossman.**
Daily Values of Non-Instrumental Meteorological Phenomena in London, 1763–1896. By R. C. Mossman. *With Diagrams.*

A note on this paper was given in the Monthly Record for June, vol. xi. p. 662.

United Kingdom—England. *Fortnightly Rev.* **63** (1898): 479–485. **Warren.**
The Westminster "Improvement" Scheme. By E. P. Warren. *With Plan.*

The plan shows the projected rebuilding of part of Westminster, the bill to authorize which has failed to pass the House of Commons.

United Kingdom—Ethnography. *British Assoc. Reports* (1897): 452–512. ———
Ethnographical Survey of the United Kingdom. Fifth Report of the Committee.

This report contains a further report on the Folklore of Galloway by the late Rev. Walter Gregor, reports of the ethnographical surveys in Wigtonshire, Kircudbrightshire, and East Anglia, and anthropometric notes relating to Aberdeen, Banffshire, the isle of Lewis, and Cleckheaton in Yorkshire, concluding with a report on the ethnographic survey of Ireland.

United Kingdom—Food-supply. *Nineteenth Century* **43** (1898): 879–889. **Marston.**
Our Urgent Need of a Reserve of Wheat. By R. B. Marston. *With Diagram.*

United Kingdom—Geology. *T. Edinburgh Geolog. S.* **7** (1897): 203–222. **Goodchild.**
Desert Conditions in Britain. An Address to the Geological Society of Edinburgh, at their Opening Meeting on November 19, 1896. By J. G. Goodchild. *With Plate.*

This was referred to in the Monthly Record for June, vol. xi. p. 662.

United Kingdom—Geological. *British Assoc. Reports* (1897): 298–332. **Watts.**
Photographs of Geological Interest in the United Kingdom.—Eighth Report of the Committee.

The work of this committee has been carried on energetically, 364 new photographs of geological interest having been added within the year 1896–97, and the whole collection, which is preserved in the Jermyn Street Museum, now includes 1751, dealing with the various divisions of the country as follows: England, 1027; Wales, 122; Channel Islands, 14; Isle of Man, 30; Scotland, 166; Ireland, 342; and typical rock structures, 50.

United Kingdom—Ireland. **Gardiner and Reynolds.**
Quarterly J. Geolog. S. **54** (1898): 135–148.
The Bala Beds and Associated Igneous Rocks of Lambay Island, co. Dublin. By C. I. Gardiner and S. H. Reynolds. *With Map and Sections.*

A geological map of Lambay island is given on the scale of 4 inches to the mile.

United Kingdom—Ireland. *T.R. Irish A.* **31** (1897): 23–38. **Coffey.**
Notes on the Prehistoric Cemetery of Loughcrew, with Fasciculus of Photographic Illustrations of the Sepulchral Cairns. By George Coffey.

United Kingdom—Ireland. *P.R. Dublin S.* **8** (1897): 421–431. **Kilroe.**
The Distribution of Drift in Ireland in its relation to Agriculture. By J. R. Kilroe. *With Map.*

United Kingdom—Ireland. *P.R. Dublin S.* **8** (1897): 475–507. **Praeger and Sollas.**
Report of the Committee . . . appointed by the Royal Dublin Society to investigate the recent Bog-flow in Kerry. Drawn up by R. Lloyd Praeger and Prof. Sollas. *With Plates.*

United Kingdom—Meteorology. ———
Report of the Meteorological Council, for the Year ending 31st of March, 1897, to the President and Council of the Royal Society. London: Eyre & Spottiswoode, 1897. Size 10 × 6½, pp. 124. *Map. Price* 8*d. Presented by the Meteorological Council.*

United Kingdom—Meteorology. ———
Official No. 129. Meteorological Observations at Stations of the Second Order for the Year 1894. With Frontispiece Map. Published by Direction of the Meteorological Council. London: Eyre & Spottiswoode, 1897. Size 12½ × 10, pp. 184. *Price* 27*s. Presented by the Meteorological Council.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000028

مكتبة قطر الوطنية
Qatar National Library

United Kingdom—Ordnance Survey Maps. ———

Board of Agriculture. Ordnance Survey Maps. I. Copies of Three Contracts entered into by the Board of Agriculture, with the Agents appointed for the Sale of Ordnance Survey Maps in London, Edinburgh, and Dublin. II. Copy of the Conditions upon which Agents are appointed in Provincial Towns. III. List of the Agents appointed in England and Wales, Scotland, and Ireland. IV. List of Post Offices at which Ordnance Survey Maps may be ordered. London: Eyre & Spottiswoode, 1897. Size 13 × 8½, pp. 16. *Price* 2*d.*

United Kingdom—Scotland. *P.R.S. Edinburgh* **21** (1897): 105-115. **Mossman.**

On the Seasonal Death-rate from Certain Diseases in Edinburgh during the Period 1878-94, with Remarks on the Relation between Weather and Mortality. By R. C. Mossman. *With Plate.*

United Kingdom—Scotland. **White.**

The Flora of Perthshire. By Francis Buchanan W. White. Edited with an Introduction and Life of the Author, a list of his Scientific publications, and an Appendix. By James W. H. Trail. Edinburgh: Printed for the Perthshire Society of Natural Science by W. Blackwood & Sons, 1898. Size 7½ × 5½, pp. lx. and 408. *Portrait and Map. Price* 7*s.* 6*d. Presented by the Publishers.*

The geographical part of the late Dr. Buchanan White's discussion of the flora of Perth includes the careful subdivision of that county into natural districts, in each of which the distribution of the indigenous plants could be considered. The book forms an important contribution to the slowly accumulating material for a complete geographical description of the British Islands.

United Kingdom—Scotland. **Mossman.**

T.R.S. Edinburgh **38** (1896): 681–756; **39** (1897): 63–208.

The Meteorology of Edinburgh. Parts i. and ii. By Robert C. Mossman. *With Plates. Presented by the Author.*

This monument of laborious compilation brings together a connected series of carefully discussed statistics of the meteorological conditions of Edinburgh for over one hundred years. Not only are instrumental observations discussed, but such observations as the number of days with rain or snow, the occurrence of thunderstorms, etc., are carefully recorded.

United Kingdom—Scotland. **Burns.**

The Coinage of Scotland. Illustrated from the cabinet of Thomas Coats, Esq., of Ferguslie, and other Collections. By Edward Burns, F.S.A. SCOT. 3 vols. Edinburgh: A. & C. Black, 1887. Size 12½ × 10, pp. (vol. i.) xxiv. and 366; (vol. ii.) xviii. and 556; (vol. iii.) *Plates. Presented by the Family of the late Mr. Coats.*

These splendid volumes describe and figure the finest collection of Scottish coins ever brought together, with specimens from other collections, which make the monograph absolutely complete.

United Kingdom—Scotland. *P.I. Civil Engineers* **130** (1897): 276-297. **Kinipple.**

Greenock Harbour. By W. R. Kinipple. *With Plan.*

An account of new harbour works at Greenock, accompanied by a note on the growth of the port.

United Kingdom—Tide Tables. **Harris and Goalen.**

Tide Tables for the British and Irish Ports for the year 1898; also the times and heights of High Water at full and change for the principal places on the Globe. By Captains H. R. Harris and W. N. Goalen. London: J. D. Potter. Size 10 × 6½, pp. xi. and 262. *Presented by the Hydrographer.*

United Kingdom—Wales. *Quarterly J. Geolog. S.* **54** (1898): 119–134. **Pollen.**

Exploration of Ty Newydd Caves, Tremeirchion, North Wales. By the Rev. G. C. H. Pollen, S.J. *With Plan and Sections.*

ASIA.

Russia—Caucasus. *Mém. Caucasian Sect. Imp. Russian G.S.* **19** (1897): 39–50. ———

Statistical information on Zakataly district, Gov. Elisabethpol, Trans-Caucasus. [In Russian.]

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

Russia—Caucasus. **Akinfiyeff.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): 1–37.

Alpine Plants of Central Caucasus. By I. Akinfiyeff. [In Russian.]

A list of plants, the botanical names in Latin, and the range of height in feet.

Russia—Caucasus. **Dinnik.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): Append. 1–81.

The Provence of Kuban at the sources of the rivers Vrushten and Belaya. By N. Ya. Dinnik. *With Map.* [In Russian.]

Russia—Caucasus. **Eristoff.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): Append. 2, 1–111.

Notes on Svanetia. By Prince Raphail Davidovich Eristoff. [In Russian.]

Russia—Caucasus. **Kawraisky.**

Die Lachse der Kaukasusländer und ihrer angrenzenden Meere. Von F. F. Kawraisky. 2te Lieferung. Tiflis, 1897. Size 10 × 7, pp. 80. *Plates.*

On the Salmonidæ of the Caucasus. The memoir is in duplicate, Russian and German.

Russia—Caucasus. **Kondratenko.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): 369–380.

Tables showing the distribution of the population of Trans-Caucasus according to religion. By E. Kondratenko. *With Map and Tables.* [In Russian.]

The map of the distribution of religious forms in the Trans-Caucasus is on the scale of 50 miles to an inch.

Russia—Caucasus. **Markovich.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): 229–338.

In the forests of Ichkeria, Caucasus. By V. V. Markovich. [In Russian.] *With Illustrations.*

Describes the economic utilization of the forests, and the farming carried on in the district, with illustrations of the implements used.

Russia—Caucasus. *Nineteenth Century* **43** (1898): 717–723. **Napier of Magdala.**

The Caucasus and Tirah: a Retrospect. By the Right Hon. Lord Napier of Magdala.

A comparison of warfare in mountain regions held by independent tribes in different countries.

Russia—Caucasus. **Vinnikoff.**

Mém. Caucasian Sect. Imp. Russian G.S. **19** (1897): 169–194.

List of points in the Caucasus, geographically determined by the military-topographical section of the Caucasus. By N. Vinnikoff. [In Russian.]

The geographical co-ordinates of about 500 determined points are given, and also an alphabetical index of the places.

Russia—Sakhalin. **Dickins.**

A Journal kept in Karafuto. A Paper by Mr. F. Victor Dickins. Read before the Japan Society of London, December 11, 1895. Size 10 × 6½, pp. 30. *Illustrations. Presented by the Translator.*

Russia—Siberia. *Questions Diplomat. et Colon.* **1** (1897): 285–288. ———

L'état actuel du chemin de fer transsibérien, par un ingénieur russe. *With Map.*

Russia—Siberia. **Lopatin.**

I. A. Lopatin. Itinerary of the Turukhansk Expedition in 1866. Discussed by M. N. Miklukho-Maklay. Zapiski, Imperial Russian Geographical Society, General Geography, T. xxviii. No. 2. St. Petersburg, 1897. Size 10 × 7, pp. x. and 192. *Map and Diagrams.* [In Russian.]

On the geological results of the expedition, including a geological map of the Yenesei from Yeneseisk to the sea.

Russia—Siberia. *A travers le Monde, Tour du Monde* **4** (1898): 73–76. **Labbé.**

De Tomsk à Tachkent, l'Instruction publique—les Écoles russes et indigènes—l'Enseignement du français. Par M. Paul Labbé. *With Illustrations.*

On the system of education in South-Western Siberia and Central Asia.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000025

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Russia—Siberia. *Iz. Imp. Russian G.S.* **33** (1897): 34–47. **Bogdanovich.**
Letters from the Okhotsk-Kamchatka Expedition. By K. I. Bogdanovich. [In Russian.]

Russia—Siberia. *Tour du Monde* **3** (1897): 577, 589, 601, 613. **Chimkiévitch.**
Chez les Bouriates de l'Amour. Par M. Chimkiévitch. *With Map and Illustrations.*

Russia—Siberia. *Deutsche G. Blätter* **20** (1897): 129–178, 237–257. **Franz.**
Ueber die Möglichkeit einer ständigen Seeverbindung zwischen Europa und West-Sibirien. Von Dr. A. Franz.

An important practical paper dealing with the possibility of establishing permanent profitable sea-trade with Siberia. It takes account not only of the conditions of the route, but also of the resources and commercial prospects of Siberia. The paper is fortified by about 130 references to authoritative memoirs.

Russia—Siberia. *Yezhegodnik Imp. Russian G.S.* **7** (1897): 1–34. **Koversky.**
Sketch of the various Geodetic Works connected with the Construction of the Great Siberian Railway. By E. A. Koversky. [In Russian.]

Russia—Siberia. **Krahmer.**
Sibirien und die grosse Sibirische Eisenbahn. Von G. Krahmer. Leipzig: Zuckschwerdt & Co., 1897. Size 9½ × 6½, pp. vi. and 104. *Map. Price* 3*m.*

Russia—Siberia. *A travers le Monde, Tour du Monde* **4** (1898): 145–148. **Labbé.**
De Tomsk à Tachkent. Par M. Paul Labbé. *With Illustrations.*

Russia—Siberia. **Mostitz.**
Protocol Troitskosavsk-Kyakhta Br. Amur Sect. Imp. Russian G.S. No. 1 (1896): 5–17.
Traces of the Stone Age in the Valley of the River Selenga. By A. Mostitz. [In Russian.]

Russia—Siberia. *Iz. E. Siberian Sect. Imp. Russian G.S.* **28** (1897): 1–24. **Obrucheff.**
Excursion into the Gold-bearing Region of the Rivers Sarna and Ilikta in the western Baikal highlands. V. Obrucheff. *Map.* [In Russian, *résumé* in French.]

Russia—Siberia. **Patkanov.**
Die Irtysch-Ostjaken und ihre Volkspoesie. Von S. Patkanov. 1 Tiel. Ethnographisch-statistische Uebersicht. St. Petersburg, 1897. Size 12 × 8½, pp. viii. and 168. *Presented by the Imperial Academy of Sciences of St. Petersburg.*

A thorough study of the Ostyaks and their country.

Russia—Siberia. *Zemlevedenie* **4** (1897): 128–143. **Selnitzky.**
The Anadyr Region. By A. P. Selnitzky. *Tables.* [In Russian.]

Russia—Siberia. *Zemlevedenie* **3**, 1896 (1897): 51–110. **Soboleff.**
The Russian Altai Mountains. By M. Soboleff. *Illustrations.* [In Russian.]

Russia—Siberia. *Deutsche Rundschau G.* **20** (1897): 122–126. **Thiess.**
Handelsfahrten durch das Karische Meer, nach den sibirischen Flüssen Ob und Jenissei. Nach russischen Quellen von F. Thiess.

Russia—Siberia. *Iz. Imp. Russian G.S.* **33** (1897): 48–52. **Tronoff.**
The Sources of the River Bukhtorma. By V. Tronoff. *Map.* [In Russian.]

Russia—Siberia. *Iz. E. Siberian Sect. Imp. Russian G.S.* **28** (1897): 160–165. **Yokhelson.**
On the Vanished Races of Kolymsk District, Gov. Yakutsk. By V. Yokhelson. [In Russian, *résumé* in German.]

Linguistic studies attempting to solve the problem of a vanished tribe of North-Eastern Siberia known as Anauli, Khodintsi, Shelagi, Omoki, or Kangyenisi.

Russia—Siberia. *B.S.G. Marseille* **21** (1897): 362–373. **Saint-Yves.**
Omsk et le Gouvernement d'Akmolinsk. Par M. G. Saint-Yves.

Russia—Siberia. *Scottish G. Mag.* **14** (1898): 241–254. **Greig.**
A Journey from Kirin, Manchuria, overland to Moscow. By James A. Greig *With Illustrations.*

Russia—Siberia. *B. American G.S.* **30** (1898): 135–146. **Howard.**
Some Observations on Prisons in Vladivostock and Sakhalin. By Benjamin Howard.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000085

مكتبة قطر الوطنية
Qatar National Library

Russia—Trans-Caspian Railway. *Globus* **73** (1898): 140–144. **Hahn.**

Die transkaspische Eisenbahn bis Tschardschui. Von C. v. Hahn. *With Illustrations.*

Description of a trip along the trans-Caspian line as far as Charjui, with interesting photographs of Geok-Tepe, Askabad, Merv, and Charjui.

Russia—Trans-Caucasia. **Lisovskii.**

Mem. Caucasian Sect. Imp. Russian G.S. **20** (1896): 1–232.

V. Ya. Lisovskii. trans-Caucasia. Part i. [In Russian.] *With Map.*

The first part of a comprehensive general account of trans-Caucasia, treating of the physical geography, with a remarkably clear map of the whole Caucasus region, on the scale of 1 : 100,000.

Russian Asia. *Iz. Imp. Russian G.S.* **33** (1897): 348–355. **Mushketoff.**

Exploration of Russian Glaciers in 1896. By I. V. Mushketoff. [In Russian.]

On the glaciers of the Caucasus, and the mountains of Central Asia and Southern Siberia.

Russian Central Asia. *Contemporary Rev.* **73** (1898): 680–697. **Adler.**

A Bird's-Eye View of the trans-Caspian. By E. N. Adler.

A record of a journey last year on the trans-Caspian railway to Samarcand.

Russian Central Asia. **Konshin.**

Solution of the problem on the ancient course of the Amu-Daria. According to contemporary geological and physico-geographical data. A. M. Konshin. Zapiski, Imperial Russian Geographical Society, General Geography. T. xxxiii. No. 1. St. Petersburg, 1897. Size 10 × 7, pp. 256. *Maps and Plates.* [In Russian.]

This is an elaborate discussion of the present condition of the region between the Murghab on the south, the Aral lake on the north, and the Caspian on the west, of which a geological map is given. The dunes of the desert region are considered incidentally, and some interesting drawings of them are reproduced.

Russian Central Asia. *Oesterreichische Monats. Orient.* **24** (1898): 25–29. **Rein.**

Eine Woche in Samarkand und am Serafschan. Von Prof. Dr. J. Rein.

Russian Turkestan. *Globus* **73** (1898): 268–272. **Vambéry.**

Bilder aus Russisch-Turkestan und Ferghana. Von H. Vambéry. *With Illustrations.*

Siam. **Smyth.**

Five Years in Siam, from 1891 to 1896. By H. Warington Smyth. 2 vols. London: John Murray, 1898. Size 8½ × 5½, pp. (vol. i.) [16] and 330; (vol. ii.) [10] and 338. *Maps and Illustrations. Price* 24*s. Presented by the Publisher.*

These volumes present in a handsome form the results of Mr. Warington Smyth's numerous adventurous journeys in Siam, which have, in part, already been described in the *Geographical Journal* and the extra publications of the Society. The descriptions of travel are supplemented by general chapters on Siamese history and politics, and by a collection of valuable appendices dealing with commercial statistics, natural phenomena, Siamese music and musical instruments. The book is beautifully illustrated by the author's sketches and from photographs.

Siam. **Young.**

The Kingdom of the Yellow Robe. Being Sketches of the Domestic and Religious Rites and Ceremonies of the Siamese. By Ernest Young. With Illustrations by E. A. Norbury. London: A. Constable & Co., 1898. Size 10 × 7, pp. xiv. and 400. *Price* 15*s. Presented by the Publishers.*

This deals with the people of Siam on the basis of several years' residence in Bangkok and much reading. The life and customs of the people are first considered, then the amusements, the predominant industry of rice-growing, which has a chapter to itself, the laws, and ceremonies for the dying and dead. A very full account is given of the temples and the religion of Siam, and the whole concludes with a chapter devoted to elephants. There are numerous illustrations from photographs and sketches.

Siam. *Imp. and Asiatic Quarterly Rev.* **5** (1898): 145–163. **Gerini.**

Shan and Siam. By Capt. G. E. Gerini.

A controversial discussion of the names *Shan* and *Siam*, and of some points in the history of Siam.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Turkey—Palestine. *Contemporary Rev.* **73** (1898): 706–713. **Prag.**
The Jewish Colonies in Palestine. By Joseph Prag.

The colonization of Palestine by Jewish agriculturists commenced in 1882; now the leading colony at Jaffa has about 500 inhabitants engaged in vine-culture, and there are twenty others, the largest of which is at Zichron Jakob with 2000 settlers, most of them from Eastern Europe.

Turkey—Palestine. **Hornstein.**
Palestine Exploration Fund, Quarterly Statement (1898): 94–103.
A Visit to Kerak and Petra. By Charles Alexander Hornstein. *With Map and Illustrations.*

A journey in 1895, with some admirable photographs of towns and scenery.

Turkey—Palestine. *Palestine Exploration Fund, Q. Statement* (1898): 7–20. **Schick.**
Ramathaim-Zophim—the Home of Samuel the Prophet. By Dr. C. Schick. *With Map.*

Turkey—Syria. *B.S.G. Lyon* **14** (1898): 766–794. **Chevrillon.**
La Syrie (Impressions de Voyages). Par M. Chevrillon.

Turkey—Syria. **Cuinet.**
Syrie, Liban et Palestine. Géographie administrative, statistique, descriptive et raisonnée. Par Vital Cuinet. Fascicule 3. Paris: E. Leroux, 1898. Size 11 × 7½, pp. 301–460. *Map.*

Turkey—Syria. **Birch.**
Palestine Exploration Fund, Quarterly Statement (1898): 110–121.
The Prospect from Pisgah. By Rev. W. F. Birch.

A discussion of the limits of the view from Pisgah.

Turkey—Syria. *A travers le Monde, Tour du Monde* **4** (1898): 41–44. **Parisot.**
Le chemin de fer de Beyrout à Damas et Mzérib. Par J. Parisot. *With Illustrations.*

Turkey—Syria and Palestine. *Zemlevedenie* **3**, 1896 (1897): 19–50. **Birkenheim.**
The Present Economic State of Syria and Palestine. By A. M. Birkenheim. [In Russian.]

Western Asia. *J. of T. Victoria I.* **30** (1898): 29–85. **Rassam.**
Biblical Lands, their Topography, Races, Religions, Languages and Customs, Ancient and Modern. By Hormuzd Rassam. *With Map.*

The article deals almost exclusively with the Jews, Armenians, Kurds, and Chaldæans.

AFRICA.

Abyssinia. *Questions Dipl. et Colon.* **4** (1898): 12–19. **De la Genardirère.**
Les Provinces équatoriales d'Éthiopie. Par G. de la Genardière.

Abyssinia. *C. Rd., S.G. Paris* (1898): 137–141. **Darragon and Poncins.**
Éthiopie. Le Sidama, l'Amara, le Konso, etc. Par M. Léon Darragon. *With Map.*

Issas et Adals: Abako. Par Vicomte Edm. de Poncins.

African Travel. *B.S.G. Paris* **19** (1898): 107–133, 109–142. **Foa.**
Séance extraordinaire. Réception de M. Édouard Foa, explorateur dans l'Afrique équatoriale. *With Map.*

Traversée de l'Afrique équatoriale. Du Zambèze au Congo par les grands lacs (Août 1894—Novembre 1897). Par Édouard Foa. Observations astronomiques et magnétiques et altitudes en mètres des principaux points de l'itinéraire, suivies d'un résumé des autres travaux de l'expédition.

Congo State—Kasai. *Mouvement G.* **15** (1898): 215–216. **Wauters.**
Le Kasai et ses affluents. Par A. J. Wauters. *With Map.*

The description of the Kasai accompanies the ninth sheet of the map of the Congo State on the scale of 1 : 2,000,000.

East African Islands. *B.S.R.G. d'Anvers* **22** (1898): 37–53. **Mager.**
Souvenirs de Voyages aux Iles de la Côte Orientale d'Afrique. Madagascar, Réunion, Sainte-Marie, Nossi-Bé, Mayotte. Par M. Henri Mager.

Notes and observations of a popular kind.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000082

مكتبة قطر الوطنية
Qatar National Library

French Congo—Brazzaville. **Bourdarie.**
L'avenir de Brazzaville. Par M. P. Bourdarie. No. 4.—Renseignements Coloniaux et Documents publiés par le Comité de l'Afrique Française. Size 12 × 9, pp. 101–106. *Map.*
On the probable effect of the completion of the Congo railway on Brazzaville.

French Possessions. *Deutsche Rundschau G.* **20** (1898): 364–368. **Rumpe.**
Frankreichs Afrikabesitz und seine geschichtliche Entwickelung. Von Dr. med. Robert Rumpe. *With Map.*
The map on the scale of 1 : 30,000,000 is coloured, so as to contrast the area of the French possessions in 1878 and 1898.

French Sudan. **Lartigue.**
Notice historique sur la région du Sahel. Par le commandant de Lartigue. No. 4.—Renseignements Coloniaux et Documents publiés par le Comité de l'Afrique Française. Size 12 × 9, pp. 69–101.
A history of the French advance from the Senegal to the Niger.

French West Africa—Ivory Coast. *Ann. G.* **7** (1898): 273–277. **Eysséric.**
Exploration du Bandama (Côte d'Ivoire) (1896–1897). Par M. J. Eysséric. *With Map and Plates.*

German East Africa. *Petermanns M.* **44** (1898): 73–81. **Werther.**
Die mittlern Hochländer des nördlichen Deutsch-Ostafrika. Von Prem.-Leutn. W. Werther. *With Map.*
This will be specially noticed.

Sahara. *B.S.G. Paris* **17** (1896): 518–554. **Cornetz.**
Le Sahara tunisien, étude géographique. Par V. Cornetz. *With Map.*

Sahara. *Ann. G.* **7** (1898): 180–183. **Schirmer.**
Le Sahara inconnu. L'Adrar des Aouélimmiden. Par M. H. Schirmer.

Sahara—In-Sâlah. *C. Rd., S.G. Paris* (1898): 85–89. **Foureau.**
Longitude d'In-Sâlah. Par F. Foureau.
The longitude of In-Salah was given in the *Quarterly Review*, in an account of Laing's journey, as 2° 15′ E.; on the authority of Sir E. Sabine, Laing's longitude was 1° 51′ E.; Hassenstein, in his map of Rohlf's travels, makes it 2° 10′ E.; while M. Foureau's own result is 2° 43′ E. of Greenwich.

Sahara—Tuareg. *Questions Diplomat. et Colon.* **2** (1897): 33–39. **Attanoux.**
Ce qu'il faut penser des Touareg. Par M. J. Bernard d'Attanoux. *With Map.*
The article contains a list of travellers who were well received in the Sahara and north-western Sudan, and a map of the places at which travellers had been massacred, with the object of showing that the people of the Tuareg confederation are not so dangerous as usually supposed.

Somaliland. **Millosevich.**
Elia Millosevich. Discussione delle osservazioni astronomiche fatte dal tenente di vascello Lamberto Vannutelli addetto alla seconda Spedizione Bòttego in Africa. Estratto dalle Memorie della Società Geografica Italiana vol. viii. 1898. Roma, 1898. Size 9½ × 6½, pp. 60. *Presented by Lieut. L. Vannutelli.*
The astronomical, magnetic, and other observations are recorded and discussed.

Somaliland. *Petermanns M.* **44** (1898): 49–55. **Paulitschke.**
Reise des Grafen Eduard Wickenburg im Somâl-Lande, Juni bis Oktober 1897. Von Prof. Dr. Philipp Paulitschke. *With Map.*
This will be separately referred to.

Somaliland. *Questions Diplomat. et Colon.* **1** (1897): 413–419. **Noll.**
Les explorations italiennes dans la péninsule des Somalis. Par M. Ned Noll. *With Map.*

South Africa. **Stanley.**
Through South Africa. By Henry M. Stanley, M.P., D.C.L. Being an Account of his recent visit to Rhodesia, the Transvaal, Cape Colony, and Natal. Reprinted,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000025

مكتبة قطر الوطنية
Qatar National Library

with Additions, from 'South Africa.' London: Low & Co., 1898. Size 7½ × 5, pp. xx. and 140. *Map and Illustrations. Price* 2*s.* 6*d. Presented by the Publishers.*

The narrative of a tour in South Africa on the occasion of the opening of the Bulawayo railway, with personal impressions and political remarks.

South Africa. **Younghusband.**

South Africa of To-day. By Captain Francis Younghusband. London: Macmillan & Co., 1898. Size 9½ × 6, pp. 178. *Illustrations. Price* 8*s.* 6*d.*

South Africa—Rhodesia.

The British South Africa Company. Reports on the Native Disturbances in Rhodesia, 1896–97. Printed for the information of Shareholders by order of the Board of Directors. March, 1898. Size 10½ × 8½, pp. 160. *Map and Plans.*

South-West Africa. *Ymer* (1898): 49–89. **Möller.**

Iakttagelser under en resa i sydvästra Afrika. Af Peter Möller. *With Map and Illustrations.*

A journey from Mossamedes to Humbe, on the Cunene, whence part of the upper streams of that river were explored; then south through Ovampoland, in about longitude 16° E.; and, finally, south-westward to Walfisch bay.

Sudan—Bahr el Ghazal. *Mouvement G.* **15** (1898): 13–18. **Wauters.**

Les missions Liotard et Marchand. Par A. J. Wauters. *With Sketch-map, Portrait, and Illustration.*

These expeditions are referred to in the *Journal* for February, vol. xi. p. 169.

Transvaal. *Quarterly J. Geolog. S.* **54** (1898): 73–100. **Hatch.**

A Geological Survey of the Witwatersrand and other Districts in the Southern Transvaal. By Frederick H. Hatch, PH.D. *With Map and Sections.*

Also a separate copy, *presented by the Author.*

West Africa. *B.S.G. Com. Paris* **20** (1898): 42–53. **Bretonnet.**

Le Moyen-Niger français. Par M. le lieutenant Bretonnet. *With Map.*

West Africa. *Contemporary Rev.* **73** (1898): 698–705. **Robinson.**

The Slave Trade in the West African Hinterland. By Canon C. H. Robinson.

Mr. Robinson lays stress on the want of a coinage for interior Africa, pointing out that the slave-trade is encouraged by the use of slaves as a convenient currency which may be changed anywhere.

West Africa. *Ann. G.* **7** (1898): 230–238. **Schirmer.**

Principaux résultats géographiques des explorations récentes dans la boucle du Niger. Par M. H. Schirmer.

West Africa. *Imp. and Asiatic Quarterly Rev.* **5** (1898): 321–343. **Bourne.**

France and England in West Africa. By H. R. Fox Bourne.

A history of the development of West Africa by British and French enterprise.

West Africa. *Rev. Française* **23** (1898): 193–212. **Demanche.**

Hinterland du Dahomey: La mission Baud-Vermeersch au Gourma.—La mission Bretonnet au Niger. Par G. Demanche. *With Map.*

West Africa. *Contemporary Rev.* **73** (1898). **Westlake.**

England and France in West Africa. By Prof. J. Westlake.

West Africa. *B. Comité l'Afrique Française* **7** (1897): 425–428. **Bourdarie.**

Du Congo à la Méditerranée: La mission F. de Béhagle. Par M. P. Bourdarie. *With Map.*

West Africa. *B.S.G. Commerc. Paris* **19** (1897): 752–760. **Chanoine.**

Mission au Gourounsi. Par le lieutenant Chanoine.

West Africa. *Globus* **72** (1897): 336–338. **Förster.**

Die englisch-französischen Streitfragen in Westafrika. Von Brix Förster. *With Map.*

West Africa. *Petermanns M.* **43** (1897): 225–236, 262–267. **Frobenius.**

Der Westafrikanische Kulturkreis. Von L. Frobenius. *With Maps.*

A discussion of the distribution in Africa of the different types of shields, of bows, of certain forms of house, and of types of clothing material, illustrated by ten maps.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004d

مكتبة قطر الوطنية
Qatar National Library

West Africa. *Fortnightly Rev.* **62** (1897): 917–925. **Greswell.**
England and France in West Africa. By Rev. W. Greswell. *With Map.*
Historical references and a map of the present condition of affairs.

West Africa. *B. Comité l'Afrique Française* **7** (1897): 415-422. **Mille.**
Le voyage de M. André Lebon dans l'Afrique occidentale. Par M. Pierre Mille.

West Africa. *B.S.G. Com. Paris* **19** (1897): 729–751. **Voulet.**
Au Mossi et au Gourounsi. Par le capitaine Voulet, 1896–1897. *With Map.*

West Africa. *C. Rd. S.G. Paris* (1897): 301–307. **Voulet and Chanoine.**
Mission Voulet-Chanoine au Mossi et au Gourounsi (1896–1897). Jonction du Soudan au Dahomey. Objet et marche de la mission, résultats obtenus; le pays et ses habitants.

NORTH AMERICA.

Bermuda. **Cole.**
Bulletin of Bibliography Pamphlets. No. 2. Bermuda in Periodical Literature. A Bibliography. By George Watson Cole. Boston: the Boston Book Co., 1898. Size 6 × 4½, pp. 26. *Presented by the Author.*
An interesting collection of the titles of magazine articles on Bermuda, with occasional editorial notes. The entries range in date from 1664 (*Phil. Trans.*) to 1897.

Canada. ———
Annual Report of the Department of the Interior for the Year 1897. Ottawa, 1898. Size 10 × 6½, pp. [596]. *Plates and Maps.*
This report deals with the Dominion lands, the Dominion land-surveys, irrigation, immigration, together with special reports on the North-West Territories, Keewatin, the Rocky Mountains Park, and the Swan River valley.

Canada—Alberta. *Appalachia* **8** (1898): 320–327. **Thompson.**
At the Headwaters of the Bow. By Charles S. Thompson. *With Illustrations.*

Canada—British Columbia. ———
Annual Report of the Minister of Mines for the Year ending December 31, 1897, being an account of Mining Operations for Gold, Coal, etc., in the Province of British Columbia. Victoria, B.C., 1898. Size 10½ × 7½, pp. 449–640. *Map and Plates.*
Photographs are given of a number of the mines, the working of which is fully described.

Canada—British Columbia. *Appalachia* **8** (1898): 327–336. **Habel.**
The North Fork of the Wapta. By Jean Habel. *With Illustrations.*

Canada—Ethnological Survey. *British Assoc. Reports* (1897): 440–451. ———
An Ethnological Survey of Canada. First Report of the Committee.
This report describes the methods by which an ethnological survey of Canada is proposed to be carried out, and includes two appendices: one on the growth of Toronto children, by Franz Boas; the other on the origin of the French Canadians, by B. Sulte, discussing the parts of France from which the ancestors of the present French-speaking population came.

Canada—Historical. *P. & T.R.S. Canada* **2** (1896) (sect. i.): 35–58. **Gosselin.**
Quelques observations à propos du voyage du P. le Jeune au Canada en 1660, et du prétendu voyage de M. de Queylus en 1664. Par M. l'Abbé Gosselin.

Canada—Hudson Bay. **Wakeham.**
Report of the Expedition to Hudson Bay and Cumberland Gulf in the Steamship *Diana*, under the command of William Wakeham, Marine and Fisheries, Canada, in the year 1897. Ottawa, 1898. Size 10 × 6½, pp. 84. *Maps and Illustrations. Presented by the Colonial Office.*
This expedition will be referred to elsewhere in the *Journal*.

Canada—Hudson Bay. *Globus* **73** (1898): 105–106. **Bach.**
Die Canadische Expedition zur Hudsonbai und nach Baffinland. Sommer 1897. Von R. Bach.
An account of the Canadian expedition, which will be fully described in the *Journal*.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Canada—New Brunswick. **Ganong.**
A Monograph of the Cartography of the Province of New Brunswick. By W. F. Ganong, M.A., PH.D. (From the *Transactions* of the Royal Society of Canada. Second Series—1897–98. Vol. ii. sect. ii.) Ottawa: J. Durie & Son, 1897. Size 10 × 7, pp. 313–428. *Maps. Presented by the Author.*

After a general discussion of the character of old maps and the method of studying them, the maps of New Brunswick are considered as belonging to eight different types arranged chronologically; from the "Pre-differentiation type" of 1500 to 1534, to the "Exact type," which, for New Brunswick, does not yet exist. There are lists of maps and a bibliography as appendices.

Canada—North-West Territory. *National G. Mag.* **9** (1898): 105–112. **Scidmore.**
The North-West Passes to the Yukon. By Eliza Ruhamah Scidmore. *With Illustrations.*

Historical notes on the various crossings of the passes of the Coast range into the Yukon district and Alaska.

Canada—Nova Scotia. *P. & T.R.S. Canada* **2** (1896) (sect. iv.): 167–179. **Gilpin.**
Coal-Mining in Pictou County. By E. Gilpin, junr., LL.D. *With Map.*
A history of coal-mining in Nova Scotia.

Canada—St. Lawrence. **Dawson.**
Character and Progress of the Tides in Gulf and River St. Lawrence as ascertained by simultaneous observations with self-registering Tide-Gauges. By W. Bell Dawson. (From the *Transactions* of the Royal Society of Canada. Second Series—1897–98. Vol. iii. sect. iii. Mathematical, Physical, and Chemical Sciences.) Ottawa: J. Durie & Son, 1897. Size 10 × 7, pp. 51–68. *Chart and Diagrams.*

Canada—Tides and Currents. **Dawson.**
Survey of Tides and Currents in Canadian Waters. Report of Progress by W. Bell Dawson. Ottawa, 1898. Size 10 × 7, pp. 16. *Map and Diagrams.*

Canada—Yukon District. *National G. Mag.* **9** (1898): 113–116. **Garland.**
Overland Routes to the Klondike. By Hamlin Garland. *With Illustration.*
The routes considered are from Edmonton, and the old telegraph trail up the Fraser river from Ashcroft, or Kamloops, concerning all of which information is scanty.

Canada—Yukon Goldfields. *National G. Mag.* **9** (1898): 117–120. **Dall.**
The Future of the Yukon Goldfields. By Prof. William H. Dall.
The future considered is the very immediate one of next winter, the paper dealing with the disparity between the number of miners reaching Klondike and the possible transportation for their necessary supplies.

Historical—Cabot. *P. & T.R.S. Canada* **2** (1896) (sect. ii.): 3–30. **Dawson.**
The Voyages of the Cabots in 1497 and 1498. A sequel to a paper in the *Transactions* of 1894. By Samuel Edward Dawson. *With Maps and Illustration.*

Mexico—Lower California. **Merrill.**
Smithsonian Institution. United States National Museum. Notes on the Geology and Natural History of the Peninsula of Lower California. By George P. Merrill. From the Report of the U.S. National Museum for 1895, pp. 969–994. *With Ten Plates.* Washington, 1897. Size 10 × 6½.

Mexico—Orizaba. *Appalachia* **8** (1898): 350–355. **Cogshall.**
A Trip to the Summit of Orizaba. By W. A. Cogshall. *With Illustration.*

Mexico—Orizaba and Popocatepetl. *Appalachia* **8** (1898): 356–361. **Douglass.**
The Altitudes of Orizaba and Popocatepetl. By A. E. Douglass.

United States—California. *American J. Sci.* **5** (1898): 355–375. **Ransome.**
Some Lava Flows of the Western Slope of the Sierra Nevada, California. By F. Leslie Ransome. *With Maps.*

United States—Cliff Dwellings. *B. American G.S.* **30** (1898): 111–123. **Mindeleff.**
Origin of the Cliff Dwellings. By Cosmos Mindeleff.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

United States—Massachusetts. **Marindin.**
Tables of Cross Sections on the North Shores of Nantucket and Martha's Vineyard, Massachusetts. By H. L. Marindin. Report of the Superintendent of the U.S. Coast and Geodetic Survey, showing the progress of the work during the Fiscal Year ending with June, 1896. Pp. 305–346. Washington, 1897. Size 12 × 9½.
These measurements were made with the object of determining the position of the shore-line as a measure of past erosion, and as a standard from which future erosion may be calculated.

United States—Michigan. *Science* **7** (1898): 577–585. **Spalding.**
A Natural History Survey of Michigan. By Prof. V. M. Spalding.
Historical account of the natural history survey of Michigan.

United States—Ozark Region. *Science* **7** (1898): 588–589. **Keyes.**
The Myth of the Ozark Isle. By Dr. Charles R. Keyes.
The outcrop of the dome-like Ozark Uplift of ancient rocks in the midst of the more recent sediments of the Mississippi Basin, has been held to prove the existence of an island in the Palæozoic ocean which had never since been submerged; but the author points out evidence of the phenomenon being due to a comparatively recent uplift followed by extensive denudation.

United States—Pennsylvania. **Bascom.**
Department of the Interior. Bulletin of the United States Geological Survey. No. 136. The Ancient Volcanic Rocks of South Mountain, Pennsylvania. By Florence Bascom. Washington, 1896. Size 9½ × 6, pp. 124. *Maps and Plates. Presented by the Survey.*

United States—Sierra Nevada. **Turner.**
Further Contributions to the Geology of the Sierra Nevada. By H. W. Turner. Part i. Pp. 529–740. *Maps and Illustrations.* Washington, 1896. Size 12 × 8.
—Seventeenth Annual Report of the United States Geological Survey . . . 1895–96.

United States—Wisconsin. *J. Geology* **6** (1898): 182–192. **Squier.**
Studies in the Driftless Region of Wisconsin. II. By G. H. Squier. *With Sketch-Maps.*
On the character and origin of land-forms.

Washington and British Columbia. **Hodges.**
Mining in the Pacific North-West. A Complete Review of the Mineral Resources of Washington and British Columbia. Edited by L. K. Hodges. Seattle, 1897. Size 9 × 6, pp. 192. *Maps. Presented by the Editor.*

CENTRAL AND SOUTH AMERICA.

British Guiana Boundary. *Rev. G.* **42** (1898): 356–360. **Pariset.**
Le Contesté anglo-vénézuélien en Guyane. Par G. Pariset.

British West Indies. *J.R. Colonial I.* **29** (1898): 313–344. **Carrington.**
Our West Indian Colonies. By George Carrington, B.A.
This paper deals mainly with the economic conditions of the West Indies.

Chile. *Tour du Monde* **2** (1896): 577, 589, 601, 613; **4** (1898): 181, 193, 205. **Cordemoy.**
Au Chili. Par M. C. de Cordemoy. *With Illustrations.*

Chile and Argentine Boundary. *Ann. G.* **7** (1898): 239–262. **Delachaux.**
La question des limites chilo-argentines. Examen d'un article du Dr. Steffen. Par M. Henri F. Delachaux. *With Map.*
Also separate copy. *Presented by the Author.*

Colombia. *Verh. Ges. Erdk. Berlin* **25** (1898): 167–176. **Regel.**
Herr Prof. Dr. Fritz Regel: Über seine Reisen im nordwestlichen Kolumbien 1896–97. *With Map.*

Costa Rica. *Ann. Hydrographie* **26** (1898): 102–104. ——
Naranjo (Costa Rica). Juli 1897.
On the harbour of Naranjo.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008e

مكتبة قطر الوطنية
Qatar National Library

Cuba. *Fortnightly Rev.* **63** (1898): 855-866. **Lee.**
Cuba and her Struggle for Freedom. By Major-General Fitzhugh Lee.

Ecuador and Peru—Amazons. *Z. Ges. Erdk. Berlin* **32** (1897): 360-409. **Rimbach.**
Reise im Gebiet des oberen Amazonas. Von Dr. A. Rimbach. *With Map.*

Haiti. *Deutsche Rundschau G.* **20** (1898): 289-298, 355-364. **Fischer-Treuenfeld.**
Reminiscenzen eines haïtianischen Regierungsbeamten. Von R. v. Fischer-Treuenfeld. *With Illustration.*
Deals largely with the economic conditions of the Haitian Republic.

Paraguay. *B.S.G. Madrid* **39** (1897), (Suppl.): 1–86. **Garay.**
El Comunismo de las Misiones de la Compañia de Jesús en el Paraguay. Conferencia pronunciada por D. Blas Garay.

Patagonia. *C. Rd., S.G. Paris* (1898): 98–102. **De la Vaulx.**
A travers la Patagonie, du Rio Negro au Détroit de Magellan. Par le comte Henry de la Vaulx. *With Map.*

South America. *Ymer* (1898): 31–48. **Hultkrantz.**
Nagra bidrag till Sydamerikas fysiska antropologi. Af J. Hultkrantz. *With Illustrations.*
A study of the anthropological collections brought back from Nordenskiöld and Dusen's expedition in the extreme south of South America.

West Indies. **Morris.**
Royal Gardens, Kew. Bulletin of Miscellaneous Information. Additional Series I. Report on the Economic Resources of the West Indies, by D. Morris, C.M.G., etc. London: Eyre & Spottiswoode, 1898. Size 9½ × 6, pp. viii. and 166. *Map. Price* 1*s.* 6*d. Presented by the Director, Royal Gardens, Kew.*

West Indies—Cuba. *Fortnightly Rev.* **63** (1898): 705-722. **Davey.**
Glimpses of Havana and the Havanese. By Richard Davey.

AUSTRALASIA AND PACIFIC ISLANDS.

Queensland—Ethnology. **Roth.**
Ethnological Studies among the North-West-Central Queensland Aborigines. By Walter E. Roth. Brisbane, 1897. Size 10 × 6½, pp. xvi. and 200. *Map and Plates. Presented by the Agent-General for Queensland.*
A very remarkable original study of the Queensland aborigines.

Rotuma. *Quarterly J. Geolog. S.* **54** (1898): 1-11. **Gardiner.**
The Geology of Rotuma. By J. Stanley Gardiner. With an Appendix by H. Woods. *With Map and Plan.*
This is the subject of a note, p. 193.

Society Islands. *A travers le Monde, Tour du Monde* **4** (1898): 97-100. ——
L'Expédition de Raïatéa en 1897. *With Illustrations.*
The expedition the visit of which to the Society islands is here described was sent out in order to bring the islands effectively under the control of France.

South Australia—Horn Expedition. *Petermanns M.* **44** (1898): 1-9. **Hahn.**
Die Horn-Expedition in Zentralaustralien und ihre geographischen Ergebnisse. Von Prof. Dr. F. Hahn. *With Map.*

Tasmania and New Zealand. *Deutsche G. Blätter* **21** (1898): 22-30. **Greffrath.**
Geographisch-statistische Uebersicht über die australischen Kolonien. IV. Die Inselkolonie Tasmanien. V. Die Kolonie Neu-Seeland. Von Henry Greffrath.

Western Australia. **Maitland.**
Reports by the Government Geologist in connection with the Water Supply of the Goldfields. Perth. Size 13 × 8⅓, pp. 8. *Maps. Presented by the Government Geologist.*

Western Australia. ——
The Abrolhos Tragedy. Australia's First White Residents. The Batavia's Castaways. How they Fought and Suffered. [First Complete Translation in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000079

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

English of the Original Dutch Account, Published Eighteen years after the Massacre.] From the *Western Mail*, Christmas Number, 1897, pp. 3–11. Perth, W.A. Size 19 × 13½. *Map and Illustrations.*

Western Australia. *T. Edinburgh Geolog. S.* **7** (1897): 174–182. **Cadell.**

Some Geological Features of the Coast of Western Australia. By Henry M. Cadell, B.Sc.

The result of a visit to the Pilbarra goldfield, in the north-west of Western Australia, in 1895.

Western Australia. *Scottish G. Mag.* **14** (1898): 113–136. **Carnegie.**

Explorations in the Interior of Western Australia, between Coolgardie and Kimberley. By the Hon. David W. Carnegie. *With Map and Illustrations.*

This paper was also published in the *Journal* for March, p. 258. The map is, however, different; although on a smaller scale, it includes the whole of Western Australia, and the routes of other recent travellers.

POLAR REGIONS.

Greenland. *G. Tidskrift* **14** (1898): 116–123. **Ryberg.**

Fra Missions- og Handelstationen ved Angmagssalik. Af Carl Ryberg.

An account of the new Danish enterprise in establishing mission and trading station on the east coast of Greenland.

Greenland—Ice Conditions. *Petermanns M.* **44** (1898): 55–64. **Drygalski.**

Die Eisbewegung, ihre physikalischen Ursachen und ihre geographischen Wirkungen. Von Dr. Erich v. Drygalski. *With Illustrations.*

The article is founded on Dr. von Drygalski's great report on his Greenland expedition.

Spitsbergen. *Quarterly J. Geol. S.* **54** (1898): 197–227. **Garwood and Gregory.**

Contributions to the Glacial Geology of Spitsbergen. By E. J. Garwood, M.A., and J. W. Gregory, D.Sc. *With Map and Plates.*

This comprehensive paper treats of the glaciers of Spitsbergen and their action, the varieties of moraine produced by them, the action of marine ice in transporting material and in erosion, traces of former glaciations, and concludes with a series of general conclusions.

Spitsbergen. **Conway.**

With Ski and Sledge over Arctic Glaciers. By Sir Martin Conway. Illustrated from Photographs taken by E. J. Garwood. London: J. M. Dent & Co., 1898. Size 8 × 5½, pp. vi. and 240. *Map. Price 6s. Presented by the Publishers.*

Sir Martin Conway calls this book an appendix to that describing his first journey in Spitsbergen. He cordially recognizes the services of his companions by name in the preface, but kindly veils the identity of a hired Norwegian who was a hindrance. The geographical results of the expedition will be published in full in the *Journal*. The record of the journey is diversified by the historical associations of the now desolate country, which was formerly a summer rendezvous of thousands of whalers and hunters.

PHYSICAL AND BIOLOGICAL GEOGRAPHY.

Meteorology—Kites. *Globus* **73** (1898): 272–276. **Herrmann.**

Die Verwendung von Drachen zu wissenschaftlichen Zwecken. Von Dr. E. Herrmann. *With Illustrations.*

On the use of kites for scientific observations.

Oceanography. **Pettersson and Ekman.**

K. Svensk. Vet.-A. Handlingar **29** (1897): No. 5.

De hydrografiska förändringarne inom Nordsjöns och Östersjöns område under tiden 1893–1897. Af Otto Pettersson och Gustaf Ekman. *With Charts and Sections.* Pp. 1–126.

A discussion of the oceanographical conditions of the western Baltic and Gulf of Bothnia.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000086

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Oceanography. *Verh. Ges. Erdk. Berlin* **25** (1898): 111–127. **Schott.**

Dr. Gerhard Schott: Die oceanographischen Aufgaben und der voraussichtliche Verlauf der geplanten deutschen Tiefsee-Expedition 1898–99.

This is referred to in a note, vol. xi. p. 673.

Oceanography. *B.S.G. Com. Bordeaux* **21** (1898): 81–100. **Thoulet.**

Étude sur la distribution de la magnétite dans les fonds du golfe de Gascogne. Par J. Thoulet. *With Chart.*

Oceanography—Deposits. *P.R.S. Edinburgh* **21** (1897): 25–34. **Hartley.**

On the Cause and Nature of the Chemical Changes occurring in Oceanic Deposits. By Wm. Hartley.

Oceanography—Deposits. *P.R.S. Edinburgh* **21** (1897): 35–39. **Irvine and Murray.**

On Chemical Changes in Marine Muds. By Robert Irvine and John Murray, LL.D.

Oceanography—Fauna. **Monaco.**

Résultats des Campagnes Scientifiques accomplies sur son yacht par le Prince Albert 1er, Prince de Monaco, publiés sous sa direction avec le concours du Baron Jules de Guerne, et M. Jules Richard. Fasc. I.—XII. Imprimerie de Monaco, 1889–1898. Size 14 × 11½. *Maps and Plates. Presented by H.S.H. the Prince of Monaco.*

These fine volumes contain the reports of specialists on the collections made by the Prince of Monaco on his yacht.

Oceanography—North Atlantic. **Pettersson and Ekman.**

Die hydrographischen Verhältnisse der Oberen Wasserschichten des nördlichen Nordmeeres zwischen Spitzbergen, Grönland und der Norwegischen Küste in den Jahren 1896 und 1897. Von O. Pettersson und G. Ekman. Unter Mitwirkung von P. T. Cleve.—Bihang till K. Svenska Vet.-Akad. Handlingar. Band 23, Afd. II., No. 4. Stockholm: P. A. Norstedt & Söner, 1898. Size 8½ × 6, pp. 56. *Maps and Plate. Presented by the Authors.*

The results of this research are given by Prof. Pettersson in the *Journal* for June, vol. xi. p. 611.

Physical Geography. **Klein.**

Jahrbuch der Astronomie und Geophysik. Enthaltend die wichtigsten Fortschritte auf den Gebieten der Astrophysik, Meteorologie und physikalischen Erdkunde. Unter Mitwirkung von Fachmännern herausgegeben von Dr. Hermann J. Klein. VIII. Jahrgang, 1897. Leipzig: E. H. Mayer, 1898. Size 9 × 6, pp. viii. and 370. *Maps and Plates.*

River-temperature. *P. & T.R.S. Canada* **2** (1896) (Sec. iii.): 37–44. **Barnes.**

On some Measurements of the Temperature of the River Water opposite Montreal, made during the Winter with a Differential Platinum Thermometer. By Howard T. Barnes.

Sand-dunes. *Le Globe, B.S.G. Genève* **37** (1898): 22–31. **Ritter.**

Les Dunes. Par M. Étienne Ritter.

This short paper deals with continental or desert dunes, sea-shore dunes, the formation of inverse dunes, small sand-waves—in which the two slopes are different from those of large dunes—on the geographical distribution of the large and the inverse dunes in a chain, and on the dimensions of the constituent sand-grains.

Seismology. *British Assoc. Reports* (1897): 129–206. **Milne.**

Seismological Investigations.—Second Report of the Committee. *With Diagrams.*

This report includes a record of the work done in establishing a seismological survey of the world, accounts of various seismological researches, and of suboceanic changes, all by Prof. John Milne.

Soil Temperatures. **Callendar and McLeod.**

P. & T.R.S. Canada **2** (1896) (Sec. iii): 109–117.

Observations of Soil Temperatures with Electrical Resistance Thermometers. By Hugh L. Callendar and C. H. McLeod. *With Diagrams.*

Terrestrial Magnetism. *P.R.S.* **63** (1898): 64–78. **Ellis.**

On the Relation between the Diurnal Range of Magnetic Declination and Horizontal Force and the Period of Solar Spot Frequency. By William Ellis, F.R.S. *With Diagrams.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000010

مكتبة قطر الوطنية
Qatar National Library

Terrestrial Magnetism. **Naumann.**
Geotektonik und Erdmagnetismus. Von Dr. Edmund Naumann.—Verhandlungen des Zwölften Deutschen Geographentages, Jena 1897. Berlin: D. Reimer, 1897. Pp. 142–166. *Plate.*

Terrestrial Magnetism. **Schmidt.**
Die geographischen Aufgaben der erdmagnetischen Forschung. Von Gymnasial-Oberlehrer Dr. Adolf Schmidt.—Verhandlungen des Zwölften Deutschen Geographentages, Jena 1897. Berlin: D. Reimer, 1897. Pp. 124–141.

Terrestrial Magnetism. **Carlheim-Gyllensköld.**
Sur la forme analytique de l'attraction magnétique de la Terre, exprimée en fonction du temps. . . . Af V. Carlheim-Gyllensköld. Stockholm: P. A. Norstedt & Söner, 1896. Size 9½ × 8, pp. 36. *Presented by the University of Upsala.*

Terrestrial Magnetism. *Ann. Hydrographie* **26** (1898): 21–31. **Schmidt.**
Ueber die Darstellung der Ergebnisse erdmagnetischer Beobachtungen im Anschluss an die Theorie. Von Dr. Ad. Schmidt.

Terrestrial Magnetism. *Terrestrial Magnetism* **2** (1897): 105–114. **Eschenhagen.**
On Minute, Rapid, Periodic Changes of the Earth's Magnetism. By Prof. Max Eschenhagen.

Terrestrial Magnetism. **Leist.**
The Influence of Planets on the Observed Phenomena of Terrestial Magnetism. By Ernest Leist. Moscow, 1892. Size 9 × 6, pp. 1–123. *Maps and Diagrams.* [In Russian.]
Works published by the Physico-Mathematical Faculty of the University of Yuryeff (Dorpat). The data and discussion are given.

Terrestrial Magnetism. *Nature* **57** (1897): 160–163, 180–184. **Rücker.**
Recent Researches on Terrestrial Magnetism. By Prof. A. W. Rücker, F.R.S. *With Diagrams.*
This is a report of the Rede Lecture, an abstract of which appears in the *Journal* for May, vol. xi. p. 522.

Tides. *J. School G.* **2** (1898): 122–132. **Davis.**
Waves and Tides. By W. M. Davis.
A clear and simple statement of the essential principles of wave and tidal motion in water.

Underground Water. *Die Natur* **47** (1898): 17–19, 30–32, 40–41. **Ule.**
Das Wasser im Boden. Von Willi Ule.

Zoogeography. *C. Rd.* **126** (1898): 1358–1361. **Bouvier.**
Note préliminaire sur la distribution géographique et l'évolution des Péripates. Note de M. E. L. Bouvier.
Peripatus is a low form of articulated animal hitherto known only in Central America and the West Indies, the Cape of Good Hope, Australia, and New Zealand. The author shows that it also occurs in Gabun, and is there of a form intermediate between that of Central America and South Africa. The bearing of this fact on the former distribution of land and sea is of some importance.

Zoogeography. *P.R. Dublin S.* **8** (1897): 439–468. **Carpenter.**
The Geographical Distribution of Dragon-flies. By George H. Carpenter, B.SC. *With Map.*
The map shows the approximate range of dragon-fly faunas, and closely corresponds to the faunal regions deduced from the study of the distribution of mammalia.

Zoogeography. *Natural Science* **12** (1898): 100–105. **Duerden.**
The Geographical Distribution of the Actinaria of Jamaica. By J. E. Duerden, B.SC.
This subject is treated as bearing on the question of a former connection between the Atlantic and Pacific across Central America. A considerable amount of agreement has been found between the Pacific coast actinarians of Central America and those of Jamaica.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000090

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ANTHROPOGEOGRAPHY AND HISTORICAL GEOGRAPHY.

Geographical Progress. *L'Universo* **8** (1898): 81–86, 97–101. **Porena.**

Il Giubileo della Nuova geografia. Del Prof. Filippo Porena.

The inaugural discourse of the University of Naples summarized, on the progress of geographical exploration during the last half-century.

Historical. **Castanhoso and Pereira.**

Quarto Centenario do Descobrimento da India. Contribuições da Sociedade de Geographia de Lisboa. Dos feitos de D. Christovam da Gama em Ethiopia. Tratado composto por Miguel de Castanhoso publicado por Francisco Maria Esteves Pereira. Lisboa: Imp. Nacional, 1898. Size 10 × 6½, pp. xlviii. and 154.

Historical. **Lopes.**

Quarto Centenario do Descobrimento da India. Contribuções da Sociedade de Geographia de Lisboa. Textos em Aljamia Portuguesa. Documentos para a Historia do dominio Português em Safim extrahidos dos originaes da Torre do Tombo. Por David Lopes. Lisboa: Imp. Nacional, 1897. Size 10 × 6½, pp. 158.

Historical—Cabot. **Dawson.**

The Voyages of the Cabots, latest phases of the Controversy. By Samuel Edward Dawson, LIT.D. From the *Transactions* of the Royal Society of Canada for 1897. Ottawa: James Hope & Co., 1897. Size 10 × 7, pp. 139–268. *Maps. Presented by the Author.*

Historical—Map. *Riv. G. Italiana* **5** (1898): 50–51. ——

Il planisfero portoghese di Bartolomeo Velio (1561) di recente scoperto nel R. Istituto di Belle Arti in Firenze. Di F. L. P.

Historical—Measures. *B.S.G. Madrid* **39** (1897), (Suppl.): 1–14. **Blázquez.**

La milla romana. Por D. Antonio Blázquez.

The conclusions of this discussion are that the Roman mile, deduced by six different methods, is from 1670 to 1672 metres, *i.e.* from 5479 to 5485 feet, instead of 1481 metres or 4859 feet, as formerly held.

Historical—Mlle. Tinné. *Questions Diplomat. et Colon.* **2** (1898): 75–79. **Vuillot.**

Au Sahara. La vérité sur la mort de Mlle Tinné. Par P. Vuillot.

The tribe responsible for the murder of the French traveller, Mlle. Tinné, in 1869 has been the subject of frequent discussion. M. Schirmer having recently recurred to the view that the Tuareg Asjer were guilty of the crime, M. Vuillot here states the case in their favour, and expresses the belief that they have always been loyal to France, and innocent of the murder.

Historical—Vasco da Gama. **Ruge.**

Die Entdeckung des Seeweges nach Ostindien durch Vasco da Gama 1497–8. Vortrag, gehalten in der Gehe-Stiftung zu Dresden am 9 Oktober 1897. Von Prof. Dr. S. Ruge. Dresden: Zahn and Jaensch, 1898. Size 9½ × 6, pp. 48. *Maps.*

Historical—Vasco da Gama. **Ravenstein.**

A Journal of the First Voyage of Vasco da Gama, 1497–1499. Translated and Edited, with Notes, an Introduction and Appendices, by E. G. Ravenstein. London: Printed for the Hakluyt Society, 1898. Size 9 × 6, pp. xxxvi. and 250. *Maps. Presented by the Hakluyt Society.*

This was noticed in the *Journal* for July, p. 20.

Historical—Vasco da Gama. *B.S.G. Lisboa* **16** (1897): 247–389. **Cordeiro.**

O premio da descoberta. (Uma certidão da casa da India.) Por Luciano Cordeiro.

Historical—Vasco da Gama. *Rev. G.* **42** (1898): 161–179. **Gaffarel.**

Vasco da Gama. Par Paul Gaffarel.

Historical—Vasco da Gama. **Aragão.**

Quarto Centenario do Descobrimento da India. Contribuições da Sociedade de Geographia de Lisboa. Vasco da Gama e a Vidigueira. Estudo historico por A. C. Feixeira de Aragão. Lisboa: Imp. Nacional, 1898. Size 10 × 6½, pp. xxxviii. and 304. *Portrait and Plates.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

Historical—Vasco da Gama. **Lima.**

Vesperas do Centenario. O Centenario no Estrangeiro, Conferencia realisada na Sociedade de Geographia de Lisboa no dia 11 de Novembro de 1897. Por Magalhães Lima. Lisboa, 1897. Size 10½ × 7, pp. 30.

Political Geography. *Ann. G.* **7** (1898): 97–111. **Vidal de la Blache.**

La géographie politique à propos des écrits de M. Frédéric Ratzel. Par M. P. Vidal de la Blache.

Based upon Prof. Ratzel's recent work on political geography.

GENERAL.

German Colonies. *Oester. Monats. Orient.* **24** (1898): 13–19, 30–32. ———

Die deutschen Schutzgebiete bei Beginn des Jahres 1898.

German Colonies. **Riebow and Zimmermann.**

Die deutsche Kolonial-Gesetzgebung. Sammluug der auf die deutschen Schutzgebiete bezüglichen Gesetze, Verordnungen, Erlasse und internationalen Vereinbarungen, mit Anmerkungen und Sachregister. Erster Theil. Bis zum Jahre 1892. Auf Grund amtlicher Quellen und zum dienstlichen Gebrauch, herausgegeben von Riebow. Zweiter Theil. 1893 bis 1897. . . . herausgegeben von Dr. Alfred Zimmermann. Berlin: E. S. Mittler und Sohn, 1893–1898. Size 10 × 6½, pp. (vol. i.) xiv. and 706; (vol. ii.) xviii. and 378.

A complete collection of the laws and ordinances relating to the German colonies.

German Colonies—Bibliography. **Danckelman.**

Inhaltsverzeichniss zu den Mittheilungen von Forschungsreisenden und Gelehrten aus den Deutschen Schutzgebieten. Band I. bis X. (1888 bis 1897). Mit Benutzung amtlicher Quellen herausgegeben von Dr. Freiherr von Danckelman. Berlin: E. S. Mittler und Sohn, 1898. Size 9½ × 7, pp. 100.

Königsberg Geographical Society. **Tesdorpf.**

Hundert Versammlungen der Königsberger Geographischen Gesellschaft 1881–1898. Zur 100sten Versammlung im Auftrage der Gesellschaft herausgegeben vom Schriftführer Dr. W. Tesdorpf. Königsberg i. Pr., R. Leupold, 1898. Size 9 × 6½, pp. xii. and 198. *Portraits. Presented by the Königsberg Geographical Society.*

This volume comprises a list of members of the Society, and a brief summary of each of the hundred meetings that have been held since the establishment of the Society in 1882.

Mountaineering. *Appalachia* **8** (1898): 361–367. **Douglass.**

Effects of High-Mountain Climbing. By A. E. Douglass.

Mountaineering. **Oberhummer.**

Alpenverein und Alpenforschung. Von Eugen Oberhummer. Wien, 1898. Size 7 × 4½, pp. 98.

Nomenclature. *J. Geology* **6** (1898): 161–170. **Keyes.**

The Use of Local Names in Geology. By Charles R. Keyes.

Statistics. **Craigie.**

Notes on the Subjects discussed at the St. Petersburg Meeting of the International Statistical Institute. By Major P. G. Craigie. Reprinted from the *Journal of the Royal Statistical Society*, vol. lx., part iv. (December, 1897). 1898. Size 8½ × 5½, pp. 54.

A report of the international meeting of statisticians in St. Petersburg, with much interesting material bearing on the relative conditions of the countries taking part, and on various distributions.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000094

مكتبة قطر الوطنية
Qatar National Library

NEW MAPS.

By J. COLES, *Map Curator*, R.G.S.

EUROPE.

England and Wales. **Wells.**

Map of Canals and Navigable Rivers of England and Wales. By Lionel B. Wells, M.INST.C.E. Scale 1 : 420,000 or 6·7 stat. miles to an inch. George Falkner & Sons, Manchester and London, 1898. *Price* £2 10*s. in sheets.*

This map shows the present state of inland navigation in England and Wales. By the colouring and manner in which the canals are drawn, the class of vessel by which they can be navigated is shown; those that have fallen into decay are specially distinguished.

England and Wales. **Ordnance Survey.**

Publications issued since June 8, 1898.

1-inch—General Maps:—

ENGLAND AND WALES (revision):—20, 52, 54, 120, 216, 279, 293, engraved in outline. 1*s.* each.

6-inch—County Maps:—

ENGLAND AND WALES (revision):—**Durham**, 4 S.W., 5 N.E., 6 N.W., 7 S.W., 8 N.W., 11 N.E., S.E., 12 N.E., 14 S.E., 16 S.E. **Essex**, 3 S.W., S.E., 8 N.W., S.W., 9 S.W., 14 N.W., S.E., 15 S.W., 16 S.E., 18 S.E., 19 S.E., 23 S.E., 25 S.W., 26 S.E., 28 N.E., S.W., 29 S.E., 36 S.E., 37 N.E., S.E., 39 N.E., 44 S.E., 48 N.W., N.E., S.E., 52 N.E., 57 N.W., 73 N.E., S.E., 74 S.W., 78 N.E., 79 N.E., S.W., 80 N.W., S.W. **Hampshire**, 4 S.W., 6 S.W., S.E., 49 S.E., 52 S.E., 65 N.E., 71 S.W., 74 N.E. **Kent**, 9 S.W., S.E., 33 S.W., 43 N.E., 44 N.E., 50 S.E., 51 S.W., 52 N.W., 54 N.W., S.W., 60 N.W., N.E., S.E., 61 N.W., 62 N.E., 63 S.W. **Northumberland**, 40 S.E., 41 N.E., 42 N.W., 50 N.E., 58 S.E., 59 N.E., 60 N.W., S.E., 61 N.W., N.E., 62 N.W., 63 S.E., 64 N.E., 67 N.W., 72 S.E., 79 S.E., 80 S.E., 87 N.E., 88 N.W., N.E., 91 N.W., 94 S.E. **Sussex**, 11 S.W., S.E., 12 S.W., S.E., 13 N.E., S.W., 21 N.W., N.E., S.W., S.E., 22 N.W., N.E., S.W., S.E., 23 N.W., N.E., S.W., S.E., 24 N.W., N.E., S.W., 34 N.W., N.E., S.E., 35 N.W., N.E., S.W., 36 N.E. **Surrey**, 9 S.E., 21 N.W., 15 S.E. 1*s.* each.

25-inch—Parish Maps (revision):—

ENGLAND AND WALES:—**Cheshire**, III. 3, 7, 14, 15; IX. 7, 9, 12, 13; X. 14; XI. 2, 7, 9, 13; XVII. 4; XVIII. 1, 9; XXVI. 16; XXVII. 9; XXVIII. 5; XXXIV. 4, 8, 12; XXXV. 1, 9, 15; XLI. 4, 8; XLVIII. 4, 6, 15; XLIX. 1, 3, 4, 5, 15; L. 1; LI. 9; LV. 16; LVI. 2, 3, 5, 6, 16; LVII. 1, 4; LXI. 10; LXV. 8. **Derby**. VII. 15; IX. 14, 15, 16; X. 9, 13, 14, 16; XI. 10, 15; XII. 9, 11, 12; XV. 3 5; XVI. 1, 2, 3, 4, 5, 7, 8, 10, 11, 12; XVII. 1, 2, 5, 7, 9, 11. **Durham**, II. 14. **Essex**, VII. 16. **Hampshire**, LXXXIII. 4, 6, 10; LXXXIV. 10; LXXXVII. 2, 6; XCIII. 14, 15; XCV. 16; XCVI. 13; XCVII. 4; XCVIII. 2, 3, 4, 10, 14, 15; C. 4, 5, 6. **Hertfordshire**, III. 3, 11; IV. 12; VI. 16; XI. 6; XII. 2; XXIII. 14; XXIX. 6, 8, 11, 12, 14; XXXIII. 3, 4, 7; XXXIV. 1, 2, 3, 4, 9, 13, 14; XXXVIII. 8, 12; XL. 6, 10, 16; XLI. 4; XLIV. 8; XLV. 3, 7. **Kent**, XV. 4, 8; XIX. 3; XXV. 9, 11, 12, 13, 14, 15; XXVI. 2, 6, 9; XXXVI. 4; XXXVII. 16; LXVII. 8; LXX. 2, 4, 6, 8, 10, 11, 12, 14, 15, 16; LXXI. 2, 3, 5, 6, 9, 10; LXXXI. 12, 13, 14, 15, 16; LXXXII. 1, 2 and 6, 9; LXXXIV. 2, 3, 4, 8, 12. **Surrey**, XXXVII. 14; XLIV. 2 and 3. **Sussex**, XLVII. 15; LX. 3, 7, 11, 15; LXI. 4; LXIV. 14, 15; LXV. 10, 11; LXVI. 6; LXXII. 3, 7, 11 and 16. **Westmoreland**, XXVII. 15, 16; XXVIII. 13, 14, 15, 16; XXIX. 5, 8, 9; XXXIII. 3, 4, 7, 10, 11, 12, 13, 14, 15, 16; XXXIV. 2, 3, 4, 6, 8, 9, 10, 11, 13, 14; XXXV. 5 and XXXIV. 8; XLI. 8, 16; XLIV. 14; XLVI. 10; XLVII. 4; LI. 2. 3*s.* each.

Miscellaneous:—One-inch Parish Indexes, printed in colours, showing 25-inch parish maps only: Sheets 274, 299, 300, 301, 302, 304, 315, 316, 317, 318, 319, 329, 330, 332, 333, 344, 345. *Price* 1*s. each.* These are also published showing 6-inch quarter-sheets only. *Price* 1*s. each.*

(*E. Stanford, Agent.*)

Historical Atlas. **Poole.**

Historical Atlas of Modern Europe, from the Decline of the Roman Empire; comprising also maps of parts of Asia and of the New World, connected with European

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

History. Edited by Reginald Lane Poole, M.A., PH.D., Fellow of Magdalen College and Lecturer in Diplomatic in the University of Oxford. Part xviii. *Price* 3*s.* 6*d.* Oxford: The Clarendon Press; London, Edinburgh, Glasgow, and New York: Henry Frowde, M.A.; Edinburgh: W. & A. K. Johnston, 1898. *Presented by the Clarendon Press.*

Part xviii. contains the following maps: No. 7, Europe in 1360, by C. Oman, M.A.; No. 31, Ireland from 1541 to 1653, by Robert Dunlop, M.A.; No. 79, Western Asia at the time of Saladin, A.D. 1190, by Stanley Lane-Poole, M A. Each of these maps is accompanied by explanatory letterpress.

ASIA.

China. **Oxenham.**

Historical Atlas of the Chinese Empire. By E. L. Oxenham, F.R.G.S. (late H.B.M. Consul at Chinkiang). Second edition, giving the original Chinese maps with their English counterparts. London: Royal Geographical Society, and John Murray, 1898. *Price* £1 10*s.*; to Fellows of the R.G.S., 17*s.* 6*d.*

The Chinese edition of this historical atlas appeared in 1887, having been compiled by the late Mr. E. L. Oxenham, F.R.G.S., from original maps, and the Chinese works of Chinese scholars. In consequence of representations made to him, Mr. Oxenham decided to issue a second edition of this atlas, containing the original Chinese maps with their English counterparts. His premature death prevented his carrying out his intention, and the Council of the Royal Geographical Society decided to defray the expense of preparing the atlas in its present form for publication.

Indian Government Surveys. **Surveyor-General's Office, Calcutta.**

India, 128 miles to an inch, 1897.—Indian Atlas, Quarter-sheets, 4 miles to an inch: Nos. 3 N.E., parts of districts Karachi and Hyderabad (Sind, Bombay Presidency), additions to 1895; 26 S.E., part of district Ratnágiri (Bombay Presidency), 1898; No. 48 S.W., parts of districts Hissar and Karnal and Native States of Patiala and Jind (Punjab), 1898; 52 N.W., parts of Native States, Gwalior, and Indore (Central Indian Agency), Oodeypore, Tonk, Jhallawar, and Kotah (Rajputana Agency), additions to 1891; 52 S.E., parts of district Sangor and Bhopal, Gwalior, Pathari, Kurwai, Tonk, Muhammadgarh, and Nawab Básoda (Native States), additions to 1896; 67 S.E., parts of districts Bareilly, Pilibhit, and Shahjahanpur (North-West Provinces), and Kheri (Oudh), additions to 1895; 69 N.W., parts of Gwalior and Bundelkhand (Central India Agency), and of districts Jalaun, Jhansi, Hamirpur, and Etawah (North-West Provinces), additions to 1894; 71 N.E., part of districts Jubbulpore, Damoh, Mandla, and Narsinghpur (Central Provinces), and of Rewah (Central Indian Agency), additions to 1888; 77 S.E., parts of districts Nellore, Coddapah, North Arcot, and Chingleput (Madras Presidency), 1897; 87 N.W., parts of districts Kheri, Bahraich, Sitapur, Baru Banki, and Gonda (Oudh), additions to 1892; 129 N.E., parts of district Lakhimpur (Assam) and the Miri and Mishmi Hills, additions to 1896.—Skeleton map of district Pubnah, 4 miles to an inch, additions to 1897.—District Burdwan (Bengal), 8 miles to an inch, 1890.—District Dacca (Bengal), 8 miles to an inch, 1890.—District Montgomery (Punjab), 8 miles to an inch, 1898.—Punjab Survey, 1 inch to a mile. Parts of district Hissar (Punjab) and Bickaneer State (Rajputana Agency), Seasons 1867-68, 1882-84, corrections to 1895.—Bengal Survey, 1 mile to an inch. Parts of districts Lohardaga and Singhbhum (Bengal), Seasons, 1863-65, additions to 1892.—Central India and Rajputana Survey, 1 inch to 2 miles. Sheets: Nos. 161, 162, and 194, 195 (on one), part of Jeypore, Jodhpore, Bickaneer, and Shaikhawati (Rajputana Agency), Seasons 1875-77, additions to 1896; No. 252, parts of district Hissar (Punjab) and Bickaneer State (Rajputana Agency), Seasons 1867-68, and 1882-84, additions to 1895; No. 441, parts of district Jubbulpore (Central Provinces), and of Panna, Ajaigarh (Central India Agency), Season 1856-57, 1866-67, 1869-70, additions to November, 1897.—North-West Provinces and Oudh Survey, 1 inch to a mile; No. 13, districts Saharanpur (North-West Provinces), and Umballa (Punjab), Seasons 1878-80, additions to 1897.—Lower Burma Survey, 1 mile to an inch; No. 281, districts Hanthawaddy, Pegu, and Rangoon Town, Seasons 1881-83, corrections to 1897; No. 447, districts Amherst and Thaton, Seasons 1891-96, additions to 1897.—North-Eastern Frontier, 16 miles to an inch. Sheet: No. $\frac{5\text{-}12}{6\text{-}13}$, parts of Great Tibet, Sikkim, Assam, and Bhután, 1897.—Burma-Siam Boundary, 1 inch to a mile, 6

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

sheets, 1897.—Index to the Standard Sheets of Sind (Bombay Presidency).—Chart of Triangulation and Traversing, Gujarat Survey. Degree Sheet 10, ¼ inch to 1 mile.
(*E. Stanford, Agent.*)

AFRICA.

German East Africa. **Capus.**

Reiseroute der Missionare Pères van den Biesen, Capus und van der Burgh, von der Station N. D. Auxiliatrice in Ushirombo nach Uha und Urundi. Juni u. Juli, 1895. Nach einer Originalskizze de Père Capus. Scale 1 : 350,000 or 5·5 stat. miles to an inch. *Petermanns Geographische Mitteilungen.* Jahrgang 1898, Tafel 9. Gotha: Justus Perthes. *Presented by the Publisher.*

Tunis. **Service Géographique de l'Armée, Paris.**

Carte de la Tunisie. Scale 1 : 50,000 or 0·7 stat. miles to an inch. Sheet: Environs de Tunis. Publié par le Service Géographique de l'Armée, Paris. *Price 1.5 fr.*

GENERAL.

The World. **Andree.**

Andrees allgemeiner Handatlas, 126 Haupt- und 130 Nebenkarten auf 186 Kartenseiten, nebst alphabetischem Namenverzeichnis. Vierte, völlig neubearbeitete, stark vermehrte Auflage, herausgegeben von A. Scobel. Bielefeld und Leipzig: Verlag von Velhagen & Klasing, 1898.—Lief 17, Karte der Nordpolarregion: Europäisches Russland.—Lief 18, Provinzen Brandenburg, Pommern und Posen: Spanien und Portugal.—Lief 19, Verbreitung der Wichtigsten Wild- und Kulturtiere: Nordwestliche Vereinigte Staaten und Südwestliches Canada.—Lief 20, Deutsches Reich, Staatenübersicht: Norditalien: Sizilien und Sardinien.

The World. **Bartholomew.**

The Citizen's Atlas. One hundred maps and gazetteer. By J. G. Bartholomew, F.R.G.S. Published by George Newnes, Ltd., London. To be completed in 20 parts. Parts 9 and 10. *Price 6d. each.*

CHARTS.

North Sea. **Olsen.**

Chart of the North Sea. Scale 1 : 815,000 or 12·8 stat. miles to an inch. Compiled by O. T. Olsen, F.L.S., F.R.G.S., for the use of fishermen. Published by Norie & Wilson, London, 1898. *Presented by the Author.*

PHOTOGRAPHS.

British Central Africa. **Codrington.**

Eleven Photographs of Angoniland, British Central Africa, taken by R. Codrington, Esq., 1891–92. (1) Bows and arrows of the Achewa; (2) Knives and spears of the Achewa; (3) Yao warrior; (4) Yao woman pounding mealies; (5) Yao woman with Lip-ring (Pelele); (6) Angoni warrior; (7) Stabbing assegais of the Angoni; (8) Dress of the Angoni warrior; (9), (10), (11), no titles. *Presented by R. Codrington, Esq.*

Greenland. **Peary.**

Twenty-eight Photographs of North-West Greenland taken during the explorations of Lieut. E. A. Peary, U.S.N, 1891–92. *Presented by Lieut. E. A. Peary, U.S.N.*

This is a most interesting series of photographs taken by Lieut. Peary, U.S.N., during his stay in Greenland and journey to Independence bay. As the titles will show, they illustrate many incidents which took place during his adventurous journey and phases of Esquimo life, as well as the physical features of the country.

(1) Sailing on the Inland ice; (2) Glacier of the Scarlet Heart; (3) Eskimo woman, Whale sound; (4) Ice Cap camp; (5) Red Cliff House, 91–92; (6) A breakdown on the Ice Cap; (7) An August day in McCormick bay; (8) Sastrugi of the inland ice; (9) Taking an observation; (10) Eskimo house-building; (11) Eskimo group; (12) Red Cliff House; (13) Fœtal glaciers, McCormick bay; (14) Eskimo mother; (15) The Stars and Stripes on the Cairn at Independence bay, Independence bay in the distance; (16) Josephine headland, Northumberland islands; (17) Littleton island; (18) Eskimo mothers, Whale sound; (19) October at Anniversary Lodge; (20)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

Anniversary Lodge, 1893–95; (21) Beset off Cape Mercy; (22) Eskimo young man, Whale sound; (23) Eskimo woman, Whale sound; (24) On the Great Ice; (25) Moving the big meteorite; (26) Gnome glacier; (27) Icing sledge shoes; (28) Bowdoin glacier.

Manchuria. **Smith.**

Thirty-two Photographs taken by Dr. Donaldson Smith during his journey through Manchuria, 1897. *Presented by Dr. Donaldson Smith.*

The following is a list of the titles of these photographs:—

(1) Mongolian spotted deer; (2) Yang Shu Pai; (3) A group of Mongols; (4) Salt caravans; (5) Main street of Tsitsihar; (6) Main street in Tsitsihar; (7) Prince Nau Hang Wang; (8) Prince Nau Hang Wang; (9) The "belle" of the Mongols, on the banks of the river Tshor; (10) Chinese junks at Tsitsihar; (11) San Ti Ying, temple and hot springs; (12) The Sungari river from a cattle boat; (13) Taking cart across the river Torre in ferry boat; (14) A Golde (one of the natives of the upper Amur districts) at a railway station near Vladivostock; (15) Mongol village, Hu Pu; (16) At the junction of the Amur and Sungari rivers; (17) Statue of the first governor of the Amur provinces at Kabasopka; (18) Entrance to Lamasery at Ching Pong; (19) Shiao Ho Tsu; (20) Ta Lai Hu Shu; (21) La Ho Ku, Mongols in camp; (22) The river Tshor at Pu La Su Ku, Lamasery in the distance; (23) The river Tshor at Pu La Su Ku; (24) The flooded Nonni; (25) A Nonni steamer on the Amur; (26) Lamas; (27) Mongol women; (28) Mongol village; (29) A Lama and some of his relatives examining a camera; (30) Temple and graves outside of walled town, Shi Hia; (31) Lassooing pony at Dolon Nor; (32) No title.

North-West Frontier of India. **Tate.**

Thirty-four Photographs taken in the neighbourhood of the Railway to Kandahar, by G. P. Tate, Esq. *Presented by G. P. Tate, Esq.*

This set of photographs contains different views of the railway to Kandahar, types of natives, some interesting geological features, and the scenery of the adjacent country. The following is a list of the subjects:—

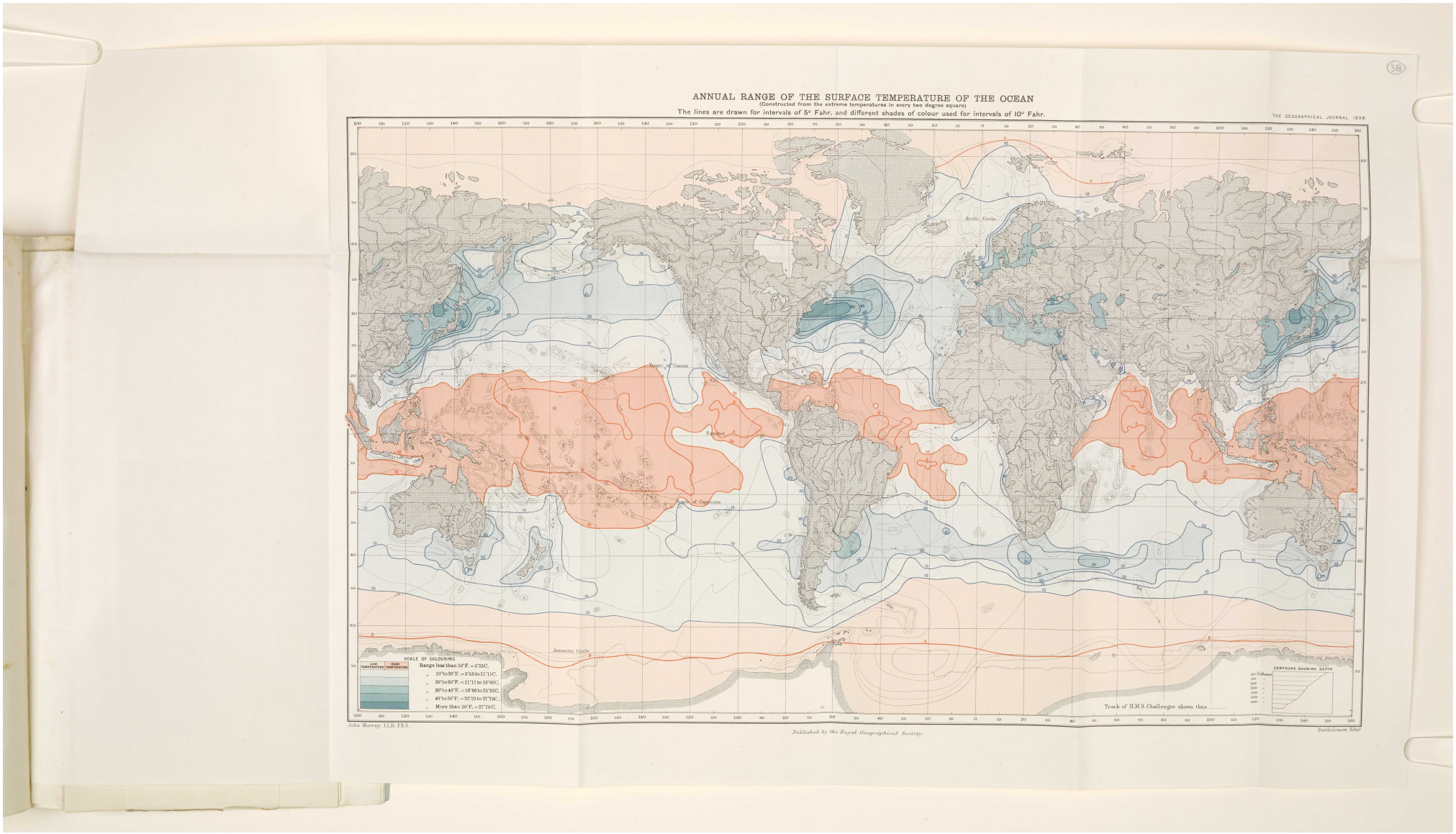
(1) Chitkan of Panjgur, showing huts for troops in 1892; (2) Village of Turbat in Kej; (3) Types of inhabitants, Kej; (4) Village of Gushtang, in Kej (Makran); (5) Fisher village on the Kalmat creek; (6) Cavalry lines in Chitkan of Panjgur, 1891–92; (7) Tennis court at Chitkan of Panjgur, 1891–92; (8) "A bit" in Panjgur; (9) Fort at Pidárk, Makran; (10) Village on the Kalmat creek, Makran coast; (11) Mir Muhamad Ali Khan, Gichki, Sardar, and Khan's deputy in Panjgur; (12) "A bit" in Panjgur; (13) Fort at Khudabadan, Panjgur; (14) Officer's quarters, and hospital for troops and civil patients, Chitkan of Panjgur, 1891–92; (15) Fort at Hor, Kolwah valley, Kej; (16) General view in Kej, 1891–92; (17) "A bit" in Panjgur; (18) Miri fort in Kej; (19) Bridge near the Mushkáf railway, showing sandstone ridges; (20) "A bit" in Mushkáf-Bolan railway, showing clay and recent stratified rock (sandstones) forming cliffs in Mushkáf river; (21) Inside Kalmat creek, Makran coast, 1891–92; (22) "A bit" showing relative position of railway line as first constructed, and the "high-level" line now in use and recently finished; (23) Railway bridge near river at Mach, Bolan pass; (24) The railway station at Hirok, Mushkáf-Bolan railway; (25) "A bit" on the Mushkáf-Bolan railway; (26) The Laleji plain in Mushkáf-Bolan railway, clay hills capped with sandstones, and containing layers of same; (27) A bridge on the Mushkáf-Bolan railway, showing piers constructed for double line of rails if required; (28) Bridge and tunnel on Mushkáf-Bolan railway; (29) Tunnel through watershed near Kolpur; (30) Kolpur station, and houses of officers and staff, Mushkáf-Bolan railway; (31) "A bit" on railway line near Hirok, showing nature of hills; (32) General view of portion of the line; (33) "A bit" on the Mushkáf-Bolan railway, showing stratified recent sandstones; (34) Mushkáf-Bolan railway, "A bit" in the Bolan pass, showing nature of hills.

N.B.—It would greatly add to the value of the collection of Photographs which has been established in the Map Room, if all the Fellows of the Society who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they will be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000040

مكتبة قطر الوطنية
Qatar National Library

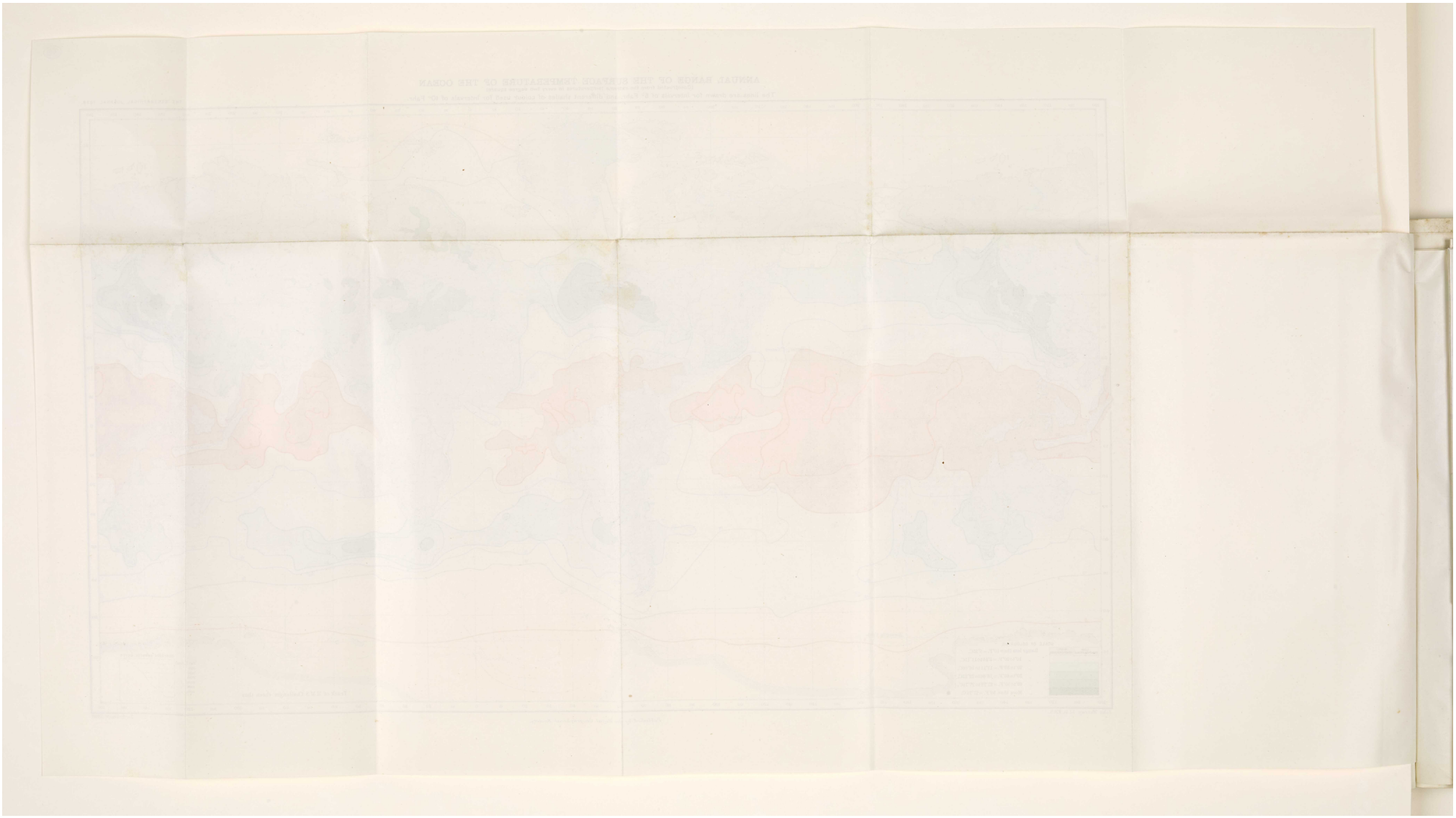
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005a

مكتبة قطر الوطنية
Qatar National Library

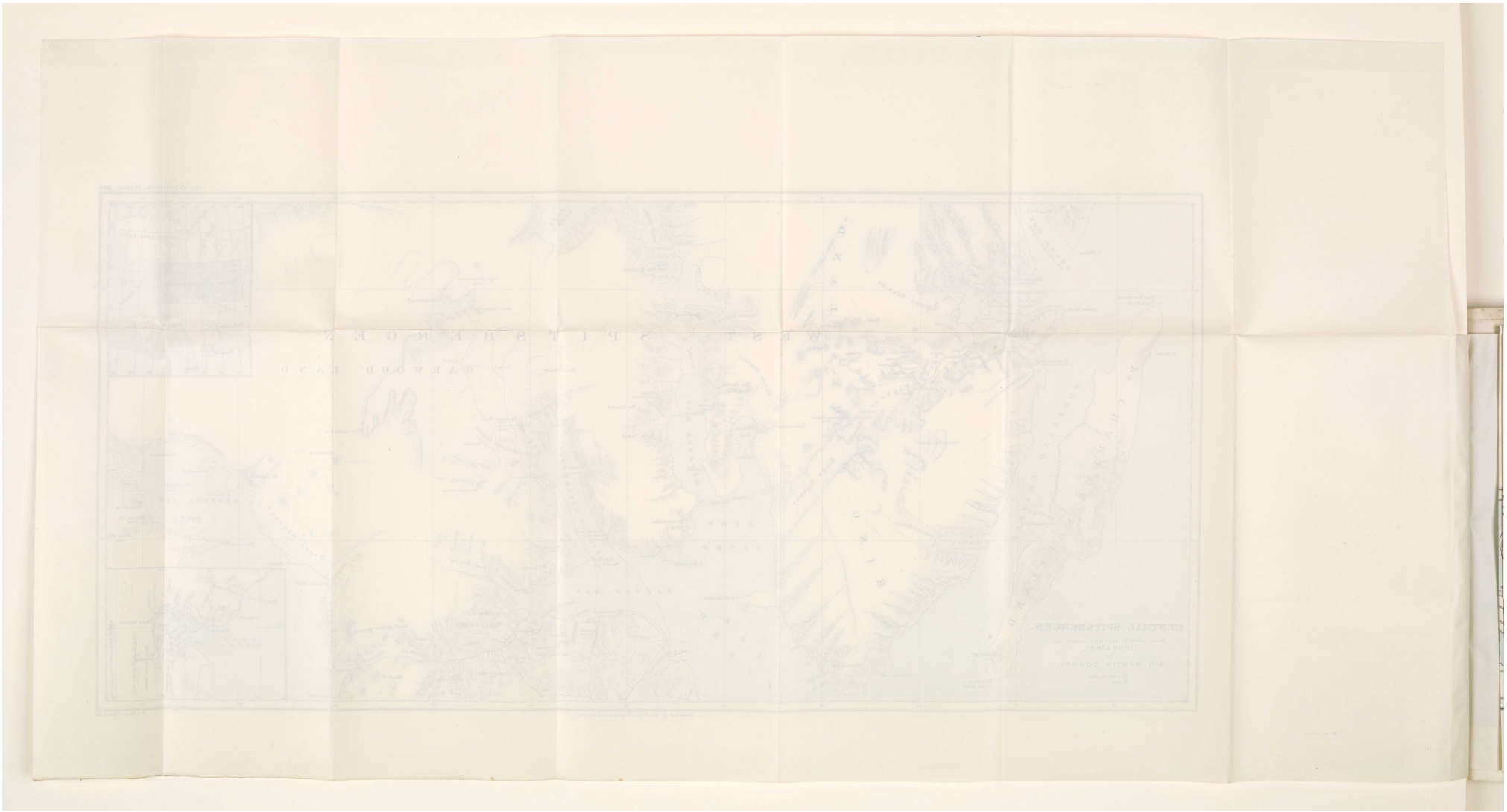
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000064

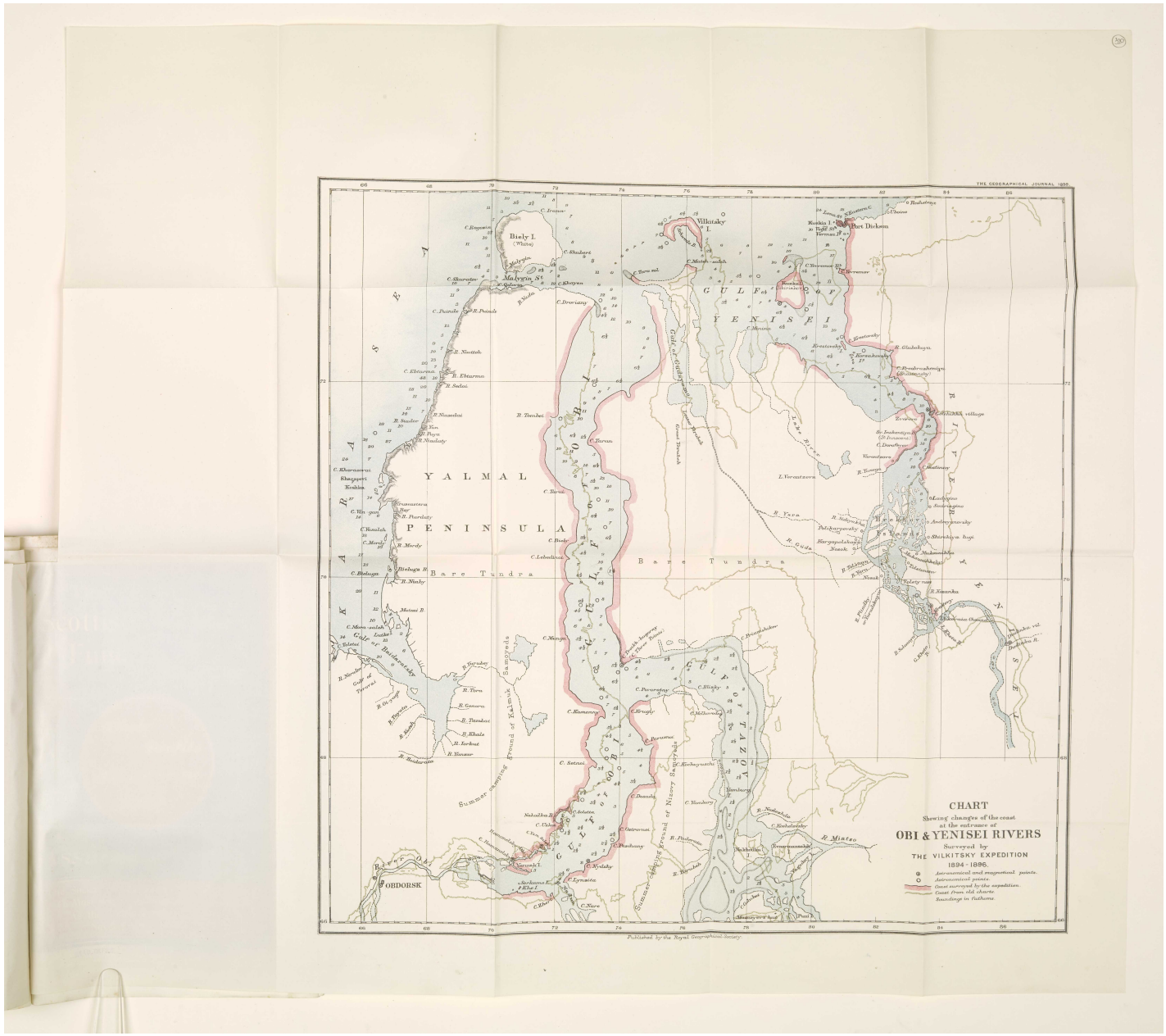
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



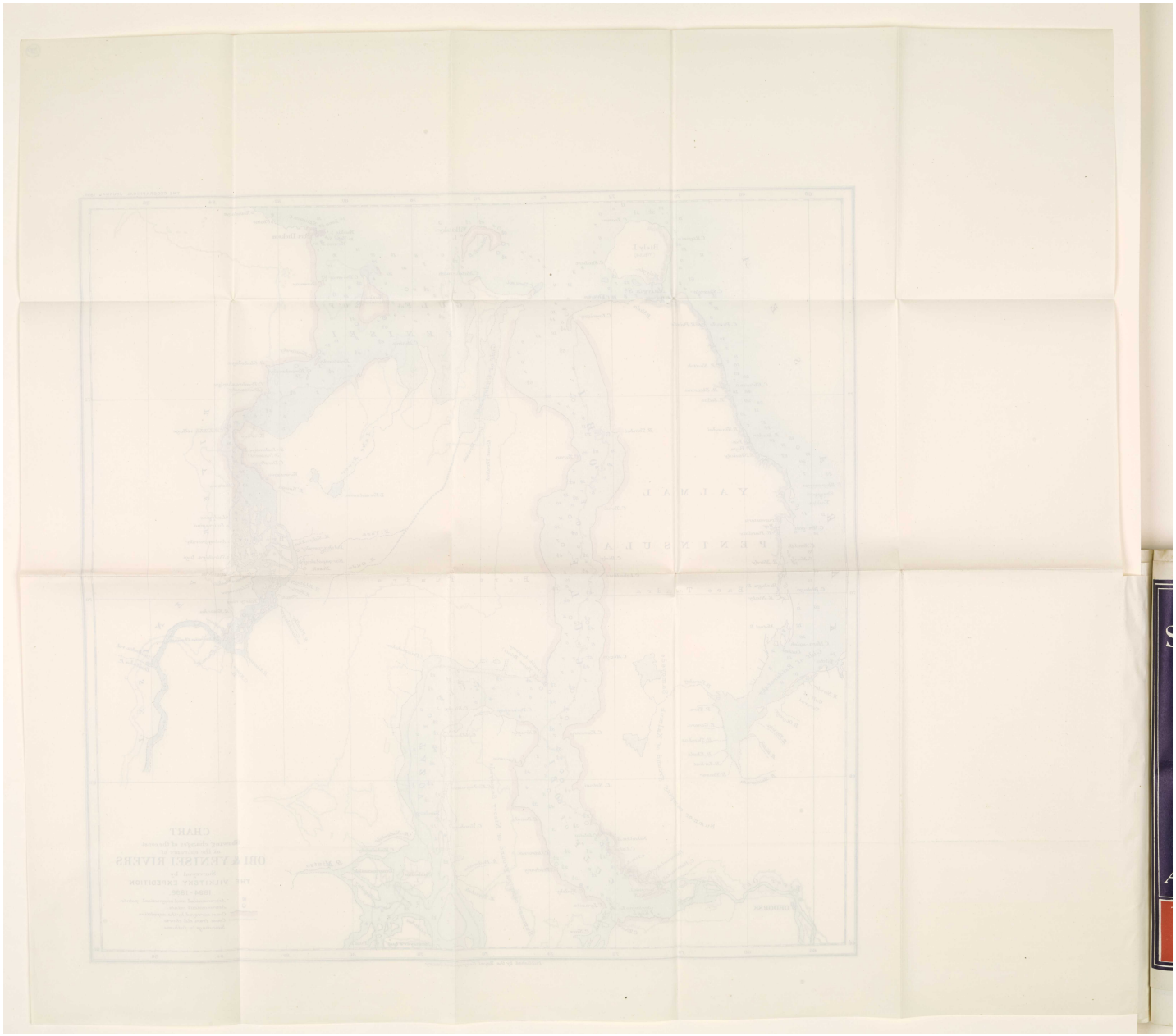
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005a

مكتبة قطر الوطنية
Qatar National Library



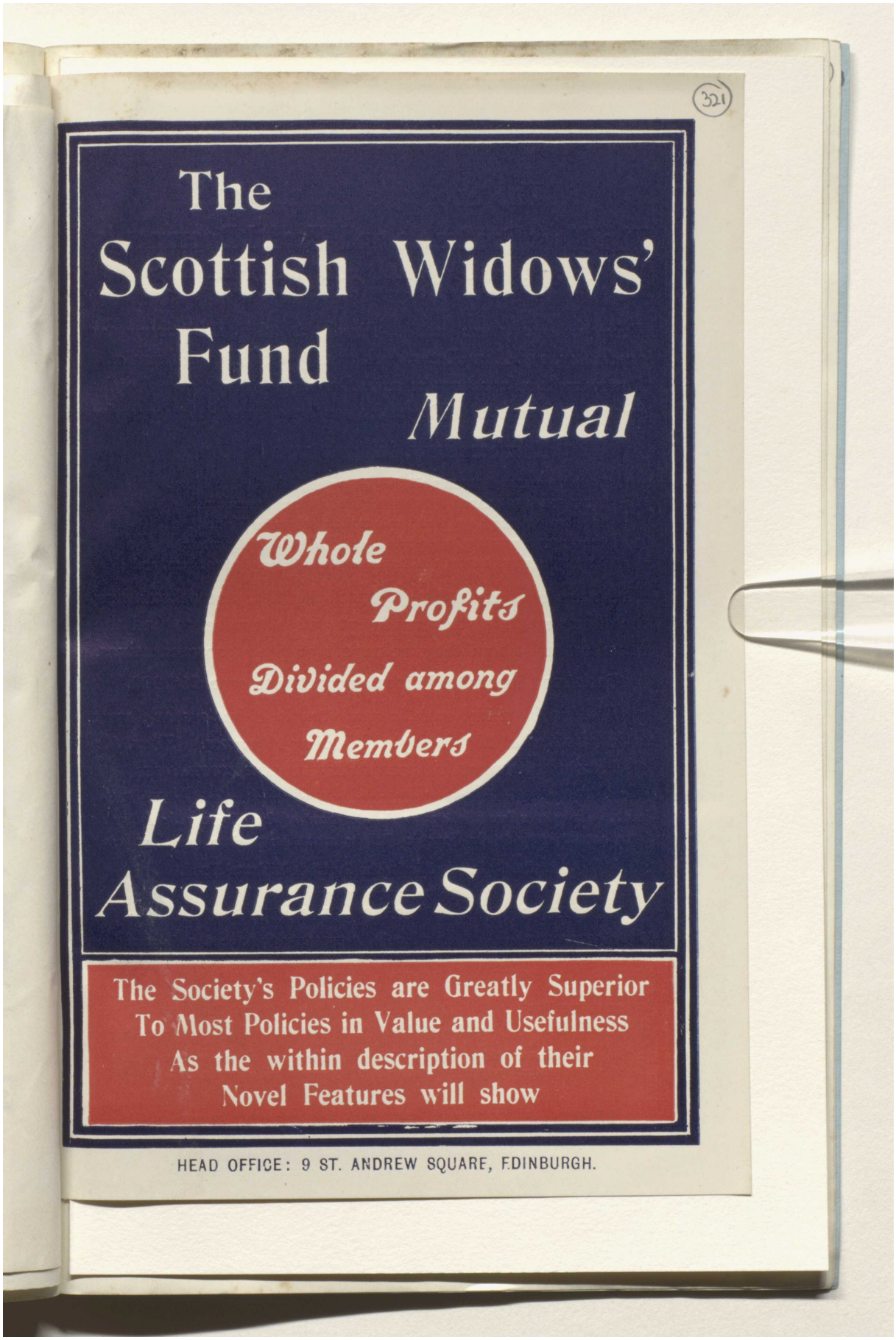
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000071

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000090

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000091

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Society's Policies are The Most Profitable and Useful Documents of the kind that can be obtained,

Every source from which Profit is derivable being so productive, viz. Low Rates of Mortality and Expenditure and Remunerative Investments: with Division of the Whole Profits among the Members. They, also, confer unusual privileges, for

Members may, in their own Option,

1. KEEP UP THEIR POLICIES till they become due in the usual way.
2. HAVE THEM DECLARED "PAID-UP" free of future premiums.
3. BORROW ON THEM any Sums within their Surrender Values.
4. SURRENDER THEM *after payment of one full annual premium.*
5. WHEN POLICIES LAPSE, the Surrender Value is credited to them, and

There are now at **Credit of Lapsed Policies,** notwithstanding the efforts made, by advertisement and otherwise, to find the Members to whom they belonged, or their representatives,

Unclaimed Surrender Values amounting to over £16,000,

application for which may be made to the Directors on forms to be obtained at the Society's Offices or Agencies. Thus, the

SERIOUS OBJECTIONS OFTEN TAKEN TO LIFE ASSURANCE,

that the Policyholder is deprived of the use of his money as long as his Policy exists, or may even lose it altogether in the event of his allowing the Policy to lapse, cannot apply to the Society's Policies, such Inconvenience and Loss being

Absolutely Impossible in the Scottish Widows' Fund.

RESULTS OF THE SOCIETY'S OPERATIONS FOR 1897.

NEW ASSURANCES (net)	£1,337,400	MORTALITY 69 p. cent. of Expectation	
NEW PREMIUMS	£56,318	RATE OF INTEREST p. cent.	£3 18 9
ANNUAL INCOME OVER	£1,540,000	EXPENSES ON PREMS. p. ct.	£9 16 3
CLAIMS PAID	£720,630	ON TOTAL REVENUE p. ct.	£6 4 5
ADDITION TO FUNDS	£642,236	AVERAGE BONUS PAID on Policies of *all durations*	£54 p. ct.
TOTAL FUNDS	£14,142,982		

Tables of Bonuses, Paid-up Policies, Surrender Values, and Loans, referred to in the above Options, practically under all existing Policies, may be had on application.

LONDON: 28 CORNHILL, E.C., AND 5 WATERLOO PLACE, S.W.

R. & R. CLARK, LTD. PRINTERS, EDINBURGH

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

ABBOTTS' WATERPROOFS

Manufacturers of High-class and Reliable Goods for

HOME, COLONIAL, AND FOREIGN USE,

As supplied to Fellows of the Royal Geographical Society.

REGULATION ARMY WATERPROOF. REGULATION NAVAL WATERPROOF.

WATERPROOFS FOR FISHING, SHOOTING, HUNTING, DRIVING, TOURING, YACHTING, CYCLING, Etc.

Contractors to the Admiralty, War Office, India Office, Metropolitan Police, etc.

Only Address: 15, QUEEN ST., CHEAPSIDE, LONDON, E.C. Works: Limehouse, E.

HALF THE PRICE OF MEAT EXTRACT.

EXPLORATION AND TRAVELLING EXPEDITIONS WILL FIND

FROMMS EXTRACT

(The Pioneer of Concentrated Vegetable Foods)

NOURISHING, SUSTAINING, ECONOMICAL.

"A COMPLETE FOOD."—*LANCET.*

Samples, Price Lists, Analyses, and Testimonials on application to

FROMMS EXTRACT CO., Ltd., 5, White St., LONDON, E.C.

LINCOLN, BENNETT & CO., LIMITED,

1, 2 and 3, SACKVILLE STREET, and 40, PICCADILLY, LONDON, W.

Hat Manufacturers.

BY SPECIAL APPOINTMENT

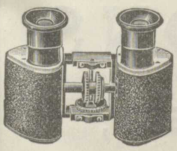
To T.R.H. THE PRINCE and PRINCESS OF WALES.



PATENT INSULATED HELMETS FOR TROPICAL CLIMATES,

As supplied to Fellows of the Royal Geographical Society.







Gold Medals and Highest Awards at all Great Exhibitions.

Established 1830. **ROSS.** *Catalogues post-free.*

PHOTOGRAPHIC LENSES AND COMPLETE OUTFITS.

Every requisite supplied. Developing and Printing executed promptly

TELESCOPES & FIELD GLASSES OF FINEST QUALITY.

New Prismatic Binocular Glasses.

ANEROID BAROMETERS, COMPASSES, THERMOMETERS, ETC.

Special Sets for Travellers, very Light and Portable.

SURVEYING INSTRUMENTS, SPECTACLES AND EYE-GLASSES

MICROSCOPES AND MAGNIFIERS, ETC., ETC.

ROSS & CO., 111, New Bond Street, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003b

مكتبة قطر الوطنية
Qatar National Library

THE STANDARD LIFE ASSURANCE CO.

A Life Office of 72 years' standing, and one of the wealthiest and most progressive of the Provident Institutions of the United Kingdom.

FUNDS - - - - - £8,400,000.
ANNUAL REVENUE - OVER £1,000,000.

THE STANDARD, owing to its world-wide connection, has established an Agency organization throughout the world second to that of no other Office, and thus affords exceptional facilities to persons travelling or living in any part of the Globe. The Company has Secretaries and Local Boards of Directors at the following places abroad :—

CANADA. WEST INDIES. BOMBAY. CHINA. MAURITIUS.
SOUTH AMERICA. CALCUTTA. CEYLON. SOUTH AFRICA. SCANDINAVIA.

And Agents in all the chief towns of the Empire.

PREMIUMS MODERATE. *CONDITIONS LIBERAL.*

EDINBURGH (Head Office): 3, GEORGE STREET.
LONDON: 83, KING WILLIAM STREET; and 3, PALL MALL EAST (West End Office).

Where all particulars can be obtained.

KROMSKOP COLOUR PHOTOGRAPHY.

NOW ON EXHIBITION.

New Series of Pictures made with the Multiple Back for Amateur Colour Photography.
BOTANICAL AND ENTOMOLOGICAL SUBJECTS.
By W. SAVILLE-KENT, F.L.S., F.Z.S.
MEDICAL SUBJECTS. By DR. FALLOWS.
ALSO NATIONAL GALLERY PICTURES. The first perfectly successful Colour Reproductions of great Paintings.
"KROMSKOP COLOUR PHOTOGRAPHY."
By FREDERICK IVES. 1s. nett.
PRICE LISTS FREE.

THE PHOTOCHROMOSCOPE SYNDICATE, LTD.,
121, SHAFTESBURY AVENUE, LONDON, W.C.

HICKS & SONS,

GOY OUTFITTER 21, LEADENHALL STREET & 54, LIME STREET, LONDON. TRADE MARK.
Established 1812

(Successors to Goy Limited,)
21, LEADENHALL STREET,
Opposite the P. and O. Office; and
54, LIME STREET, LONDON, E.C.

TAILORS AND OUTFITTERS.

OUTFITS FOR ANY PART AT SHORTEST NOTICE.
ESTIMATES ON APPLICATION.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000039

مكتبة قطر الوطنية
Qatar National Library

HÔTEL MÉTROPOLE, LONDON

NORTHUMBERLAND AVENUE, TRAFALGAR SQUARE.

The Hôtel Métropole, London, offers unequalled accommodation for real comfort and luxury in every detail.

Numerous single and double Bedrooms, also Bedrooms, with private Bathroom and Lavatory attached; all most comfortably and beautifully furnished.

Suites of Private Apartments varying in accommodation from Bedroom and Sitting-room, with or without private Bath and Dressing-room, to the princely suites comprising Dining, Drawing, and Reception Rooms, with Bedrooms, Dressing-rooms, and Bathrooms.

The Restaurant, well known for its high standard of excellence, is also available for guests not staying in the Hotel. Table d'Hôte Breakfast, Luncheon, and Dinner. Also *à la carte* Service at moderate prices.

THE GORDON HOTELS ARE—

GRAND HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND WHITEHALL ROOMS, } LONDON.
HÔTEL VICTORIA, LONDON.
FIRST AVENUE HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND CLARENCE ROOMS, } BRIGHTON.
BURLINGTON HOTEL, EASTBOURNE.
ROYAL PIER HOTEL, RYDE, I. OF W.
CLIFTONVILLE HOTEL, MARGATE.
LORD WARDEN HOTEL, DOVER.
HÔTEL MÉTROPOLE, FOLKESTONE.
HÔTEL MÉTROPOLE, MONTE CARLO.
HÔTEL MÉTROPOLE, CANNES.

Proprietors—THE GORDON HOTELS, LIMITED.

JOHN WOOD & SON,

CIGAR, CIGARETTE AND TOBACCO MANUFACTURERS,

23 & 25, QUEEN VICTORIA STREET, E.C.;
AND FACTORY, 87, SOUTHWARK STREET,
LONDON.

ESTABLISHED 1836.

Awarded Gold Medal Liverpool International Exhibition, 1886.
Also Grand Prix (Highest Award) Antwerp, 1894.

ENGLISH MANUFACTURED
SWEETENED TOBACCOS AND CIGARETTES.
RICHMOND CAVENDISH Co., Ltd., LIVERPOOL.

SPECIAL BRANDS:—

"Pioneer" Golden Flake Cut. Twin Clouds. "Richmond Smoking Mixture." Richmond Navy Cut. Superfine Bird's Eye. "Hand it Round," Fine Cigarette Tobacco. Golden Bird's Eye. "Golden Brown" Fine Cut. Bright and Black Plug Cavendish in all usual sizes.

PRICE LISTS ON APPLICATION. ESTABLISHED OVER THIRTY YEARS.

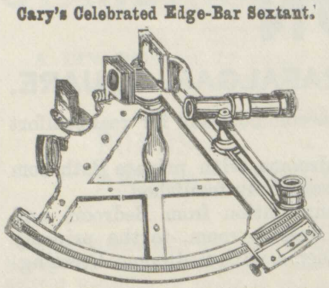
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000031

مكتبة قطر الوطنية
Qatar National Library

CARY'S

TRAVELLING SETS OF SURVEYING INSTRUMENTS,

Cary's Celebrated Edge-Bar Sextant.



ONLY MAKER of Capt. George's Patent Barometers, Artificial Horizons, & Double Sextants.

Consisting of Barometers, Compasses, Sextants, Artificial Horizons, Binocular Glasses, &c., &c., specially made for the ROYAL GEOGRAPHICAL SOCIETY, by

H. PORTER,

APPRENTICE AND SUCCESSOR TO THE LATE

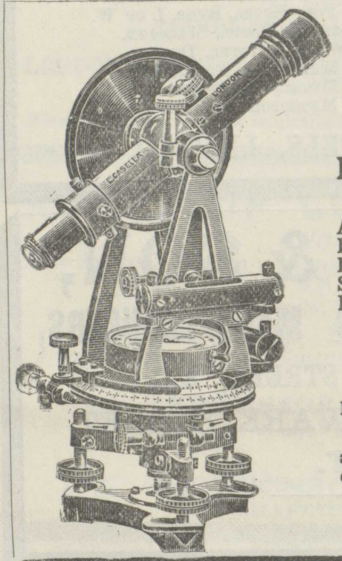
W. CARY,

Optician by Special Appointment to the Admiralty, War Office, India Office, Trinity House, Swedish, Norwegian, and other Foreign Governments.

7, Pall Mall, London, S.W.

ESTABLISHED OVER 100 YEARS.

GOLD MEDALS AND HIGHEST AWARDS.



L. CASELLA,

Surveying, Mining, Meteorological,

AND

ELECTRICAL INSTRUMENT MAKER

TO THE

Admiralty, Ordnance, Board of Trade, British and Foreign Governments; various Observatories; The Royal Geographical, The Royal Meteorological Societies, and the principal Scientific and Meteorological Societies throughout the World.

Every improvement in Instruments for the

Army, Navy, & Scientific Explorations,

Many of these now being made in Aluminium, for portability.

And special sets of portable and other Instruments as supplied to the Royal Geographical Society and other Explorers.

147, HOLBORN BARS, LONDON, E.C.

Telegraphic Address: "ESCUTCHEON, LONDON."

HERBERT BLOCKLEY, SUCCESSOR TO LUND & BLOCKLEY

(Late VINER, Established 1801.)



Watch & Clock Makers



TO

The Queen, the Royal Family, Royal Geographical Society, Admiralty, Foreign and Colonial Offices, &c.

Sole Authorised Makers of the R. G. S. Watertight Half-Chronometer Keyless Fusee Watch. Watches for all Purposes. Marine Chronometers.

41, DUKE STREET, ST. JAMES'S, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

(324)

CYCLE SECTION:—*Attention is called to the following announcements of Manufacturers of High Grade Cycles suitable for Travellers.*

FOR TRAVELLERS

ESTABLISHED 1873.

THE OSLADE CYCLES

Send post card for list.

Are the result of 26 years' practical experience and continuous trading, and combine all the good qualities requisite in a first-class Machine.

MANUFACTURED BY
THE BIRMINGHAM CYCLE AND ENGINEERING CO.,
HURST ST., BIRMINGHAM.

IMPROVED
KEY CAMERA.

Simplest and Best Hand Camera Made. Measures only 8 × 4¾ × 4 ins.
PRICE, QUARTER PLATE, £7 7s. SIZE, 5 × 4 INCHES, £10 10s.
Used by the best Scientific and Artistic Photographers, including
CAPTAIN ABNEY, G. DAVISON, F. HOLLYER, R. KEENE, &c., &c.
Our FINDER, *which is the only one that can be used in bright sunshine, can be supplied, if desired, price* 7s. 6d.

USE PLATINOTYPE

If you wish to gain Medals—If you wish for Permanent Results—If you wish for Artistic Effects—If you seek the Simplest Process.
PRICE LISTS AND FULL INSTRUCTIONS UPON APPLICATION.
THE PLATINOTYPE COMPANY, 22, Bloomsbury St., New Oxford St., London, W.C.

MINERVA PRINTING OFFICE.



ESTAB. 1790.

DARLING & SON, LIMITED
(Printers to H.M. Stationery Office),
1, 2, 3 & 5, GREAT ST. THOMAS APOSTLE
(Mansion House Station),
AND
31, EASTCHEAP, LONDON, E.C.
PRINTERS OF BOOKS OF TRAVEL, NEWSPAPERS, MAGAZINES, PERIODICALS, &c.
ENGRAVERS OF BONDS & BANK NOTES.
ACCOUNT BOOK MANUFACTURERS & LITHOGRAPHERS.
ESTIMATES FREE.

EDWARD WELLER,
GEOGRAPHICAL AND GENERAL DRAUGHTSMAN,
ENGRAVER, LITHOGRAPHER, & COPPER PLATE PRINTER.
Chromo and Color Printing of every description.
DENMARK WORKS, 42, Denmark Hill, London, S.E.
City Office:—17, FARRINGDON STREET, E.C.
MAP ENGRAVER TO THE ROYAL GEOGRAPHICAL SOCIETY, ADMIRALTY, Etc.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000098

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

OOPONG

(REGISTERED).

A Blend of Choicest India and Ceylon Teas,

PER 2/- LB.

The best value in Tea ever offered to the Public. Six Pounds and upwards forwarded the same day as ordered, carriage paid, to any part of the United Kingdom.

This Tea is supplied in hermetically sealed air-tight cases to Travellers, Yachtsmen, and Expeditions.

W. A. HIGGS & CO., Limited, TEA IMPORTERS,

39, HIGH STREET, ISLINGTON, LONDON, N.

AND BRANCHES.

SPRATT'S PATENT LTD.

PURVEYORS OF

SHIP BISCUITS,

Flour, and Hunter's Scotch Oat Meal

FOR MEMBERS OF

JACKSON-HARMSWORTH

POLAR EXPEDITION.

ALSO

DOG CAKES

FOR

SLEDGE DOGS.

SPRATT'S PATENT Limited, Bermondsey, LONDON, S.E.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

INDIA, CEYLON, JAVA, QUEENSLAND, BURMAH, PERSIA, EAST AFRICA, &c.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED,
BRITISH INDIA ASSOCIATION.

MAIL STEAMERS FROM LONDON TO

CALCUTTA.	BOMBAY.	BRISBANE.
MADRAS.	KURRACHEE.	BATAVIA.
COLOMBO.	BAGHDAD.	ROCKHAMPTON.
RANGOON.	ZANZIBAR.	TOWNSVILLE.
MAURITIUS.	MOMBASSA.	MARYBOROUGH.

For Dates see Daily Advertisements.

Delivering Mails, Passengers, Specie, and Cargo to all the principal Ports of INDIA, BURMAH, EAST AFRICA, QUEENSLAND, and JAVA.

Every comfort for a tropical voyage.

Apply to GRAY, DAWES, & CO., 23, Great Winchester Street, E.C., and Craven House, Northumberland Avenue, W.C.; or to GELLATLY, HANKEY, & CO., Albert Square, Manchester; 51, Pall Mall, and Dock House, Billiter Street, London.

NORTH GERMAN LLOYD.

FAST MAIL STEAMERS will sail regularly from Southampton, as under:—

NEW YORK.—Two Services a Week. Wednesday Express Service by steamers of great speed and luxurious accommodation, including *Kaiser Wilhelm der Grosse*, 14,500 tons, 28,000 I.H.P.; and *Kaiser Friedrich*, 12,500 tons, 25,000 I.H.P. Special Sunday Service of the North German Lloyd by twin-screw passenger steamers of 10,600 tons, designed for extreme steadiness at sea, with accommodation amidships. Fares from £15 10*s*. first class, £10 second class. Special train from Waterloo Station on sailing day.

CHINA AND JAPAN.—By new Fast Mail Steamers, with all modern improvements, leaving every 28 days, taking passengers for Genoa, Naples, Egypt, Aden, Colombo, Singapore, Hong Kong, Shanghai, and Japan ports.

AUSTRALIA (Freemantle, Adelaide, Melbourne, and Sydney).—By Imperial Mail Fast Steamers, every 28 days.

RIVER PLATE (Monte Video and Buenos Ayres).—New steamers of good power and exceptional first-class accommodation. Low fares through from London.

Apply to KELLER, WALLIS, & CO., 32, Cockspur-street, Charing Cross; 2, King William-street, E.C. Telephone No. 2012; Telegrams, "Teutonic, London;" and Southampton; or to the North German Lloyd, 2 bis, Rue Scribe, Paris.

ORIENT COMPANY'S PLEASURE CRUISES

By their Steamship "LUSITANIA," 3912 tons register,

For COPENHAGEN, WISBY, STOCKHOLM, ST. PETERSBURG, BALTIC CANAL, Etc.

Leaving LONDON 17th August, returning 14th September.

For SICILY, CONSTANTINOPLE, The CRIMEA, GREECE, MALTA, ALGIERS, Etc.

Leaving LONDON 20th September, returning 8th November.

String band, electric light, high-class cuisine.

Managers {F. Green & Co. / Anderson, Anderson & Co.} Head Offices: Fenchurch Avenue.

For passage apply to the latter firm, at 5, Fenchurch Avenue, London, E.C.; or to the West-end Branch Office, 16, Cockspur Street, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000058

مكتبة قطر الوطنية
Qatar National Library

The Military Equipment Stores & "Tortoise" Tents Co., Ltd.,

OFFICES & SHOWROOMS: 7, WATERLOO PLACE, S.W.

Telegraphic Address: "Wagonage, London."

POLAR EXPEDITIONS COMPLETELY FITTED OUT AND PROVISIONED.

☞ If Suitable Notice is given, Arrangements can be made for the Purchase or Hire of a Scotch, Norwegian or American Whaler; also for the Hire for a Summer Sporting Cruise of a completely fitted-out Walrus Sloop, with Crew comprising competent Ice Pilot and Officers.

Siberian Dogs.
Russian Ponies.
Reindeer.
Reindeer Dried Meat.
Russian Log Huts.
Sledges (Dog, Hand, or Reindeer).
Ski.
Finmarken Ski.
Telmarken Ski.
Extra long flat Ski as used by Nansen for smooth ice.
Sails and Masts in bamboo for Sledges.
Fur Malitzas.
Fur Sovike.
Loupthu.
Pimmies.
Reindeer-skin Toboc.
White Blanket Tobogaining Suits.

Fur Dog-skin Gloves (leather-lined).
Watertight Sealskin Boots with leather feet.
Fur-lined Sea Boots.
Reindeer Sleeping Bags.
Sheep-skin Caps for crew.
Cat-skin Stockings.
Loose Tan Reindeer Skins.
Black Swedish Skin Jackets lined with red flannel for crew.
Brown ditto for officers.
Reindeer-skin Finskoo.
Elk-skin Winter Boots.
Lapp Pesks with hood and glove attached.
Young and Old Reindeer Stockings.
Black Leather Ski Boots for Ski-running.

Ice Spikes with straps.
Finn Bindings for Ski.
Ice Sledge Boats.
Walrus or Whale Boats.
Aluminium Boats.
Berthon Boats.
James or Sayce Collapsible Boats.
Arctic Collapsible Huts.
Walrus and Whale Harpoons.
Lines and Lances.
Bottle-nose Whale Lances.
Grindscrooken.
Alpine Rope.
Masts, Sails, and Oars for Ice and Walrus Boats.
Bamboos with flags attached for marking positions in the ice.

All descriptions of Flags, Sledge Covers, Valises, Special Tents, Jackson's Aluminium Stoves, Canteens, Forks, Spoons, &c., &c.
Special Condensed Food for Sledging and Arctic work.
All requirements of Provisions to keep preserved & sweet for a number of years.
Jaeger Vests and Drawers, Ice Axes, Alpen Stocks, Plane Tables, Compasses, Barometers for Altitude, small Registering Thermometers, Wet and Dry Bulbs, and other Instruments.
Guns, Rifles, Harpoon Guns, Revolvers, Ammunition, &c., &c.
Medicine Chests and complete Medical Stores.
Military Equipment Co. Compressed Coffee, Tea, Cocoa, Sugar, Salt, &c., in Tablets.

MILITARY, EXPLORING AND SPORTING EXPEDITIONS COMPLETELY FITTED OUT, AND PROVISIONED TO ALL PARTS OF THE WORLD.

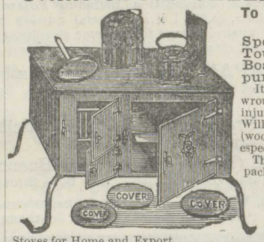
BROWN & ROWLEY,

WATLING STREET, CITY,

Printers,
Account Book
Manufacturers,
AND
General Stationers.

Contractors to the Royal Geographical Society.

THE WROUGHT IRON
CAMP OR TRAVELLING STOVE



To burn wood or any fuel.

Specially designed for Tourists, Travellers, Boating, and other purposes.

It is made of malleable wrought iron. Cannot be injured by any rough usage. Will burn any kind of fuel (wood, charcoal, peat, &c., especially).

The size of the stove, when packed, measures 24 in. wide, 12 in. deep, 14 in. high; weighing only 36lbs. Price complete, with cooking utensils and pipes, £3. Specialities in Oil Cooking Stoves for Home and Export.

Send for a 100-page Illustrated Catalogue of Stoves for all purposes, which will be sent free by mail on application.

W. POORE & CO., American Stove Stores, 139, Cheapside, London, E.C.

KEATING'S POWDER

DESTROYS BUGS FLEAS MOTHS BEETLES

TINS 3D 6D & 1S

Established nearly a Century.

HILL & SON,

4, HAYMARKET, LONDON,

Manufacturers of

Sporting, Table, Toilet, & Pocket Cutlery,

ALPINE ICE-AXES, SKATES,

AND FINE STEEL WORK GENERALLY.

Practical Dodgy Utilities for Home Requirements and Travellers' Use.

☞ Reliable English-made Goods at Moderate Prices.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000034

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

326

WARNING TO MANUFACTURERS.

Spurious Patents and bad infringements are always on offer from Abroad. Users and makers are liable. Save expense by using our recognized systems.

THE PARENT COMPANY.

PIONEERS AND CONTROLLERS OF ALL LEADING SYSTEMS OF

Motor Carriages, Motor Cycles, Motor 'Buses, Motor Cabs, etc.

THE BRITISH MOTOR CO. LTD.,

Sole Owners and Patentees of

THE DAIMLER, DE DION, AND BOLLÉE.

THE BRITISH MOTOR COMPANY are now applying for injunctions against all infringers, and have already won every action heard.

THE
BRITISH MOTOR COMPANY,
LIMITED,
40, Holborn Viaduct, E.C.

All Applications for Advertisements to be made to—
WALTER JUDD, LTD., 5, QUEEN VICTORIA STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

327

DECEMBER, 1900. VOL. XVI. No. 6.

The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

SUMMARY OF CONTENTS.

(For Details, see over.)

	PAGE
The President's Opening Address, Session 1900–1901	597
An Expedition between Lake Rudolf and the Nile. By Dr. A. DONALDSON SMITH	600
The Voyages of Diogo Cão and Bartholomeu Dias, 1482–88. By E. G. RAVENSTEIN	625
The Oases of the Mudirieh of Assyut. By A. R. GUEST	655
The Danish East Greenland Expedition in 1900. By Lieut. G. C. AMDRUP, R.D.N.	662
On the Afghan Frontier: A Reconnaissance in Shugnan	666
The Monthly Record	679
Correspondence	691
Meetings of the Royal Geographical Society, Session 1900–1901	693
Geographical Literature of the Month	694
New Maps	707
Maps and Illustrations.	

TITLE-PAGE, CONTENTS, INDEX, ETC., TO VOL. XVI.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.

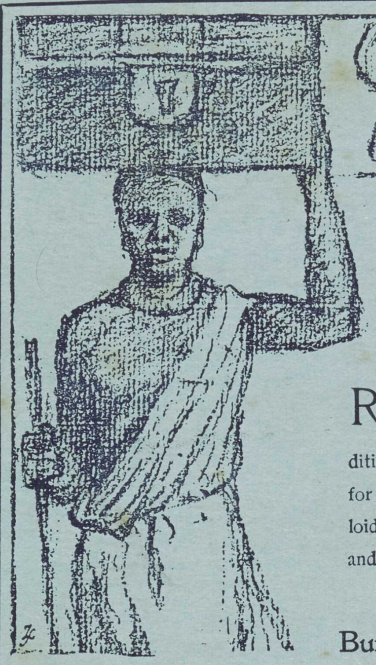
PUBLISHED MONTHLY.] [To Non-Fellows, Price 2s.

For Notices as to the Society's Meetings and other important matters, see p. iv.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000026

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



TRADE MARK 'Tabloid' BRAND

Medical Equipments.

REPORTS from every clime prove the incomparable superiority of these equipments for exploring expeditions, military campaigns, etc. They are ideal outfits for compactness, portability and completeness. The 'Tabloid' products with which they are fitted are pure, reliable and keep perfectly in all climates

Of all chemists. Full particulars and illustrated lists from

Burroughs Wellcome & Co., London & Sydney.

[COPYRIGHT]

THORNTON-PICKARD Illustrated Catalogue Free.



CAMERAS AND SHUTTERS

Make Photography a Pleasure.

"AMBER" CAMERA, No. 1, Complete Outfit, £5 6s.
"RUBY" CAMERA, half-plate Outfit, from £7 17s.
TIME & INSTANTANEOUS SHUTTER, from 12s. 6d.

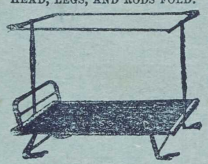


THORNTON-PICKARD MANUFACTURING CO., Ltd., ALTRINCHAM.

ISAAC CHORLTON & CO.'S PATENT SPRING BEDSTEADS.

17, Blackfriars St., MANCHESTER. Also 149, Queen Victoria St., LONDON.

HEAD, LEGS, AND RODS FOLD.



FOR ALL CLIMATES.

As supplied to the Admiralty, War Office, India Office, etc., and to Members of the Royal Geographical Society.

Only the Furnishing Trades and Shippers Supplied.

PACKS IN PARTS.



GREAT VARIETY.



FOLDS IN CENTRE.

ALL CHORLTON'S GOODS BEAR THIS TRADE MARK.

None other are Genuine.



PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

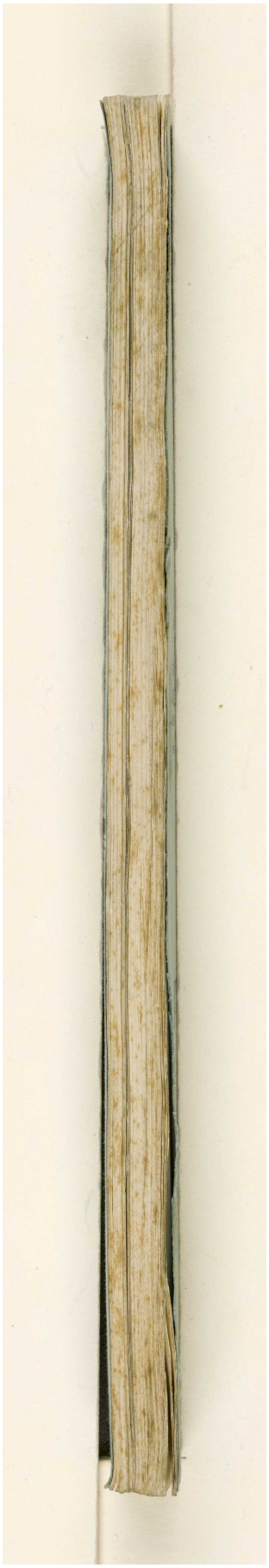
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000ae

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000053

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000084

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006b

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

THE GEOGRAPHICAL JOURNAL. To Advertisers.—All communications respecting Advertisements and Bills to be sent to Walter Judd, Ltd., 5, Queen Victoria Street, Mansion House, E.C.

H. SOTHERAN & CO.,
Booksellers, Bookbinders & Publishers.
GENERAL AGENTS FOR PRIVATE BOOKBUYERS & PUBLIC INSTITUTIONS
In India, the Colonies, America, and Abroad.
A MONTHLY CATALOGUE of SECOND-HAND BOOKS: Specimen No. post free.
LIBRARIES PURCHASED OR VALUED, AND ARRANGED AND CATALOGUED.
Telegraphic Address: BOOKMEN, LONDON. Codes: UNICODE and A.B.C.
140, STRAND, W.C., & 37, PICCADILLY, W.

ST. ERMIN'S HOTEL,
WESTMINSTER.
Midway between Victoria and Charing Cross Stations.



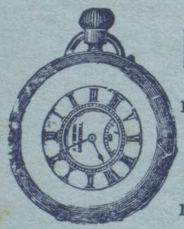
The NEW TERRACES in the Courtyard form a unique attraction. The NEW LOUNGE is the largest and most charming in London.

INCLUSIVE TERMS from 10/6 PER DAY.

Unexcelled for CUISINE, LUXURY, and COMFORT.

Telegraphic Addresses—
For Management: "UNPARALLELED, LONDON."
For Visitors: "ERMINITES, LONDON."

THE TRAVELLER'S WATCH.
THIS WATCH HAS BEEN SUPPLIED TO MEMBERS OF THE ROYAL GEOGRAPHICAL SOCIETY.



BENSON'S SPECIAL STRENGTH "FIELD" WATCH.
In massive 18-ct. Gold Cases, £35. In Silver Cases, £21.
Best London make; Half-Chronometer movement; pivoted on rubies and diamonds; strong and safe Keyless work; fine Chronometer Balance; Breguet Balance Spring.
As a high-class, strictly accurate, and reliable Watch, it is unsurpassed for Explorers, Travellers, and Officers on Foreign Service.
In extra strong close-fitting Cases, Hunting, Half-Hunting, or crystal-glass, engine-turned or polished, 18-ct. gold, £35; or silver, £21.
Sent to any part of the World on receipt of drafts (postage and insurance paid by us).
Illustrated Book of Watches, Chronometers, Chronographs, Clocks, and Jewellery sent post free.

J. W. BENSON, LTD., Steam Factory: 62 & 64, Ludgate Hill, E.C.
AND AT 28, ROYAL EXCHANGE, E.C., AND 25, OLD BOND STREET, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

328

For List of Council and Officers, Conditions of Admission to the Fellowship of the Society, and Society Notices, see pages ii. and iv.

The Geographical Journal.

Authors are alone responsible for their respective statements. In MS. communications all new or unfamiliar geographical names should be written in imitation of Roman type.

CONTENTS.—DECEMBER.

PAGE

The President's Opening Address, Session 1900–1901 597
An Expedition between Lake Rudolf and the Nile. By Dr. A. Donaldson Smith . 600
The Voyages of Diogo Cão and Bartholomeu Dias, 1482–88. By E. G. Ravenstein . 625
The Oases of the Mudirieh of Assyut. By A. R. Guest 655
The Danish East Greenland Expedition in 1900. By Lieut. G. C. Amdrup, R.D.N. . 662
On the Afghan Frontier: A Reconnaissance in Shugnan 666
The Monthly Record 679

EUROPE
The River System of North Wales
Influence of Latitude on Plant-life in Germany
ASIA
Burma-Sechuan Railway Survey
Himalayan Ascents
The Trade of the Persian Gulf
Map of Afghanistan: Correction
Cession of Spanish Islands to the United States
The Khotan River
AFRICA
The Blanchet Expedition: Death of the Leader
The Northern Territories of the Gold Coast
Organization of French Congo
The Lemaire Expedition
AMERICA
Currents in the Gulf of St. Lawrence
Influence of Wind on the Level of Lake Erie
Mr. A. P. Low's Explorations in Labrador

AMERICA—*continued.*
Glaciers of British Columbia
Physical Features of the Klondike Gold Fields
POLAR REGIONS
Work of the Russian and Swedish Parties in Spitsbergen
Russian Expedition to Novaya Zemlya
The Stein Arctic Expedition
Suggested International Co-operation in Antarctic Research
MATHEMATICAL AND PHYSICAL GEOGRAPHY
Currents in Australian Waters and the Southern Ocean
Lord Dunraven's 'Navigation'
GENERAL
Memento of Captain Cook's Death

Correspondence—The Aurora Australis and Borealis. By Arthur Harvey, F.R.C.S. Mr. Grogan's Picture of Mount Ruwenzori. By Edward S. Grogan 691
Meetings of the Royal Geographical Society, Session 1900–1901 693
Geographical Literature of the Month 694
New Maps 707

MAPS AND ILLUSTRATIONS.

On the Omo at Mursu 603
Bad Lands, near Saki, east of Lake Stefanie . 605
Gazella Grantii Brightii 607
Mursu on the River Omo 610
Cedar Valley 612
A Magois Youth 613
Near Magois 615
Raffia Palms, Country of the Akara . . . 617
Tragelaphus Bor (Heuglin) 619
The Nile at Fort Berkeley 623
The Arms of Portugal up to 1485 628
The Padrão of São Jorge 630
The Coat-of-arms of D. Cão, 1484 632
The Padrão of Cape Cross 634
The Royal Coat-of-arms, 1485 634
Fragments of a Padrão of B. Dias, 1487 . . 642

Sketch-map of the Oases of Assyut 656
Er Ramlah el Kabir, on the Assyut Road to Kharjah 657
Oasis of Kharjah 658
Town of Mut, Oasis of Dakhilah 659
General View of Kasr Dakhil, Oasis of Dakhilah . 660
Ruined Temple, Smint el Kharab 661
Sketch of the Course of the *Antarctic* and of the Coast-Expedition in 1900 662
Cape Garde, on Blossonville Coast 663
Cape Christiansen, 67° 13′ N. lat. 664
View from the North Side of Kaugerdlugsuak . 665
A Small Glacier East of Kaugerdlugsuak . . 666
Auroral Curves in the Antarctic and in Canada . 692
Map to illustrate Explorations in North-East Africa 712
Maps illustrating the Voyages of Diogo Cão and Bartholomeu Dias 712

SOLD BY

PARIS: Barrère.
VIENNA: Artaria & Co.
HAMBURG: L. Friederichsen & Co.
ST. PETERSBURG: Watkins & Co.
MANCHESTER: John Heywood.
EDINBURGH: Douglas & Foulis.
DUBLIN: Hodges, Foster & Co.
BERLIN: D. Reimer.
LEIPZIG: F. A. Brockhaus.
NEW YORK: International News Co.
MELBOURNE: E. A. Petherick & Co.



SCOTT ADIE. TAILOR TO THE ROYAL FAMILY,
The Royal Scotch Warehouse,
115, 115a, REGENT STREET, LONDON, W.

Norfolk Suits.
Travelling Coats.
Stalking Capes.
Shooting Suits.
Tartan Plaids.
Walking Gowns.
Cycling Gowns.
Golf Capes.
Travelling Ulsters.
Rugs and Shawls.

ILLUSTRATED CATALOGUE POST FREE.
Telegrams: "SCOTT ADIE, LONDON."
a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000035

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., etc., etc.

Honorary President.

HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL.

(ELECTED MAY 21, 1900.)

President.—Sir CLEMENTS R. MARKHAM, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Hon. G. C. BRODRICK.
Right Hon. Sir GEORGE D. TAUBMAN GOLDIE, K.C.M.G.
Colonel Sir THOMAS HUNGERFORD HOLDICH, R.E., K.C.I.E., C.B.
Admiral Sir ANTHONY H. HOSKINS, G.C.B.
Admiral Sir F. LEOPOLD MCCLINTOCK, K.C.B., D.C.L., F.R.S.
General Sir CHARLES W. WILSON, R.E., K.C.B., K.C.M.G.

Treasurer—EDWARD L. SOMERS COCKS.

Trustees—Right Hon. Lord AVEBURY, F.R.S.; Sir CUTHBERT E. PEEK, Bart., F.R.A.S., F.S.A.

Honorary Secretaries—Major LEONARD DARWIN, R.E.; JAMES F. HUGHES.

Foreign Secretary—Sir JOHN KIRK, K.C.B., G.C.M.G., F.R.S.

Members of Council.

Major-General Sir JOHN C. ARDAGH, K.C.I.E., C.B.
Sir H. E. G. BULWER, G.C.M.G.
W. T. BLANFORD, LL.D., F.R.S.
Colonel GEORGE EARL CHURCH.
CLINTON T. DENT.
Major-General Sir FRANCIS W. DE WINTON, R.A., G.C.M.G., C.B.
Admiral Sir R. VESEY HAMILTON, G.C.B.
Colonel D. A. JOHNSTON, R.E.
Colonel AUGUSTUS LE MESSURIER, R.E., C.I.E.
L. W. LONGSTAFF.
GEORGE S. MACKENZIE, C.B.
Admiral A. H. MARKHAM.
A. P. MAUDSLAY.
DUKE OF NORTHUMBERLAND, K.G.
Sir GEORGE S. ROBERTSON, K.C.S.I.
HOWARD SAUNDERS, F.L.S.
General Sir HENRY A. SMYTH, K.C.M.G.
HERBERT WARINGTON SMYTH.
Lord STANMORE, G.C.M.G.
Colonel CHARLES MOORE WATSON, R.E., C.M.G.
Admiral Sir W. J. L. WHARTON, K.C.B., F.R.S.

Secretary and Editor of Publications—J. SCOTT KELTIE, LL.D.

Librarian—HUGH ROBERT MILL, D.Sc.

Map Curator.
EDWARD A. REEVES, F.R.A.S.

Chief Clerk.
S. J. EVIS.

Bankers—Messrs. COCKS, BIDDULPH and Co., 43, Charing Cross.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that—

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his admission fee, and "£2 as his first annual subscription; or he may compound, either at his entrance by one payment of "£35, or at any subsequent period on the following basis:—

Fellows of 20 years' standing and over	...	...	£12 10s.
„ 15 „ „ and under 20	...		£16
„ 10 „ „ „ 15	...		£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the Society so long as "he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's Periodical Publications.

Copies of the Year Book, Regulations, and Candidates' Certificates may be had on application at the Society's Office, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000027

مكتبة قطر الوطنية
Qatar National Library

BURBERRYS' GABARDINE.

PROOF Against RAIN, SLEET, SNOW. HOT AND COLD WINDS. TROPICAL THORNS. } Indestructible AND Untearable.

It is as **VENTILATING** to the exhalations of the body as ordinary **WOOLLENS**, and **MAINTAINS A NORMAL** temperature. The **PROOFING** is not affected by heat or cold, and lasts as long as the materials.



Worn by Officers in the Matabele, Ashantee, Chitral, Benin, Lagos, Indian Frontier, Dongola; and amongst Private Expeditions:—
Dr. NANSEN'S, The JACKSON-HARMSWORTH, Mr. WELLMAN'S, Mr. E. A. FITZGERALD'S, Mr. A. HARPER'S, Mr. F. J. JACKSON, Sir LEWIS MOLESWORTH, Mr. G. V. KIRBY.

30 & 31, HAYMARKET, LONDON; AND BASINGSTOKE.



TENTS
FOR ALL CLIMATES.

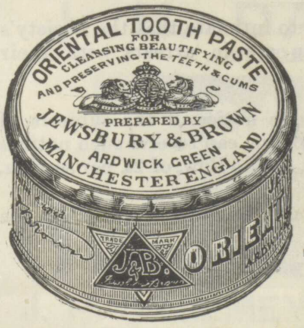
TENTS AND CAMP EQUIPMENT,
Specially suitable for Africa,
As supplied to Mr. H. M. STANLEY, Major WISSMANN, the late Sir GERALD PORTAL, Captain STAIRS, the IMPERIAL BRITISH EAST AFRICA CO., &c.

John Edgington & Co.,
19, *Long Lane, LONDON, E.C.*
National Telephone No. 734, Holborn.
Telegrams: "ABRI, LONDON."

SPECIALLY AWARDED
TWO GOLD MEDALS,
PARIS, 1900,
For Superiority in Quality and Design, combined with Low Prices.

MAPPIN BROTHERS,
(ESTABLISHED 1810.)
DIAMONDS AND GEM JEWELLERY, SILVER, QUEEN'S PLATE, CUTLERY, WATCHES, CLOCKS, DRESSING-BAGS, ETC., SUPPLIED DIRECT TO THE PUBLIC AT FACTORY CASH PRICES.
Inspection invited. *Goods forwarded to the Country on approval.*

Only LONDON Show Rooms. **220, REGENT ST., W.; 66, CHEAPSIDE, E.C.** (Next Sir John Bennett's.)
& THE QUEEN'S MANUFACTORY.



JEWSBURY & BROWN'S Oriental Tooth Paste.

White, Sound Teeth, Healthy Gums, and Pleasant Breath to Old Age.

CAUTION:—
The only Genuine is JEWSBURY & BROWN'S.
Price 1/6 and 2/6. All Chemists.
Over 70 Years in Use.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000095

مكتبة قطر الوطنية
Qatar National Library

ROYAL GEOGRAPHICAL SOCIETY.

NOTICES.*

Hints to Travellers.—The Seventh, revised, Edition, edited, under a Committee of the Council, by Capt. W. J. L. WHARTON, R.N., F.R.S. (Hydrographer to the Admiralty), and Mr. DOUGLAS W. FRESHFIELD, Sec. R.G.S.
Price Eight Shillings; to Fellows at the Office of the Society, Five Shillings.

Instructions for Intending Travellers, under the authority of the Council of the Royal Geographical Society.—Arrangements have been made for the instruction of intending Travellers in the following subjects:—1. Surveying and Mapping. 2. Geology, including practical training in the field. 3. Botany. 4. Zoology. 5. Anthropological Measurements. 6. Photography. 7. What and How to Observe in the Field.
For details apply to the Secretary, 1, Savile Row, W.

Extra Publications.—'The Pamirs and the Source of the Oxus.' By the Right Hon. George N. Curzon, M.P. 83 pp., royal 8vo, with many Illustrations and large new Map of the Pamirs. Price, bound in half-calf, to non-Fellows, 6*s.* nett; to Fellows, 3*s.*—'The Topography of the Battle of Platæa.' By G. B. Grundy, B.A. Price, bound in half-calf, to non-Fellows, 5*s.*; to Fellows, 2*s.* 6*d.*—'Notes on the Kuril Islands.' By Captain H. J. Snow. 8vo. 88 pp., with two large Charts, revised by Captain Snow. Price, in boards, to non-Fellows, 4*s.* nett; to Fellows, 2*s.*—'Eastern Persian Irak.' By General A. Houtum-Schindler, 8vo. 132 pp., with Map. Price, to Fellows, in boards, 2*s.*; bound in half-calf, 3*s.* 6*d.*; to non-Fellows, in boards, 3*s.* 6*d.*; in half-calf, 5*s.* nett.—'A Journey on the Upper Mekong, Siam.' By H. Warington Smyth. Sixty illustrations and three maps. Price, bound in half-calf, to Fellows, 4*s.*; to non-Fellows, 7*s.* 6*d.* 'British New Guinea: Country and People.' By Sir William Macgregor, K.C.M.G., C.B. Map and Illustrations. 100 pp., 8vo. Price, in boards, to non-Fellows, 4*s.* nett.; to Fellows, 2*s.* 'Supplement to the Bibliography of Algeria, from the earliest time to 1895.' By Sir Lambert Playfair, K.C.M.G. Price to Fellows, 2*s.* 6*d.*; to non-Fellows, 5*s.* Historical Atlas of the Chinese Empire. By E. L. Oxenham. Price to Fellows, 17*s.* 6*d.*; to non-Fellows, 30*s.* 'Surveying and Exploring in Siam.' By James McCarthy. Large maps of Siam and many illustrations. 236 pp., 8vo. Price, bound in cloth, to Fellows, 6*s.* 6*d.*; to non-Fellows, 10*s.* 6*d.* nett.

The Library Catalogue.—An Authors' Catalogue of the Library is now ready, embodying all the previous catalogues, and the additions during the thirteen years 1880–93. It is in one large volume, double columns, 833 pages. Price, to Fellows, 2*s.* 6*d.*; to non-Fellows, 5*s.*

The Year Book.—The Year Book for 1900 is now ready, and can be obtained by any Fellow by applying personally or by letter to the Chief Clerk, 1, Savile Row, London, W.

Evening Meeting in December.—Monday, December 10. Expedition to the Barotse Country and through Africa to the Nile. By Major St. Hill Gibbons.

Notice to Fellows in Arrears.—The Council desire to intimate that the Society's publications will not be forwarded to Fellows who are in arrears with their subscription for one year or over.

Any Fellow resident in this country, desiring to have notice of the subjects of papers to be read at the Society's Meetings forwarded to him, can receive such notices by post on payment in advance to the Chief Clerk, at 1, Savile Row, of 2*s.* per session.

The Society's House will remain open for the Convenience of Fellows on the evenings of the Society's ordinary meetings till 8.15.

* See also pp. vi. and viii.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b7

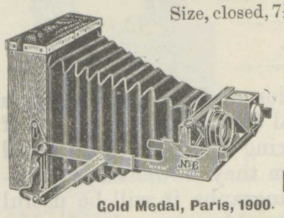
مكتبة قطر الوطنية
Qatar National Library

THE 'NYDIA' POCKET CAMERA

FOR 4¼ × 3¼-in. PICTURES ON PLATES OR FILMS.

Exceedingly light and portable, quickly set up, rigid, and absolutely self-contained.
A Good Lens. A Perfect Shutter. The Highest Finish Throughout.
Size, closed, 7¼ by 4¼ by 1⅞ ins. Weight, loaded: under 1¾ pounds.

Price complete from £7 10s.





Universal Cameras, Tripod Cameras, Kinematographs, Lenses, and all Photographic Accessories and Materials.

Speciality: COMPLETE OUTFITS for Scientific Expeditions and Special Research.

Catalogues and Estimates free on application.

NEWMAN & GUARDIA, LTD.,
90 & 92, Shaftesbury Avenue, LONDON, W.

Gold Medal, Paris, 1900.

Regd. No. 337866.



NORRIS'S

Cycling and Walking Shoe,
The "PEDES-CYCLO."

The best shoe for the double purpose. Comfortable, Durable, Smart, Stylish Appearance.

"CYCLING" says—"It combines the best forms of fastening, for while doing away with hooks and lacing, it does not leave part of the foot exposed to dust or wet, as the front is completely covered, the fastening being a neat buckle at the side. Excellently made and finished."

Black or Brown, with or without Toe Caps, 12/6 and 9/9.

OUTFITS FOR INDIA AND THE COLONIES.

Illustrated Catalogue post-free on receipt of postcard.

We can fit you by post. Send shape of foot on paper, or old boot for size, with remittance.
Postage—United Kingdom, 4*d.* (on goods under 12*s.* 6*d.* in value).

GEORGE NORRIS, 55 & 56, Bishopsgate St. Within, London, E.C.
28 & 29, St. Swithin's Lane; 62, King William St.; 8, Holborn Viaduct, E.C.

JOSEPH TUCKER,

INDIA, CHINA, COLONIAL, AND FOREIGN STORES,
79, NEWINGTON GREEN ROAD, LONDON, N.

Complete Outfits and Supplies for all Climates can be selected from stock, arranged, packed, and shipped within a few hours.

The latest inventions for saving space and weight and for promoting health and comfort are continually being added.

The Times, January 2, 1900 (*re* Exhibit at Livingstone Exhibition): "There are wonderful beds and chairs, which resolve themselves into a bundle of sticks and a small parcel; there is a combined washhand-stand and bath, so compact and convenient that it almost vanishes before the eyes. One article specially worth notice is a real sun-helmet, a thing as different as possible from the heavy police helmets, slightly disguised in khaki, with which our troops were furnished."

The Outfitter, January 6, 1900: "JOSEPH TUCKER exhibited air-tight trunks and boxes, cabin trunks, tents and hammocks, sleeping valises, camp furniture, folding bedsteads, mattresses, mosquito netting, holdalls, and kit-bags; also special woollen material clothing, hosiery and haberdashery, boots and shoes, helmets, hats and caps, blankets, sheets, pillows, cushions, and travelling rugs. Altogether, the outfitting trade is well and worthily represented in its special section, and one can thoroughly appreciate the pains taken nowadays to cater for the hygienic requirements of travellers and missionaries."

Nursing Notes, June, 1900: "Everything connected with tropical outfits can be procured at TUCKER'S COLONIAL STORES, 79, Newington Green Road, N. (three minutes from Mildmay Park, N.L.Ry.). They are great missionary outfitters, and therefore have a wide experience of what is required in the most various climates, and their prices are reasonable."

Illustrated Price List and Patterns post free.

Established 1868. **79, NEWINGTON GREEN ROAD, N.** *Telegraphic Address: "Turbala, London."*

J. H. DALLMEYER, LTD.

OPTICIANS AND MANUFACTURERS OF

PHOTOGRAPHIC LENSES & CAMERAS
OF THE HIGHEST QUALITY ONLY.



SPECIALTIES.—The Stigmatic Lenses $\frac{F}{6}$ (convertible). Telephoto Lenses, High and Moderate Power. Rectilinear, Wide Angle, and Landscape Lenses. Portrait Lenses for all classes of work. Hand Cameras for Slides or Magazine. Popular Magazine Camera with new Stigmatic Lens. High-class Field Cameras, including Improved Sanderson Camera.

J. H. DALLMEYER, LTD. Optical Manufactory, 25, Newman Street, **LONDON, W.**

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000096

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

PHOTOGRAPHS.

ROYAL GEOGRAPHICAL SOCIETY.

It would greatly add to the value of the Collection of Photographs which has been established in the Map Room of the Royal Geographical Society, if all the Fellows who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they would be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

KODAK

THERE IS NO KODAK BUT THE EASTMAN KODAK.

Light-weight Kodaks taking extremely light and unbreakable spools of film.—These are some advantages of Kodak photography that commend the system to explorers and travellers. The spools of exposures may readily and safely be posted for development and printing. Kodaks from £1 1s. to £7 7s. KODAK, Ltd., 43 Clerkenwell Road, London, E.C. *Retail Branches:* 60 Cheapside, E.C.; 115 Oxford Street, W.; 171-173 Regent Street, W.

Full catalogue of KODAKS post free on application.

KODAK

MACONOCHIE'S

Army Rations, Pure Fruit Jams, Pickles, and Potted Meats.

BADEN-POWELL,

the hero of Mafeking, writes: "An Army can go anywhere and do anything so long as it possesses morale and Maconochie." Maconochie's have supplied millions of Rations to the War Office.

MACONOCHIE BROS., LTD. (Purveyors to the Queen, the Prince of Wales, and the Government),

131, LEADENHALL STREET, LONDON, E.C.

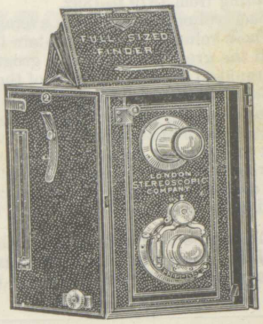
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005b

مكتبة قطر الوطنية
Qatar National Library

FOR SCIENTIFIC APPARATUS



GO TO THE STEREOSCOPIC COMPANY



ZEISS, ROSS, AND GÖERZ PRISMATIC FIELD GLASSES.

The most Powerful and Portable Glasses in the World.

106 & 108, Regent Street, W., AND 54, Cheapside, E.C.

SPECIAL ATTENTION IS PAID

To the details of Photographic Outfits for Scientific Men, Naturalists, Travellers, and others who require the Apparatus to be exact in every particular, and to be made on Scientific lines. THE STEREOSCOPIC COMPANY also make a speciality of Twin Lens Cameras, and can show the largest Stock in London of practical and highly-finished Hand Cameras of every kind.

THE STEREOSCOPIC COMPANY'S Regent Street Premises are within 2 minutes' walk of Savile Row.

THE NILE.

Cook's Modern and Splendidly Equipped Steamers

Leave CAIRO for LUXOR, ASSOUAN, and THE SECOND CATARACT, regularly during the Egyptian Tourist Season—NOVEMBER to MARCH—affording opportunities to visit all the temples, monuments, and places of interest in UPPER EGYPT.

FREQUENT SAILINGS. MODERATE FARES.

Combined Bookings by Egyptian and Soudan Railways and Cook's Steamers at Special Rates to All Points in Upper Egypt and to Khartoum.

New and luxuriously furnished Steamers and Steel Dahabeahs, of various sizes, on Hire for Private Parties.

For detailed information see Special Programme, with Maps and Plans, on application to—

THOS. COOK & SON,

LUDGATE CIRCUS, LONDON, or any Branch Office or Agency.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

NOTICE.

The "PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY," new series, consists of 14 volumes, extending from 1879 to 1892.

Each volume covers on an average 840 pages, the selling price being 18s. per volume.

These volumes not only contain full reports of the papers read at the Royal Geographical Society, by all the great travellers and geographers of the period, but constitute a record of exploration and geographical work in all parts of the world.

Each volume contains numerous maps, all of them original, embodying the results of exploration, and executed in the best style. In the 14 volumes there are some 350 maps, besides numerous illustrations of characteristic scenery in the least-known parts of the world.

It is believed that a complete set of the *Proceedings* would be a valuable addition to public libraries and other institutions, while many private individuals might wish to have the volumes. As it is desired to reduce the stock in hand, the series is now offered, bound in cloth, at £6 per set. Application to be made to the Chief Clerk, Royal Geographical Society, 1, Savile Row, London, W.

In addition to the *Proceedings*, the Society has issued four volumes of "Supplementary Papers" containing a large number of Memoirs and Narratives of considerable length, besides several valuable Bibliographies. These will be sold for half price, £2 for the four volumes. These contain over 30 Maps and numerous Illustrations.

INDIA RUBBER AND GUTTA PERCHA GOODS

MANUFACTURED BY THE

INDIA RUBBER, GUTTA PERCHA, AND TELEGRAPH WORKS CO., Ltd.

Silvertown Waterproof Coats, Cloaks, Carriage Aprons, &c.; Fishing Stockings and Trousers; Game and Cartridge Bags; Air Cushions, Pillows, and Hot Water Bottles; Golf Bags.

Silvertown Electrical Batteries, Apparatus & Cables.

Silvertown Tennis Balls, Golf Balls, Footballs; India Rubber Handle Covers; Elastic Bands; Carriage Mats, Brake Blocks, Horse-shoe Pads, Garden Hose and Gas Tubing; Door Mats, Stops, and Draught Tubing; Ebonite Photographic Baths; Pneumatic and other Tyres.

Head Office: 106, CANNON STREET, LONDON, E.C.
Warehouse: 100 and 102, CANNON STREET, LONDON.
Works: SILVERTOWN, London, E.; Persan Beaumont (Seine-et-Oise), France.

LIVERPOOL, 54, Castle Street.
BRADFORD, 1, Tanfield Buildings.
SHEFFIELD, 1, Fitzalan Square.
CARDIFF, Pierhead Chambers.
BRISTOL, 28, Clare Street.
MANCHESTER, 9, Sussex Street.
PORTSMOUTH, 49, High Street.
NEWCASTLE-ON-TYNE, 59, Westgate Road.
BIRMINGHAM, 27, Albert Street.
GLASGOW, 8, Buchanan Street.
BELFAST, 33, High Street.
DUBLIN, 15, St. Andrew Street.
MELBOURNE, 274, Flinders Street.
SYDNEY, 283, George Street.
CALCUTTA, 1–1, Fairlie Place.
BUENOS AYRES, Reconquista 394.
PERTH (West Australia), De Baun's Buildings, St. George's Terrace.
NEW ZEALAND, Box 111, Post Office, Christchurch.

Or through any First-class Local Tradesman.

THE
GOLDSMITHS & SILVERSMITHS COMPANY, LTD.,

Show Rooms: 112, REGENT STREET, LONDON, W.

INVITE INSPECTION OF THEIR LARGE AND CHOICE STOCK OF

Diamond Ornaments, High-Class Jewellery, Silver Plate, and Dressing Bags.

ILLUSTRATED CATALOGUE POST FREE. GOODS FORWARDED ON APPROVAL.

The Goldsmiths' Alliance, Ld. (A. S. Savory & Sons), late of Cornhill, E.C., is transferred to this Company.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001a

مكتبة قطر الوطنية
Qatar National Library

OF ALL THE GENUINE

Munich Lager Beers

THE

MÜNCHENER LÖWENBRÄU

Is the finest and most highly recommended.

Grand Prix, Paris Exhibition, 1900.

The *Lancet* of February 16, 1895, gives a detailed Report of the manufacture of this famous drink, which Report contains the following Analysis:—

Constituents.	English beers. Mild.	English beers. Bitter.	Loewenbraeu Beer.
	Per cent.	Per cent.	Per cent.
Alcohol by weight	6·78	5·44	3·55
„ volume	8·45	6·78	4·45
Equal to proof spirit ...	14·81	11·89	7·80
Total malt extractives ...	6·74	5·42	7·09
Mineral matters	0·43	0·24	0·36
Albuminous matters	0·26	0·16	0·577
Maltose and dextrin	5·77	4·22	6·15

For PRICES and SAMPLE BOTTLE (free of charge) apply to—

Telephone No. 1232, Holborn.

For the book, "WHAT TO DRINK" (free of charge) apply to—

The MUNICH LIONBREW COMPANY'S London Offices:
62, HOLBORN VIADUCT, E.C.

SYMINGTON'S SEASONED AND FLAVOURED

PEA SOUP.

Made from our High Pressure Steam Prepared Pea Flour, with Liebig's EXTRACT OF MEAT *added.*

Trade Mark.

Only requires boiling to produce a rich nourishing soup. Most suitable for Travellers, Colonists, etc.

This soup was selected for the British Antarctic Expedition, the Duke of Abruzzi Polar Expedition, and others recently fitted out, and supplied through the Military Equipment Stores and Tortoise Tents Co., Ltd., 7, Waterloo Place, Pall Mall, and is sold throughout the world in packets and tins.

Manufactories. Established 1827. BOWDEN STEAM MILLS, Market Harborough.

Established nearly a Century.

HILL & SON,

4, HAYMARKET, LONDON,

Manufacturers of

Sporting, Table, Toilet, & Pocket Cutlery,

ALPINE ICE-AXES, SKATES,

AND FINE STEEL WORK GENERALLY

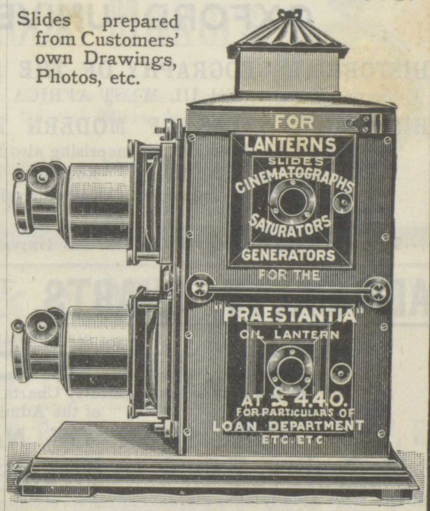
Practical Dodgy Utilities for Home Requirements and Travellers' Use.

Reliable English-made Goods at Moderate Prices

Catalogues, post-free, 9d.
Hire Lists, gratis and post-free.

LANTERN SLIDES ON ALMOST ALL SUBJECTS.

Slides prepared from Customers' own Drawings, Photos, etc.



Please name this Journal.

APPLY—

RILEY BROS. LTD.,

55 & 57, Godwin Street, BRADFORD.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006c

مكتبة قطر الوطنية
Qatar National Library

PUBLISHERS' ANNOUNCEMENTS.

The attention of Fellows of the Society is called to the following new books of Travel, etc.

IMPORTANT BOOKS.

THE ENGLISHMAN IN CHINA IN THE VICTORIAN ERA. As Illustrated in the Career of Sir Rutherford Alcock, K.C.B., D.C.L., many years Consul and Minister in China and Japan. By ALEXANDER MICHIE, Author of "The Siberian Overland Route," etc. With Illustrations, Portraits, and Maps. 2 vols. Demy 8vo, 38s. net.

KHURASAN AND SISTAN. By Lieut.-Col. C. E. YATE, C.S.I., C.M.G., Indian Staff Corps, Agent to the Governor-General and Chief Commissioner for Baluchistan. With Map and Illustrations. Demy 8vo, 21s.

A HISTORY OF RHODESIA. Compiled from Official Sources. By HOWARD HENSMAN. With a Map. Crown 8vo, 6s.

W. BLACKWOOD & SONS, EDINBURGH AND LONDON.

FOR CHRISTMAS GIFTS.

THE ROYAL ATLAS OF MODERN GEOGRAPHY.

THOROUGHLY REVISED TO DATE.

Containing 57 Maps and 94 Inset Maps and Plans, with Indexes to about 185,000 Places.

Royal folio, half-bound russia or morocco, price £6 6s.; full bound russia or morocco, extra gilt, with gilt edges, price £10 10s. (to order).

The Handy Royal Atlas of Modern Geography.

Containing 52 Coloured Maps and Index to 74,000 Places.

Imperial 4to, half-bound morocco, price £2 12s. 6d.

W. & A. K. JOHNSTON,

Geographers to the Queen, Educational and General Publishers,

EDINA WORKS, EASTER ROAD, AND 20, SOUTH SAINT ANDREW STREET, EDINBURGH; 5, WHITE HART STREET, WARWICK LANE, LONDON, E.C.

OXFORD UNIVERSITY PRESS.

HISTORICAL GEOGRAPHY OF THE BRITISH COLONIES. By C. P. LUCAS. Second Edition. Vol. III. WEST AFRICA. Crown 8vo, 7s. 6d.

HISTORICAL ATLAS OF MODERN EUROPE, FROM THE DECLINE OF THE ROMAN EMPIRE. Comprising also Maps of parts of Asia and of the New World connected with European history. Edited by R. L. POOLE, M.A., Ph.D. Imperial 4to, Parts I.–XXVII. To be completed in about thirty Parts, each 3s. 6d. *net*.

LONDON: HENRY FROWDE, OXFORD UNIVERSITY PRESS WAREHOUSE, AMEN CORNER, E.C.

ADMIRALTY CHARTS.

The Latest Editions of Charts, Plans, and Sailing Directions, Published by the Admiralty,

CAN BE OBTAINED FROM

J. D. POTTER,

AGENT for the Sale of the Admiralty Charts, by Appointment of the Lords Commissioners of the Admiralty, and

PUBLISHER OF NAUTICAL BOOKS,

31, Poultry, E.C., & 11, King Street, Tower Hill, E., LONDON.

NOTICE.—For the early information and convenience of Shipowners, Captains, and others, ALL NEW ADMIRALTY CHARTS that may be published from time to time are noted every Monday in the *Shipping Gazette and Lloyd's List* on page 7: in the *Shipping Gazette and Lloyd's List Weekly Summary* every Friday, on page 1; in the *Lloyd's Weekly Shipping Index* every Friday, on page 3 of Cover; in *The Syren and Shipping*; and *The Shipping World* (weekly). The new and corrected Admiralty Charts are also noted in the following Monthly Journals: *The Nautical Magazine*, *The Geographical Journal*, *The Steamship*, *The Mariner*, *The Imperial Institute Journal*. Copies of the Charts can be obtained by applying to J. D. POTTER. Catalogues posted on application.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000066

مكتبة قطر الوطنية
Qatar National Library

333

WILLESDEN CANVAS for TRAVELLERS' TENTS,

AWNINGS, GROUND SHEETS, COVERS, VALISES, etc. (Green or Brown),

TRADE MARK. WILLESDEN WATERPROOF W W UNIQUE

FOR ALL CLIMATES.

REGD. 1880.

Awarded Eighteen Gold and Silver Medals.

USED BY—

H.M. POST OFFICE.
ADMIRALTY.
INDIA OFFICE.
CROWN AGENTS FOR THE COLONIES.
EGYPTIAN GOVERNMENT.
SOUTH AUSTRALIAN GOVERNMENT.
H.M. THE GERMAN EMPEROR.
HENRY M. STANLEY.
JACKSON-HARMSWORTH EXPEDITION.
ECLIPSE OF THE SUN EXPEDITION.
LATE MR. THEODORE BENT.
VILLIERS (War Correspondent).

And the Principal Travellers during the last quarter of a century. Used also by all the leading Tent Makers



NOTE.

Intending users should always order Willesden Canvas.

SOLE MANUFACTURERS AND PATENTEES (Green Rot-proof Process)—

Willesden Paper & Canvas Works, Ld., Willesden Junction, London, N.W.

Telegrams: "IMPERMEABLE, LONDON." ESTABLISHED 1870.

HERBERT BLOCKLEY, SUCCESSOR TO LUND & BLOCKLEY

(Late VINER, Established 1801),



Watch & Clock Makers

TO

The Queen, the Royal Family, Royal Geographical Society, Admiralty, Foreign and Colonial Offices, &c.



Sole Authorized Makers of the R. G. S. Watertight Half-Chronometer Keyless Fusee Watch. Watches for all Purposes. Marine Chronometers.

41, DUKE STREET, ST. JAMES'S, LONDON.

MINERVA PRINTING OFFICE.



ESTAB. 1790.

DARLING & SON, LIMITED,

Contractors to H.M. Stationery Office, Public Companies, &c.,

8, BUSH LANE, CANNON STREET, E.C.

Works: 31, EASTCHEAP, E.C., & 34-40, BACON STREET, E.

PRINTERS OF BOOKS OF TRAVEL, NEWSPAPERS, MAGAZINES, PERIODICALS, PRICE CURRENTS, SHARE LISTS, &c.

ENGRAVERS OF BONDS AND BANK NOTES.

ACCOUNT BOOK MANUFACTURERS AND LITHOGRAPHERS.

ESTIMATES FREE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007a

مكتبة قطر الوطنية
Qatar National Library

J. & G. ROSS,

227 & 228, HIGH STREET, EXETER, DEVON.

The "ROSCUT" in WATERPROOFED Pure Woollen Cloths, 50/-

HIGH-CLASS TAILORS FOR

The "PORTSMOUTH" in WATERPROOFED Pure Woollen Cloths, 55/-

LADIES AND GENTLEMEN

FOR

Travel,

Town,

and

Country.



Send Cheque or P.O. for 50/- with height of figure, size round bust, length of inside seam of sleeve, and "Roscut" shall be sent by return.



Send Cheque or P.O. for 55/- with height of figure, size round chest, length of inside seam of sleeve, and "Portsmouth" shall be sent by return.

Made in our own Workshops and by our own Workmen.

EXPLORING EXPEDITIONS *Completely Equipped by*

S. W. SILVER & CO.

AND

BENJN. EDGINGTON, LTD.

"BEFORE GOING ABROAD, I would recommend Travellers, who desire to spare themselves trouble, as well as time, to consult with Messrs. SILVER & CO., of Cornhill. This firm has supplied travellers, including myself, with their outfit, and know exactly what is needed for every part of the Globe."—*Extract from "Notes on Outfit," by* Sir H. H. JOHNSTON, *late H.M. Commissioner for CENTRAL AFRICA.*

BENJAMIN EDGINGTON'S Tents and Camp Equipments for Africa, &c.



Made from a Special Canvas, treated by the Copper Rot-Proof Process.

"After four years in East Central Africa, I have no hesitation in saying that, as far as my experience and observation go, your tents are the best that can be procured.

"I have seen other tents, when almost new, torn to pieces after a tropic storm, or giving way after one rainy season, while one of your double-roof tents which I used constantly for two years in Central Africa, is still as strong and sound as ever.

"Yours faithfully,
"R. U. MOFFAT, M.B.,
"Medical Officer, Uganda Protectorate."

Illustrated Catalogues and Particulars on Application to

S. W. SILVER & CO. & BENJN. EDGINGTON, LTD.,

67, CORNHILL, and 2, DUKE ST., LONDON BRIDGE, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000069

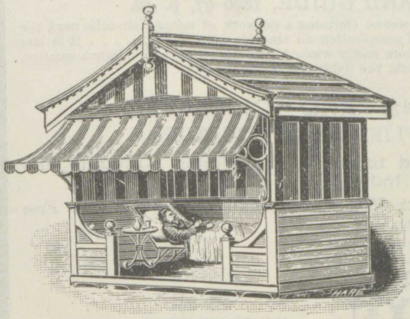
مكتبة قطر الوطنية
Qatar National Library

Boulton & Paul, Ltd., Manufacturers, NORWICH.

LIEGENHALLE.

REVOLVING SHELTER

For Open-air Treatment of Consumption, or any other form of Tuberculous Disease.



BOULTON & PAUL LTD MAY 16TH 1899.
REGISTERED COPYRIGHT.

Size: 8 ft. × 6 ft. × 7 ft. to eaves, 10 ft. to ridge.

Cash Price £19 10s. 0d.
A cheaper pattern, £10 10s. 0d.
Ready for easy erection by purchaser.

ILLUSTRATED CATALOGUE of Sanatoria, Cottage Hospitals, Schools, Parish Rooms, Gymnasiums, Village Club Rooms, Shelters, etc., free on application.

No. 468.

'Xmas Presents.

The current issue of the "White House Budget" is rich in suggestion and resource. Please write for free copy. Describes, quotes, and in some cases illustrates genuine Irish productions obtained by us from the peasants, and offered without intermediate profit and expense, comprising

Homespuns. Irish Hand-Knitted
Tweeds. Hosiery.
Irish Lace. Belleek Ware or
Irish Linen. Irish Porcelain.
Irish Poplins. Irish Bog Oak.
Connemara Marble Novelties.

Guaranteed genuine. Make choice and uncommon gifts. Money refunded on unsatisfactory purchases. Parcels over 20/- carriage paid.



Hamilton & Co.,
Desk 35.
Depôt for Irish Peasant Industries,
Portrush, Ireland.

"PREMIER" NAVY CUT TOBACCO

(MILD, MEDIUM, AND FULL STRENGTHS).

In 2-oz., ¼-lb., ½-lb., and 1-lb. Air-tight Tins.

TADDY & CO., LONDON, E.

Manufacturers of Tobaccos and Cigarettes in Bond for Export.

MONTAGUE MANSION
PRIVATE HOTEL
(Opposite the British Museum Entrance),
GREAT RUSSELL STREET, W.C.

Most conveniently situated for Business or Pleasure. Splendid Enclosed Suites of Apartments, each fitted with Bath and Lavatories for Families. 100 Rooms. 18 Bath Rooms (free). Passenger Lift to every floor. Electric Light throughout.
Noble Dining Saloon, Coffee, Billiard, Smoking, and Reception Rooms. Table d'Hôte, Separate Tables. High-class Board.
Bedroom and Breakfast, including Bath and Attendance, from 5s. 6d. each person.
NIGHT PORTER. TERMS STRICTLY MODERATE AND INCLUSIVE.
Telegraphic Address: "MONTARAZES, LONDON." Telephone 1588, Gerrard.
BRANCH ESTABLISHMENTS (FOR FAMILIES ONLY)—
HENRIETTA MANSION, HENRIETTA STREET, CAVENDISH SQUARE, W.
APPLY PROPRIETOR.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000027

مكتبة قطر الوطنية
Qatar National Library

AERTEX CELLULAR

THE CELLULAR CLOTHING CO.'S ORIGINAL UNDERWEAR AND SHIRTS.

THE HEALTHIEST AND MOST ECONOMICAL FOR TRAVELLERS.

Extract from C.T.C. HANDBOOK AND GUIDE, 1896-97, p. 52.

"From the peculiar manner in which CELLULAR CLOTH is woven (forming a network of minute air-cells next the skin), it allows, even more fully than wool, the free evaporation of perspiration on the side next the skin. . . . It is less bulky, and is lighter to carry; it dries much more quickly; it is more easily washed, and its prime cost is much smaller. Last, but not least, it is quite free from that bane of all woollen goods, the liability to shrinkage."

BEST FOR ALL SEASONS AND CLIMATES.

ESTIMATES FOR OUTFITS SUPPLIED ON APPLICATION.

To be obtained in all the principal cities and towns in the United Kingdom, the Colonies, and India.

Illustrated Price List of full range of Cellular goods for Men, Women, and Children, sent Post Free on application.

This registered Trade Mark



on all Garments.

Full assortment of goods at the following retail houses:—

ROBERT SCOTT, Limited, 14 and 15, POULTRY, LONDON, E.C.
OLIVER BROS., Limited, 33, NEW BOND STREET, LONDON, W.
" " " 417, OXFORD STREET, LONDON, W.

And Agents in all towns of the United Kingdom. See Price List for names.

DR. J. COLLIS BROWNE'S CHLORODYNE

ONLY GENUINE



ORIGINAL AND

IS THE GREAT SPECIFIC FOR CHOLERA,

COUGHS, COLDS, ASTHMA, BRONCHITIS.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Dr. J. C. BROWNE (late Army Medical Staff) DISCOVERED a REMEDY to denote which he coined the word CHLORODYNE. Dr. Browne is the SOLE INVENTOR, and, as the composition of Chlorodyne cannot possibly be discovered by Analysis (organic substances defying elimination), and since the formula has never been published, it is evident that any statement to the effect that a compound is identical with Dr. Browne's Chlorodyne *must be false*.

This Caution is necessary, as many persons deceive purchasers by false representations.

DR. J. COLLIS BROWNE'S CHLORODYNE. — Vice-Chancellor Sir W. PAGE WOOD stated publicly in Court that Dr. J. COLLIS BROWNE was UNDOUBTEDLY the INVENTOR of CHLORODYNE, that the whole story of the defendant Freeman was deliberately untrue, and he regretted to say it had been sworn to."—See *The Times*, July 13th, 1864.

DIARRHŒA, DYSENTERY. GENERAL BOARD of HEALTH, London, REPORT that it ACTS as a CHARM, one dose generally sufficient.

Dr. GIBBON, Army Medical Staff, Calcutta, states: "2 DOSES COMPLETELY CURED ME of DIARRHŒA."

From SYMES & Co., Pharmaceutical Chemists, Simla. *Jan.* 5, 1880.

To J. T. DAVENPORT, London.

DEAR SIR, — We congratulate you upon the widespread reputation this justly-esteemed medicine has earned for itself all over the East. As a remedy of general utility, we much question whether a better is imported, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances *ad infinitum* of the extraordinary efficacy of DR. COLLIS BROWNE'S CHLORODYNE in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power.

We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best, and also from a sense of duty we owe to the profession and the public, as we are of opinion that the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.—We are, Sir, faithfully yours, SYMES & CO., *Members of the Pharmaceutical Society of Great Britain, Hix Excellency the Viceroy's Chemists.*

DR. J. COLLIS BROWNE'S CHLORODYNE is the TRUE PALLIATIVE in NEURALGIA, GOUT, CANCER, TOOTHACHE, RHEUMATISM.

DR. J. COLLIS BROWNE'S CHLORODYNE is a liquid medicine which assuages PAIN of EVERY KIND, affords a calm refreshing sleep WITHOUT HEADACHE, and INVIGORATES the nervous system when exhausted.

DR. J. COLLIS BROWNE'S CHLORODYNE rapidly cuts short all attacks of EPILEPSY, SPASMS, COLIC, PALPITATION, HYSTERIA.

IMPORTANT CAUTION. The IMMENSE SALE of this REMEDY has given rise to many UNSCRUPULOUS IMITATIONS. Be careful to observe Trade Mark. Of all Chemists, 1s. 1½d., 2s. 9d., and 4s. 6d.

SOLE MANUFACTURER,
J. T. DAVENPORT, 33 Gt. Russell St., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

335

INDEX TO ADVERTISEMENTS.

Where no folio is given, Advertisement does not appear this month.

PAGE

Admiralty Charts.
Potter, J. D. 10

Aerating Apparatus.
Aerators, Ltd. .....

Assurance.
Royal Exchange Assurance.....
Standard Life Assurance Co. ...

Boats (Folding).
James Folding Boat & Contract Co. 17

Booksellers.
Sotheran & Co. .....*Cover* 2

Boots & Shoes.
Norris, Geo. 5

Camp Beds
Chorlton, L., & Co. .....*Cover* 4

Champagne.
Hallowes & Tosetti .....*Cover* 3

Cutlery.
Hill & Son 9

Draughtsmen.
Weller, Edw., & Grahams, Ltd. 22

Electrical Engineers.
India Rubber, Gutta Percha, & Telegraph Works Co., Ltd. ... 8

Engravers.
Weller, Edw., & Grahams, Ltd. 22

Foods for Travellers.
Bovril, Ltd. .....
British Somatose Co., Ltd. 20
Cosenza & Co. .....
Liebig's Extract of Meat Co., Ltd. 16
Maconochie Bros., Ltd. ... 6
Spratt's Ship Biscuits .....*Cover* 3
Symington's Pea Soup 9

Guns.
Chambers, Septimus 22

Hotels & Restaurants.
Hôtel Metropole .....
Montague Mansion (Private) ... 13
St. Ermin's Hotel .....*Cover* 2
Thackeray Hotel (Temperance) 22

PAGE

Instruments for Travellers.
Cary's 18
Casella, L. 18
Heath & Co., Ltd. 20

Insurance.
Imperial Insurance Co., Ltd. ... 18

Jewellers.
Goldsmiths & Silversmiths Co., Ltd. 8

Lager Beer (Munich).
Munich Lionbrew Co. 9

Lanterns.
Riley Bros. Ltd. 9

Medicines & Medicine Cases.
Browne, Dr. Collis 14
Burroughs, Wellcome & Co. *Cover* 4
Jewsbury & Brown..... 3
Keating 22
Zimmer & Co., Ltd. 19

Mineral Waters.
Jewsbury & Brown... 3

Miscellaneous.
Irristum Anti-fat Co..... 18

Outfitters.
Cellular Clothing Co., Ltd..... 14
Dr. Jaeger's Coy., Ltd. .....
Hamilton & Co. 13
Paté, Burke & Co. 17
Ross, J. & G. 12
Scott Adie 1
Silver, S. W., & Co., and Benjamin Edgington, Ltd. 12
Thresher & Glenny.....

Pens.
Mabie, Todd, & Bard 15

Photographic Outfits.
Dallmeyer, J. H., Ltd. 5
Kodak, Limited 6
London Stereoscopic Co..... 7
Newman & Guardia, Ltd. 5
Platinotype Co. 17
Ross, Ltd. ..... *Cover* 3
Thornton-Pickard Manufacturing Co., Ltd.....*Cover* 4

Pleasure Cruises.
Orient Co ... .

PAGE

Portable Buildings.
Boulton & Paul, Ltd. 13

Printers & Account Book Manufacturers.
Brown & Rowley 22
Darling & Son, Ltd. 11

Publishers.
Blackwood, W., & Sons 10
Frowde, H. 10
Johnston, W. & A. K. 10

Ship Owners.
British India Steam Navigation Co. 19
Hamburg-American Line 19

Silversmiths.
Mappin Bros. 3

Sporting Outfits.
Burberrys' 3
Dr. Jaeger's Coy., Ltd. .....

Stationers, etc.
Brown & Rowley..... 22

Stores for Expeditions, &c.
Beale & Cloves.....
Silver, S. W., & Co., and Benjamin Edgington, Ltd. 6
Tucker, Joseph 5

Tents.
Edgington, John, & Co..... 3
Piggott Bros. & Co..... 14
Silver, S. W., & Co., and Benjamin Edgington, Ltd. 12
Tucker, Joseph 5
Willesden Paper & Canvas Works 11

Tobacco Manufacturers.
Richmond Cavendish Co., Ltd. 21
Taddy & Co..... 13
Wood & Son 21

Tours and Excursions.
Cook, T., & Son 7

Watch & Clock Makers.
Benson, J. W., Ltd.....*Cover* 2
Blockley, H. 11

Waterproof Roofing.
Willesden Paper & Canvas Works 11



"AN IDEAL XMAS. GIFT."

Largely used by Fellows of the Royal Geographical Society.

INVALUABLE FOR USE BY TRAVELLERS AND EXPLORERS IN ALL LANDS.

THE SWAN FOUNTAIN PEN

IS OF ALL PENS MOST FAMOUS.

Made in 3 sizes at 10/6, 16/6, & 25/-,

up to 18 guineas, post free.

Your Steel Pen and Handwriting only required to select a suitable Pen.

WRITE for Illustrated Catalogue to CHIEF OFFICE—

Mabie, Todd, & Bard, 93, Cheapside, E.C.;

BRANCHES LONDON: 95a, Regent Street, W.
MANCHESTER: 3, Exchange Street.
PARIS: Brentano's, 37 Avenue de l'Opera.

Sold by all Stationers.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007f

مكتبة قطر الوطنية
Qatar National Library



TENTS

FOR THE

TRAVELLER

AND

EXPLORER.

Write for our "Red Bound Catalogue" of Tents and Camp Equipment, post free.

THE MOST PERFECT TENT is PIGGOTT BROS. & CO.'S "PROSPECTING TENT." Made double. The inner roof being suspended 12 inches below the ridge, allows of a free circulation of air between the outer and inner roofs. The inner roof has ventilators, protected by mosquito net. *Made from Green Waterproof and Rot-Proof Canvas.*

PIGGOTT BROS. & CO., MANUFACTURERS,
57, 58, 59, Bishopsgate Street Without, LONDON.

"LEMCO"



THE HEALTH OF THE PRAIRIES BROUGHT TO YOUR DOOR

The genuine
LIEBIG COMPANY'S EXTRACT.

SIGNED J. Liebig IN BLUE

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The
Geographical Journal.

No. 6. DECEMBER, 1900. Vol. XVI.

THE PRESIDENT'S OPENING ADDRESS, SESSION 1900–1901.*

The most important geographical event since the close of the last session has been the return of the expedition of the Duke of Abruzzi from Franz Josef Land. His Royal Highness has the great merit of having personally organized and fitted out the expedition in every detail; and an expedition has seldom sailed which has been so carefully and thoroughly equipped. Its geographical results are of great importance, for it has finally discovered the northern limits of the Franz Josef group, and confirmed Nansen's discovery of a deep ocean to the north; while the sledging party under Captain Cagni reached the highest northern latitude yet attained. I had a very interesting conversation with the Duke of Abruzzi at Christiania, and, if it can be arranged, his Royal Highness will be pleased to give us an account of his expedition in the course of the session.

The Danish expedition to East Greenland, under Lieutenant Amdrup, has also returned, after successfully continuing the work of Dr. Nathorst last year, while a Norwegian whaler was able to follow the coast to 75° 30′ N. Thus the dotted line which has so long indicated the supposed position of the East Greenland coast on our maps will now give place to a definite surveyed line; thanks chiefly to the persevering efforts of Danish geographers and explorers since the days of Graah.

We are still anxiously waiting for news of the expeditions of Sverdrup and Peary up Smith sound. The *Windward* went out to bring them succour, but she has not yet returned.

* Delivered at the Meeting of the Society, November 12, 1900.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000053

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The two recent expeditions to the antarctic regions have both supplied us with valuable information. In Dr. Cook's work there are extremely interesting appendices by members of the Belgian expedition; and Mr. Borchgrevink's paper is accompanied by a very able report on the meteorology and magnetic work of Sir George Newnes's expedition by Mr. Bernacchi, and by a map drawn by Mr. Colbeck, based on his own survey. The biological collections of Sir George's expedition have arrived, and have, I understand, been handed over to the authorities of the British Museum at South Kensington.

Our own antarctic expedition is now, at last, making progress as regards equipment and other arrangements. The ship is in an advanced state, and we have had every reason to be satisfied with the work of the Dundee Shipping Company. Captain Scott, R.N., the commander of the expedition, was only able to take charge last August, but he has already shown that he possesses many of those qualities which are essential for so difficult and responsible a post.

The German expedition is far more advanced than we are, in every department of its work, under the direction of its able and accomplished commander, Prof. von Drygalski; but this is because his Committees have seen the wisdom of giving him a perfectly free hand. I am glad to say that the commanders of the two expeditions have had an opportunity of becoming friends, and of exchanging views during the autumn; and Captain Scott, if not too much trammelled by Committees, will soon make up for lost time. Captain Scott has also derived very great advantage from his intercourse with the scientific men who are conducting dredging operations and physical investigations on board the *Michael Sars* on the Norwegian coast. Dr. Hjört and our gold medallist, Dr. Nansen, have given Captain Scott the results of their great experience as regards the best nets for dredging, and the latest inventions connected with oceanic researches generally. They spared no pains to inform him on these points, and, as they are gifted with remarkable powers of exposition, the advantage derived from conversations with them is very great. Captain Scott will, I am sure, desire to join in a cordial expression of thanks from this Society to our Norwegian colleagues.

Our friend Dr. Sven Hedin has, during the past year, been actively at work in the Lob-nor country and the basin of the Tarim; and I believe that his archæological discoveries will throw a flood of light on the past history of that region. The complete record of the scientific work of Dr. Sven Hedin's former journey has, meanwhile, been published in a special number of *Petermanns Mitteilungen*, fully illustrated by maps. Another important geographical work which has appeared during the recess, is the statement of the Argentine case in the boundary arbitration now in progress. It is very fully illustrated by maps and photographic views. Still another excellent book is a 'Glimpse of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000003

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Guatemala,' which is most beautifully illustrated, with valuable chapters on the Maya ruins, by Mr. Maudslay, and a most charming and interesting narrative of travel by Mrs. Maudslay. The biography of my old friend Mr. Oswell, the companion of Livingstone, with an introduction by Mr. Francis Galton, is very interesting, and contains a good deal of hitherto unpublished matter respecting the early exploration of Southern Africa. The Duke of Abruzzi's ascent of Mount St. Elias, by Dr. Filippo de Filippi, is a beautifully illustrated work, with a well-written and interesting narrative.

It is in Africa that the greatest amount of geographical work has been done this year. But a review of it must, alas! commence with a reference to the loss of a valued young explorer. It was only last session that Captain Wellby's father read us the account of his gallant son's splendid geographical achievement in marching from Abyssinia to the Nile. You will all remember how we looked forward to welcoming him on his return from the front. Now that can never be. Captain Wellby has fallen, fighting for his country in a most righteous war. It was a glorious death, fitting close of an adventurous and active life. We are left to mourn the death of a young officer who was a great explorer and an ornament to the army. His noble example has been followed by others; for there has been remarkable activity in the exploration of Africa this year. Major Gibbons has followed Mr. Grogan from the Cape to Cairo. Mr. Moore has returned after his important investigation of the Central African lakes. Mr. Harrison has brought home an admirable map of the region between Lake Rudolf and Addis Abeba. Our gold medallist, M. Foureau, has safely returned after his wonderful journey across the Sahara, of which he has promised to send us some account. Last, but certainly not least, Dr. Donaldson Smith, who is an old friend and known to us all from his previous work, has made very remarkable journeys, involving new discoveries between Lake Rudolf and the Nile; and I am sure we are all delighted to welcome him here this evening.

Already the benefits to geographical knowledge of the effective occupation of the Sudan are beginning to be felt; the first sheets of the new maps of the Nile, as far as the Bahr Ghazal, the results of the survey under Colonel Talbot, have reached us; while Sir W. Garstin's journey up the Nile to the lakes will no doubt yield further important results in the same direction. Major Wynn has gone out to Abyssinia, and will shortly be followed by Major Austin and Major Bright, the two latter to the Sudan; and between them we may expect great accessions to our knowledge of the eastern tributaries of the Nile, and of their basins.

From South Africa again we have in the map room several sheets of the maps which have been made during the war by the surveyors sent out by the Intelligence Department. And in this connection I am pleased to learn that serious steps have been taken to carry out

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000005

مكتبة قطر الوطنية
Qatar National Library

administrative surveys of all those territories in Africa which are directly dependent on the Home Government, and that in conjunction with the other European Powers which have African possessions.

AN EXPEDITION BETWEEN LAKE RUDOLF AND THE NILE.*

By Dr. A. DONALDSON SMITH.

In 1895, when my first expedition reached Lake Rudolf, it had been a whole year on the march, and had been successful also in exploring much more new country than I had anticipated, so I contented myself in making a fortnight's journey up the Mela river. On this side journey, however, I made up my mind, on looking across a vast expanse of plain towards the west, that some day I must pursue the setting sun from Rudolf to the Nile, and I continually watched for an opportuity to satisfy my desire. Since I could not do this at once, I filled in a part of the intervening time by a journey through some of the unknown parts of the Khingan range in Mongolia in 1897, a short account of which was published in the *Geographical Journal* of May, 1898.

The whole of the winter of 1898–99 I was in the jungle in Somaliland, hoping for an opportunity to cross the border, but owing to political reasons and to the gratuitous interference of the Consul-General, I was unable to put my project into execution until mid-summer. During May and June, while negotiations with the Foreign Office were under way, I employed my time in recruiting twenty-eight Sikhs and Gurkhas in the Punjab. I thought it advisable to enter *viâ* Kismayu, but the Mombasa local authorities stopped me. To be brief, I fitted out three distinct expeditions before I managed to get finally out of the reach of incomprehensible officials. I started from Berbera on August 1, 1899. After the first march eleven of my Sikh ex-Sepoys deserted, having become aware that they must sweat occasionally, and that they could not be supplied with all the manifold luxuries they were accustomed to in the Indian army. Knowing that I should never succeed if I took one of the officially recognized headmen with me, I had great difficulty in getting Somali camel-men, since all the Berbera headmen formed a ring against me. Several camel-men having deserted me at Hargeisa, and fearing further official interference, I started across the Haud with only seventeen Somalis, and as many Gurkhas and Sikhs, besides my assistant, Mr. Frazer, and my excellent Goarnese cook, kindly lent me by Captain P. Z. Cox. During the journey to the Shebeli river *viâ* Milmil, Sesebane, and

---

* Read at the Royal Geographical Society, November 12, 1900. Map, p. 712.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Sheneli, I increased my following to forty-eight men. Near Milmil a small caravan of camels and women which was following us was attacked by three highwaymen. One of the robbers was captured by my boys and brought before me. He was a lad of eighteen, with wiry limbs and an intelligent expression, and struck me as a likely recruit, and a better brigand than the majority of my men. So I contented myself by making him march handcuffed for a day, and then enlisted the homeless fellow as a camel-man. He became known as Ali Hatbury, or "Ali of the handcuffs," and proved one of my best boys.

My surveys began immediately upon leaving Sesebane. Although I had with me all the most recent maps, the "tug" Fafan had been given no resting-place by cartographers. All the way to the Juba river we had work to do filling in what had been to all intents and purposes a blank upon the maps, except where I came upon my old line of march in 1895 at Turr. Sportsmen had knocked about the country in places, but they evidently never thought that Longfellow's idea of a brook applied to a tug or wady from the different positions the poor sandy river-beds were made to assume.

At the end of our march on September 8, we reached the Shebeli river at a spot called Godi, over 400 miles from Berbera by road, and crossed without unloading the camels. It contained only from 2 to 3 feet of water in its deepest part. So dry was the country about the river that I pitched my camp in a dark grove of immense cedar trees within a few yards of the stream, not having to fear malarial poisoning. Not a single mosquito disturbed our rest at night. On September 11 we started west again across a rich river-made plain, passing numerous villages of Aulihan and Dagodi to the foot of the highlands, which intervene between the river Web and the Shebeli. We followed up a tug to its sources in these highlands, and found many pools of water in it. Considering the extreme dryness of the season, I believe this tug must be usually a flowing river. The natives would sell us nothing at any price, although they were rich in live stock. For the next few days we experienced a delightful change from the trying heat of the low plains, where the mean temperature for the twenty-four hours was over 90° Fahr. The plateau was only 2500 feet above the sea, but that was a sufficient elevation to give a slight tonic effect to the atmosphere. The land was only suitable for grazing purposes to a limited extent, since the granite and iron ore, of which the hills were composed, was bare, or else covered with a thin layer of sub-soil, which supplied nourishment to a tangled mass of mimosa and acacia trees and bushes. Inhabitants were consequently very few, and giraffes very plentiful. Water is to be obtained in holes in the rock.

Near some villages called Mucha, which we reached on September 14, there were some remarkable deep rock wells. Two days after leaving these we descended from the plateau and reached my old line of march

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

at Gohule. From here until we reached the Boran at El Dere I cannot add to the description I gave to you of the country when I read my paper before the Society in 1896. The rivers Web and Juba had only half their usual supply of water. The people were flourishing, and nothing could have exceeded their meanness in not wishing to sell us food, which made it most difficult for me to keep my men supplied, there being also little game on our line of march. The Boran, on the other hand, were most friendly. I must here refer to the Abyssinian method of annexation. In 1895 I saw the worst side of their treatment; but on my recent journey, I found that their treatment of tribes, once thoroughly brought to submission, was commendable. In their first attacks they are certainly very cruel, but later, when the natives have been so harried that they look upon their masters with the greatest respect, they are given back a good proportion of their belongings and very nearly their original self-government, but a moderate tax being imposed. From the Somalis to the Boran I was surprised to find the natives quite as rich apparently as they were before they had come under Abyssinian rule.

Since I could fill in many blank spaces on my former map before reaching Lake Stefanie, I started survey work again at El Dere, and continued it to the Nile. Marching in as straight a line as possible from Berbera, El Dere may be considered to be 750 miles by road and the same distance from the Nile. Three long marches from El Dere to Le lead us through a very wooded and broken country, where elephants abound and man is a rare visitor. There are many mountains scattered about, principally of limestone rock, and the deep wells at Le I now believe to have been originally formed by the disintegrating effects of water on chalk, in which the natives have actively assisted. My Somalis gave me infinite trouble and annoyance. They were never satisfied unless they had over ten pounds of camel meat or mutton a day per man, and when food was scarce I had to be constantly on the alert to prevent them from poisoning my transport animals, so that they could eat the meat, or from stealing sheep, but they were not, however, as miserable petty thieves as most of my Indians. All but four of them mutinied at a place called Gof on November 4, and remained out over night, putting me in a decidedly disagreeable situation. If I call my Somalis howling hungry humbugs, I describe some bad points of their character, but it would be unjust in me not to mention their superb physical condition, swift-footedness and endurance, and their intelligence, which made them compare favourably with the Indians. Of my nine Gurkhas, five only were pure-blooded men from the backwoods of Nepal, and these were among the best men in camp. The other four Gurkhas had Rajput or other blood in their veins, and it is with regret that I look upon them as human beings. These latter, and as many more Sikhs, continually

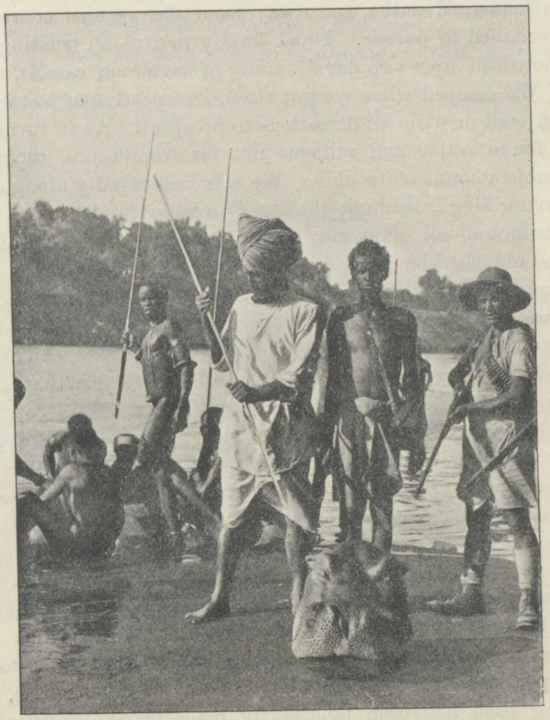
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000043

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

strove to commit suicide by hiding if the march was long, and gave me and the Somalis infinite trouble in hunting them up. Two Indians were cunning enough to evade the Somalis search-parties sent after them at different points on the journey, and were never heard from again. Whenever the march was protracted over five hours, either my assistant or I fell back far to the rear of the caravan to protect tired Indians from themselves.

Between Goff and Lake Stefanie the Abyssinian highlands are



Mursu. Sikh. Somali. Gurkha.

ON THE OMO AT MURSU.

continued south as a long mountain chain all the way to Mount Koroli and Marsabit, near the southern end of Lake Rudolf, a fact that I was not aware of on my first journey. Proceeding westward three marches from Gof, and passing Egder, we arrived on November 8 at a large settlement called Gorili, at an elevation of 3000 feet, where the people welcomed us with large vessels of honey and milk. There were Arab and Somali traders among them from Kismayu, buying ivory in exchange for cattle.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001b

مكتبة قطر الوطنية
Qatar National Library

On the next day we rose over 1500 feet to Mega, a beautiful broad open meadow or series of meadows between mountain peaks, into which tiny watercourses trickle, and where there was a delightful freshness in the atmosphere and in everything living. Besides the many cattle, sheep, goats, and donkeys which were to be seen grazing on the fine green grass, we were much impressed by the numerous droves of sleek ponies. For some reasons the natives west of Egder did not wish us to be a witness of their wealth, and whenever we managed to get a guide from them, he persisted in taking us by the most unfrequented paths, and away from the western course, which I was determined to pursue. I had finally to give up trusting in guides altogether, load up a two days' supply of water on camels, and march ahead. We camped when we got tired, irrespective of water or people, and then sent men in all directions to prospect. As it turned out, we usually found water and villages not far from camp, though with a considerable amount of trouble. We marched rapidly along easy paths after leaving Mega, through the same green upland basins, for a little over four hours, all of us revelling in the delicious cool atmosphere. The good old Gurkha Havildar voiced the sentiment of the crowd by exclaiming, "Ah! Sahib, if we could always have it like this."

We were at an elevation of over 5000 feet, when suddenly, on rounding a little promontory, the caravan was brought to an abrupt halt. We found ourselves perched on the edge of a precipice that sheared off almost perpendicularly down to a broad plain 1700 feet below us. Across the plain, some 30 miles to the west, rose what appeared to be a low mountain range, the southern extension of the Tertala mountains; but the plain itself we found to be over 3000 feet above the sea-level, a no mean elevation compared to the valleys of Lake Stefanie and Rudolf. On my first journey I crossed this plain 80 miles north of here, where it was only a narrow valley running up to its origin in the Amara mountains. The view was, indeed, magnificent from this great wall, the western edge of the Boran highlands, which run from the Amara to Marsabit, but it was appalling when I came to consider how my poor camels were to get beyond it. To my surprise, we found a winding path had been laboriously made by the natives for their donkeys, many stones, weighing two or three tons, having been rolled aside. We set to work on this road, and after a day's hard labour got it in fit enough condition to take the camels down empty. All the loads were carried down by my men, and then the long line of grunting, stumbling, patient "ounts" were shoved and lifted after. In spite of the inimitable Kipling, I have the greatest respect for the long-suffering camel. On this occasion only one animal was injured, but he was afterwards consumed by us to his last marrow-bone. Thus you see that the good that a camel does is not interred with his bones.

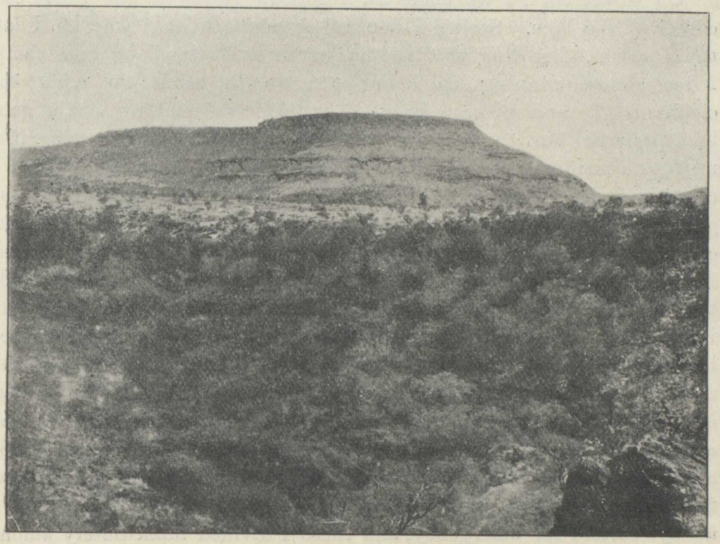
There were numerous villages about the foothills and on the plain,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and many natives helped us down the paths. The most important settlement, about an hour's march from the foot of the mountain, called Saki, was in a most flourishing condition, judging from the large numbers of cattle which the people owned. A couple of marches west of Saki we got into a very bad washed-out stony country, where the plain was cut into hideous designs by the rushing of the waters in times of flood. A guide whom we had got at Saki insisted on going to the north, which I would not do, so I felt that I had only myself to blame for getting into the bad land. It took five long marches to get across the plain, on account of several stretches of this character. A specimen of one of the tiny gazelle, or dig-dig, of this plain, which I



BAD LANDS, NEAR SAKI, EAST OF LAKE STEFANIE.

presented to the British Museum, has been proven to be new to science by Mr. Oldfield Thomas (*Madoqua guntheri smithii*). On November 19 we were among the mountains again, and not far from the south-east end of Lake Stefanie.

There was one rather isolated mountain called Janissa, 5600 feet high, which I decided to ascend while my camels were resting. From the top of it I got a splendid view, and picked up most important points of my previous journey—Mount Kanjaro, the Tertala range, Lakes Stefanie and Rudolf, and Mount Koroli—and could thus check my work, which I was most pleased to find correct. The trip was not without other advantages also, for on the very top of the mountain

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [340v] (33/232)

I bagged two specimens of *Cervicapra chanleri*, a beautiful antelope not known to exist near Lake Stefanie. Two marches beyond Mount Janissa we came to what appeared to be an enormous barnyard, with a solid stone floor, and in the centre a bubbling warm spring. The water was sparkling with carbonic acid gas, tasting like acidulated seltzer, and it was evidently the drinking-place of many scores of elephants, judging from appearances. Elephants were ubiquitous; you could scarcely move in any wooded valley without disturbing many of them. The next day we were well down in the valley of Lake Stefanie, and looking forward to plenty of fresh fish and plenty of water for washing.

On November 26 we made an afternoon march to the south-east corner of the lake. Seeing a herd of elephants a long way off, I left the caravan, directing the men to march on to the lake and camp. After almost running an hour or more to catch up with the elephants, I came upon a herd of buffalo, and picking out a good bull, preferred him to the tuskers. Killing the bull and cutting him up took considerable time, and it was not until near sunset that I came in sight of the camp. To my horror I saw nothing but blazing grass where the camp should have been, and on some rising ground, covered with smoking ashes, stood my boys, looking like the central figures in one of Doré's conceptions of the Inférno. I certainly thought my ship had been burnt up, but my boys were only resting a moment after their heroic efforts to save the kit, which they had accomplished to the last camel-blanket. No wonder my camel-men's faces looked doubly sad when they brought me a tin of water and asked me to taste it. It was the briniest water I ever touched, and then I too felt sad. I learned that the lake with its undrinkable water was 2 miles away over a sea of mud covered with dead fishes. I only had two small barrels of water in camp, which I always carried for emergency, and these I divided immediately among the poor parched boys, who had been fighting the fire. Every man was tired, and yet I had to send at once several boys with camels to travel all night back to the mineral spring and fetch water the next day. Here is where the Somalis showed their pluck. Not a man that I ordered out objected, since it was a question of life or death. Other Somalis I sent in all directions to follow the paths made by the countless myriads of animals, and learn where they drank. Most of the Indians were dead to all intents and purposes, and considered themselves to belong already to another world. Luck was not so much against us, however, for in two hours my camel-men had found a spring of fresh water by following elephants' spoor, and soon after this the Indians were resurrected by a gallon of water each.

I will pass over our journey from this point to Lake Rudolf, which we reached on December 10. The formerly rich tribe of Rusia had

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ceased to exist, and except a few representatives of the Hamar Koki tribe, we saw no human beings at all until we reached the river Nianam. The water was 12 feet lower in the shallow lake than it was in 1895.

I was quite surprised at first at the manner of our reception by the Murle and by their poverty. The rich villages that welcomed us in 1895 did not exist. There were only a few little groups of huts, principally on the west bank of the river, that showed the remnants of a once large and flourishing tribe. We spent nearly a whole day endeavouring to get the people to come to us; but finally, when we



GAZELLA GRANTII BRIGHTII.

gained their confidence, they were most eager to assist us. The secret of the natives' distress was to be found in Abyssinian raids. With the help of the natives and their canoes we easily crossed the Nianam, which was half dried up like all the streams we had crossed. On my first journey I followed up what I supposed to be the Nianam for a long distance to Mela; but since I was there that illustrious explorer, the late Captain Bottego, discovered another river, the Omo, coming in from the west. It is clear to me now that my river, which I will call the Mela, and the Omo together in equal volume join at Gumba to form the Nianam, the name given by Count Teleki to the large stream flowing into the lake.

A remarkable change now occurred in the fauna. Not only did

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000090

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

we find a completely different set of birds between the Nianam and the Nile, but scarcely any of the mammalia that we had been accustomed to were to be found in this western section. The Soemerings gazelle had given place to the larger Boran gazelle, and now this had disappeared, to make way for a smaller variety without any longitudinal black stripe on its side, and which Mr. Thomas has proved to be new after examining a specimen which I have given your museum (*Gazella grantii brightii*). The bouncing, nervous, long-necked Waller's gazelle, which had been a constant companion, was nowhere to be seen, but oribi and reed-buck took its place. Speake's gazelle was replaced by the beautiful *Gazella thomsoni*. The hartebeests, as a matter of course, thought it best to give themselves differently curved horns, and to go under the name of *Bubalis lelwel*, Heuglin. The birds were represented by curious scarlet-breasted barbettes, with their enormous dentated bill for cracking hard berries; by curious tiny flycatchers, with large scarlet wattles around their eyes; and by more than a hundred other different species, all of them strikingly beautiful, belonging principally to the West African types. Many troops of monkeys made the tall forest about the rivers and ponds ring with their chatter. The most beautiful of these, a large horse-tailed colobus (*Colobus guereza poliura*), was found to be new on examination of some skins which I gave to the museum.

I may mention here that from the time we left the Boran gallas until we reached Arabic-speaking natives near the Nile, we could communicate with none of the tribes except by signs, unless we remained long enough at some village to pick up a few words of the vernacular. I had hoped to find some Masai, but there were none. The whole way to Tarangole the natives refused to give us guides, although they were friendly in other respects. This was to be accounted for, I suppose, partly in my refusal to pursue any other than a westerly course, when the natives advised my going north or south, or even east again, and partly through fear that the guides would be killed by their hostile neighbours. We kept our course, however, although we literally got into many a hole, and struck out each morning regardless of paths, waterways, or dire prophecies on the part of the natives.

The day after Christmas we bade the Murle good-bye, and struck out in a northerly direction that would bring us to the Omo, near the point where that stream makes an acute angle as it bends from north to east around the Mela hills. At the end of a long march over a grassy open plain, we came to a place where the loose fireclay which underlay the sub-soil of the plain had been cut away by the action of waters to a depth of 50 feet, and in the deep round basin a dense forest of giant sycamores, mimosa cedar, and tamarind trees stretched before us for about 2 miles. Finding plenty of elephant paths, we wandered through the dark woods the next morning until we came to a pretty lake a mile

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

long, in which a school of over a hundred hippopotami disported themselves. The forest was alive with animal and bird life. The elephants were, indeed, so numerous that their stench was most disagreeable. From here to the river the land was so cut up that we did not reach the Omo until we had made a second march in the afternoon. I may say that most of our day had been spent in passing around and over little hills of crumbling clay. The Mursu, whom we found on the banks of the Omo, had escaped the raids of the Abyssinians, and were in a most flourishing condition. After we had shot a couple of hippos for them, they became most friendly, and brought us much food, consisting of durrha, or sorgham, lentils, beans, maize, and dried tamarinds. I bought a small tusk or two from them at first to start trade; but when I discovered a long line of ebony-like forms bearing about a ton of ivory upon their shoulders to my camp, I had to cry a halt, as it was impossible for me to transport more ivory than I then had with me.

The Mursu and Murle are very identical in speech, customs, and appearance, but the Mursu have more of the warlike spirit of the Turkana than the Murle. The Mursu shave the hair well up from above their ears, and also behind the head, a custom observed by the Dume, Bunno, and other tribes living to the north of Lake Stefanie. Moving along the river with camels was hard work, owing to the thick forests, in which much cutting had to be done. Several of my camels died from eating a poisonous vine, and many were made so ill that they never recovered. I have found it always dangerous to allow camels to remain in forests along rivers or lakes for any length of time.

On January 3 we left the river, and, proceeding west, arrived on the second day's march at another little pond at a point where several river-beds unite in one very deep and wide ravine. Thence our route lay across a fertile river-made plain to the base of a low mountain range. I have little doubt, from what I saw of the valleys passing to the right and left of the various mountain ranges and from levels taken, that Lake Rudolf, the Nile, and the Sobat were once united in a vast inland sea. A couple of hours' climb on January 6 got us over the crest of the first range of hills and on to a valley 15 miles broad, that provided excellent grazing to the numerous domestic animals which the natives of these parts owned. The waterways contained plenty of water in pools, and there were many broad stretches of open pasture, while the lower hills surrounding the plain were almost treeless, but covered with fine green grass. On the west, a splendid mountain range ran for 20 miles along the length of the valley; the highest point, Mount Etua, over 7000 feet high, stood out in bold relief as a bare-pointed volcanic remains—a splendid point for surveyors, and a magnificent mass from an artist's point of view. We saw this point from the Omo river, and did not lose it until we were 40 miles the other side.

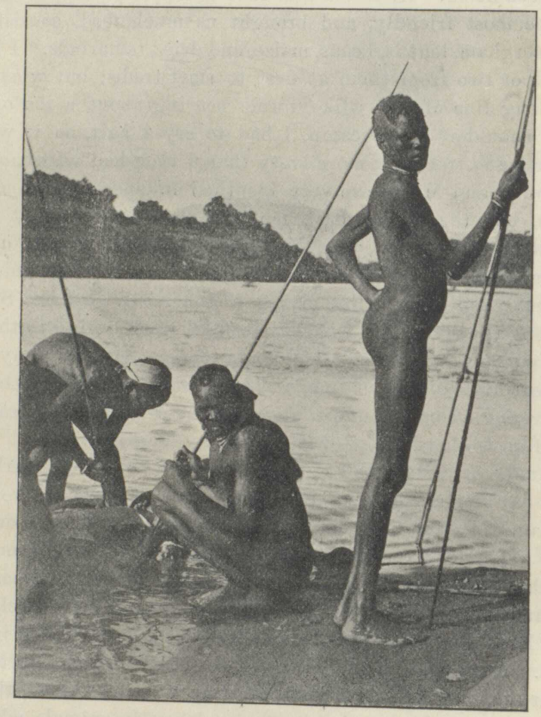
Almost all the natives fled to the hills on our approach, and seemed

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

inclined to fight. From their long parallel-sided shields, their Masai-like spears, and their tall athletic build, I made them out to be a branch of the Turkana. A lot of about twenty warriors attacked two of my camel-men one day, who were loitering behind the caravan with my sheep and goats, and were only driven off by my boys firing at them. This was the only time on the journey that the natives attempted hostilities. The people here call themselves Mushas, but I could not get any vocabulary from them, as I only managed to get speech with them on



MURSU ON THE RIVER OMO.

two or three occasions before I was about to quit their country. We kept pretty much to the valleys, which were at an elevation of 1700 feet as we progressed through their country for seven long marches, occasionally going over some mountain passes, where stretches of open upland meadows and grass-covered hills made me feel that I should be wearing tweeds instead of khaki. In such places there were usually a good number of small villages, but occasionally, where the bush was very thick, we sometimes did not see a sign of any inhabitants

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

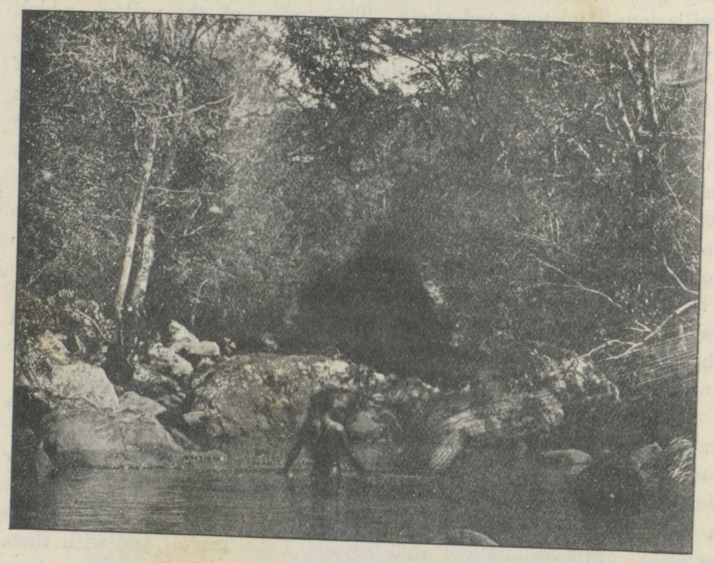
for a distance of five miles. I frequently saw the male members of the tribe, and tried to get them to approach the caravan, but in vain, and occasionally I met a few old women who had remained in their villages while the caravan passed them, and once a dozen hunters came into camp to sell ivory. I bought a few ornaments and a beautifully tanned goat-skin apron from the women, which were very like the things in use among the Turkana. Except for the goat-skin apron worn by the women, the Mushas contented themselves with the same cleanly nakedness that was the fashion from the Boran to the Egyptians. The taller mountain ranges of this country are of volcanic origin, and in many cases their slopes are covered with abominable brecchiated rock, principally granite, while most of the flat-topped hills are composed of argillacious sandstone and shale. The surface of the valleys, which are for the most part covered with bush and forest, is composed of the richest alluvial soil underlaid with clay. To the south of our line of march the broad, yellow, grassy plains were considerably below 1700 feet from the sea-level. In a large valley at the outskirts of this country we remained a week to rest the camels, where a shower or two of rain had freshened up the foliage of the mimosa bushes. A day or two before we left, the natives living in the vicinity began to come to camp, finding that we did not disturb them; and if we had remained longer, no doubt we should have been on intimate terms with the whole tribe. They did not care to sell me any sheep, however, and for this and various other reasons connected with my outfit of men and camels, I thought it best to push on. While here we had the last of the autumn showers.

Since the changing climatic conditions of East Africa is now a subject of much importance, I must not omit to mention some of my meteorological observations. It is well known that the "karif," or fierce winds, that sweep the Somali coast in the summer months are a part of the northern trade winds. Now, these northerly winds persisted until we had got well beyond Lake Rudolf, and with them came a little rain. It was the autumn rains that are expected in Somaliland in September which first struck us in a sudden burst after we had left the Dawa river on October 13. These rains followed us all the way to our camp of January 13. They were very scanty, but it was curious that they should progress so from east to west. Half a dozen slight showers were all that any particular section of country received. The reason that Somaliland and the lowlands to the south of Abyssinia are so dry must be found in the drying effects of the Abyssinian highlands on the northern trade winds, the lofty mountain ranges condensing all the moisture in the air, and allowing only a pitiful drop or so to work south. All the rivers and lakes which came under my observation were half dried up—surely because there was a scanty rainfall this year in the Abyssinian highlands. The

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004d

مكتبة قطر الوطنية
Qatar National Library

secret can only be solved by a study of the changes that occurred in the northern trade winds. Hardly had we left our camp of January 13 before we began to see the natives preparing for a spring rain, and a spring rain dependent upon the monsoon winds from the south, which gives life to Uganda and most of the East African Protectorates. Thus we had arrived at a point where the autumn rains of one country, dependent on the northern trade winds, would have met the monsoon rains coming from Madagascar had not these been extremely late in arriving this year, as they were in reaching India. The famine which we found to spread all along the upper Nile was dependent upon the same conditions as the famine in India, and the very low condition of



CEDAR VALLEY.

the Nile at Cairo was caused both by the changes in the monsoon and also by the northern trade winds, since the Sobat rises in Abyssinia.

On January 21 we ascended a steep pass to a long narrow plateau, over 3000 feet above the sea, the game path which we took leading us along a beautiful clear-flowing brook shaded by tall cedar trees. The accompanying photograph shows a pool in "Cedar valley" near our camp at the top of the pass, in which a Gurkha is to be seen following my example in having a delicious cool plunge. The men I had sent ahead, and who had found the trail up Cedar valley, did not go far enough across the flat top of the ridge, and consequently did not discover that this ended abruptly in a sheer precipice on the other side.

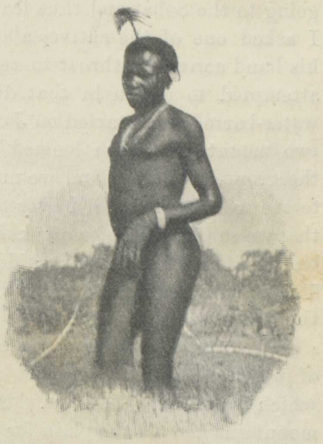
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000055

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Beyond, to the west and north-west, stretched a vast plain, as far as we could see. For a distance of about 30 miles the plain did not look so unattractive with its occasional little watercourses, fringed by many a pretty bit of green meadow or shady grove, but towards the horizon the monotonous greyish-white appearance of the surface looked very ominous. We spent three days on the top of the mountains in finding a game trail, and clearing this so that the camels could descend. Game was abundant, and it was in this country that I secured the specimens of the new gazelle, which I previously referred to, and also two varieties of buck, *Aurebia haggardi* and *Aurebia montana*.

At the foot of the hills we crossed at right angles the line of march of the late Captain Wellby. A couple of marches beyond this brought us to a large watercourse flowing west, where we found a new tribe of natives, the Magois. Noticing from the distance that the people were preparing for a fight and driving away their cattle, I pushed ahead with two boys, and persuaded them to desist from their hostile exhibitions. One stout young fellow in particular persisted for a long time in giving frequent leaps into the air to show that he would fight if called upon to do so, but this man proved afterwards to be as friendly and jolly as he was fat. He is shown in the accompanying photograph.



A MAGOIS YOUTH.

The Magois were distinctly different from any tribe previously met with on the journey in appearance and customs. They had the heavy build and large features, with high cheek-bones, of the Soudanese, and, above all, the lines of raised tattooing on their cheeks that is so typical of the people about the Nile. I believe that it is not unlikely that they are a branch of the Dinkas, who, perhaps, being driven from the Sobat by the Neurs, put the desert between themselves and their persecutors. They seem to care principally for small red beads, of which they had many already, some of them worked in gorgeous patterns on leather plaques, with which the warriors adorned their massive head-dresses. The most *outré* of our fashionable young men can never aspire to the height of collar worn by some of the Magois. With a collar of beads, which shoved their chin high up in the air, their locks done up in a great chignon, composed principally of clay covered with ostrich feathers, they looked the very pink of gay deceivers.

Parallel lines of raised tattooing on the chest and abdomen, leopards'

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000098

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

skins hung over the back, and a bell hung on a slender cord around the waist, helped to liven up the men's appearance. These are the only people whom I have ever seen wearing a zebra's tail suspended from the elbows. Many of the younger girls had rather attractive features and pretty figures, but I will not mention the appearance of the fair sex after they get to be twenty. The worst burden which they have to carry in life, however, seems to be the countless necklaces of beads which spread over their bosoms to the waist, and the large bracelets and anklets of ivory, brass, and iron. Their hair is shaved above the ears, and cut fairly close on the top of the head.

The Magois represented to us that if we went north-east again we would find a stream of water winding northward about the foot of the mountains into a bigger river a long way off, but I had no intention of going to the Sobat and thus leaving my work incompleted. Whenever I asked one of the natives about the plain to the west, he would draw his hand across his throat to represent that we must surely die if we attempted to march in that direction. However, we loaded up all our water-barrels and started on January 28 in a westerly direction, towards two mountains which loomed up on the plains. For a short distance the ground was firm, and we marched along swiftly, but then we came to the worst cotton soil I ever took men or beasts over. It was so loose that we sank in it up to our knees at one moment, while the next instant we stumbled in some crack hidden by a tuft of the coarsest yellow grass. The intense heat added to our burdens, so that we were glad to camp at the end of seven hours.

The next day's march was even worse than the first, and at the end of it I determined to stop and hunt for water about the two mountains, which were then near us. At the end of thirty hours the barren mountains and all the plain for many miles to the west had been scoured for water, but in vain. My animals had been nearly three days without food or water, so that there was nothing to do but to look disappointment in the face, and turn back to Magois. Two of my men found a stream, before reported by the natives, running north, where they told me there were many people and signs of cultivation. This was the stream I have since learned was followed by Captain Wellby to the Sobat. It starts in the mountains north-east of Magois, and not far away in the south.

Another of my scouts reported water directly east, and nearer the Magois, so in the afternoon of January 30 we started off in the direction indicated. My own Somali had been lying to me, since he had only seen what appeared to be a promising waterway, and took it for granted there was water in it without fully satisfying himself on the subject. Owing to this blunder we had one of the worst marches the next day that we experienced throughout the journey. From three o'clock in the morning until all hours the next night the wearied men and animals

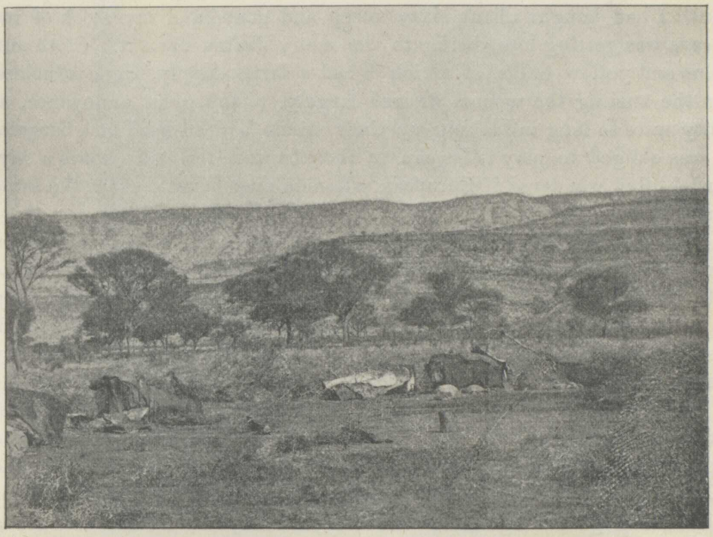
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000002

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

plodded on in intense heat, and over the same terrible ground, to a pool of water which I finally found in the Magois river-bed, not far to the east of the Magois villages. At midday I distributed the last of the water we were carrying, which gave the men three pints each, not enough for many of the men, especially the Indians, but sufficient for Frazer and myself, although we had harder work to do than any of the escort.

At 5 o'clock, when I reached water, there were only a few boys and two camels loaded with empty water-barrels with me. These barrels were soon filled and sent back to revive the broken-down men, who were being taken care of by my assistant many miles behind; and then



NEAR MAGOIS.

came the hunting up of the camels and donkeys, which had been deserted by their camel-men, and which were roaming about in the dark among the bushes with all their loads on them. All the men we got safely into camp during the night or the following morning, but I never recovered from the loss which I sustained in transport animals. Some five camels died within the next two days, and as many more within a fortnight; five donkeys were lost, not one of my two dozen sheep and goats ever reached camp alive, and many boxes were injured. I was obliged to throw away much valuable kit. Besides this, the men became so disheartened that they never afterwards recovered from their apathy. Two days after this found us back again among our friends the Magois.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

We determined now to follow the wady as far as we could, even though it took us a little south of west. Two short marches on February 5 and 6 brought us to a long pool of still water, but here the river-bed spread out in many little dried-up ditches, that lost themselves within a quarter of a mile in the plain. Here we found another branch of the Magois, who called themselves Katua, and represented that they were very independent of their immediate neighbours, and at war with a tribe called Toporan, living in the mountains west of Turkana. The Katua occupied a dozen large villages, and owned an immense number of cattle and other live stock. Although rich, they wore scarcely any ornaments, and did not care much for any other kind of beads than the wonderfully fashionable little red sim-sim. Trading went on merrily until I had bought about sixty sheep and goats, and my stock of red beads was getting low, owing to the many drains upon it. Cloth and blue and yellow beads, of which I had a large supply, were valueless. In the trading the women figured largely, to my great annoyance, as they were so long in making up their minds, and so hard at a bargain. I was obliged to play salesman to these women for many hours a day, and I often wondered if European salesmen ever have to exact the same amount of patience.

To my surprise, I discovered these people to be cow worshippers, and to indulge in certain rites which were supposed to be peculiar to the Hindoo religion. Plastering themselves with cow-dung, and throwing bits of dried *bois de vache* at every one and everything they liked, seemed to be a matter of much import to them, and occasionally some old man or woman would be quite unmerciful in giving me a too generous dusting. The origin of this cow worship is presumably the same with the Katua as with the Hindoo, traceable to the great dependence placed upon the animal for sustenance. The Katua eat the cow, but all their people turn out when the beast is killed, and go through much ceremony. They would not sell me a single cow.

We were again confronted by the waterless plain to the west, but to the south-west, however, rose a mountain range 40 miles away, that I thought must surely provide water, and thither I accordingly sent Ali Esa, whom I had made headman, and seven other Somalis with a week's supply of water and food to reconnoitre. I employed my time that was not given up to trading, in surveying and collecting and studying the natives, of whose language I made a short vocabulary.

Just here, for the first and only time on the journey, I found a number of Rüppel's reed-buck, the original *Cervicapra bohor*. This animal was first described by Rüppel nearly eighty years ago from a skull, probably brought down the Nile by traders, but it was not until the arrival of my complete specimens at the museum that all the characteristics of the animal were known. It stands 40 inches at the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008d

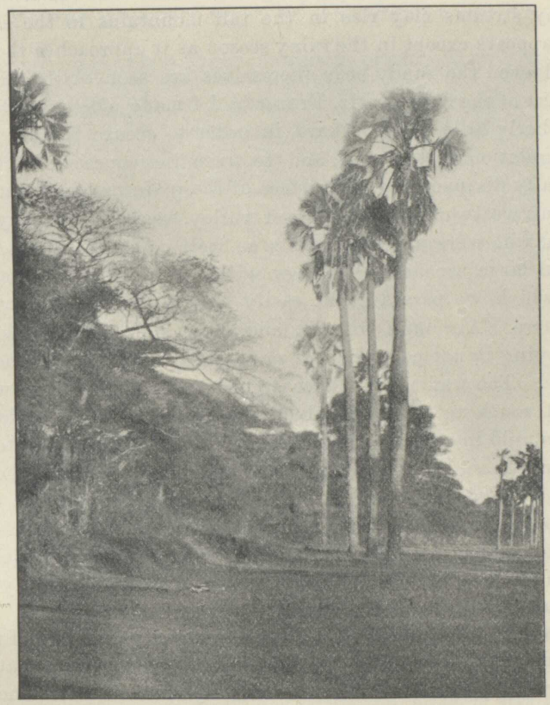
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

346

shoulder, and is remarkable on account of its pretty light yellowish hair, and the peculiar forward bend of its horns.

The natives were very busy moving their villages to the hills in anticipation of the spring rain, and by the time my scouts returned, there was scarcely a soul left in the huts by the river. Ali Esa returned on February 12, and, to my great relief, reported water and people at the mountains before mentioned. We set out, therefore, once again across the abominable plain, and after four long marches arrived on



RAFFIA PALMS, COUNTRY OF THE AKARA.

February 15 at some wells situated among pretty hills, the most northern extension of the Uganda highlands. Far away to the south we got glimpses of great rocky masses, towering about 7000 to 8000 feet above the level of the sea. The friendly natives, who are called Akara and Dinka-Dings, did not understand a word of the Magois language, nor were they as heavily built or as black as the latter. Fairly tall and slender, with small features and moderate-sized noses, they resembled the Masai more than they did the Sudanese. They are again different to the Latuka, their immediate neighbours on the west.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005f

مكتبة قطر الوطنية
Qatar National Library

Two more marches in a north-westerly direction took us across as many very broad dry river-beds, in which the groves of handsome raffia palms, with their ripe yellow fruit, made a great display. The country was very thickly populated by the Akara, who seemed delighted to have us come among them.

According to old maps of this region, which were founded entirely on native reports, several running rivers should have been crossed by us on our journey from Lake Rudolf, one large one running north into the Sobat, and several others running north-west into the Nile. However many streams may rise in the tall mountains to the south, the water disappears except in the rainy season as it approaches the ghastly plain, and even the sandy beds themselves are soon obliterated in this great desert of the Sobat. Mr. Frazer and I made side trips to all the most northerly hills of the Akara, in order to secure further bases for the triangulation to the west, and to trace the courses of the wadies, which finally disappear on the surface of the plain not far from Katua.

Keeping westwards across a broad valley, we came to many more of the Akara, who were agriculturalists as well as stock raisers, and had substantial large wooden dwellings with peaked roofs. Some of the villages which we passed could easily have contained fifteen hundred souls or more. Although friendly and eager to trade, the Akara were very annoying in not pointing out to us where water lay to the west of each camp. The wadies, which contained water in pools and wells, ran only from south to north, and I suppose the natives thought me excessively stupid in not following these river-beds instead of intersecting them at right angles, which involved long marches across hot plains and a hunt at the end for water.

Near our camp of February 21, in a large open forest, I shot a male and female spotted bush-buck (*Tragelaphus bor*, Heuglin), much to my delight, since they are the only specimens of this beautifully marked animal that have ever been secured.

On the 22nd we rounded the extreme northern end of one of the arms of the Dinka-Ding mountains, and camped near some villages at Lumin. A plain or valley similar to the one we had just crossed stretched before us to another arm of the southern highlands. We had some water difficulties crossing this plain, since my few remaining camels were loaded heavily enough without my burdening them with water. Some camel gave out almost every march, which necessitated my throwing away more and more loads. Although there was much to interest me, I cannot reflect on my journey from the time we reached the great desert of the Sobat until we arrived at the Nile with pleasure unalloyed, for shoving along a caravan of dying camels and would-be dead Indians, by the help of careless Somalis and a few tired though good Indians, for many weeks is a thing that one cannot forget. We were soon to meet more Sudanese tribes, the Latuka, together with the Okatela and Beri.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000029

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Akara, Dinka-Dings, Turkana, Mushas, Mursu, and Murle seemed to belong to the Masai and to the aboriginal pigmies who live north of Lake Stefanie, and to have nothing in common with the Sudanese.

On February 27 we reached some pools of water on the plain, not far from the Okatela mountains, and the same afternoon my boys reported many natives to be watching us in a suspicious manner. Two of my Somalis, whom I had sent to the mountains in search of water for our next march, came back in the evening with strange tales of the natives trying to surround them and take them prisoners. They also



TRAGELAPHUS BOR (HEUGLIN).

reported very many large villages in the hills. I wished to pass around the northern end of the mountain range and proceed straight to Lado, but the reported attitude of the natives decided me on taking the southern route to Tarangole. Although there was but slight danger of not succeeding to come to friendly terms with the natives, I was particularly anxious just here to avoid any risk even of a fight, since I was near Tarangole, the most northerly point of Colonel Macdonald's expedition, where friendly arrangements had been entered into between the British Government and the native chief. Two marches brought us to Omin, a very large village near Tarangole, perched on a hill called Alanga at the foot of the mountain. During most of the morning's march crowds of natives, armed with spears and bows and arrows,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008b

مكتبة قطر الوطنية
Qatar National Library

followed the caravan at some distance in an unfriendly manner. After a time, however, others more civilized from near Omin joined them, and these latter approached to within 100 yards and made friendly advances. The best course for me to pursue was to go over to these people without escort, and the result was even more than I expected. In a couple of minutes the natives were crowding round me, patting me on the back and grasping my hand in a rather annoyingly familiar manner, that showed plainly enough that they were greatly relieved to find that we were not a hostile party of Egyptians or Mahdists, from both of whom they had received many unwelcome visits since Sir Samuel Baker's time.

At Omin we found quite a number of blacks dressed in loose white cotton suits, such as are worn by Sudanese townspeople, or occasionally in Dervish "jibbas." Each man who wore any clothing carried some old musket or rifle, of which he was immensely proud, even though the weapon were useless. The people were all under the chief Amara of Tarangole and Loguren, who only allowed those who carried rifles to wear clothing, or who, in other words, gave to any bit of cloth the dignity of a uniform. Whenever a man laid aside his rifle he also disembarrassed himself of all clothing. There were strangers here from many Sudanese tribes, some of them deserters from the Khalifa's forces after the Belgians had destroyed the Dervish influence on the upper Nile.

It was an agreeable change to meet natives who had some knowledge of Europeans, and with whom we could converse through the medium of Arabic. The great strength of the people, however, lay in the magnificent physique, pluck, and skill in the use of the spear and bows and arrows of the proud young men who never knew the use of cloth, and who do not imagine that there is a power on earth equal to that of their king Amara. The one great ornament of these warriors is a heavy helmet made of brass plates, laid together on a frame of interwoven grasses. It has the appearance of a solid brass Crusader's casque, and when worn easily by jaunty and graceful warriors the effect is most striking.

We spent nearly two days at Omin, during which time I arranged for a rendezvous with chief Amara, at a village called Lorkale, some 6 miles north of his capital Loguren, and near Tarangole. Since I had now picked up many points of Colonel Macdonald's survey, and found them to have been relatively very correct, as were those of Major Austin at Rudolf, I dropped my triangulation after leaving Omin, and carried on my chartographical work to the Nile by means of a pocket compass and dead reckoning. I had wrongly judged that the country to the west of Tarangole had been thoroughly explored by Emin Pasha, Sir Samuel Baker, and by members of the Macdonald Expedition, but I find my map to be the only one giving any detail.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000012

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [348r] (48/232)

BRITISH LIBRARY

On March 2 a tramp of four hours west, principally through a highly cultivated country, brought us to Lorkale, where we were joined by King Amara in the afternoon. We were quite unprepared to receive so great a chief. Accustomed as we had been to meet with petty chiefs ruling generally but a single village, we were rather taken aback at the display made by this commander of perhaps 25,000 warriors on his visit to our camp. He was accompanied by a flag-bearer and about 200 soldiers with rifles, and clad in various kinds of uniforms, principally white with gay-coloured sashes and turbans, and by a much larger following of archers and lancers, naked except for their quick-flashing, bright helmets. Everything about Amara was "spick and span," from his dark blue uniform of a Uganda rifleman to the European saddle upon his mule.

I received him with all the honours that I could command with my insignificant though trained escort, for it was deemed a great honour that he should pay me the first visit. His curiosity as to how I had come was too great, however, for him to wait until I called on him. It took him a long time to grasp the fact that we had not wandered either from Uganda or Egypt; and from the many questions he asked, it was apparent that the fact that we had come directly from the far East exercised a great moral influence over him, which I was pleased to think could not be otherwise than for the good of European interests on the upper Nile.

In return for the many presents which I made him, he gave me much durrha flour, honey, and ground nuts, but it was not until I had bidden him accept a large leopardine blanket that covered my bed that his heart really warmed towards me. I am sure he has never owned anything which pleases him more than this rug, which resembles the skin of some marvellous species of the cat family. Not only did the king at once send for an escort and guides for us, but he insisted on having a large tusk brought me from his village, to my regret, for I am afraid a poor native had some of his bones broken in consequence, if he did not fare worse. This man had made a mistake, and instead of bringing the tusk the king had ordered, he arrived at midnight with two ridiculously small cow tusks. Amara was so enraged that, picking up one of the latter, he began beating the wretched messenger in a terrible manner.

The smiling chief had suddenly turned into such a ferocious brute that when I endeavoured to prevent his killing his subject, he at first turned upon me a pair of eyes so full of passion that I feared lest he might deal his next blow at me, but I pretended that I had only interrupted him to praise the two small tusks, with which "I would be delighted," etc., and thus managed to quiet him. The unconscious body of his victim was almost hurled out of camp, and others sent to bring the proper tusk, which did not arrive until two o'clock in the morning.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [348v] (49/232)

Amara was a splendid specimen of a Sudanese, over 6 feet in height, very broad and muscular, and with a strong, handsome face. But for his outburst of passion, which lasted but a minute, I should have thought him most cheerful and amiable.

Two long marches on March 3 and 4 brought us to a village where we were visited by a lady chieftain. I followed out my custom of offering a chair to a recognized chief, but I must confess the position was rather strange to me to be sitting with a well-formed young lady clad in the same manner only as Gunga Din, and talking over weighty affairs involving the welfare of her subjects with the latter. Her name was Kari, but she behaved herself in such a dignified manner as to preclude any idea that she would have recognized a name such as Caroline. The day after this we reached the village of the chief Uri Sube, the last of the villages under King Amara. From here on until we reached Loker we found ourselves in territory belonging to the Lukoyu, who inhabit principally the hills to the south, and possess but a few scattered hamlets in the bushy, wild plain through which we passed. We had much difficulty in cutting our way through the low forests and dense bush, occasionally getting tangled up in bamboo jungles, which we here encountered for the first time.

I heard from Amara that there was an Englishman stationed on the east bank of the Nile considerably south of Lado, so I abandoned my intention of going to the Belgians on account of the pleasure I felt it would give me to talk once more to an English officer, not dreaming that I could not enjoy the same benefit in the Uganda Protectorate that all civilized countries extend to visitors—that of being able to leave my valuables in bond at a frontier post, if I did not intend to enter them in the country. I firmly anticipated finding the Nile open, so that I could take my outfit to Cairo either in steamers or canoes. The first great disappointment came at Loker's, a large settlement situated almost on top of the long mountain which can be seen from the Nile 25 miles east of Fort Berkeley or Rejaf. On reaching here on March 10 we were informed that no steamers had come up the Nile, and that, furthermore, there were no canoes to be had. We were all cut up by the news, for my transport had already given out, and I was obliged to leave thirteen loads with the chief Loker to hold until I sent back for them. However, we reached Fort Berkeley on March 14, 1900, and although I was much pained at the extortions which were enforced upon me by the Government, according to Uganda Protectorate regulations, I shall never regret having touched an English outpost, from the simple fact that I met Captain Wm. K. Dugmore of the Uganda Rifles, and remained with him as his guest for nearly seven weeks.

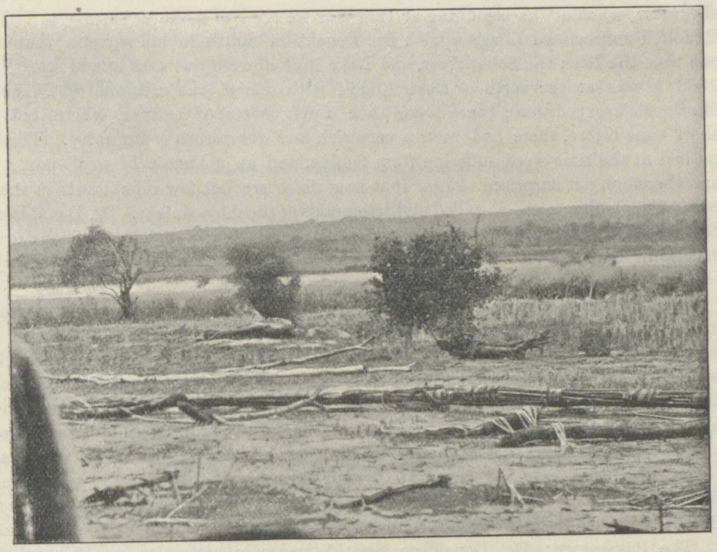
I only wish I could look upon some other officials with whom I came in contact at Aden and Berbera with nearly the same respect as I do my good friend and hospitable host at Fort Berkeley. Learning from

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

despatches to Captain Dugmore, three months old, that "sudd" cutting had been begun on the Nile, I kept my men for nearly a month at the post, hoping that a steamer would come up the river and take us out *viâ* Omdurman. But on April 13, I found it necessary to send Mr. Frazer with all my men to Mombasa, except my cook and my bright Gurkha orderly, Hasap Singh. Famine was raging throughout the upper Nile districts, and had it not been for the great kindness of the Belgians in giving me grain, I could not have kept my men at all. I was obliged to remain longer myself, since I could get no transport for my collections and kit; and I had just made arrangements with the Belgians to go down



THE NILE AT FORT BERKELEY.

the Congo, a journey of four months in the rains, to the west coast, when, to my joy, Major Peake turned up in a gunboat, after having cut through the "sudd," and most kindly took me away with him on May 5, on his homeward journey of 1100 miles to Omdurman.

I reached Cairo the beginning of June, just ten months from the time of starting from the Somali coast for the interior, and a fortnight later found me in London with my collections safely installed at the British Museum of Natural History, to which I am presenting the most valuable of my specimens. The Academy of Natural Sciences of Philadelphia will also receive a large share. The collections include several hundred different species of birds, mammalia, plants, reptilia and batrachia, fishes, butterflies, etc.—a good number of them new to science.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

I am much indebted to the Indian Survey Department for the loan of a valuable set of surveying instruments, by which I was enabled to lay down in detail over 500 miles of previously unmapped country between occasional known lines.

Before the reading of the paper, the President gave his introductory address (see p. 597). After the paper—

Major R. G. T. BRIGHT said: I have listened with very much interest to Dr. Donaldson Smith's paper. It is, perhaps, doubly interesting to one who has had the good fortune to pass over much of the country which he has traversed. Judging from the amount of water which Major Austin and I found in the country south of the Sobat, when at the beginning of this year we tried to make a journey to Lake Rudolf, I am inclined to agree with Dr. Donaldson Smith in his surmise that at one time the Nile, the Sobat river, and Lake Rudolf were one vast inland sea. In 1898 I was at the north of Lake Rudolf with one of the columns of Colonel Macdonald's expedition; there were then a few wretched natives, where, but a short time before, there had been a very rich and prosperous community. These natives at the time were suffering from famine, and an epidemic of small-pox. I am, therefore, not surprised to hear that now there are but few inhabitants in that part. This is due to the so-called civilizing raids of the Abyssinians. Dr. Donaldson Smith will, I am sure, not rest long. He has already led several expeditions to a successful issue, and I wish him, as in the present case, safe and many happy returns.

Dr. BOWDLER SHARPE: Dr. Donaldson Smith has on his former, as on his present expedition, greatly benefited zoological science, and his discoveries are quite on a par with the wonderful new facts which he has brought from the countries through which he has been. You have heard from the paper that we have at the Natural History Museum five new specimens of mammalia. I have not quite finished the birds, but there are certainly some new species, and many of great interest, especially from that new part of Africa which has not been visited by a naturalist before. I need hardly say that the British Museum thanks him on this occasion, as it has on former occasions, for not having forgotten zoological science. He has presented us with those specimens which we before had not in the Museum.

The PRESIDENT: Dr. Donaldson Smith's paper is certainly one of peculiar interest, even apart from his description of a new and almost entirely undiscovered region. I was particularly struck by the remarks (very important remarks, I think) he made respecting the meteorology of this country. The desert lands, especially to the eastward, are caused by the winds from the north blowing over the mountains of Abyssinia, and being thus wrung perfectly dry, coming down on their southern sides as dry winds. This no doubt accounts for many phenomena connected with the regions south of Abyssinia; but it requires a great deal more careful study, and this is a point of some importance, as the country will hereafter become a British settlement. Possibly connected with this question is the very remarkable fact that the whole fauna, both birds and mammals, appears to change as soon as Lake Rudolf is passed. There is a different fauna on the eastern to that on the western side. In considering the paper of Dr. Donaldson Smith, all these points give rise to reflection; but we get very little idea of the important geographical work he has done from simply listening to his paper, even when taken in conjunction with the paper he read to us a few years ago. He has not only explored a new region, but has done so with the greatest care; and has made a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

most valuable series of surveys by triangulation. He produced on his first journey a number of extremely valuable maps, and will, I have no doubt, do the same with regard to his latest journey. He has also made, as Dr. Bowdler Sharpe told us, a most important collection of specimens of mammals and birds, as well as of batrachians and other lower forms. All this, I think, places Dr. Donaldson Smith in a very high position as an explorer of unknown countries, and I think that he deserves the highest praise that can be bestowed on him by geographers. I now propose a very cordial vote of thanks to Dr. Donaldson Smith, which I feel sure will be carried unanimously.

Note on Dr. Donaldson Smith's Map.—Heights determined by many boiling points, as well as aneroid observations. As far as Lake Stefanie the positions were determined by triangulations based on points fixed by me in 1895, aided by frequent astronomical observations with theodolite, three chronometers, and sextant. Between Lake Rudolf and Tarangole I depended upon triangulation almost entirely, aided by occasional astronomical observations for latitude. The base for this was plotted in the vicinity of the northern end of the lake from my previous observations, from a new set of measurements, and from points laid down by Major Austin.—A. D. S.

THE VOYAGES OF DIOGO CÃO AND BARTHOLOMEU DIAS, 1482-88.*

By E. G. RAVENSTEIN.

When Prince John, on August 26, 1481, and at the age of twenty-six, ascended the throne of his father Affonso, he found the royal treasury empty, and his ambitious nobles, jealous of their feudal privileges, ever ready to defy the authority of their king. But John was strong and energetic where his father had been weak and vacillating, cautious where he had been rash and regardless of consequences. Wise measures of administration once more filled the royal coffers, and a strong hand crushed the nascent conspiracy of the nobles.

The Guinea coast by this time had been explored as far as Cape S. Catharina. Lopo Gonçalves had been the first to cross the line; Fernão Po is credited with having discovered the Ilha Formosa, which now bears his name, in 1472; whilst Ruy de Sequeira, "about the same time," according to Galvão,† followed the coast as far as Cabo de S. Catharina (November 25), and also discovered the islands of S. Thomé (December 21) and S. Antonio (January 17).‡ This last subsequently

---

* The substance of this paper was communicated at the Toronto Meeting of the British Association in 1897. For a notice of the maps referred to, see the Appendix. Maps, p. 712.

† Antonio Galvão (b. 1503, d. 1557), 'The Discoveries of the World' (1555, London; Hakluyt Soc., 1862), p. 75.

‡ Faria e Sousa ('Asia Portuguesa' (Lisbon, 1675), i. p. 18; iii. p. 529) credits João de Santarem with having explored the coast as far as Cabo de S. Catharina in 1471—a most unlikely thing to have happened. Lopez de Lima ('Ensaios sobre a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00007d

مكتبة قطر الوطنية
Qatar National Library

became known as Ilha do Principe, that is the island of Prince John, the future King John II., who had enjoyed the revenues of the Guinea trade ever since 1473.*

The Guinea trade by this time had become of importance, but since the termination in 1475 of the monopoly granted to Diogo Gomes nothing had been done to expand it; nor had steps been taken to render effective the claims to sovereignty put forth by Portugal. Hence foreign interlopers made their appearance on the coast, and during the unfortunate wars with Castile (1475–80) entire fleets sailed from Spanish ports to share in the profits of the trade there.

One of the first measures taken by King John was to put a stop to these irregularities. Royal ships were sent out to protect Portuguese interests, and on January 20, 1482, Diogo d'Azambuja † laid the foundations of the famous Castello de S. Jorge da Mina, which was the first European settlement on the Gold Coast, and the centre of Portuguese activity up to 1637, when it was captured by the Dutch.

The First Voyage of Diogo Cão, 1482–84.

When King John had thus attended to what he conceived to be his more immediate duty as a king and ruler, he took up the long-neglected work of his uncle Henry, for he was both "a good Catholic, anxious for the propagation of the faith, and a man of an inquiring spirit, desirous of investigating the secrets of nature." ‡

Diogo Cão, whom the king selected to initiate this work of exploration, was a "man of the people." Genealogists have provided him with a noble pedigree, but he was in truth the descendant of one Pedro Affonso Cão, or Cam, who, in the days of King Diniz (1279–1324), had been one of the bailiffs of Villa Real in Traz os Montes, and of his wife, Briolanja da Nobrega.§ In the patent of nobility of 1484,‖ by which the king "separated him from the common herd," the past services of

Statistica das Possessões Portuguezas' (Lisbon, 1844), ii. p. v.) makes him at the same time the discoverer of the Guinea islands, including Annobom, or New Year's island. This island, however, was only discovered at a much later period, and independently of the other islands, for it is absent from Soligo's chart (1485), and is shown on early charts as lying to the south or even south-east of St. Thomé, when it really lies to the south-west. The island was no doubt discovered by a ship attempting a "short cut" across the Guinea gulf, and carried upon it by the equatorial current. If Duarte Pacheco Pereira (b. 1450, d. 1533) ('Esmeraldo de situ orbis,' p. 78) tells us that S. Thomé and S. Antonio were "discovered" by King John, we may be permitted to assume that this "discovery" took place when King John was still heir-apparent.

* For documents proving this, see 'Annaes mar. e col.,' v., 1845, p. 38.

† Luciano Cordeiro, 'Diogo d'Azambuja.' Lisbon, 1892.

‡ Ruy de Pina, 'Chronica d'El-Rei D. João II.' (Lisbôa, 1792), ii. t. 57, p. 144. (Ruy de Pina and Garcia de Resende were cavaliers of King John's household.)

§ See Sisera de Sanches de Baena (*Boletim Lisbon Geogr. Soc.*, 1886, p. 55) and Luciano Cordeiro (*ib.*, 1892, p. 109).

‖ See this patent in full in L. Cordeiro's 'Diogo Cão' (1892), p. 75.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the recipient of the honour are referred to, and also those of his valiant father, Badalhouce, and of his grandfather, Gonçalo Cão, who may have fought in the famous battle of Aljubarrota (1385), when the Castillian pretender was routed, and the king, duly elected by the Cortes, got his own. Among the services rendered by Diogo Cão himself may be instanced the capture of three Spanish vessels on the Guinea coast in 1480.*

We do not know whether Cão was given the command of one or of more vessels, nor have the names of any of his officers been placed on record. But when we turn to ancient maps, we meet with a Rio do Infante, a Golfo de Alvaro Martins, a Cabo de Pero Dias, a Rio de Fernão Vaz, an Angra de João de Lisbõa, an Angra de Ruy Pires, and a Serra de Corte Real. There can be no reasonable doubt that the names attached to these bays, capes, or rivers are those of persons who were with one or more of the expeditions engaged in the discovery of these coasts. Of João Infante, Alvaro Martins, and Pero Dias, we know that they were with Dias, and may previously have been with Cão. João de Lisbõa won great distinction in the course of time, and in 1525 was appointed Piloto mór of India. Unfortunately, he died the year after.† Fernão Vaz may have been the pilot who, in 1486, witnessed the agreement between Fernão Dulmo and João Affonso do Estreito about the search for the Sette citades; who got into disgrace for poisoning his wife, and was himself poisoned by his mistress in 1502.‡ The name of Côrte Real we find on Behaim's globe only, and as the Côrte Reaes of Terçeira were a family of seamen, it is quite possible that a member of it may have joined one of these expeditions, perhaps Gaspar, the alleged discoverer of "terra nova." It is, however, quite possible that Behaim merely intended to pay a compliment to a family with whom he was distantly related.§ Of Ruy Pires we know nothing.

Cão was the first to carry "padrões," or pillars of stone,‖ on an exploring voyage. Up to his time the Portuguese had been content to erect perishable wooden crosses, or to carve inscriptions into trees, to mark the progress of their discoveries. King John conceived the happy idea of introducing stone pillars, surmounted by a cross, and bearing, in

* For an account of this capture by Eustache de la Fosse of Doornick, who was in one of the Spanish vessels, see Duro (*Bol. Geogr. Soc. of Madrid*, 1897, pp. 193–195).

† Sousa Viterbo, 'Trab. naut. dos Port.,' i. pp. 187, 255.

‡ Sousa Viterbo, *loc. cit.*, p. 304.

§ Behaim's brother-in-law, Jobst Hürter, junr., married the youngest daughter of Fernão Vaz de Côrte Real. See E. do Canto, 'Os Corte-Reaes' (Ponta Delgada, 1883), p. 23.

‖ On these padrões see two 'Memorias,' by A. Magno de Castilho (Lisbon, 1869 and 1871), and Luciano Cordeiro, "Diogo Cão" (*Boletim Lisbon Geogr. Soc.*, 1892).

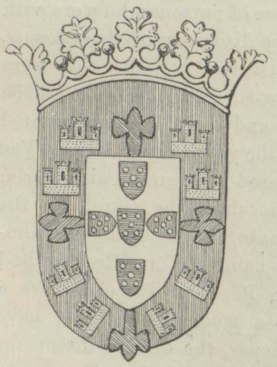
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

addition to the royal arms, an inscription recording in Portuguese, and sometimes also in Latin, the date, the name of the king by whose order the voyage was made, and the name of the commander. The four padrões set up by Cão on his two voyages have been discovered *in situ*, and the inscription upon two of them (one for each voyage) are still legible, notwithstanding the lapse of four centuries, and have been deciphered.

During the first voyage two padrões were set up—one at the Congo mouth, the other on the *Cabo do Lobo* in lat. 13° 26′ S., now known as Cape St. Mary. The latter has been recovered intact. It consists of a shaft 1·69 m. high and 0·73 m. in circumference, surmounted by a cube 0·47 m. in height and 0·33 m. in breadth. Shaft and cube are cut out of a single block of lioz, a kind of limestone or coarse marble common in the environs of Lisbon. The cross has disappeared, with the exception of a stump, from which it is seen that it also was of stone, and fixed by means of lead.



THE ARMS OF PORTUGAL UP TO 1485.

The arms of Portugal carved upon the face of the cube are those in use up to 1485, in which year João II., being then at Beja, caused the green cross of the Order of Avis, which had been improperly introduced by his grandfather, who had been master of that order, to be withdrawn and the position of the quinas, or five escutcheons, to be changed.*

The inscription covers the three other sides of the cube. It is in Gothic letters and in Portuguese, and reads as follows: "In the year 6681 of the World, and in that of 1482 since the birth of our Lord Jesus Christ, the most serene, most excellent and potent prince, King D. João II. of Portugal did order (*mandou*) this land to be discovered and these padrões to be set up by Dº Cão, an esquire (*escudeiro*) of his household." There is no inscription in Latin.

As the year 6681 of Eusebius begins on September 1, 1481, we gather from this inscription that the order for the expedition was given between January and August, 1482. Of course the departure may have been delayed, but the delay cannot have been a long one, as Cão was home again before April, 1484.

* See Ruy de Pina, 'Chronica d'El-Rei D. João II.' (Lisbon, 1792), p. 64; Garcia de Resende, 'Chronica' (Lisbon, 1752), p. 27. The exact date when the change was made is not given, and Sr. José Bastos, the learned keeper of the Torre do Tombo, informs me that there are no documents in his charge which would enable him to settle the point. The change was obviously made prior to the introduction of the new coinage in June.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Further light is thrown upon Cão's first voyage by a chart of Cristoforo Soligo, evidently drawn immediately after his return, a notice of which we give in the Appendix. Apart from this, we are dependent upon João de Barros and the chroniclers Ruy de Pina and Garcia de Resende.*

Cão may thus be supposed to have left Lisbon about the middle of 1482—say in June. He called at S. Jorge da Mina for supplies, and then made straight for Cabo de Lopo Gonçalves. His progress south along this coast was necessarily slow, for the current sets to the northward, the winds are southerly, and the surf is heavy. Only on rare occasion is the mariner favoured with a current setting to the south. He is dependent, therefore, for his progress upon a judicious use of land and sea-breezes. Leaving behind him the Cabo de S. Catharina, with its "tree" marking the furthest point reached by the seamen employed by Fernão Gomez, the Cape of Pedro Dias,† and the wooded hills of the Holy Spirit, Cão seems to have made a first stay in a bay merely described as "Angra" on Soligo's chart, but named Gulf of Alvaro Martins on others, and now known as Mayumba bay. He then left behind him a country of heavy rains and most luxuriant vegetation, and entered upon a region occasionally actually arid. Passing beneath the Paps of Bamba (*os duos montes*), and along a coast for the most part cliff-bound, he entered the Bay of Loango, which must have taken his fancy, for he called it *Praia Formosa de S. Domingos*. It is possible that he arrived here on that saint's day, that is on August 4. Passing thence to the south, and along fine red cliffs (*barreiras vermelhas*), Cão become soon aware that he was approaching a large river, for when still 5 leagues out at sea—as a legend on Soligo's chart tells us—he found the water fresh—by no means an exaggeration, for islands of floating vegetation coming out of the Congo have been encountered 100 miles from its mouth, and 9 miles to seaward the surface water is quite fresh.‡

Great must have been the astonishment—nay, terror—of the natives when for the first time they saw rising above the horizon the sails of a white man's vessel; and beheld the bleached faces of its inmates. Cão sailed up the river § for a short distance, and at once entered into friendly relations

* According to Ruy de Pina, Cão's first voyage was undertaken in 1485–86; according to Barros ('Da Asia,' Dec. I., liv. iii. c. 3), in 1484–86. Both suppose Cão to have gone no further south than the Congo.

† Corrupted into Pedras point.

‡ 'Africa Pilot,' Part ii. (London, 1893), p. 154.

§ The Congo seems at first to have become known as Rio do Padrão, and river of the Mani Congo; but Duarte Pacheco already knows one of its native names, Nzadi, though in the corrupted form of Emzaze.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000060

مكتبة قطر الوطنية
Qatar National Library

with the natives. Physically, they resembled the negroes of Guinea, but the interpreters whom Cão had with him failed to make themselves understood. The natives came freely on board to barter cloth in exchange for ivory, and gave their visitors to understand by signs that far in the interior there lived a powerful king. Cão at once despatched some Christian negroes to this king as his ambassadors. They were, as a matter of course, the bearers of suitable presents,* and were instructed to assure the king of the friendly intentions of his visitors from Portugal, and of their desire to trade. The native guides promised to bring these messengers back within a certain number of days.

Before leaving the Congo for the south, Cão set up the first of his padrões, emphatically called "the first" on Canerio's chart. It stood on Shark point (and not on Padron point of our chart), and was dedicated to S. Jorge, a saint for whom King John felt a "singular devotion." We learn from Fathers Cavazzi and Merolla† that the Dutch, when they occupied the Congo in 1642, wantonly destroyed this memorial of Portuguese enterprise. Merolla, who saw the fragments in 1682, was able to trace the royal arms and an inscription, of which unfortunately he made no copy. A tall wooden cross was subsequently erected on the spot where the pillar stood, and an oratory built near it where masses might be said.‡



THE PADRÃO OF SÃO JORGE.

The fragments of the padrão were appropriated by native priests, who looked upon them as most potent fetishes. Sr. Sori saw them in 1859;§ Burton visited the locality in 1863;‖ and Baron Schwerin, guided by Sr. F. J. de França, did so in April, 1887. The baron caused the bandages in which the fragments were wrapped up to be removed, in honour of which event the *Massebi*, a Portuguese gunboat, fired a salute.

---

* The damask petticoat which the king wore when he received Ruy de Sousa in 1491 is said to have been given him by Cão (Barros, 'Asia,' t. I. i. p. 231).

† Cavazzi, 'Istorica descrizione de tre' regni Congo,' etc. (Bologna, 1687), p. 319; Merolla, 'Relatione del viaggio nel regno di Congo' (Napoli, 1692).

‡ This plain statement disposes of the absurd story told by the Portuguese in 1859, according to which the padrão was broken by cannon-balls fired from an English ship, and that its fragments would have found their way to the British Museum had not the boat in which they were being conveyed on board capsized. (L. Cordeiro, *Boletim Lisbon Geogr. Soc.*, 1892, p. 152; and *Transactions South African Philos. Soc.*, 1898, p. 298.)

§ Sr. Sori's 'Descobrimentos dos Portuguezes nos Seculos, xv. e xvi.,' we were unable to obtain, and we take this information, together with our illustration, from Castilho's 'Os Padrões' (Lisbon, 1869), p. 17.

‖ Burton, 'Two Trips to Gorilla Land' (London, 1876), i. p. 59.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Mr. Dennett * examined the fragments in May of the same year. There were two large pieces, as shown in our illustration, and two ball-shaped pieces, 7 and 9 inches in diameter, lying at their foot. The material was a coarse white marble. The two larger fragments are now in the museum of the Lisbon Geographical Society.

The very hideous monument set up in 1859 by Sr. Sori was fortunately washed away by the sea in 1864. It was replaced, in 1892, by a memorial of better design, but still vastly inferior to the original padrão.

It is to be presumed that Cão, when, after a delay which may well have extended over several months, left for the south, was able to gain a fairly complete knowledge of the coast, for his progress must have been slow. We know from Soligo's chart that he discovered a river, which he named after Fernão Vaz,† as also the low sandy Ilhas das Cabras (Goat islands), off the modern city of Loanda.

Making a long stretch from the coast, Cão never noticed the most important river along the coast, the Kwanza, although its clayey waters discolour the sea for 10 or 15 miles. It is curious that none of his immediate successors should have been more fortunate. The river is not mentioned in Pacheco's 'Esmeraldo,' and is apparently shown for the first time on a chart of P. Reinel, who already knew its native name.

A remarkable headland, which from some bearings appears as a double peak, was appropriately named by Cão, "A terra da duas Pontas." It is now known as the "Morro," or hill, of Old Benguella. Further south, Cão seems to have examined the mouth of the Catumbela, for Rio do Paul—river of the swamp—is a very appropriate name for a river which, after the rains in March and April, overflows its banks and converts a great extent of country into a swamp or marsh. As Cão called the bay to the south Angra de St. Maria, he may have been in the vicinity of this river on Lady Day, March 25, 1483.

The bold granitic cliffs immediately to the south of Ponta Choca (13° 17′ S.) became known as Castello d'Alter pedroso;‡ and about 10 miles beyond, on a low point, which he called "Cabo do lobo" (seal point), Cão erected his second padrão, which was dedicated to St. Augustin, from which it must not be inferred that it was erected on August 28, as these dedications were made in Portugal. At the back of this cape, now known as St. Mary (13° 26′ S.), rose a Monte negro (black mountain), and Pacheco § tells us that it was called Ponta negra, or Preta (both meaning black point), because of a "black" trump, "manilha negra," which was played here in a game of manille. This

* Dennett, *Jour. Manchester Geogr. Soc.*, iii., 1887, p. 122.

† The river Dande. It is shown on Soligo's chart.

‡ Alter pedroso is a village near Portugalete, belonging to the Order of S. Bento; Diogo d'Azambuja was commander of this village ('Esmeraldo,' p. 68).

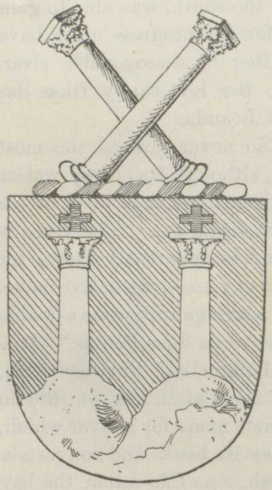
§ 'Esmeraldo,' p. 85.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000068

مكتبة قطر الوطنية
Qatar National Library

padrão has already been described by us. It was the second and last set up during this voyage, and Soligo's chart correctly describes it as "o ultimo padrão."

When Cão returned to the Congo, he was annoyed to find that the messengers whom he had despatched to the king had not yet returned, although they had been absent double the time expected. Cão, who was naturally anxious to return home with a report of his discovery of what seemed a powerful kingdom, therefore seized four native visitors to his ship as hostages, giving their friends * to understand that after the lapse of fifteen months he would bring them back and exchange them for his own men, who were still with the king. These latter, we learn from Ruy de Pina, had been made much of; but when the king heard of Cão's high-handed proceedings, he refused to admit them any longer to his presence, and threatened to kill them, should his own people not be restored in time.



THE COAT-OF-ARMS OF D. CÃO, 1484.

Among Cão's hostages was one Caçuto, a "nobleman" in his own country, and a man of some intelligence, who seems to have picked up Portuguese rapidly. King John was much pleased with this man, and the information which he was able to give. He, as well as his companions, were treated with much distinction, and dressed in fine cloth and silk!

Cão came back to Lisbon probably in the beginning of 1484, and certainly before April of that year. The king, first of all, made him a "cavalleiro" of his household. He then, on April 8, 1484, "in consideration of the services rendered in the course of a voyage of discovery to Guinea, from which he had now returned," granted him an annuity of ten thousand reals, to be continued to one surviving son; and a few days afterwards, on April 14, he separated his "cavalier" from the common herd and made him noble, and gave him a coat-of-arms charged with the two padrões which he had erected on the coast of Africa.†

* Garcia de Resende, 'Chronica,' c. 155, p. 68, says "certain months;" but Ruy de Pina, 'Chronica,' c. 56, p. 146, and Barros, 'Da Asia' (Lisbon, 1778), t. I. i. p. 174, say fifteen months.

† These documents, which prove absolutely that Cão was back from his first voyage before April 1, 1484, were first published by Albano da Silveira in 'Annaes mar. e col,' v., 1845, p. 37. L. Cordeiro republished them in the *Boletim*, 1892, p. 159.

Coat-of-arms: Field *vert*, charged with two columns *argent*, each rising upon a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Second Voyage of Diogo Cão, 1485–6.

The materials for writing a history of Cão's second expedition are even less complete than those available for the first. There are the padrão of Cape Cross with its inscription, an important legend on the chart of Martellus Germanus, and the narrative of Martin Behaim, who claims to have commanded one of the vessels. Apart from these, we are dependent upon the accounts given by Ruy de Pina and João de Barros, for none of the later historians seem to have had access to original sources.

The narrative of Behaim, as gathered from the legends on his famous globe, and a paragraph in Schedel's 'Liber Chronicorum,' printed at Nürnberg in 1493, during Behaim's presence in that town, is as follows :—

In 1484 King John sent two vessels to the south, one being commanded by D. Cão, the other by Martin Behaim. They carried, in addition to goods for barter, eighteen horses with splendid harness, intended as presents for Moorish (*i.e.* Negro) kings. They traded with the Jolof and on the Gambia; visited King Furfur's land,* 1200 German leagues from Lisbon, where the Portugal pepper grows, and came to a country where they found cinnamon. They also discovered Prince's island, S. Thomé and Martin (Behaim's!) islands (*i.e.* Annobom). On January 18 they set up a column on Monte Negro (Cão's third pillar in 15° 40′). Having sailed 2300 leagues, they set up another pillar on Cape Ledo.† They were again with their king after an absence of 19 (16 or 26) months,‡ having lost many men from the heat, and bringing pepper, grains of paradise, and many other things in proof of the discoveries they had made.

We have elsewhere § considered the trust-worthiness of this account of Cão's expedition, and arrived at the opinion that Behaim did not accompany Cão, but may have been on the Guinea coast with an expedition such as that of João Affonso d'Aveiro.

Far more useful for our purpose is the pillar which formerly stood

---

hillock, and surmounted by a cross *azure*. Crest: the two columns crossed and tied with a ribbon *vert*. Our illustration is taken from the 'Thesouro de Nobreza,' of Francisco Coelho, 1575, as published by Luciano Cordeiro.

* King Furfur's land is clearly Benin, whence d'Aveiro, in 1486, brought the first Guinea pepper to Portugal. Behaim's cinnamon must have grown in Ptolemy's apocryphal Cinnamoniphera Regio.

† 2300 leagues on Behaim's globe actually carry us to a Cape Ledo, which critics may be forgiven for identifying with Dias' furthest.

‡ Nineteen months on the globe, 16 in the German, 26 in the Latin version of the chronicle.

§ Ravenstein, 'Martim de Bohemia' (Lisbon (Ferin), 1900), pp. 25–35.

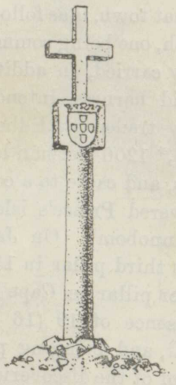
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000081

مكتبة قطر الوطنية
Qatar National Library

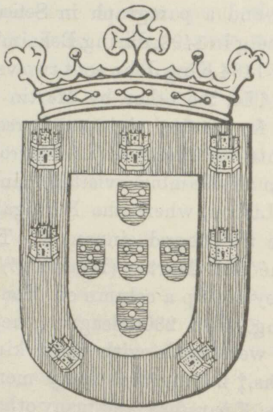
on Cape Cross, and which Captain Becker of the *Falke* carried off to Kiel * in 1893. Dr. Scheppig has fully described the pillar.†

The shaft is 1·84 m. long, and has a circumference at the bottom of 0·93 m. It tapers slightly towards the top, and is surmounted by a cube 0·43 m. high, 0·45 m. broad, and 0·26 m. thick. The whole is hewn out of a single block of marble. The cross, also of marble, was fixed by means of lead. The arms carved on the face of the cube are those adopted by John II. in 1485. There are two inscriptions in Gothic characters, the one in Portuguese, the other in Latin. The Portuguese inscription says—

"In the year bjMbjclxxxb (6685) of the creation of the world, and



THE PADRÃO OF CAPE CROSS.



THE ROYAL COAT-OF-ARMS, 1485.

of Christ llllclxxxb (485), the excellent, illustrious King D. João II. of Portugal did direct this land to be discovered, and this padrão to be set up by Dº Cão, a cavalleiro (knight) of his household."

The Latin inscription reads as follows:—

"There had elapsed 6684 (5?) years since the creation of the world, and 148– since the birth of Christ, when the most excellent and most serene King, D. João II. of Portugal . . . ordered this column to be set up by his knight (*militem*) Iacobus Canus (*i.e.* Diogo Cão)."

Dr. Scheppig observes that the dates in this Latin inscription are both written in Arabic characters, "which, owing to their novel form, were still sources of frequent error and confusion," and that the fourth

* The German Emperor has since caused an exact copy of it to be erected, substituting granite for marble.

† *Annalen der Hydrographie*, 1893, p. 190; *Marine Rundschau*, 1894; *Times* December 27 and 31, 1894; and L. Cordeiro, "O ultimo Padrão de Diogo Cão" (*Boletim*, 1895, p. 885).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

cipher in 6684 is certainly of abnormal shape, and may perhaps be meant for a 5, in which case both inscriptions would agree. As to "1485" no doubt whatever arises.

As the year 6685 of the Eusebian era begins on September 1, 1485, Cão must have departed after that day, and before the close of the year. As he had returned from his first voyage before April, 1484, his departure must have been delayed for reasons not known to us. Perhaps it was owing to the opposition of the Royal Councillors to further expeditions, perhaps a desire that the contemplated change of arms might be recorded on the padrões to be sent with the explorer.

During this voyage Cão seems to have commanded a fleet—at least, so we are told by Ruy de Pina, Garcia de Resende, and Martellus Germanus. He took with him, as a matter of course, the four men whom he had so unceremoniously carried off. These had been well treated in Portugal, and were the bearers of rich presents to their king, whom they were to invite to throw aside his idols and fetishes and embrace the only saving faith.*

It may be presumed that Cão, in the course of this second voyage, gained a fuller knowledge of the coast first discovered by him to the north of the Congo. He may thus have visited and named the bay called *Golfo do Judeu*, the Jews' bay, of old maps, either because there was a Jew on board his vessel, or, what is less likely, because he was struck with the Jewish physiognomy of some of the natives, who are absurdly supposed to keep the Jewish sabbath, when in reality they have fetishes and *Casas da tinta* like their neighbours.† He may also have entered the fine *Golfo das almadias* (Kabinda bay), still famous for its boats, as it appears to have been in the days of the early Portuguese.

There was great rejoicing when Cão entered the Congo, and it became known that the hostages whom he had carried off were on board his ship. He at once sent one of these men to the Mani Congo, to announce his arrival, and to beg that his own people should be sent down to the coast, when the other three would be released. When the man came back, Cão sent a present to the king, and let him know that he was about to follow the coast to the south, but that on his return he would seek speech with him, and hand over the presents with which he had been entrusted.‡

Passing southward along the coast, Cão landed several times for the

* I. da Costa Quintilla, 'Annaes da Marinha Portuguesa,' i. p. 197, says that the king sent an "ambassador" to the King of Congo, but Ruy de Pina (p. 147) and Garcia de Resende (p. 68) only say that he sent a "message" (*embaixada*) by these four men.

† Makoya, near Chinchosho, is one of the principal villages of these supposed Jews. See Bastian, 'Deutsche Expedition nach der Loangoküste,' ii. pp. 45, 275.

‡ All this according to Barros, Dec. I., liv. iii. c. 3.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003f

مكتبة قطر الوطنية
Qatar National Library

purpose of carrying off natives who were to be taught Portuguese, so that on future occasions they might act as interpreters. Near Cape St. Bras he saw native fishgarths, and hence called that double of the Bill of Portland *Ponta das Cambóas*.*

When about 160 miles beyond the second padrão set up by him in 1483, he reached a second *Monte Negro*, a remarkable headland in 15° 41′ S., rising like an island to a height of 200 feet, and presenting a rugged black face towards the sea, and upon this he set up a padrão. The bay to the south he named *Angra das Aldeas*, because of two poor fishing villages. In design and size this padrão resembles that of Cape Cross. A trace of the royal crown is still visible, but time has obliterated the inscriptions.†

The aspect of the country had gradually grown poorer and poorer, until barren sandhills and arid rocks were all that could be seen from the sea, except at a few openings where streams or rivers had given birth to vegetation and verdure (*praias verdes*). Lofty mountains now and then were visible far inland. Passing along such a coast of low sandhills and white cliffs, Cão come past the broad Golfo da Baleia (Whale bay), separated by a "sleeve of sand" (Manga de Areia) from the open sea; he must have noticed the low black rocks with yellow specks, first known as Cabo preto;‡ and ultimately reached a truncated cone of red sandstone, in 21° 50′, upon which he set up the last of his padrões, already fully described by us. This was one of the Cabos do padrão of old charts, and is now known as Cape Cross. To the south of it, on Martellus Germanus's chart, we notice a Praia das Sardinhas (Sardine shore), now known as Sierra bay, and a Serra parda, which may safely be identified with the dark and rocky cliff now known as Cabo dos Farilhões (22° 9′ S.), surmounted by a sandy dune, and rising inland into peaks—*os montes do padrão*.

This cape, 430 leagues, or 1450 sea miles, to the south of Cape Catharina, is the furthest point reached by Cão, and if a legend on the chart of Henricus Martellus Germanus may be accepted, he died there. This legend is to the following effect:—

"This mountain, called the Black mountain [*i.e.* Monte negro, in 15° 41′] was reached by the fleet of [John] the second King of Portugal, which fleet was commanded by Diegus Canus, who, in memory of this

* Pacheco, 'Esmeraldo,' p. 85.

† Shaft, height, 2·01 m., circumference, 1·08 m.; cube, 0·46 m. high, 0·45 m. broad, 0·19 m. thick (L. Cordeiro, *Boletim*, 1892, and 'Diogo Cão,' p. 66). This pillar is now in the museum of the Lisbon Geographical Society, with the exception of the cross, which had disappeared. A new pillar, of poor design, was erected in its place in 1892.

‡ Subsequently as Cabo frio (Cold cape), because of the cold coast current which runs past it.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000065

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

fact, set up a marble column, with the emblem of the cross, and proceeded onwards as far as the Serra parda, which is distant 1000 miles from the Black mountain, and here he died" (*et hic moritur*).

A "parecer," or opinion, drawn up by the Spanish astronomers and pilots who attended the congress of Badajoz in 1525, and signed by Hernan Colon, Juan Sebastian del Cano, and others, goes far to confirm this legend, for it tells us that Cão, in the course of his second voyage, discovered the coast from Montenegro as far as the Sierra Parda, where he died (*donde murio*), a distance of 200 leagues (680 sea miles).*

The distance between Cape Negro and Sierra Parda actually amounts to 435 sea miles (139 leagues, or 556 Italian or Roman miles), but if we assume the Mediterranean on the chart of Germanus (which has no scale) to measure 3000 Italian miles in length, as usually adopted, then the distance separating Montenegro from Sierra Parda on that chart would equal 1000 of these miles.

Of course, if Cão died near his last padrão, we are compelled to reject the account given by Ruy de Pina and Barros of the final stages of his expedition, and generally accepted. According to these historians, Cão returned to the Congo, had an interview with the Mani Congo, who expressed a desire for priests to convert his people, masons and carpenters to build churches and houses, labourers to break in oxen, and women to make bread, so that his kingdom might in every respect become like Portugal. He sent Caçuto, one of Cão's hostages, as ambassador to Portugal, and with him the sons of several of his courtiers, desiring that they should be taught to read and write and made Christians. At the same time he sent a present of ivory and palm cloth, the most valuable products of his kingdom.

Now, we have good reason to believe that Caçuto was received by the king in the beginning of 1489, the king being then at Beja, where he and his companions were baptized with much solemnity, the king himself, his queen, and gentlemen of title acting as sponsors.† We know, further, that Caçuto, henceforth known as D. João da Silva, was sent back to Congo with D. Gonçalo de Sousa, King João's ambassador, in December, 1490. Barros ‡ says that this happened two years after he had been baptized.

It might reasonably be concluded, from these dates, that Caçuto arrived in Portugal in December, 1488, was baptized at Beja in January, 1489, and again left for Congo, after a stay of two years, in December, 1490. But if this be so, he cannot have come with Cão, for Cão, or his ships,

* Navarrete, 'Colleccion,' iv. (Madrid, 1837), p. 347. Observe an omission after "el dicho cabo."

† Ruy de Pina (who may have been present at this reception and baptism), p. 149; Garcia de Resende, p. 69; Barros, 'Asia,' t. I. i. pp. 177, 227.

‡ 'Asia,' t. I. i. p. 224.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005e

مكتبة قطر الوطنية
Qatar National Library

must have been back before August, 1487, in which month Dias started on his voyage, taking with him the people whom Cão had kidnapped. Nay, in all probability Cão's ships came home even earlier, say in September, 1486, for on October 10 of that year Dias seems already to have been appointed to the command of the expedition which was to make him famous for all time.*

Indeed, we are inclined to think that after Cão's death, his vessels returned straight home, and if they did so, and the Eusebian era is stated quite correctly on the padrão of Cape Cross, they can have been away at the outside for thirteen months, that is, from September, 1485, to September, 1486—not a long period, but amply sufficient for a voyage to Cape Cross and back, and a stay of several months on the Congo river.†

The Voyage of Bartholomeu Dias, 1487–88.

No sooner had Cão's vessels returned to the Tagus than King John, whose curiosity had been excited by the reports about the supposed Prester John, brought home by d'Aveiro,‡ determined to fit out another expedition to go in quest of him by doubling Africa, Friar Antonio of Lisbon and Pero of Montaroyo having already been despatched on the same errand by way of Jerusalem and Egypt. The command of this expedition was conferred upon Bartholomeu Dias de Novaes, a cavalier of the king's household, who, if we may trust Fernão Lopez de Castanheda ('Historia,' liv. i. c. 1), held at the time the appointment of superintendent of the royal warehouses (*almoxarife dos amazens*). Portuguese historians speak of this Dias as a kinsman or descendant of João Dias, who was associated with Gil Eannes in doubling Cape Bojador in 1434, and of Diniz Dias, a cavalier of King John I., whom Azurara credits with the discovery of Cape Verde in 1445, but I am not aware of any documentary evidence in favour of these assumptions. There can be no doubt, however, that Dias was a seaman of considerable experience. It may have been our Bartholomew whom King John, in 1478, when still crown-prince, in consideration of 12,000 reis expended in the purchase of a slave, exonerated from payment of the usual royalty on the ivory bought on the Guinea coasts.§ It certainly was our Bartholomew who commanded one of the vessels despatched in 1481 with Diogo d'Azambuja to the Gold Coast.

The appointment seems to have been made in October, 1486, for on

* See below.

† The embassy of 1490 reached the Congo river in one hundred days. A journey up to the capital and back need at most take forty days.

‡ João Affonso d'Aveiro in 1486 brought the first pepper from Benin to Portugal, as also information of a king Ogane in the interior, who was rashly identified with Prestor John, though in truth the ruler of Ghana or of the Mosi.

§ Sousa Viterbo, 'Trabalhos Nauticos dos Portugueses,' 1898, p. 81.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000015

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the 10th of that month King John, "in consideration of services which he hoped to receive," conferred upon Bartholomeu Dias, the "patron" of the *S. Christovão*, a royal vessel, an annuity of 6000 reis.* We shall see presently that ten months were allowed to elapse before the expedition actually left the Tagus.

The account which João de Barros has transmitted to us of the remarkable expedition which resulted in the discovery of the Cape of Good Hope † is fragmentary, and on some points undoubtedly erroneous. Unfortunately, up till now no official report of the expedition has been discovered; but there are a few incidental references to it, which enable us to amplify, and in some measure to correct, the version put forward by the great Portuguese historian.

Most important among these independent witnesses is a marginal note on fol. 13 of a copy of Pierre d'Ailly's 'Imago mundi,' which was the property of Christopher Columbus, and is still in the Columbine Library at Seville. This "note" reads as follows :— ‡

"Note, that in December of this year, 1488, there landed at Lisbon Bartholomeu Didacus [Dias], the commander of three caravels, whom the King of Portugal had sent to Guinea to seek out the land, and who reported that he had sailed 600 leagues beyond the furthest reached hitherto, that is, 450 leagues to the south and then 150 leagues to the north, as far as a cape named by him the Cape of Good Hope, which cape we judge to be in Agisimba,§ its latitude, as determined by the astrolabe, being 45° S., and its distance from Lisbon 3100 leagues. This voyage he [Dias] had depicted and described from league to league upon a chart, so that he might show it to the king; at all of which I was present (*in quibus omnibus interfui*)."

The same voyage is referred to in a second "note" discovered in the margin of the 'Historia rerum ubique gestarum' of Pope Pius II., printed at Venice in 1477. From this second note we learn that "one of the captains whom the most serene King of Portugal sent forth to seek out the land in Guinea brought back word in 1488 that he had sailed 45° beyond the equinoctial line." ‖

Las Casas ('Historia de las Indias,' lib. i. c. 7) assumed these notes to have been written by Bartholomew Columbus, whom, as the result

* Albano da Silveira (*Annaes mar. e col.*, v., 1845, p. 55) first published the royal rescript, since reprinted by Texeira de Aragão ('Vasco da Gama,' 3a ed. p. 24).

† 'Da Asia,' Dec. I. liv. iii. c. 4.

‡ For a facsimile, see 'Raccolta Columbiana' (Rome, 1892), pt. I. t. iii. tav. lxx., No. 23.

§ Agisymba, according to Marinus, was supposed to lie at a distance of 24,600 stadia (41°) to the south of the equator. This grossly exaggerated distance Ptolemy arbitrarily reduced by one-half, and on his map Agisymba lies beyond the Mountains of the Moon.

‖ See 'Raccolta,' serie B, No. 6.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of a misconception of the meaning of the concluding words of the note, he supposed to have taken part in this voyage. These assumptions, however, are absolutely inadmissible, for as early as February 10, 1488, Bartholomew had completed at London a map of the world for Henry VII.* If we remember that Bartholomew was detained by pirates for several weeks before he reached England, he must have left Lisbon towards the end of 1487. He did not return to that place until many years afterwards.

On the other hand, the note is unhesitatingly recognized as in the handwriting of Christopher by such competent authorities as Varnhagen (*Bulletin Paris Geog. Soc.*, xv., 1858, p. 71), d'Avezac (*ibid.*, xvi., 1858, p. 268), H. Harrisse ('Fernand Colomb.' (Paris, 1872), p. 120),† Asensio ('Cristobel Colon,' i. pp. 137, 217), and Cesare de Lollis, the editor of the 'Raccolta Colombiana,' published at Rome in 1892 (pt. i. t. iii. p. ix.).

And if Christopher is the author of these notes, they must have been written in 1488, for it was on March 28, 1488, that King Manuel, in response to an application, cordially invited his "especial friend," Christopher Columbus, to come to Lisbon, promising him protection against all criminal and civil proceedings that might be taken against him.‡ Such a promise was needed, for Columbus, in 1480, stole away from Lisbon without paying 220 ducats, which he owed to certain of his creditors.§ Columbus, when he received this royal invitation, was at Seville, where his son Ferdinand was born unto him on September 28, 1488. If he left Seville soon afterwards, he may certainly have been present on the memorable occasion, in December, 1488, when Bartholomeu Dias rendered an account to the king of the results of his hope-inspiring voyage.

If, then, Bartholomeu Dias returned in December, 1488, after an absence (according to De Barros) of sixteen months and seventeen days, he must have started towards the end of July or in the beginning of August, 1487; and if the Bartholomeu Dias referred to in the royal rescript of October 10, 1486 (*v.* preceding page) is the discoverer of the Cape, which hardly admits of a doubt, he cannot have started in July,

* For the curious inscription on this map, see Las Casas, 'Historia' (Madrid), i. p. 225, and list of errata, where "anno domini quater centesimo octiesque uno atque insuper anno octavo: decimque die tum tertia mensis Februarj" is correctly rendered February 13, 1488.

† Harrisse subsequently ('Christopher Colomb.' (Paris, 1884), ii. p. 19) changed his views. He assumes, erroneously as we conceive, that Dias returned in December, 1487, and that Christopher Columbus cannot have written this "note," as he is known to have been in Spain at least up to October, 1488, but that his brother Bartholomew may have done so.

‡ For the king's letter of invitation, see Navarrete, 'Collecion de los Viagens,' 2a ed. ii. p. 10; and Asensio, 'Cristobal Colon.,' ii. p. 132.

§ In his last will and testament, dated May 19, 1506, he charged his son Diogo to pay these debts "for conscience' sake" (Asensio, 'Cristobal Colon.,' ii. pp. 131–138).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000058

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

1486, as usually assumed. He cannot have been in Lisbon in December, 1487.

This date (namely 1488) is further confirmed by Duarte Pacheco Pereira, the "Achilles Lusitano" of Camoens ('Canto,' x. 12), for in his 'Esmeraldo de Situ Orbis,' written soon after 1505, but only published in 1892, we are told that the Cape was discovered in 1488.* And Pacheco is a very competent witness, for Dias, on his homeward voyage, met him at the Ilha do Principe.†

Turning back now to Colon's "note," we find that Dias is supposed to have sailed 450 legoas, or 25·3°,‡ to the south of Cão's furthest; and as Cape Cross actually stands in lat. 21·8°, this would have brought him to lat. 47·1° S. A return voyage of 150 legoas, or 8·5° to the northwards, would have reduced his latitude to 38·6° S. But if Colon assumed Cape Cross to be in lat. 19° S., as on Dr. Hamy's and the Cantino charts, then the highest latitude reached would have been 44·3° S. We are justified in concluding from this that Colon's 45° does not refer to the Cape, but to the highest latitude reached. As to the 3100 leagues (174 degrees), the supposed distance from Lisbon, we have evidently to deal with a slip of the pen, for the distance to the Cape, following the coast, is only 6000 miles, or 100°.

A further statement respecting the date of the discovery of the Cape appears in the *Parecer*, or "opinion," of the Spanish astronomers and pilots already referred to. They say, "And beyond this [the Sierra Parda, where Cão died], Bartolomé Diaz, in the year 1488, discovered as far as the Cabo d'El-Rei, a distance of 350 leagues; and thence to the Cabo de boa Esperança, 250 leagues; and thence D. Vasco da Gama discovered 600 leagues . . ."

The distances given are exaggerations, for it seems to have been the object of these "experts" to push India and the Moluccas as far to the east as possible, so that the latter might fall within the Spanish sphere: the coast-line actually discovered by Dias measures less than 380 leagues. The nomenclature given is curious, for the designation of Cabo d'El-Rei is bestowed upon the Cape of Good Hope, and the latter name, not inappropriately, transferred to the furthest point reached by Dias. I have not come across a single chart or document bearing out this nomenclature.

---

* 'Esmeraldo,' pp. 90, 94. Pacheco was born at Lisbon about 1450; served for years on the Guinea coast; was to have gone, in 1498, to the West Indies; accompanied Cabral to India in 1500, and Albuquerque in 1503; heroically defended Cochim, and came back to Lisbon in 1505. He was governor of S. Jorge da Mina, 1520–22, and died 1533, having been in receipt of an annuity since 1524. (See Raphael Bastos' introduction to the 'Esmeraldo.')

† De Barros, 'Da Asia' (Lisbon, 1778), t. I. v. ii. p. 191.

‡ Reckoning 1 degree = 17·74 legoas, the legoa of 7500 varas being = 6269 m.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000047

مكتبة قطر الوطنية
Qatar National Library

There remain to be noticed two references to the expedition of Dias in the 'Roteiro' describing Vasco da Gama's first voyage, for which we are indebted to Pero d'Alemquer, the pilot of Dias' flagship;* and the statement of John of Empoli, the supercargo of one of the vessels of Affonso de Albuquerque's fleet (1503), that the Bahia dos Vaqueiros of Dias was renamed Bahia de St. Braz, because it was discovered on the day of that saint.†

Dias is supposed to have erected three padrões, but only one of these has up till now been discovered; and as the inscription upon it is no longer legible, it furnishes no evidence of the date of the voyage.



FRAGMENTS OF A PADRÃO OF B. DIAS, 1487.

This pillar stood on Dias Point, south of Angra pequena, or Lüderitz bay. Sir Home Popham saw it in 1786, but even then the inscription could no longer be deciphered.‡ Captain Vidal, in 1823, found the pillar in fragments.§ The shaft, of marble, rose originally about 6 feet above the ground, and was buried to a depth of 21 inches; it was surmounted by a stone cross 16 inches high. In 1856 Captain Carrew brought three fragments to Capetown, two of which, in 1865, were handed over to Chevalier du Prat, and are now at Lisbon; whilst the third, 22 inches high, 8 inches broad, and 5½ inches thick, is still in the Cape museum.‖ Of the fragments now at Lisbon, the kindness of my friend Captain E. de C. e Vasconcellos enables me to publish an illustration.

The "pillars" carried away by Dias seem to have resembled those entrusted to his predecessor, Cão, except that, in addition to the royal arms, there was carved upon them a pelican, the device which King John had assumed when a prince, together with the motto, "Por tua ley e por tua grey." Such, at least, would appear to have been the case, to judge from the description of a series of pictures, illustrating the discovery of India, which were to have been painted by order of King Manuel.¶

---

* See 'A Journal of the First Voyage of Vasco da Gama' (Hakluyt Society), pp. 9, 14.

† Ramusio, i., 3rd ed., fol. 144.

‡ Rennel's 'Geography of Herodotus,' p. 698.

§ Owen, 'Narrative of a Voyage to Explore the Shores of Africa' (1843), ii. p. 269.

‖ See L. Sclater's paper, with remarks by Luciano Cordeiro in the *Transactions of the South African Philos. Society*, 1898, p. 255.

¶ See 'Alguns Documentos' (1892), p. 516; and Ruy de Pina, p. 65. Duarte Pacheco, 'Esmeraldo,' p. 97, says the inscriptions upon the pillar supposed to have been erected on St. Cruz were in Latin, Arabic, and Portuguese, and that it was visible from the sea. It is quite clear to us that Pacheco never saw this padrão, for when referring to the pillars set up by Cão during his two voyages, he says likewise that the inscriptions were in three languages, when, as a matter of fact, we now *know* that no Arabic inscriptions were to be found upon the pillars (see *ante*, pp. 628, 634).

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Apart from what can be gathered from the above, and from a few early maps, we are dependent upon De Barros for what we know concerning the voyage of Bartholomeu Dias. Other historians have either slavishly copied him, or they adduce no fresh information. Strange to say, Ruy de Pina and Garcia de Resende, the chroniclers of King John II., although they refer casually to the discovery of the Cape of Good Hope, do not once mention the name of Bartholomeu Dias. As for Correa, the author of the 'Lendas da India,' he may safely be discarded.*

Bartholomeu Dias was given the command of two ships, of fifty tons each, and of a store-vessel.† His flagship, we think, must have been a *Christovão*, perhaps the very vessel which he commanded before his departure in 1486, and again in 1490–95; or possibly a new vessel bearing the familiar name. His chief pilot was Pero d'Alemquer, an experienced seaman, who subsequently served under Vasco da Gama. The master's name was Leitão. The second ship, the *St. Pantaleão*, had for its captain João Infante, a cavalier of the king's household, with whom were Alvaro Martins as pilot, and João Grego as master. The store-vessel was placed in charge of Pero Dias, a brother of Bartholomew. João de Santiago was pilot, João Alves master, and Fernão Colaço, of Lumiar, clerk.

There were on board two negroes whom Cão had kidnapped, as also four negresses from the Guinea coast. Strict orders had been given, not only to avoid every conflict with the natives, but also to gain their confidence by gifts. The four Guinea women were to be landed at various places, handsomely dressed, and furnished with samples of gold, silver, and spices, which the Portuguese were in quest of. These they were to exhibit wherever they went, proclaiming, at the same time, the greatness and munificence of the King of Portugal, and the ardent desire which possessed him to communicate with Prester John. Women were selected for this duty, as they would be respected even in the midst of tribal wars.

Dias, we have no doubt, was furnished with a copy of the chart compiled by D. Diogo Ortiz de Vilhegas, of Calçadilha, Dr. Rodrigo, of Pedras Negras (the king's physician), and Master Moses, a Jew, which had been given in May, 1487, to Pero de Covilhã.‡

---

* Correa does not mention the name of Dias. According to him, Janinfante, a foreign merchant and practical seaman, had the command. Failing in his attempt to double the Cape, he maintained that vessels larger than caravels were needed to ensure success. The king at once ordered such vessels to be built, but Janinfante died, and the command was given to Vasco da Gama!

† De Barros, 'Asia,' t. I. p. i. p. 184.

‡ F. Alvares, 'Verdadeira Informaçao,' c. 103.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The expedition left Lisbon at the end of July or in the beginning of August, 1487, and sailed direct for the Congo, beyond which the coast was examined with attention, capes and bays being named either after saints, on account of striking physical features, or in connection with some occurrence in the course of the voyage. On reaching the Angra do Salto, which we conceive to be identical with the Golfo das Aldeas,* now known as Port Alexander, the two negroes carried off by Cão were restored to their friends. It is just possible that the store-vessel was left in this safe and commodious harbour, where fish abounded, good water was plentiful, and natives with herds of sheep and bullocks within reach.

Struggling against south-westerly winds and a current setting to the north, Dias passed the last pillar set up by Cão.† He may have named the country to the south in honour of S. Barbara, whose day is December 4, and entered on December 8 the Golfo de S. Maria da Conceição, our modern Walvisch bay. Here he seems to have tarried, for, taking the saints' names bestowed along this coast for our guide, the next locality named by him must have been the Golfo de S. Thomé (December 21), only 145 miles beyond. It cannot have taken a fortnight to make so short a run. It was probably here that the first negress was landed.

We may then suppose Dias to have sailed southward along the desolate coast of sandhills, where he possibly experienced the hot blasts of an easterly wind, and hence bestowed upon this forbidding region the appropriate name of "Areias gordas," that is, "hell." The gulf of St. Thomas was probably named on December 21, and a few days afterwards Dias arrived at the Cabo da Volta and the Serra parda, where he erected the padrão dedicated to Santiago, fragments of which have been recovered, and have already been referred to. He also landed here the second of his negresses, probably leaving her with natives who had come down to the shore to fish.‡

* Cosa's Golfo do Saco and the G. do Salto of the Cantino map refer, no doubt, to the same locality. Cosa places the name near where Port Alexander should be, whilst Cantino locates it on a barren coast between that port and Great Fish bay, not frequented even by fishermen.

† We have absolutely no direct information about Dias's proceedings from the time he left Angra do Salto to his arrival at Cabo da Volta, where he set up his first pillar.

‡ De Barros's account of this important section of the voyage is very confused. He tells us (pp. 185, 186) that the first padrão, that of Sant Iago, was set up on a Serra parda, at the Angra dos Ilheos, in 24° S., or 120 leagues (400 miles), beyond Cão's furthest. But 120 leagues beyond Cão's furthest, which Barros (p. 175) assumes to have been in 22° S., would carry us to 28° 20′, or within 50 miles of an Angra das Voltas, which he places in 29° S., and which it is thought survives in Cape Volta, to the south of the Orange river, in 28° 42′ S.

It seems thus that the two localities, which De Barros separates by an interval of 5°, cannot in reality be very distant from each other.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000012

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

On Cantino's chart, the deep bay to the east of this cape, our modern Angra pequena, is called Golfo de S. Christovão, and this, it appears, was the name originally bestowed upon a bay which subsequently became known as Angra or Golfo das Voltas—the "bay of tacks." *

It is not probable that Dias remained long in this bay. De Barros tells us that he stood off and on for five days, when there arose a strong wind, which compelled him to reduce his sails, and before which he ran south for thirteen days. This statement we are not prepared to accept, for northerly winds are exceedingly rare along this coast, and the squalls from the north-north-east or north-north-west, which are experienced occasionally, are never of long duration. But when Dias reached a higher latitude on the south-east edge of the Agulhas bank, and came under the influence of the "roaring forties," it is very likely that he met with gales and a heavy sea, and, considering the small size of the vessels, his men are to be excused if they stood in "mortal fear;" † and they naturally suffered from the cold, for in these latitudes they experienced a mean temperature of 50° or less, which is hard to bear for men fresh from a tropical climate.

During the first period of this long stretch to the south, Dias may be supposed to have kept within sight of the coast. He may thus have named the Golfo de S. Estevão, now Elizabeth bay, on December 26, and the Terra da Silvestre on December 31. He may even have heard the roar of the rollers thundering upon the shore of the Terra dos Bramidos,‡ and gained a view of the lofty Serra dos Reis on January 6,§ but beyond these he lost sight of the land, and when passing St. Helena bay, as we learn from Pero d'Alemquer, he was far out at sea.

When the storm subsided, Dias stood east, and having failed, in the course of several days, to meet with land, he turned his prow to the northward. Sailing in that direction for 150 leagues, he saw lofty mountains rising before him, and came to anchor in a bay which he called Bahia dos Vaqueiros (Cowherd's bay). This happened on

* Barros, p. 186, says, "*now* known as Angra das Voltas." Of the identity of this bay with our Angra pequena there can be no doubt. It is quite true that Duarte Pacheco places the Angra das Voltas in 29° 20′ S., the Strassburg Ptolemy in 28° S., and De Barros in 29° S.; but, on the other hand, Juan de la Cosa places this bay in 24° S., and the author of Cantino's chart in 26° 30′ S., its true latitudes being 26° 40′ S. Duarte Pacheco, in his 'Esmeraldo,' describes it as being 1 league broad at the mouth, 1½ league deep, affording a safe anchorage for a hundred vessels in from ten to twelve brasses. The only bay along this coast fitting this description, or the contours of our ancient maps, is our Angra pequena.

† De Barros, p. 187.

‡ "Bramidos" means "roars."

§ That is, mountains of the three magi.

‖ See 'A Journal of Vasco da Gama's First Voyage' (Hakluyt Society), p. 9.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000086

مكتبة قطر الوطنية
Qatar National Library

February 3, 1488, and as this day is dedicated to St. Blaise, the bay, so we are told by John of Empoli,* was renamed Bahia de S. Braz. It is the Mossel bay of our days.

We learn from Pero d'Alemquer that the natives refused the presents which were offered them, and when Dias landed to take in water from a well close to the beach, he was pelted with stones. One of the natives was killed with an arrow from a crossbow, and they then retreated inland with their cattle.

During his onward course Dias had to struggle against the Agulhas current, as also against the prevailing south-easterly winds. He may, however, have taken advantage of an inshore counter-current, setting eastward, as also of occasional westerly winds. At all events, he made his way along a coast bounded by lofty mountains. Rounding Cabo do Recife (Cape Recife), he entered a vast bay, which was called Bahia da Roca (Rock bay), but which is now known as Algoa bay. Within it lay a group of rocky islets—the Ilhéos da Cruz. Duarte Pacheco ('Esmeraldo,' p. 94) says that the tallest of this group is also known as Penedo das Fontes (Fountain rock) because of two springs which rise upon it, and that Dias erected a pillar there, visible out at sea. As a matter of fact, the largest of these islets is nearly all bare rock, and there are no springs. Nor does it appear, if we may accept the results of M. de Mesquito Perestrello's careful survey of this coast in 1575,† that a stone pillar was ever set up on this islet, notwithstanding the name it bears.

It is, however, possible that Dias erected a wooden cross upon it, all traces of which had disappeared when Perestrello examined the coast. The islet may have been named because it was discovered on the day of the invention of the cross (May 2). In that case Dias must have spent three months in making good the 200 miles which separate it from Mossel bay, which is difficult to believe.

Having left here the last of his negresses—one had died during the voyage—in the company of two women who were gathering shellfish along the beach, Dias continued his voyage. He sailed past the Ilhéos chãos (Low islands), and about 12 miles beyond them, at or near a sandy cliff, still known as Cape Padrone, he set up a padrão dedicated to S. Gregorio.‡ It is quite possible that this pillar was erected on St.

* John of Empoli sailed with Affonso de Albuquerque to India in 1503. He was supercargo of a vessel chartered by the Marchiones of Lisbon. His narrative was published by Ramusio, i. 3rd ed. f. 144.

† Published in Pimental's 'Arte de Navegar' (Lisbon, 1762), pp. 446–456.

‡ Perestrello says the pillar stood on an islet at the foot of this cliff, the only islet between the Ilhéos chãos and the Rio do Infante, but only sunken rocks are met there now, and the islet may have been destroyed by the force of the breakers. I do not gather from Perestrello's account that he himself saw the pillar.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Gregory's day (March 12), though as a rule these dedications seem to have been made at home.

It was probably about this time, when the coast was actually seen to stretch away towards the north-east, in the desired direction, that the ship's companies began to murmur about the hardships to which they were being exposed. Dias, whose *Regimento*, or instructions, directed him to consult his officers on all occasions of importance, therefore invited them to land with him, together with a few leading seamen. The result of this council was a decision in favour of a return, and a document to that effect was signed by all present. Dias, however, persuaded his followers to go on eastward for two or three days longer, and promised that, unless something happened within that period to induce them to change their minds, he would accede to their wishes.

He was thus able to pass the remarkable rock identified by Perestrello with the Penedo das Fontes, where the dammed-up waters of a small stream soak through the beach ridge. This, I have no doubt, is Ship rock.* The Rio do Infante (Great Fish river) lies only about 16 miles beyond.† It was thus named because the captain of the *Pantaleão* was the first to land at its mouth. Here Dias turned back; Galvão ‡ says that he saw "the land of India, but, like Moses and the promised land, he did not enter it."

On passing his padrão, "he took leave of it as from a beloved son whom he never expected to see again." His forebodings proved true, for twelve years afterwards, when on a voyage to India in Cabral's armada, he perished almost within its sight.

During his homeward voyage Dias was favoured by winds and currents. It is almost certain that he named the Cabo do Infante, and probably that he dedicated the southernmost cape of all Africa to St. Brandan, an apocryphal Irishman, whose day is May 16.§

It was soon after this that he beheld, for the first time, and coming from the east, the remarkable group of mountains—broken land, or "terra fragosa," as the ancient maps have it—which fill Cape Peninsula,

* See 'Africa Pilot,' pt. ii. (1889), p. 126.

† Perestrello says 5 legoas, that is, 17 miles.

‡ 'The Discoveries of the World,' 1555 (Hakluyt Soc.), p. 77.

§ The Cabo (or rather Golfo) das Agulhas first appears on Cantino's chart. On all our ancient charts (2, 4, 5, 6, 7) the Cape of Good Hope is indicated as the southernmost point of Africa. Pacheco, in his 'Esmeraldo' (pp. 90, 92), places the Cape of Good Hope and St. Brandan's point in the same latitude, viz. 34° 30', and makes no mention of a Cabo das Agulhas, but in his 'Table of Latitudes' (p. 15), the latter is placed in 35° S., or 30' further south than the Cape, whilst St. Brandan's point is omitted. This almost looks as if the two names referred to the same locality.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002b

مكتبة قطر الوطنية
Qatar National Library

the southern extremity of which, if we may believe Barros (p. 190), he named Cabo Tormentoso, in memory of the storms which he had experienced, a name which the king, whose hopes of reaching India by an ocean route seemed about to be realized, changed into Cabo da boa Esperança—the Cape of Good Hope.* We fancy that this is one of those pretty legends frequently associated with great events. Duarte Pacheco, a contemporary, distinctly tells us that it was Dias who gave the Cape its present name; Christopher Columbus, who was present when Dias made his report to the king, says the same. Barros, indeed, seems alone to be responsible for this legend, for if Camoens ('Canto,' v. 50) speaks of a "Cabo Tormentorio," we must remember that he lived through the terrible tempest which overwhelmed a part of Cabral's fleet. This was during the season of storms, in winter. Dias, who spent several months on the south coast, may of course have met with gales, which would justify an appellation such as "Cape of Storms." Still, on his homeward voyage, when alone he was in the immediate vicinity of the Cape, he seems to have been fortunate, for Pero d'Alemquer, his pilot, informs us that he left the Cape on a morning with a stern wind, which rapidly carried him northward.†

Before leaving the Cape, Dias erected the last of his padrões, which was dedicated to St. Philip.‡

After an absence of nine months, Dias rejoined his store-ship. He found that six men had been killed in a trade dispute with the natives, and Fernão Colaço, one of the three survivors, died of joy on beholding his comrades. The vessel, being worm-eaten, was burnt after the provisions had been taken out of her.

It was now about the middle of August, if we assume Dias to have parted from his store-vessel about the middle of November. There thus remained four months for making his way to Lisbon. Of what he did during these four months we know very little. We do not even know whether he called at the Congo.§ We know, however, that he touched at the Ilha do Principe, where he met Duarte Pacheco with part of his shipwrecked crew,‖ all of whom he took on board; that he then touched at Rio do Resgate—trade river—where he seems to have purchased some slaves, "so as not to come home empty-handed;" that João Fogaça, the Governor of S. Jorge da Mina, placed on board his vessel the gold he had obtained by barter; and that ultimately, in

* We have already seen that, according to the Spanish pilots, the Cape was originally called Cabo d'El-Rei (see p. 641).

† 'A Journal of the First Voyage of Vasco da Gama' (Hakluyt Soc.), p. 9.

‡ The site of this pillar is absolutely unknown.

§ The question of whether it was he or Cão who brought the envoy of the King of Congo to Portugal has already been discussed, p. 637.

‖ De Barros, *loc. cit.*, p. 191.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

December, 1488, after an absence of sixteen months and seventeen days, he once more entered the Tagus. Dias had discovered 373 legoas or 1260 miles of coast; and his voyage, jointly with the reports received by that time from Pero de Covilhã, had demonstrated the fact that India might be reached by sea.

We are not aware that Dias ever received a reward for his great achievement. It seems not, for between 1490 and 1495 he still commanded the *Christovão*,* and when King John had overruled the objections of his advisers, who thought it unwise to expend, and possibly exhaust, the resources of the kingdom in distant adventures, which, even if successful, would raise against Portugal all those who now profited, or who in the future hoped to profit, from the India trade, it was not Dias who was placed at the head of the expedition which was to crown the enterprise started by Prince Henry. Dias was merely employed to superintend the building and outfit of the vessels intended for this expedition, the command of which was given by King John's successor, King Manuel, to Vasco da Gama.†

APPENDIX.

On the Maps illustrating the Voyages of Cão and Dias.

In writing the accounts of the voyages of Cão and Dias, we have largely profited by a few contemporary maps. These maps, unfortunately, are on a very small scale. This compelled their compilers to confine themselves to a selection among the place-names which they found upon the sailing charts at their disposal, and this selection may not in all cases have been a judicious one.

Another difficulty arises from the fact that successive explorers failed to identify the places already named by their predecessors, or deliberately set aside the claims of priority. As a result, Benguella bay became successively known as Angra de S. Maria, Bahia da Torre, das Vaccas, and de S. Antonio; and Saldanha's name, instead of being attached to Table bay, is conferred upon a bay which originally seems to have been dedicated to S. Lucia.

Of course, much of this confusion is due to the utter failure of these early explorers to determine accurately the latitudes of the places they visited. José Visinho, whom King John sent to the Guinea coast in 1484 or 1485 for the express purpose of determining latitudes by observing the declination of the sun, reported that the Los islands were in 5° N., when in reality they are in 9° 30′ N.; and Bartholomeu Columbus, to whom we are indebted for this information, adds that

* For an acquittance for 4,080,912 reals expended during these five years, dated February 27, 1498, see 'Alguns Documentos,' p. 19. The Bart. Dias who commanded the *Figa* in 1497 was not the great navigator, as believed by H. Lopes de Mendonça and the editor of 'Alguns Documentos,' who publishes a facsimile, p. 515.

† Dias accompanied Vasco da Gama, in 1497, as far as the Cape Verde islands, and thence sailed to the Gold Coast. He commanded a vessel in Cabral's fleet, and perished off the Cape in 1501. His grandson, Paulo Dias de Novaes, won fame as the firs conquistador of Angola.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

he himself found by observations with a quadrant that the Gold Coast was under the equator.*

The earliest map to which we are able to refer is to be found in a codex which originally belonged to the family of Count Cornaro-Piscopi, then found its way into the Palace of the Doges, and may now be consulted in the British Museum (Eg. 73).† The volume contains 35 charts by various draughtsmen, collected in 1489. The charts which concern us are numbered 30 to 33 (originally 28–31). No. 30 is a chart of the Atlantic coast from Cape Finisterre to Cape Verde, and is stated to be by Cristoforo Soligo, a Venetian cosmographer‡—that is, Soligo copied it from some Portuguese original. Nos. 31–33 give a delineation of the entire coast from Portugal to the "ultimo padrão," set up by Cão on Cape St. Mary in lat. 13° 26′ S. In character these charts resemble No. 30, and I venture to ascribe them to Soligo or Seligo as copyist, not author.§ They were evidently drawn immediately after Cão's return from his first voyage in 1484 or 1485.

The charts are furnished with scales, but are still without parallels. A legend, written right against the mouth of the Niger, tells us "hic non apar polus," but this invisibility of the pole-star is not borne out by the scale of the chart. Assuming 75 Italian miles to be equal to one degree, the following latitudes would result from measurements made upon the charts :—

	On Charts.	Actual position.
Lisbon, assumed ...	38°·70 N., 9°·17 W. ...	38°·70 N., 9°·17 W.
Cape Verde	15°·37 N., 16°·02 W. ...	14°·75 N., 17°·53 W.
Cape Palmas	6°·17 N., 3°·66 W. ...	4°·35 N., 7°·45 W.
Niger mouth	9°·24 N., 10°·93 W. ...	5°·00 N., 5°·00 E.
Cape Lopez	2°·97 N., 15°·13 E. ...	0°·60 S., 8°·73 E.
Congo mouth	4°·43 S., 19°·41 E. ...	6°·07 S., 12°·15 E.

Our second map is by Henricus Martellus Germanus. It is one of many in a manuscript, 'Insularium illustratum,' now in the British Museum (Add. MS. 15,760). It is a map of the world very roughly drawn and without a scale, and is dated 1489, and thus shows the discoveries up to the return of Dias—1488. The author appears to have been an Italian, or if a German (Heinrich Hammer) he lived in Italy. Count Lavradio published a facsimile of this map of the world in 1863.

Behaim's famous globe is next in date, viz. 1492. As its author claims to have commanded one of the ships of Cão's second expedition, it might have proved of exceeding value had not the delineation of the south-west coast of Africa been intentionally falsified in order to make the Nurembergers believe that their clever townsman had doubled the cape and sailed a considerable distance beyond it.

The remaining cartographical materials available are the chart of the world by Juan de la Cosa (1500); a chart by an unknown author, now in the possession of Dr. Hamy (1502); a chart which Alberto Cantino caused to be designed at Lisbon for his patron, Hercules d'Este, Duke of Ferrara (1502); and a chart by Nicolas de Canerio of Genoa (1502). For an account of these charts, I refer to 'A Journal of the First Voyage of Vasco da Gama,' published by the Hakluyt Society in 1898, pp. 205–211.‖

---

* *Raccolta Columbiana*, I. t. iii., Serie B, No. 861; Serie C, Nos. 246 and 499.

† Zurla, 'Sulle antiche Mappe' (Ven., 1818), p. 88; D'Alberti, 'Le construzione navali' (Rome, 1893), p. 128.

‡ Zurla, 'Dei viaggi i delle scoperte Africane di Aloise Cadamosto,' pp. 21–23.

§ That these charts are not by the same author is seen from the fact that on No. 30 Cape Verde lies 1930 miglie to the south of Lisbon, on No. 31 only 1750 miglie.

‖ The copies of Dr. Henry's and Cantino's charts which accompany this paper are reprinted by kind permission of the Hakluyt Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [363r] (78/232)

BRITISH LIBRARY

LIST OF PLACE-NAMES.

The figures within brackets refer to the authorities, viz. (1) Soligo; (2) Henricus Martellus; (3) Behaim; (4) Juan de la Cosa; (5) Dr Hamy's chart; (6) Cantino's Chart; (7) Canerio; (8) Duarte Pacheco's 'Esmeraldo.'

The dates are those of the Saints mentioned.

Rio (Angra) de S. Maria da Nazareth (1–8). The Ogowe, which still enters Nazareth bay, 0° 40′ S.

Cabo de Lopo Gonçalves (1–8). Cape Lopez, 0° 37′ S.

Rio de S. Mathias (2, 3), February 24. Now the Mexias or Animba river, 0° 55′ S.

Praia do Judeo (3). The bay to the north of the Fernão Vaz river, 1° 15′ S.

Rio de S. André (3), November 30, is probably the same as the Rio das barreiras (8), subsequently known as Fernão Vaz, 1° 23′ S.

Rio de Campo (1), the river Kama, 1° 47′ S. It may have been named after Antonio do Campo, who accompanied Vasco da Gama on his second voyage.

Cabo de S. Catharina, November 25, where stood the "tree" of Fernão Gomez (1–8). Still known by its original name, 1° 50′ S.

Cabo de Pero Dias (7). Corrupted into Pedras point, 2° 41′ S.

Serras do Espirito Santo (3, 4, 6, 7). Still known by that name, 2° 50′ S.

Praia do Imperador, Emperor's shores (2, 3). Either off the Sette, 2° 24′ S., or off the Nyango, 3° S.

Ponta das barreiras, Cliff point (4), *Serra da Praia* (6), or *Cabo primeiro* (7). Cape Mayumbe, a red bluff, in lat. 3° 13′ S.

Golfo de Alvaro Martins (4, 6). Now Mayumbe bay, 3° 20′ S. It may be identical with Behaim's *Angra de S. Martha*, July 27.

Serra de barreiras (4). The white cliffs, backed by three ranges of hills (part of the *Serra comprida* or "Long Range" of old charts) to the south of Mabuti point, 3° 23′ S.

Os dous Montes, the Two Mountains (1, 7), or *Ponta dos Montes* (6), the two "Paps" of Banda point, or Cabo segundo, 3° 53′ S.

Barrocas das favaes, Bean-field ravines (6). The white cliffs to the south of Banda point.

Golfo do Judeu, Jews bay (2, 5). Castilho, guided by Pimental, identifies it with Kilongo bay, 4° 12′ S., and this I accept, although the *G. do Judeu* of Behaim's globe seems to represent Loango bay, whilst his *Golfo de S. Nicolão*, December 6, occupies the place of Kilongo. The Jew, later on, was converted into an Indian, and hence already on Reinel's chart (c. 1520), the bay between the *Cabo segundo* and the *Duas moutas* at the Kuilu, is called *Golfo do Indio*. The Repertorio dos tempos (1521), however, has an Angra da Judia two degrees to the north of the Congo, and Reinel's position only suits Kilongo bay. Later authorities distinguish between a Golfo do Judeu and a G. do Indio, identifying the latter with Loango bay. This I believe to be a duplication due to corrupt spelling.

Serra corasa (*corada*, "red, coloured") *de Corte Reial* (3), seems to refer to Mount Salombo and the red cliffs near it, 4° 20′ S.

As duas moutas, the "two copses" of Reinel, are identical with two wooded eminences known as the Paps of Kuilu, 4° 28′ S.

Praia and Serra formosa de S. Domingos, August 4, of Soligo stands clearly for Loango bay, 4° 38′ S. The "*Praia formosa*" and "*terra de S. Domingos*" of Cantino's chart, the *Ponta formosa* of Behaim, the "*praia formosa*" of Dr. Hamy's chart, and the *Praia de S. Domingos* of Canerio's, all refer to the same locality.

Cabo dos baixos, Cape of the Shoals (7). Beach point, 4° 50′ S.

Ponta branca, White point (1). Perhaps Massabe point, 5° 2′ S.

Golfo de S. Martinho (2, 3), November 11. Kakongo and Landana bay, 5° 10′ S.

Ponta formosa (3). A conspicuous bluff on Landana bay, 5° 13′ S.

Ponta da barreira vermelha, Red Cliff point (1, 4). A red clay cliff on Malemba bay. 5° 20′ S. The "Red cliffs" extend south to Cascaes point, 5° 23′ S.

Golfo das Almadias, Boat bay (3, 4, 6, 7). Undoubtedly Kabenda bay.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000058

مكتبة قطر الوطنية
Qatar National Library

Ponta dos Almadias (4). Kabenda point, which subsequently became known as Ponta do Palmar, 5° 33′.

Cabo do Palmar, Palm-grove cape (4, 6, 7). Red point, 5° 44′ S., where there is a palm grove, to judge from the charts.

Ponta do Paul, Swamp point (1). At the mouth of the Congo.

Rio poderoso, Powerful river (2, 3), *Rio do Padrão*, River of the Pillar (3, 4, 8), *Rio de Mani congo* (6, 7), *Emzaze* (8), is our river Congo.

Cabo or *Ponta do Padrão* (1, 2) and *Padrão primeiro* (7). The cape where Cão set up his first pillar, that is, Shark point at the Congo mouth, 5° 4′ S.

Cabo redondo, "Round cape" (6), corrupted on Behaim's globe into *muoruodo*, is Margate head, 6° 31′ S.

Serra formosa (6). The hills south of preceding.

Cabo redondo (1, 2). A cape near Funda bay, 6° 55′ S.

Ponta delgada (6). Loje point, low and sandy, 7° 48′ S.

Rio de Magdalena (1, 3, 4), July 22. The Loge river, 7° 58′ S.

Rio de Fernão Vaz (1, 3, 4). The river Dande, 8° 28′ S.

Rio Mondego (6). The river Bengo, 8° 42′ S.

Angra Grande (1), or *Golfo do Mestre* (6). Bengo bay.

Punta de Miguel (3), September 29, or *da Espichel* (4). The Morro das Lagostas, 8° 45′ S.

Ilhas das Cabras, Goat islands (3, 4, 6, 8). The islands opposite Loanda city, standing upon a tableland (the *Monte alto* of Behaim; the *Tablado* of Juan de la Cosa).

Punta das Ilhas das Cabras (6). Palmarinhas point.

The river *Kwanzo* is not to be found on early charts. P. Reinel (c. 1520) already knew the native name, and called it *Coamza*.

Cabo ledo, Joyful cape (4), still retains its ancient name. It is a rugged black promontory resembling a lion when seen from north-north-east, 9° 49′ S.

Punta das Camboas, Fish-garth point (6). Now Cabo de S. Braz, 10° S.

Terra das duas Pontas (1) is the Morro of old Benguela, which appears from some bearings as a double point, 10° 45′ S.

Cabo do Pichel, Tankard cape (6), and *Punta de S. Lourenço*, August 10 (4, 7, 8), appear to be identical with the preceding.

Rio de S. Lazaro, December 17 (6). The river Cuvo, 10° 50′ S.

Rio do Paul, Swamp river (1). River Catumbela, 12° 26′ S.

Angra or *Golfo de S. Maria* (1, 2, 6). Benguela bay, 12° 30′ S.

Cabo de S. Maria (5). Ponta de S. Joze.

Castel d'Alter poderoxo (1), *C. de S. Agostinho* (2), *Castel poderoso de S. Agostinho* (3), *Cabo do Castello pedroso* (7). There is a village, Alter pedroso (Stony Alter), near Portugalete (see note, p. 631). The "poderoxo" (powerful) of Soligo is evidently a clerical error. The full name would be Castello d'Alter pedrozo de S. Agostinho, a reference to the pillar set up to the south. I identify this "Castle" with the granite cliffs to the south of Ponta choca, 13° 17′ S.

Cabo do lobo or *dos lobos*, Seal cape (1, 5, 6), upon which Cão erected the pillar dedicated to S. Augustin (August 28); also known as *Ponta Negra* or *Ponta Preta* (8). Now Cape St. Mary, 13° 26′ S.

Ilha do lobo (4). One of the islets near the preceding.

Monte negro (5), or *Cabo negro* (7). The mountains rising above Cabo do Lobo.

Angra de João de Lisbõa (6). The Lucira grande bay, remarkable for its intensely green water, 13° 51′ S.

Golfo da Praia (4). Perhaps the Bahia das matilhas, with its red cliffs, 14° S.

Monte Negro (6). The dark-coloured Morro do velho, or Old Man peak, with islets to the south of it, 14° 23′ S.

Terra fragosa, Rugged land (2, 3), and *Terra parda*, Dark land (6), are descriptive terms applied to the country between the Morro do Velho and the Golfo das Aldeas.

Cabo do Leão, Lion cape (3), *Rio certo?* (3), *Cabo Zorto* (2), and *Cabo verde* should be along this part of the coast.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000068

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Monte negro, Black mountain (2, 3, 5, 7, 8), upon which Cão set up his third pillar, is now known as Cabo negro, and bounds Port Alexander in the north, 15° 40′ S.
Golfo or **Angra das Aldeas**, Bay of the Villages (6, 7, 8), which I believe to be identical with the *Golfo do Salto* (4). Here are—
Castello primeiro (7), the wall-like cliffs south of the Coroca river;
Punta de areia, Sandy point (6), now Bateman point; and
Punta dos baixos, Shoal point (4), the point opposite the Dormer bank.
Punto do Moço, Young Man's point (4). Now Albina point.
Golfo da balea, Whale bay (2, 5), or *Golfo das areias*, Sandy bay (6, 7). The Great Fish bay.
Manga das areias, Sandy sleeve (8). Tiger peninsula, in 1778 still an island.
Ponta das pedras, Stony point (8), and *Montanha da pedra*, Stony hill (6). The Monte Vermelho near south extremity of Great Fish bay, 16° 50′ S.
Praia verde, Green beach (2, 7). The mouth of the Cunene, 17° 15′ S.
Cabo preto (4) or *Cabo negro* (6, 8). Now Cabo frio, 18° 23′ S.
Serra de S. Lazaro, December 12.
Punta da Pedra, Rock point (7). Fort Rock point, a white block of granite.
Punta delgada, Point Slender (4). Rock spit, a sandy tongue.
Praia de Bragança (5). A João de Bragança was Moço do monte (chief forester) in 1494.
Angra de Ruy Pirez (8). Off Uniab river, 19° 50′ S.
Punta de Ruy Pirez (6). Palgrave point, 20° 31′ S.
Angra pequena de S. Amaro (8), September 2. Ogden harbour, described by Captain Morrell in 1832, but now non-existent, 20° 57′ S.
As areas, the Sands (8). Applied to sandhills along coast.
Praia das neves. Snow beach, of later maps, supposed to have been given to the sand-hills because of their whiteness, but evidently a misprint for *Praia das nevoas*, the Shore of Mist, as Homem has it, a very appropriate designation.
Golfo da Baleia, Whale bay (2, 4, 6). Cape Cross bay.
Cabo do Padrão (2, 4, 5, 6). Where Cão set up his last pillar; now Cape Cross, 21° 50′ S.
Praia das Sardinhas, Sardine shore (2). Sierra bay.
Serra parda (2, 3, 4). The Cabo dos Farilhões, dark and rocky, in the midst of sandy dunes, 22° 9′ S.
Terra de S. Barbara (6), December 4. The country to the south of Cape Cross.
Praia das Pedras, Stony beach (7, 8). Now Rock bay, 22° 18′ S.
Praia das alagoas (6), or *Praia verde* (7). Lagoon or verdant shore at the mouth of the Swakop, 22° 42′ S., marked by dense green foliage. Three small lagoons are just within the bar.
Praia das aves (6). A very appropriate name for a coast abounding in bird-life.
S. Ambrosio (7), April 4. Perhaps intended for the Swakop.
Golfo de S. Maria da Conceiçao (6, 8), or *Angra da temeridade* (7), is our Walvisch bay.
Cabo do Espiritu santo (2). Now Pelican point, in 22° 54′ S.
Golfo da Baleia, Whale bay (2, 8), or *Porto do Ilhéo* (7). Sandwich bay, 23° 21′ S. The island which formerly sheltered this bay may have grown, in course of time, into a spit of sand, an evolution not at all rare along the west coast of South Africa.
Praia das alagoas (7) may refer to the lagoon at the head of Sandwich bay, or to the mouth of the Kuiseb, which enters Walvisch bay.
Areias gordas (5), "Hell." An appropriate name for the sandy waste to the south.
Rostro da Pedra, the "Rocky beak" (4, 9), I believe to be Hallam's Bird island, in 24° 37′ S. The *terra da Roca* (6) faces it, and is also called *terra das baixas* (8), from the shoals close by.
Golfo de S. Thomé (6, 7), December 21. The bay or indentation to the north of Mount Sylvia, 25° 5′ S.
Calheta dos tres Irmãos, "Three Brothers creek" (6, 7), are the three Easter cliffs, separated by small indentations, 25° 25′ S.
Enseada pequena, Little bay (8), seems to be known also as *Golfo de S. Antonio* (7), and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000060

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

there is little doubt, to judge from the description given by (8), that it is identical with Spencer bay and Mercury island, 25° 43′ S.

Golfo de S. Maria da Victoria (4, 5, 6) is evidently named in honour of the famous victory of Aljubarrota, on August 14, 1383. As placed on Cantino's chart, I should identify it with Hottentot bay, 26° 8′ S., but on Juan de la Cosa's and Dr. Hamy's charts it is associated with the *Angra* or *Golfo das Voltas*.

Ponta dos Ilhéos (6, 7, 8). An appropriate designation for the cape facing Ichabo I., in 26° 17′ S. Here also might be found the *Angra dos Ilhéos* of De Barros. On Diogo Homem's chart (1558), a pillar stands to the north of this point.

Golfo de S. Christovão (6), July 25, we believe to be the bay absurdly called Angra pequena on our modern maps, notwithstanding that it is the only large bay along the whole coast from Great Fish bay to St. Helena bay. It is identical with the *golfo* or *Angra das Voltas* of (4, 5, 7 and 8) (see note *, p. 645).

Punta da Angra (6), is Angra point of modern maps.

Cabo da Volta and *serra parda* (2), where stood the padrão of Santiago, is now known as Diaz point, 26° 38′ S.

Ilhéos dos baixos (4, 6). Halifax and other islets to the south of Diaz point.

Golfo de S. Estevão (5, 7), December 26. Elizabeth bay, 26° 52′ S.

Ilhéos seccos (4, 7). Possession and other islands further south. The *Ilhéo do pantano*, "Swamp island," of Germanus should be one of these.

Terra de S. Silvestre (6), December 31.

Volta das angras (2), fairly suits the modern Cape Volta in 28° 42′ S. Its latitude nearly agrees with that assigned by De Barros to his *Angra das voltas* (viz. 29° S).

Terra dos bramidos (4, 6). The coast to the south of Orange river, where the heavy swell causes a continuous roar (*bramido*).

Serra or *Lombada da Penha*, ridge or summit of the rock (6, 8). Vogel Klip, 29° 40′ S., 4300 feet. For "Serra de perétal" (7) we ought probably to read *Serra do penedo*, which means the same.

Morro de pedra (4, 8). Roodewall, a red cliff, 30° S.

Rio do Infante. Apparently named after João de Infante. The earliest record of the name I find in the *Repertorio dos Tempos* of 1521. It is the Olifant river, 31° 42′ S.

Serra dos Reis (47), January 6. Olifant Bergen, 32° 10′ S.

Angra de S. Helena (6, 7, 8). The bay discovered by Vasco da Gama.

Porto de S. Lucia (5). Now Saldanha bay.

Ilha branca, White island (5). Now Dassen island.

Punta da Praia (8), Green point, Table bay.

Pico fragoso (3). Now Table mountain.

Cabo de boa Esperança, Cape of Good Hope, 34° 22′ S. Supposed to have originally been named Cabo d'El-Rei (see p. 648).

Golfo dentro das serras, Gulf within the Mountain Ranges (2). Now False bay.

Ponta de S. Brandão (6, 8), May 16. Our modern Cape Agulhas, 34° 49′ S.

Gulfo das Agulhas (6). A bay to the east of the preceding, now Struis bay. See also note, p. 647.

Cabo do Infante (5, 6, 7, 8). Still known in a corrupted form as Cape Infanta, 34° 28′ S.

Rio da Nazareth (4, 5). Now Breede river.

Rio dos vaqueiros, River of Cowherds (2, 5). It is called Rio della vacche by Martellus Germanus, and corresponds to our Gouritz river, 34° 20′ S.

Cabo das vaccas (8), or *Cabo delgado* (4). Now Cape Vacca.

Angra das vaccas, Cow bay (4). Now Flesh bay, 34° 12′ S.

Ponta da estrella, Star point (4). Now Cape St. Blaize, 34° 10′ S.

Terra de S. João (7), June 24 or December 27. The country to the west of Mossel bay.

Golfo dos Vaqueiros, Gulf of the Cowherds (4), *Bahia da aguada*, Bay of the Watering-place (5), or *Golfo (Angra) de S. Braz* (6, 7, 8). Now Mossel bay.

Serra de S. Lazaro (5), December 17. Western Outeniqua mountains, rising 5000 feet.

Ponta da Pescaria, or Fishery point (7). Gericke point.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Lago cerrada, Enclosed lake (6, 7). Zwarte vlei.
Serra da Estrella, or Star mountains (5, 6). Now Outeniqua mountains.
Cabo talhado, Steep cape (2, 5, 6, 7). Cape Seal, 34° 6′ S.
Bahia or *Angra das alagoas*, that is, Bay of the Lagoons (6, 7, 8). Now Plettenburg bay. The old name does not seem to be very appropriate.
Terra das trovoados, Land of Thunderstorms (7). The Langekloof.
Ponta de Ruy Pirez (5). Seal corner point, 34° 2′ S.
Ponta (golfo) das queimadas, Forest fire point (5, 6, 7). Now Cape St. Francis and Krom bay.
Golfo dos Vaqueiros, Cowherd bay (2, 5). St. Francis bay.
Cabo do recife, Reef cape (5, 6, 7, 8). Still Cape Recife, 35° S.
Golfo da Roca, Rock bay (5, 6, 7). Now Algoa bay.
Ilhéos da Cruz, Cross islets (6, 7, 8). St. Croix, 33° 48′ S.
Ilheos chãos, Low islands (6, 7, 8). Bird islands, 33° 50′ S.
Ponta do Carrascal, Green Oak point (6, 7). Now Woody cape.
Padrão de S. Gregorio, St. Gregory's pillar (2, 5, 6), March 12. Now cape Padrone, 33° 45′ S. The "S. Georgo" of (2) is a clerical error.
Rio da lagoa, Lagoon river (5, 6). Now the Kasuga river.
Penedo das Fontes, Fountain rock (4, 6). Now Ship rock, to the west of Port Alfred, 33° 38′ S. Pacheco uses Penedo das Fontes as a synonym for the Ilheo da Cruz.
Ilha do Infante (2, 4). Now Three Sisters, off Riet point (?).
Rio do Infante (6, 7, 8). The Great Fish river, 33° 30′ S., 27° 8′ E.

THE OASES OF THE MUDIRIEH OF ASSYUT.*

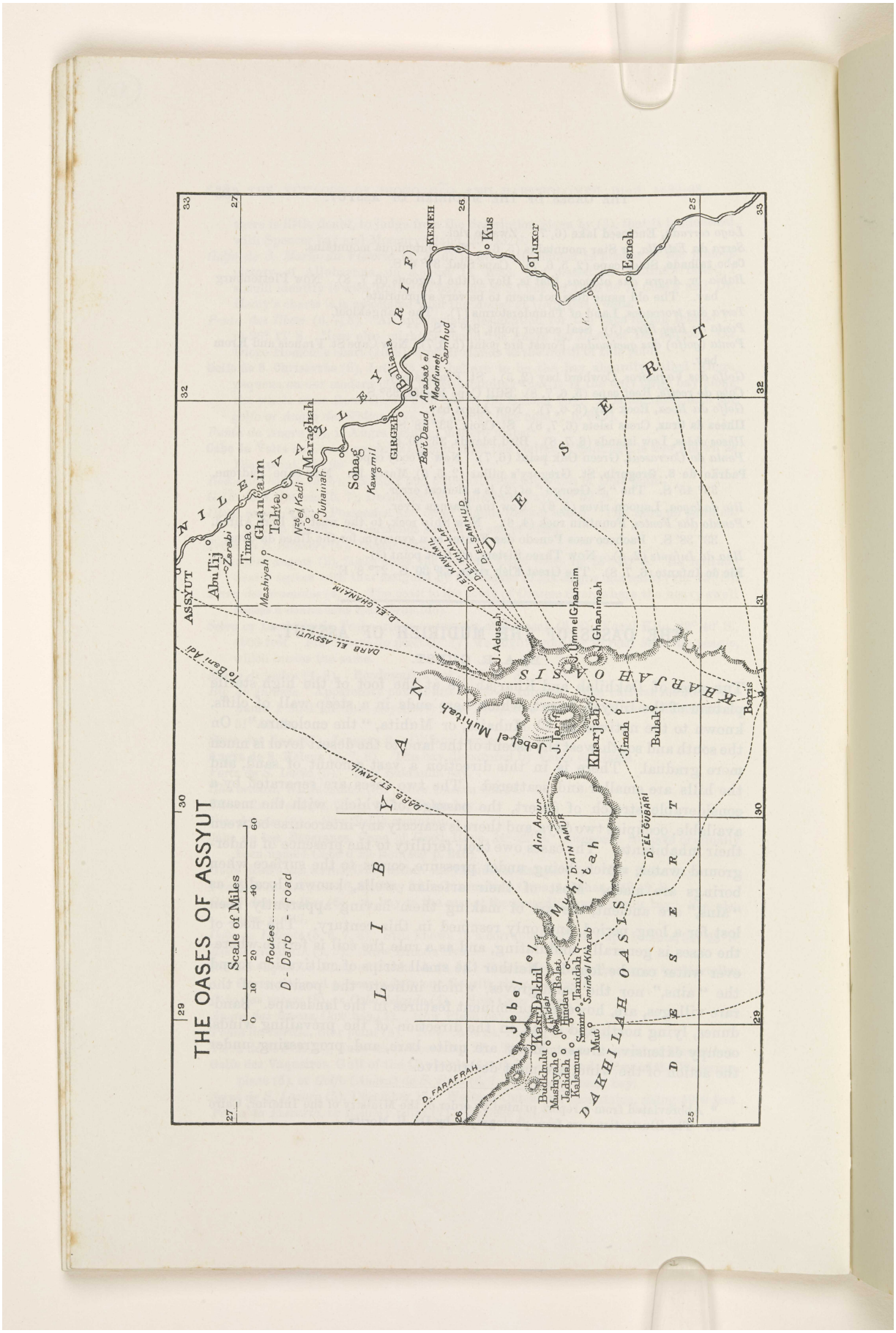
By A. R. GUEST.

The oases of Dakhilah and Kharjah lie at the foot of the high sterile plateau of the Libyan desert, which here ends in a steep wall of cliffs, known to the natives as El Muhaita, or Muhita, "the enclosure." On the south and south-west the ascent of the land to the desert level is much more gradual. There is in this direction a vast amount of sand, and the hills are smaller and scattered. The two oases are separated by a considerable stretch of desert, the passage of which, with the means available, occupies two days, and there is scarcely any intercourse between their inhabitants. The oases owe their fertility to the presence of underground water, which, being under pressure, comes to the surface when borings are made. Most of their artesian wells, known locally as "ains," are ancient, the art of making them having apparently been lost for a long period, and only resumed in this century. The floor of the oases is generally undulating, and as a rule the soil is fertile wherever water can be found. Neither the small strips of cultivation round the "ains," nor the palm-groves, which indicate the position of the rare villages, are, however, prominent features in the landscape. Sand-dunes, lying north and south in the direction of the prevailing winds, occupy extensive areas. Many are quite bare, and, progressing under the action of the wind, are most destructive.

* Abbreviated from a report printed by order of the Ministry of the Interior, Cairo 1900. The illustrations are from photographs by Dr. B. Moritz.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008d

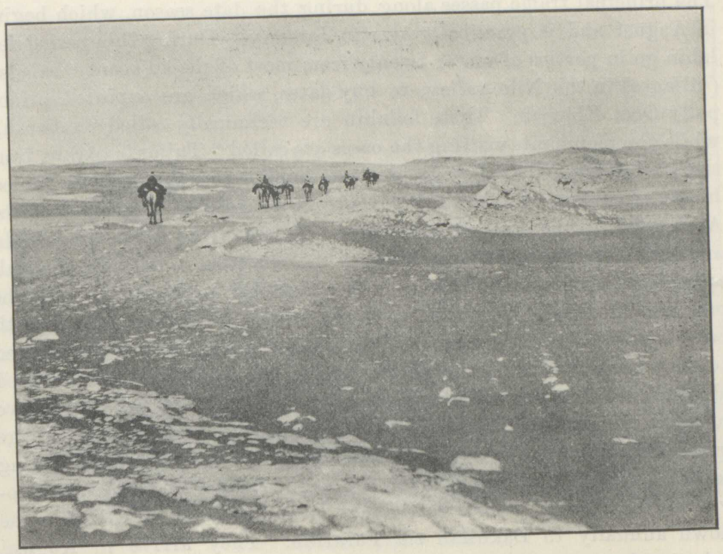
مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



ER RAMLAH EL KABIR, ON THE ASSYUT ROAD TO KHARJAH.

The oases produce grain and other necessaries, but not in sufficient quantity for the support of the inhabitants, who make up the deficiency by the sale of their dates. These form their principal means of livelihood, and practically the only article of export. There are many evidences that both the population and cultivated area were once larger than at present.

The inhabitants do not appear to differ from the fellahin of Upper Egypt, but in Kharjah there is a trace of Sudanese blood, due to the former yearly passage of caravans from Darfur. The only language spoken is Arabic, the dialect in use differing somewhat from those of neighbouring districts. It is said that it employs many classical words, and a careful study of the oases dialect might throw some light on their history. The people are Moslems to a man, belonging almost entirely to the Shafii and Maliki sects. In Dakhilah, the Senussis have been established some thirty years, and as they educate the children their influence must be considerable.

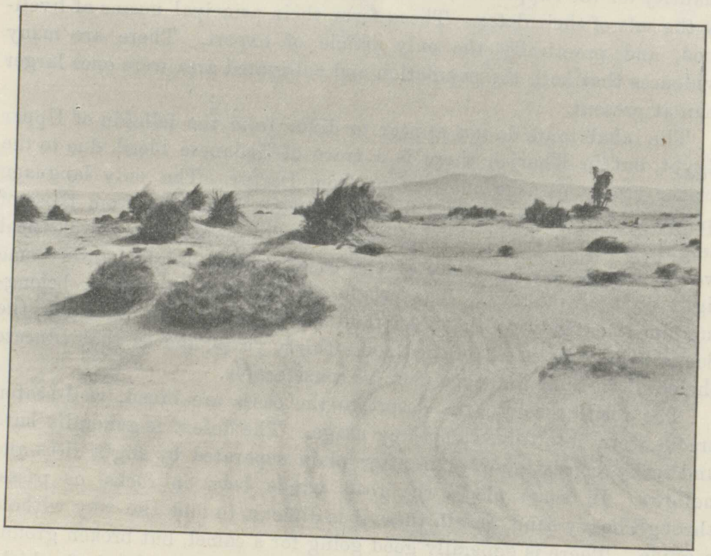
The roads through the desert to the oases are broad, well-beaten tracks worn into furrows by long usage. The desert is generally hard and rocky, consisting of plain after plain separated by slight rises and hollows. In some places the road winds between rocks, or passes through heavy sand, and in these it is difficult to find the way without a guide. There is generally good going for a camel, but broken ground in each road would render it almost impassable for any kind of vehicle.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000012

مكتبة قطر الوطنية
Qatar National Library

The principal traffic passes along during the date season, which begins in August and is practically over in January. During this period fellahin go in parties of ten or twenty from most of the adjacent "balads" (villages) in the Nile valley, to buy dates, which are exported principally from Kharjah. These fellahin are technically called "saffarah," while the merchants visiting the oases are called "Tujjar." Arabs from the west of the Nile valley go in small numbers to the oases as guides, hirers of camels, or traders, but there is no general migration of the Arab tribes to the oases at any season. These Arabs have few camels, and are in process of settling down to the condition of fellahin, the Bali tribe being the one which retains its nomad habits the most. It is the one which chiefly frequents Kharjah, while the Amaim go to both oases. About twenty years ago the guarding of the roads was entrusted to the various tribes, who then levied toll on each camel that passed along them. This arrangement has been abolished, but the tribes have not yet relinquished an idea of possession, and when a brigandage occurs on any road, the tribe to which its guardianship used to belong may be suspected. In addition to the Arab tribes of the adjacent provinces, the Rabayi, whose settlement is at Kardasah, in Gizeh, come down annually to Dakhilah *viâ* Farafrah. They arrive in August, bringing large numbers of camels, and returning by the Darb et Tawil to Assyut, and thence by the Nile valley to Gizeh.

A few words may now be devoted to the more special characteristics



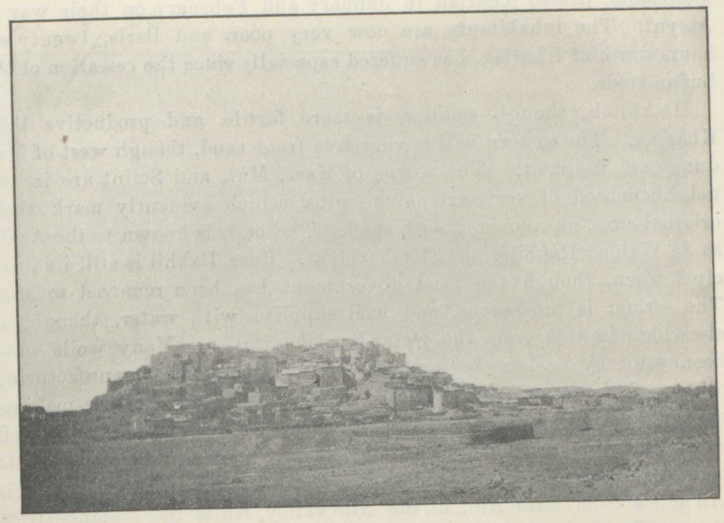
OASIS OF KHARJAH.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

367



TOWN OF MUT, OASIS OF DAKHILAH.

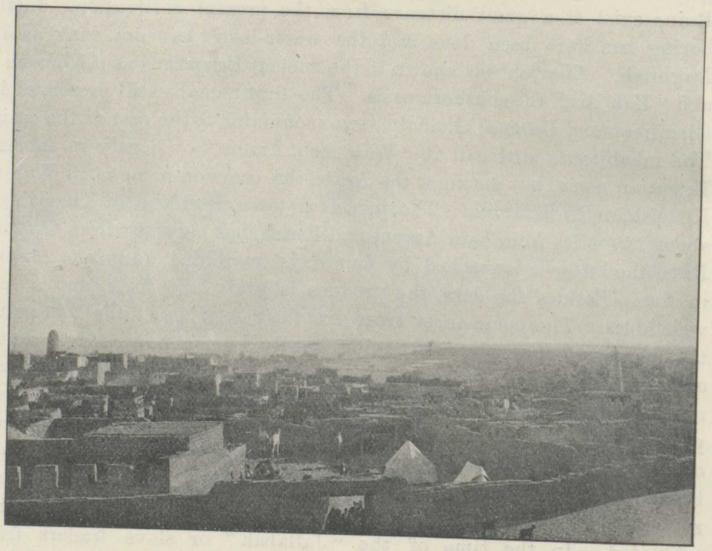
of the two oases. Kharjah is but sparsely populated, its most striking feature being the amount of sand which chokes the valley, and which gives the impression that the oasis has been overwhelmed with sand. Ruins exist at a great distance from the present cultivation. Little boring has here been done, and the water-level has not sunk as in Dakhilah. Kharjah was known to the ancient Egyptians as "Khenem" and "Uah Ris," the southern oasis. The first name is still preserved in Ghanimah and Umm el Ghanaim, two mountains to the east of the oasis. The inhabitants still call it "Wah men Amum," obviously an ancient Egyptian name, but amongst the Arabs the common name is El Wah el Kharjah, or El Kibliyah. The principal town, itself called Kharjah, is about 130 miles from both Assyut and Esneh, but only 104 from Girgeh. From the latter it is reached by four days' marching, and from Assyut in five. Besides the date, the produce is grain and fruit, and a few vegetables. The commonest trees are the "sant" and the dom palm, the sycamore, once plentiful, being hardly known now. The "sant" are remarkably fine. Good pasture for camels is found in places, but none of these are owned by the inhabitants, goats being the most plentiful domestic animal. It is stated that some six or seven hundred camels come to Kharjah during the date season, of which about one hundred go on to Dakhilah, about a hundred also coming to Baris and returning to Esneh. These figures seem, however, considerably underestimated. In the time of the "Jallabah" or slave traders from Darfur, perhaps four thousand camels a year, belonging to Sudanese

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000041

مكتبة قطر الوطنية
Qatar National Library

merchants, passed Kharjah in January and February on their way to Assyut. The inhabitants are now very poor, and Baris, twenty-six hours south of Kharjah, has suffered especially since the cessation of the Sudan trade.

Dakhilah, though smaller, is more fertile and productive than Kharjah. The eastern half is very free from sand, though west of Mut dunes are frequent. The towns of Kasr, Mut, and Smint are in the neighbourhood of very extensive ruins, which evidently mark their original sites, now covered with sand. The oasis is known to the Arabs as El Wah ed Dakhilat, or El Gharbiyat. Kasr Dakhil is still its principal town, though the local government has been removed to Mut. The former is prosperous, and well supplied with water, though, as elsewhere in this oasis, the water-level has fallen. Many wells have been sunk by modern boring-machines. Kasr is the manufacturing centre of the oasis, the principal industries being pottery-making, weaving, basket-making, and the pressure of oil. The pottery is well worth attention, some of the vessels being exactly the same as those to be seen in fragments on the old sites. Balat, in the east of the oasis, is 170 miles from Bani Adi, in the Nile valley, while the distance from Kasr to Farafrah is about 115 miles, and from Tanidah to Kharjah 72. The only direct road to the Nile valley is that to Bani Adi. The productions of Dakhilah are similar to those of Kharjah, the dates fetching, however, a slightly higher price. The dom palm is very rare, though

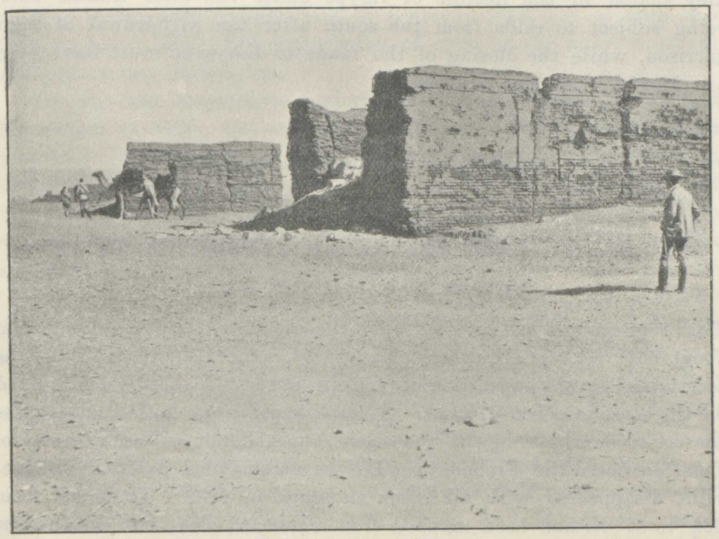


GENERAL VIEW OF KASR DAKHIL, OASIS OF DAKHILAH.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



RUINED TEMPLE, SMINT EL KHARAB.

not, as stated by Rohlfs, entirely absent. The number of camels which visit the oasis in the date season is estimated at two thousand.

The history of Kharjah and Dakhilah can be traced from very early times by the aid of the ancient inscriptions and documents, and the writings of Herodotus, Strabo, Plato, Ptolemy, Ulpian, Procopius, and the Arab geographers. Three of the latter, El Makrisi, El Istakhri, and Ibn Haukal, seem to have thought that the oases were actually abandoned at their epoch, but this would seem to be an error. What is probably true is that they had lost much of their importance by the closing of the desert roads to the west, which appear to have led to Ghanat, Fezzan, and even Marocco. According to El Masudi, Marwan, the last Umaiyad Khalif of Damascus, was slain at Abu Sir, near Mallawi, as he was preparing to proceed west to Marocco across the desert. The oldest official paper in the possession of the inhabitants which I have seen is dated 1180 A.H. A tradition quoted by Rohlfs, to the effect that the western roads were made impassable by a force of Mamluks, who stopped the wells in order to repel the raids made from that direction, appears to be demonstrably without foundation. From all we know of their history, we may deduce that the oases have never been places of great importance. That they were in a higher state of cultivation in the ancient Egyptian times than at present is unquestionable, and there is evidence that they were flourishing in the early days of the Roman emperors. It seems likely that

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000032

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

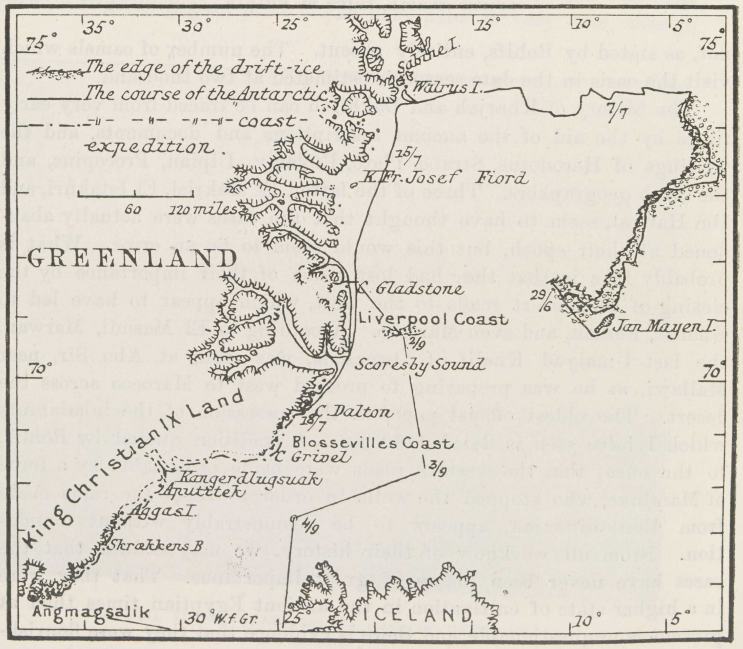
The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [368v] (89/232)

they shared in the decline of Egypt under the later Roman rule, being subject to raids from the south after the withdrawal of their garrison, while the closing of the roads to the west must have been a serious blow to their importance.

THE DANISH EAST GREENLAND EXPEDITION IN 1900.

By Lieut. G. C. AMDRUP, R.D.N.

Till 1898 no one had set foot upon the east coast of Greenland from about 65¾° lat. to about 70¼° lat. except some Eskimo, who, it was ascertained by the expedition of G. Colin in 1883–85, had formerly lived on the coast to about 67¾° lat. Several expeditions had tried to pass the ice-river which blocks the coast, but had not succeeded; one of them on board the French brig *Lilloise*, commanded by Lieut. Blosseville, disappeared, with all hands on board, in 1833. The coast from 68½° to 69° N. had been mapped from on board ship, but at a rather



SKETCH OF THE COURSE OF THE "ANTARCTIC" AND OF THE COAST-EXPEDITION IN 1900.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000078

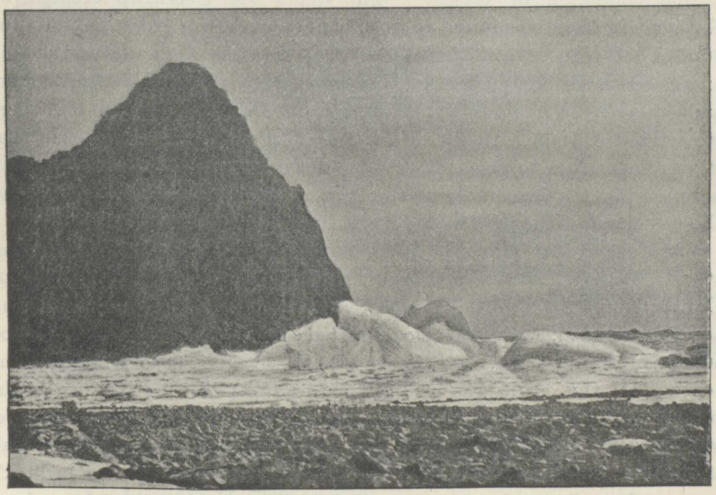
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

long distance outside the ice-barrier. The coast from 70½° to 69° was mapped by Scoresby in 1822, and by Ryder in 1892, but in both cases from on board ship. But many miles of coast on the chart were only still shown as a dotted line.

On my first expedition, undertaken during August 16, 1898, to September 12, 1899, the coast from 65¾° to 67° 22′ was explored and mapped. The explorations were made with sledges in winter-time, and in summer-time in a light-built wooden boat, 21 feet long, manned with two naturalists and two sailors, beside myself. Two depôts with provisions were erected, one at 66° 7′, and the other at 67° 15′, and fine scientific collections were brought home.

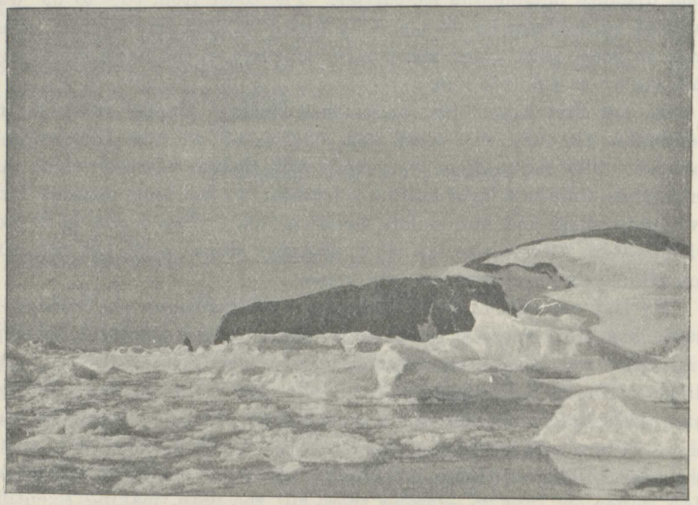
My last expedition, which returned to Copenhagen on October 4, 1900, has from every point of view been a great success. For this expedition was bought the Swedish vessel *Antarctic*, used in the expedition of Dr. A. G. Nathorst in 1899. Besides the crew, the expedition numbered five naturalists, one army officer for mapping, one artist, and three sailors, who would accompany us on the boat expedition along the coast. The expedition left Copenhagen on June 14, and arrived at Jan Mayen on June 25, staying there till the 28th, making scientific researches and collections. The edge of the ice-pack was met with on the north-west of Jan Mayen on the evening of the 28th, and was followed north-east and north until July 6 at four o'clock in the morning, when the ice (at 74° 30′ lat., 30° 58′ long. W.) allowed us to make way towards the west. Inside the dense band of pack of smaller



CAPE GARDE, ON BLOSSONVILLE COAST.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000017

مكتبة قطر الوطنية
Qatar National Library



CAPE CHRISTIANSEN, 67° 13′ N. LAT.

floe-ice now came large ice-fields, often many miles in extent, with long channels between them. On July 10 we got the first glimpse of the coast, and on the 11th, at two o'clock in the morning, we anchored at Griper Road, on Sabine island. We examined Sabine island, and found a fine collection of fossils. The depôt for Sverdrup erected by Nathorst in 1899 was found in good condition. In a cairn next to the depôt I left a record, informing Sverdrup that the *Antarctic* would stay on the coast till September 1. Then we landed at Cape Borlase Warren, and steered south along the coast to Cape Dalton (69° 30′ lat.), where we arrived July 18. South of Cape Dalton the ice was so dense that it was impossible to enter it. With three companions I left the ship here, giving the leadership of the ship-expedition to Dr. N. Hartz, and the command of the ship to the first mate.

At Cape Dalton we built a small wooden house, where all our provisions, sledges, kayaks, etc., were stored. On July 22 we left Cape Dalton, bound for Tasiusak, 65° 35′, in a light wooden boat 18 feet long and 5 feet broad, with provisions for two months and a half and a good supply of ammunition, in case we should be obliged to winter on the coast. All the outfit was as light as possible, in order that we might be able to haul the boat over the ice without difficulty. All the provisions were stowed in boxes, in such a manner that they could not sink if the boat should be crushed in the ice. But we were always in luck's way, and on September 2 we arrived at Tasiusak, having done about 500 miles in the boat. My task was done; but, in addition, I also

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000012

مكتبة قطر الوطنية
Qatar National Library

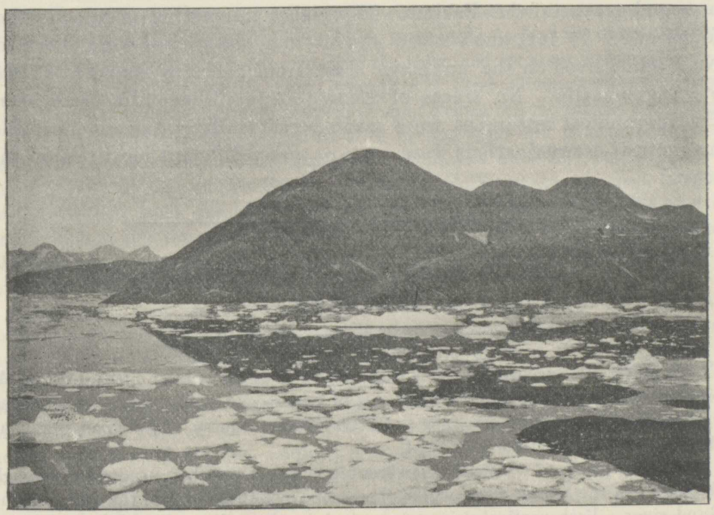
BRITISH LIBRARY

370

travelled along the coast for almost half a year, partly in an ice-boat, and partly with sledges, and had many exciting accidents and narrow escapes, the coast being, I dare say, one of the most inhospitable in the world, with its steep cliffs and numerous large glaciers, and with the polar ice driving with the current along the coast.

The ship expedition, under the leadership of Dr. N. Hartz, left Cape Dalton on July 22, and examined and mapped the coast to Scoresby sound. From July 1 to July 20, the expedition carried out scientific researches in Hurry inlet and Scoresby sound. Then the expedition left the sound, landed at Cape Grey, on the Liverpool coast, on July 23, and mapped and examined the bays west of Cape Gladstone. The expedition then made a short run in Davy sound and King Oscar's bay, and left the east coast of Greenland on September 1. After a short stay at Dyrefjord, in Iceland, the ship arrived at Tasiusak on September 11, when I took the leadership of the expedition and the command of the ship. We left Tasiusak on September 18, and arrived at Copenhagen on October 4.

Besides the mapping * of the coasts and bays, the expedition brought home fine palæontological, geological, zoological, and botanical collections; also a living specimen of the musk ox, and ten living specimens of the lemming (*Myodes torquatus*). Four ermines were killed and brought



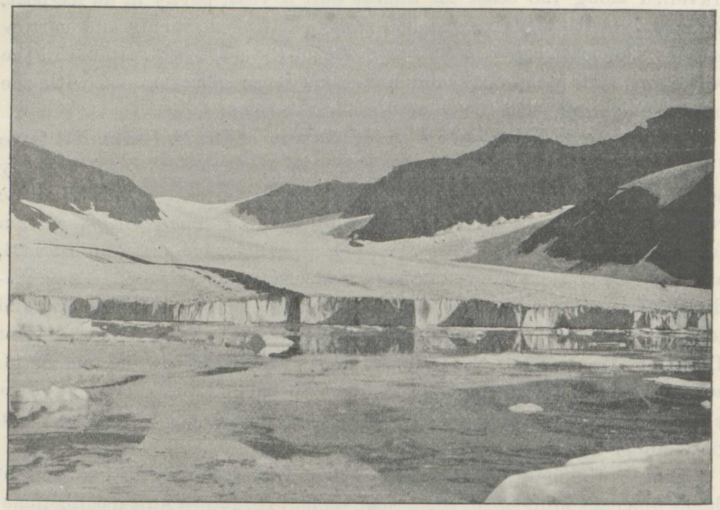
VIEW FROM THE NORTH SIDE OF KAUGERDLUGSUAK.

* The new chart of the unknown coast and of the bays west of Cape Gladstone is still unfinished, and is for this reason not shown in the sketch-map.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



A SMALL GLACIER EAST OF KAUGERDLUGSUAK.

home. An interesting ethnographical collection was made in the old huts and graves of the Eskimo. Especially interesting is a collection found at 68° 10′ lat., and sixteen skulls from old graves were obtained. No Eskimo lived on the unknown coast from Scoresby sound to 65° 45′ of Angmagsalik. No traces of Andrée or of Blosseville were seen. Hydrographical researches were made occasionally. Astronomical and magnetical determinations were made at many different localities on the coast.

ON THE AFGHAN FRONTIER: A RECONNAISSANCE IN SHUGNAN.*

(Notes from a Russian Officer's Journal.)

These notes are derived from the journal of a Russian officer, Lieut.-Colonel A. Serebrennikov, who was a member of one of two reconnoitring parties, despatched by the Russian Government into the little-known country of Shugnan from the Pamirsky Post during the year 1894.

The first party, of which Mr. Serebrennikov was a member, penetrated through the valley of the Shakh-Dara, whilst the second confined itself to the valley of the Gund river. Both parties ultimately united in the valley of the Kharokh river, near fort Kala-i-Bar-Panja, the capital of the Khanate of Shugnan.

This region is almost virgin ground for the explorer, most of the particulars we have of it at present being derived from hearsay. In view of this fact, and also

* Communicated by Dr. A. Markoff.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of the great probability that this hitherto neglected region may ultimately develop, by the march of political events, into a place of strategical importance, as the narrow belt of land separating two great powers—Russia and England—in Asia, it is to be hoped that the following short descriptive notes may induce some enterprising Englishman to undertake the task of exploration in a thorough and scientific spirit. This is the only excuse for offering these notes here. A military officer, whether English or Russian, on such a reconnoitring expedition has scarcely the means, if he had the will, to effect an exploration in the proper geographical meaning of the term. To get a written account at all, however sparse in detail it may be, from an eye-witness is a step in the right direction.

The first writer to mention Shugnan is the Chinese Buddhist monk Hwen-Thsang (in the seventh century); but every description, commencing with that of the Chinese traveller and ending with those of the English travellers Wood (1836), Forsyth, Trotter (1873) (in the nineteenth century), is largely made up from hearsay accounts. The first European who actually visited Shugnan *in propria persona* was the Russian Dr. Regel (1882–3). He was followed, a little later in 1883, by the mining engineer Ivanov. Neither traveller has published anything important on the country. In 1894, Lieut.-Colonel A. Serebrennikov, in the reconnoitring expedition to which reference has been made above, succeeded in riding along the entire courses of the rivers Shakh-Dara, Gund and Kharokh, and also along a portion of the Panj.*

As to the result of his travels we may now let him speak for himself.

A. M.

Pamirsky Post, Sunday, July 9, 1892.—There is a break in the monotonous run of garrison life at last! General Yonov has arrived with his staff, and after feastings, congratulations, etc., we settle down in earnest to discuss our proposed reconnaissance into Shugnan. There is no time to be lost, as we learn that the Afghans are expected almost daily to cross the river, and we must forestall them.

July 19.—Our two parties, each consisting of three officers, twelve infantry, twenty cossacks, and some guides, set out at eight o'clock this morning in a drizzling mist. We forded the river Murgh-ab after parting from and receiving the good wishes of all our brother-officers remaining behind, and also—last but not least—those of the only lady on the Pamirs, Madame S. G. Skerskaya, who had, in spite of the weather, made one of our honorary escort up to this point. The river is rather high at this season, and the waters rose to our horses' saddle-cloths even at the ford, but in autumn and winter, when its affluents are not fed by the melting of the glaciers, fording at any point is very easy.

How exceedingly monotonous and dreary the scenery on this vast Pamir plateau is! The low mountains, with vague outlines, which bound the broad river valleys, are quite bare and lifeless. In this respect how different from the awesome mightiness of some of the giants in the Alai range! But the fact which should astonish us is the tremendous height above sea-level, at which we are standing in these valleys. This, of course, cannot be seen, but only felt—fever, violent headaches, nose-bleeding, etc., are frequent symptoms here, and tell their own tale as regards altitude. The natives call these symptoms "tutek."

After passing the burial vaults of Shadjan, on the right side of the river, we turned sharply to the left, ascending a small plateau whereon are more graves, but

---

* The parts of Shugnan within the valley of the Panj have lately been visited by the two Danish Expeditions under Lieut. Olufsen. On the second of these a reconnaissance east of the river was also made.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000023

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

without any inscriptions. We then descended into the valley of the Kara-su river (an affluent of the Murgh-ab). In this river there is a kind of "eyot" covered with parched and sickly-looking willows, and it is strange how our eyes would affectionately cling to this anæmic oasis, which represents the sole timber growth in the Pamir highland from Fergana and the Alai to the Koi-tezek pass on the Shugnan frontier, about 240 miles.

The river now washes its way through a thick bed of conglomerate, 45 to 50 feet deep.

After crossing over to the left bank of the stream, we followed the road which brought us almost straight to the "rabat" (Persian inn) at the mouth of the river Boz-Jilga. Here we stopped for the night. More by luck than by foresight, we resisted the temptation, weary as we were, of camping in the open—for the rabat, being merely a quadrangular room with a clay dome, could not, of course, accommodate us all—and erected two of our tents outside. It was fortunate we did so, for a stiff shower fell during the night.

As a rule, the rainfall is very slight on the Pamir, and rainy days do not average more than 8–10 per annum.

We set out at daybreak next morning and crossed the summit of the Naiza-tash. This latter slopes so gently, that a carriage could easily traverse it. The road now courses between low mountains, with the usual depressing and spiritless "Pamir" perspective, which, however, opens out when we enter the Alichur valley. Here the eye can take a wider sweep, and embraces the whole of the valley, lying there as if in the palm of one's hand, with the Chatyr-tash (the tent-stone) rising in the middle, and looking really like a huge tent in the distance. A strong wind is nearly always blowing along the Alichur valley, and in our case proved very disagreeable, as we had already marched 29 miles, and were feeling tired. We camped shortly afterwards for the night about 2 miles below the Chatyr-tash on a rather marshy plain, covered with fairly good grass. Here we consulted as to our plans for the morrow.

As it was imperative that we should reach Shugnan in time to forestall the designs of the Afghan raiders, we decided to push on 18 miles next day, as quickly as possible and without halting.

Although the Alichur valley is noted for its rich grazing lands, the nomadic tribes have not yet sufficiently got over their natural fear of the Afghans to make general use of them. This warlike, though treacherous race, may be justly termed the banditti of Central Asia, and, so long as they exist, will they be a constant thorn in the sides of both English and Russians. During the summer of 1891 and 1892 they established a small military post on the eastern borders of the Yashil-kul, near Sume-tash, whence they raided and blackmailed Russian subjects on the Pamirs. It cost the Russians a very sanguinary encounter before they could be ousted from their ill-famed stronghold.

July 21.—We started at 7.15 a.m., after leaving three cossacks (as we did also at the previous halting-places) to keep up our line of communications. We again followed the road, which from this point skirts the left bank of the Alichur river, winding up and down, in and out, at the base of the mountains. The lower parts of the valley are marshy, and we had to avoid them. We crossed the stream Bash Gumbez, which falls into the Alichur further down, and passed one of the rabats of Abdullah Khan. This rabat is in very good preservation, though over three hundred years old.

A disagreeable head wind was now blowing, and we were all glad when, at four o'clock, we saw in the distance the lately-built rabat near the Mukur-Shegembet river and ravine. It stands on a high bank, and can be clearly seen a good way

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

off. The soil thereabouts is salt, and vegetation grows scantily only along the banks of the river.

July 22.—We set out again early next morning, after leaving our usual post of three cossacks behind. The road here turns to the left, and soon takes us away from the Alichur valley.

Our most direct route would have been along the Yashil-kul lake, thence following the Gund river, which flows out of its western side. As this road, however, is very hard to traverse, we decided to take the longer but easier route over the summit of the Koi Tezek, and thence through the valley of the Toguz Bulak river.

This we did, and camped for the night by the salt lake Tuz-kul. Here we received a deputation of a hundred Shugnanis, who petitioned us on behalf of the inhabitants of the Shakh-Dara for protection against the Afghans. They were a poor, dispirited-looking body of men, and must have stood to the Afghans as sheep to wolves. Their dress, made from the coarsest stuffs, led us to think that they were all simple peasants; but in this we were mistaken, as we soon perceived, for no less a personage than Azis-Khan, nephew of the last independent ruler of Shakh-Dara, was amongst them. This was the ruler who had been executed in Rosh-kala by order of the Shugnan ruler (Shah-Abduraim-Khan).

Azis-Khan, our humble petitioner, was a young fellow of about twenty or twenty-two, of medium height, with the typical features of a mountain Tajik, and the customary curly whiskers, like those we see depicted on many of the old Assyrian bas-reliefs. His dress, consisting of a black cotton "khalat," or gown, was mean in the extreme, and neither in bearing nor in apparel did he betray any hint of his princely birth. The "caste" system does not exist in Shugnan, and, owing to the general poverty which prevails throughout the kingdom, there is no visible distinction, generally speaking, between prince and pauper. Of course, there are exceptions. Later on, I met another Shugnan prince, Timur-Shah, nephew of the last Shugnan Khan, Seid-Akhbar-Shah, whose dignified bearing and manners were quite in keeping with his birth. I suppose, though, it must be hard to be dignified on next-to-nothing a year, and an empty belly will certainly humble prince as well as pauper in the long run.

We took advantage of the visit to learn something about the country, state of the roads, etc., and heard pleasant news. In the first place, it appeared, according to Azis-Khan, that the roads up to Shakh-Dara would be found exceedingly good; and, in the second place, that the inhabitants of the latter were waiting our advent with impatience, being in mortal terror of the Afghans. We continued on our way, therefore, in the best of spirits.

On entering the Shakh-Dara territory we soon had practical demonstration that, so far as our welcome was concerned, things were as Azis-Khan had represented them. We were quickly surrounded by smiling helpers, all eager to do something for us—some collecting fuel, others helping to carry the heavy loads, etc. As regards the state of the roads, however, we were disappointed, for though they may have been "exceedingly good" according to the Shugnan standard, to us they seemed exceedingly bad, even in comparison with Pamir roads.

We halted for the night near the Mazar-Kyrk-Sheit, and several of our party, having an hour or so's daylight, took advantage of it to go fishing in the stream emptying itself into the Bulyun-kul lake. Although it was the warmest season of the year (July), our thermometer only registered 10° Réaumur (54½° F.) at 9.30 p.m., and had fallen to 7° (47¾° F.) by the morning.

We started at 6.50 a.m. in fine weather. At 9.10 a.m. we reached the top of Mount Koi-Tezek (14,000 feet), which marks the frontier line of Shugnan. During

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

six months of the year this mountain is covered with snow, and it is then quite impassable; in the summer, however, there is no difficulty. On the very summit the road forks, the right-hand branch leading to the valley of the Toguz-bulak river, a tributary of the Gund, and the left-hand one to the Shakh-Dara valley. Here we halted, and after dividing up our baggage train our party split up, I myself being with the division which pursued the Shakh-Dara route.

We reached the Kok-bai plateau, which is surrounded by snow-capped mountains. We were now at a great altitude, many of our party suffering from incipient headache, and all were glad when the road, after turning to the left, descended along the banks of the stream Kok-bai-Chat, source of the river Shakh-Dara. Here we camped for the night, starting again at 7.15 a.m. As we proceeded, the character of the country gradually changed, and the scenery began to get more diversified. It was indeed time, for we were all heartily sick of the great "monotonous Pamir," which should furnish an ideal country for the pessimist if he is ever in want of such.

Indeed, for an image to express downright, utter melancholy, in the abstract, I cannot think of anything more apt than the picture of a pessimist reading Schopenhauer in the Pamirs. It is the "land of no hope." But although the scenery was now more cheering to the eye, this was an advantage only purchased at the expense of weary limbs, for the roads went from bad to worse. We stumbled on, however, encouraged by the sight of wild-rose bushes and the warmer-tinted vegetation which bordered our route. A wild rose is perhaps not much, in an ordinary way, to make a fuss about, but to any poor wanderer, like ourselves, whose eyes were tired and aching from the monotony of a Pamir landscape, it will appear, as it did to us, as a sign from God in the midst of the wilderness. But we still had to go through some wearisome plodding, for the road hereabouts is most precipitous. My heart knocked apprehensively against my ribs several times when my horse stumbled on the edge of some chasm or slipped in some deep rut on a breakneck descent. The best thing for a man to do in such cases is to trust implicitly to his horse; and not to attempt to control or guide it in any way, for the horse's instinct will be a surer and safer guide out of the danger than the judgment of its rider. Many a life has been lost, of horse and man, through humanity's insufferable conceit in its own prowess, and through its often ignorant contempt for the powers of that noble servant of man, the horse.

After a rough up-and-down scramble, a steep descent brought us to the confluence of the Koi-bai-Chat and the Mats. From this spot we had a truly splendid view of the distant snow-capped Wakhan mountains and the green valley of the Jaushankuz river, the latter being one of the sources of the Shakh-Dara. Of the Wakhan mountain range, two peaks tower pre-eminent, one rising to a height of 23,000 feet, and the other, the Tsaritsa Maria, to 20,000 feet above sea-level. These two majestic mountains stand adjacent and tower above all the others in their impressive majesty and might.

We soon came out into the valley of the Jaushankuz river, and thence to a place called by the Kirghiz Depchi-utun, "the trough-like." The path here became very steep and broken, but afterwards improved greatly. At this point we met ten Tajiks, who, hearing of the approach of the expedition, had come forward several versts * to meet us. Our guide, Azis-Khan, displayed much pleasurable excitement at meeting his compatriots, and when he came upon a second "welcoming party" a mile or so further on, his delight was at its height.

When they saw us, the Tajiks dismounted from their horses and took us quite

* One Russian verst = 0·6 English mile.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000076

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

by surprise with the fervour of their welcome. On meeting with persons either older or of higher social grade than themselves, the custom is for the younger to take the other's hand and kiss it, to which greeting the elder responds by either kissing him on the forehead or throwing him a kiss, the whole performance being accomplished generally with dignity and grace.

The Tajiks, therefore, on meeting us ran up alongside our horses, took our hands, kissed them, and seemed to expect us to be as demonstrative as they were. It was only later on, when our interpreters had explained to them that we were unfortunate enough to have different customs, that they greeted us with hand-shakings and by making the "kulduk," *i.e.* a low reverence, performed with hands on breast.

By midday we had taken up our quarters in the tent prepared for us, and received numerous visits from Tajik-Shugnanis as well as from an influential family of Kirghiz then nomadizing in the district—that of Bai-Kurban-dakhta. In the time of the Khans, Kirghiz nomads, to the number of forty or fifty families, regularly made their homes in the Shugnan district, but now there are only about seven families there, and even those edge as near as possible to the Pamir deserts, so as to have a refuge handy against the Afghans. The latter swoop down on the higher reaches of the Shakh-Dara every now and then from Wakhan, where they garrison the fortress Kala-i-Bar-Panja, the capital of the Khanate of Shugnan.

The intervening country is very precipitous, and is icebound for three to four months in the year. Indeed, it is only the great difficulty of communication which has hitherto protected the Kirghiz from being forced under the sway of the Afghans. As it is, the latter have only thought fit to demand that the Kirghiz shall maintain a post of observation on their behalf, and inform them of everything worthy of notice—especially regarding the actions of the Russians on the Pamir.

As the entire garrison turned out and greeted us with every demonstration of friendship, their faithfulness to their charge, I am afraid, is more assumed than real. We made a halt near by the demolished Kirghiz fortress Butenek-Kurgan on the rivulet Jaushankuz (*Anglicè*, "sown barley"), formed by the junction of the Kok-bai-Chat and Mats. The name is appropriate, and not merely poetical, because, as a fact, barley-sowing actually begins here. Most probably this Butenek Kurgan, like all the others of which we have occasion to mention, was a place fortified by the Kirghiz so as to serve as a defence from their Tajik persecutors.

In the times of the khans, or, as they were called, "Shah" (ruler), these Tajik invasions were looked upon as such matter-of-fact enterprises, that even the Shah himself would not scruple to enrich his coffers by the despatch of a marauding party or two. In fact, these raids came to be looked upon as so many legitimate commercial expeditions, combining personal gain with the pleasures of war, without any of its dangers.

The Jaushankuz valley, which widens at this part, is encompassed by low mountains, quite bare, alike of vegetation and of snow. The soil, though rather marshy, is covered with a rich grass, dotted here and there with willow bushes, averaging 6 feet in height.

We started at 9.30 a.m., accompanied by an enthusiastic and increasing crowd of Tajiks and Kirghiz. The road first traversed the plain, but soon led us to a ford across the river. The latter here takes a sharp bend to the right. After crossing the river we entered a large defile, at the mouth of which stand a number of peculiar stone masses bearing a rough resemblance to Kirghiz "kibitkas" (dwelling-tents). Regarding the latter there is a legend which says that they mark the site of a former rich "aul" (village). A holy man wandered in one day craving rest and food, but the rich inhabitants, who had waxed proud in their

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00003b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

prosperity, repulsed him with scornful words. The holy man thereupon, angered at their shameful forgetfulness of the laws of hospitality as enjoined by the prophet on all the faithful, changed their kibitkas into stone.

On the right-hand side, we soon come to a ravine which bears the characteristic name "Duzakh-Dara" (hell's ravine). This is quite a misnomer, if the much-quoted dictum, "Facilis est descensus averni," is right, for the road which leads through this ravine is most difficult. Right opposite the ravine Duzakh-Dara, in the centre of the Jaushankuz valley, may be seen ruins of the old fortlet Jaushankuz-kala.

After ascending a small ridge a little further on, the ruins of an old Shugnan village became visible. The road then led us through a small stone ravine, and thence continued along the Jaushankuz valley again, to the junction of the river with the Vrang. From this junction, in reality, commences the river Shakh-Dara. Here we were met by the Shugnan Khudoyar, who acts as "aksakala" (governor) over Shakh-Dara, having been appointed to the office by the Afghans, when they took possession of the country.

Khudoyar is a tall, fine-looking, energetic man, with the characteristic features of the Pamir-Tajiks. Barred from any but casual intercourse with the surrounding countries by almost untraversable mountains and the neighbouring desert, the Tajiks of Shugnan were forced to intermarry among themselves, and thus to keep pure, though debilitated, their original Aryan blood. Another thing to strengthen this isolation was the fact of their being "Shiites," who are heretics, and worse than dogs in the opinion of the surrounding Sunites. Khudoyar was accompanied by a "jiguit," a tall, fine young fellow, dressed in the gray uniform of the Afghans, with bright buttons, carrying a curved Afghan sword. I could not help looking on him with suspicion, and the more I looked, the less satisfaction I got from his cunning, evil-looking face. He disappeared soon—"gone home," we were told—and that was all the information we could glean about him.

Eventually we got quite accustomed to the various uniforms, but at the beginning the sight of them raised rather uncomfortable feelings.

Having passed the ruins of the "kishlag" (encampment) Vrang, we rode along the left side of the Shakh-Dara, sometimes making our way over bare rocks which overhang the water, and sometimes through willow bushes, till we reached the ancient fortress Koi-Kuvat. According to local tradition this fort was erected 700 years ago by the Amir Koi-Kuvat; and its strategical position, built as it is on an almost perpendicular rock, was certainly very well chosen. At the present, the old fortress walls enclose several huts, "saklya," which serve as winter quarters to Kurban-Datkha and his numerous family. The surrounding country is very beautiful. The river valley broadens out, and is rich in vegetation. Here we stopped for the night.

July 24.—A beautiful summer morning. Though still early, the southern sun was so hot, that some of us sought the friendly shade of the willow-clumps, where we could tranquilly lie and gaze our fill at the beautiful landscape before us. The bright emeralds of the valley at our feet, made brilliant by the changing glow of the sunlight, and the outlines of the mountains standing out clean-cut against the blue sky, whilst the river wound its way in between, all combined to make up a picture from which we were loth to move.

When the time fixed for the halt had expired, it was very unwillingly that we rose to our feet and prepared to continue our journey.

A little further on the road passed to the right bank of the Shakh-Dara, and we had to cross a deep ford. Further on, about half a mile from Baba-Abdal-Mazar, which was agreed on as our night's halting-place, we had again to ford another

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

river, the Baba-Abdal, an affluent on the right bank of the Shakh-Dara. This was altogether a disagreeable business, the waters being rather deep, and the current rapid and boisterous. As if these disadvantages were not enough, the bed of the stream, moreover, was strewn with big stones, and we had several narrow escapes from accidents. We stopped on the bank of the Shakh-Dara, in sight of the burial-place of Baba-Abdal. This holy man is so revered by the inhabitants that many of those accompanying our party descended from their horses and walked past the tomb as a sign of respect. The burial-place stands on an elevation, and is visible some distance off. The exterior is quite ordinary in appearance, and the interior consists of two rooms and a terrace. Long poles stick up over the roof, hung with tails of yaks and different-coloured rags—remnants of pious offerings from the faithful.

A little lower down the slope stand the ruins of a "kishlag," by all appearance not long abandoned. We arrived at our night's camp at 11.45 a.m., and prepared for a lengthened rest, as the Tajik guides told us that the next place where we could put our horses to grass was some distance off. As the country was quite unknown to us, we had to rely entirely on the guides, which we could do with the more confidence, because it was as much their interest as ours to lead us as quickly as possible to the confluence of the Shakh-Dara and Gund, the rendezvous where our two reconnoitring expeditions were again to join. The longer they delayed, the more anxiety they would have on account of the Afghans. During the remainder of the day I visited the sepulchre, the ruins of the kishlag, and the ravines of the river Baba-Abdal.

July 25.—We started at 6.45 a.m. on our difficult journey to the first Shugnan kishlag, Seij, on the right bank of the Shakh-Dara. The difficulty and danger lay in the fact that we had to wade four times across the river, which was at rather high water. The road follows first a terrace, slightly sloping towards the river, and after passing a meadow goes through a thicket of willow trees, then ascends a slope, descends to the meadow again, enters a thicket of brushwood, and finally, 2½ miles from Baba-Abdal-Mazar, runs close under high perpendicular rocks, which make it impossible to follow the right side of the river any further. As the ford was difficult, and would take some time, we resolved, after crossing, to wait till all the beasts of burden had arrived, and to see ourselves the most valuable bales and packages transferred safely across. The waiting would have been very dreary but for one incident, which, although rather unpleasant, served to pass the time. A pack-horse, carrying two cases of cartridges and a small barrel of spirits, slipped from the slope into the river. Through the efforts of the Tajiks, amongst whom was Azis-Khan, one case of cartridges was eventually saved, but the other sank in deep water and was lost. As regards the small spirit-barrel, that floated, and ten or twelve Tajiks immediately rushed into the water at the ford. By spreading themselves across the river they caught it, as it came down the stream. We regretted the loss of the cartridges, but the cossacks and soldiers regretted the spirits more, which had leaked out and become diluted with water. This cask was part of the very little we had remaining, hence their sorrowful looks. The crossing of the baggage and of the foot-soldiers took two hours and a half, and it was only at 10 a.m., *i.e.* after three hours and three-quarters, that we were able to continue our journey.

An hour after we had to recross the Shakh-Dara, which divides here into two streams. This made the fording easier, as, although the streams were still deep, the current was not so strong.

We halted once more amongst great thickets, "tugai," of poplars and willows. At 12 o'clock we continued our journey. The path now mounts up to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000019

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

490 feet above the river, with abrupt descents and ascents, often across transversal gullies. On the left side can be seen the enormous Indich Bashur, hemmed in by precipitous cliffs, from the two clefts of which appear the peaks of the Wakhan mountains, covered with eternal snows; and below the mountains flows a small rivulet which falls into the Shakh-Dara. Right opposite the Indich Bashur, on the right side of the Shakh-Dara, there is a small kishlag, abandoned by its inhabitants, as we were told by the Tajiks, only last year. Having passed the Indich Bashur, we rode out on to a kind of level platform, where we met a fresh party of Tajiks, bearing a letter to us from the inhabitants of the lower kishlags, praying us to hasten. We now pushed on with all the speed which the difficult path would allow, and at 2 p.m. arrived at the third crossing. This proved to be the deepest, the water reaching to the saddle-cloths of our horses, besides which the bed was rough and stony. The breadth of the river here is about 60 feet. Hardly half a mile further on we had to cross again to the right side of the Shakh-Dara, but this time the ford was the shallowest and most convenient of all, and the bed quite even and firm. After this the road wends its way between enormous masses of stone, or on narrow ledges with walls so close to the rock that our stirrups grated on them as we went along. At last we began to ascend a very steep gradient on the bare rock, so steep and narrow that in some places steps had been hewn out and "balconies" constructed, *i.e.* widenings of the path by planks laid down and hanging over the precipice. We had been told about the fords, but not a word about this place, which proved to be the most dangerous on the whole road. In one place the rock wall projects so much over the ledge that our horses could not pass through, and we were obliged to carefully alight, take off the loads, and even to unsaddle the horses. Neither my companions nor myself shall ever forget this awful passage. Several Tajiks from Seij met us here, and helped us carry our luggage. Their agility, diligence, and, above all, the stamina they displayed in carrying heavy burdens weighing 144 to 180 pounds, were really wonderful. If it had not been for their help we should have been delayed here for several hours, but as it was we did it all in about half an hour.

A short ride brought us to the mouth of the river Drum, which flows into the Shakh-Dara. We halted here about 5 p.m. on a small spur jutting between these two rivers. Our hazardous journey had tired me thoroughly out, not so much physically, but on account of the strain on the nerves. I therefore postponed my inspection of the neighbourhood till the following day, and went to rest.

We were now approaching the Afghans, and had to be on the *qui vive*, especially when bivouacked, in order to guard against surprises. We had carefully chosen the position for our halt on this account, and having the water on both sides, and above us the perpendicular rocky banks of the river, 50 to 70 feet high, we felt quite safe from any night attack.

The only difficulty we were under was through the absence of green fodder, which put us under the necessity of buying hay from the inhabitants of Seij.

The night was fine and warm, with a light wind blowing up the valley. We had left our cold altitudes now, we hoped, for good. Towards evening, a band of excited Tajiks brought us the disquieting news that the Afghans were advancing in two columns from Kala-i-Bar-Panja, up the Shakh-Dara and Gund, to meet us. We had therefore to prepare for the worst.

July 27.—At 7 a.m. we cautiously set out to continue our journey. After having first crossed a rather well-preserved bridge on the right side of the Drum, and afterwards another bridge on the left side of the Shakh-Dara, the road began to ascend steeply till we at last emerged on to a small stony square place—a platform 120 to 150 feet above the level of the bridges. Higher and higher we

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000006

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

went, till we came out on a second platform. All traces of a road had now disappeared, and even the path was sometimes hard to trace. This was all tiring work, and having rested a few minutes, we began the third and most troublesome part of our ascent. This proved simply cruel, what path there was being covered with needle-pointed flints which were torture to walk on. We had to dismount, as the path crumbled away under the weight of our horses, and many a slip sent rocks and stones and soil rolling down the slopes. In many places the ascent was so steep that steps had been hewn in the cliff, which we walked up as on stairs. The fatigues of this ascent, in fact, transcend description. Really we had to stop every five or ten steps to take breath. In cases like this the best thing to do is to let the horse go in front, and for the man to be half-tugged up, holding on to its tail. This we did. If the ascent was so difficult for a horseman, it is easy to imagine how much more difficult it became when we had to help to drag up all our baggage. We were often obliged to unload the pack-horses and to carry the baggage over the most difficult places parcel by parcel; and even when we could load up the luggage again, the task was more often than not very dangerous on account of the narrowness of the path, bordered by a perpendicular cliff on the left and a precipice on the right. At last (at 9.45) we arrived at the summit, all of us more or less exhausted, with throats parched, and trembling all over from the strain. We could still look back and see the struggles of our companions. In one place a large load had slipped from the back of a horse to its hind quarters, together with the pack-saddle, and the horse was prancing with fright, to the danger of all surrounding it; in another place some loads had fallen down, and the "kerekesh" (guides) were struggling, some to put them on the restive horses again, others to drag them forward themselves. It is a miracle to me, however, how we managed to get through without a serious accident.

Having rested a little, we went on again, and were soon descending the slope leading to the Shakh-Dara at the spot where the river Badjan-Dara joins it. The descent is here, if anything, more precipitous than the former ascent, going down no less than 1000 feet; but, being a descent, we accomplished it without much difficulty along a path which had been specially laid out for us by Tajiks sent from Seij the day before, and to whom we had lent our spades and mattocks for the purpose. We rested at the foot amongst the enormous poplars and willows of a great "tugai" (grove), at the bottom of a deep valley surrounded by cliffs, and bearing the name of Kara-Dangue. On two sides we had the Shakh-Dara river and its affluent on the left side, the Badjan-Dara, and on the others there was the rocky declivity we had just descended. The cliffs here almost overhang the stream, and the sombre grandeur and gloom of the scene weighed heavily on all of us, so that we would willingly have chosen a more cheerful resting-place if the choice had been given us.

It was in this gloomy place that we received a letter from the chief of the Afghan detachment, then stopping at the fortress Rosh Kala, a little distance from our bivouac, literally gorgeous with all the flowers of Persian speech. To have read his compliments and the wordy welcome we received, any one unacquainted with Afghan ways would have imagined we were long-lost brethren; but as we knew that the Afghan praises most those whom he means to kill, the letter had no other effect on us than to make us exercise greater vigilance. The reader will see further on that we were right in our interpretation.

Our baggage train had not yet arrived, when darkness settled down on us like a funeral pall. A cool wind fanned us from the snowy heights of the Wakhan mountains, whose outlines were lightly silvered against the purple-black sky by the pale crescent of a young moon. Our tired men had dined hastily, many falling

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000071

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

asleep as they ate, and lay sprawling about in all sorts of ungainly postures. On account of the proximity of the Afghans and the obvious disadvantages of our position, we posted several foot soldiers as sentries on the ridge of the slope, which was the only place by which we could have been surprised.

In spite of my own fatigue, I could not get to sleep. The gloomy genius of the surroundings seemed to weigh on me, and the most hopeless thoughts thronged through my brain, and made me utterly miserable. "Out of the depths have I called unto Thee, O Lord!" The sombre, grand old psalm sank deep into me, and I felt a little perhaps of what our Aryan ancestors felt—fear of the unknown, the vast, illimitable nature surrounding us! Only the rhythmical gurgle of flowing water and the mournful soughing of trees rocked by the wind broke the heavy black silence. At last I fell into a troubled sleep, and when I woke again—what a relief! All was noise and bustle, and in the general hurry-scurry of my fellows I soon forgot the terrors of the night.

July 28.—A memorable day. We continued our journey at 7 a.m., and crossed the Badjan-Dara. This was comparatively easy, as the mountain-rivers rarely contain much water in the early morning. We had some more difficult ascents to get over, however. The first half of the one we now faced was not so steep but that the loaded horses and ourselves could ride up; but the second half was like a huge irregular staircase up a slightly slanting cliff. Here we experienced a renewal of our old troubles; but thanks to our men having in a measure gained fresh strength, and to the help afforded us by a number of willing Tajiks who had come to meet us, we made much better progress. We had to be careful also not to overtire our men on account of possible events.

In an old number of the journal *Razvyedchick*, I remember once reading an article on the training of German cavalry. One part described the exercises by which they were taught to ride over different obstacles in the road. Among others, I remember that one exercise was to ride "upstairs" and down. This seemed to me very curious at the time; but now, since I had had my own share of riding "upstairs" and other unpleasantness, I could not help admiring the effectiveness with which the German military code seeks to prepare their cavalry for all sorts of emergencies. It is certainly worthy of imitation by other nations.

We soon rode into a large place, from which could be seen the far-off kishlag Sendip, the residence of our titled companion, Azis-Khan.

This was a glorious day, and the scenery truly delightful after the gloomy grandeurs we had just escaped from. On account of the proximity of the Afghans we had resolved to move forward, massed together, with the baggage in the centre. While our soldiers were making the necessary arrangements I took the opportunity of taking a peep at the kishlag and the surrounding country through my field-glasses. The kishlags of the Shugnanis generally consist of a collection of a few homesteads with fields, but not grouped close together. Each family generally consists of the father, mother, and married brothers. The "saklyas" (huts) of the Tajiks are made of stones, held together with clay, and look like so many rude cowsheds. These huts often have no windows, and the doors are always made very small, several boards being roughly nailed together. Light enters through a quadrangular opening in the ceiling, which can be shut by a shield; and this opening at the same time serves as an outlet for smoke. The fireplace, "ruùz," is built against one of the walls of the hut, and the sanitary arrangements are very imperfect. As there are no windows, the huts of the Tajiks are very dark, damp, and foul. Of furniture there is hardly any, and its absence is badly compensated for by wide shelves along the walls. On these shelves the inmates sit, sleep, dine, etc. The majority of Tajiks' dwellings are

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

very unattractive, although one meets here and there an exception—as, for instance, that of Azis-Khan, of which the woodwork is decorated with clumsy though quaint carvings, and the walls are evenly plastered, with niches for utensils, clothes, etc. The stables, cowhouses, farmyards, barns for seeds, cellars, etc., generally adjoin the huts. We could not help especially noticing the very curious buildings called "topkhana." These are old quadrangular towers in which the inhabitants of the kishlags used to hide from the attacks of the enemy till relief came, or till the enemy got tired of waiting, or else starved them out. One often notices these "topkhanas" along the Shakh-Dara and Gund rivers. In one place on the latter there is a strong fortress, Chartym, consisting of seven such towers. The topkhanas were built generally on sites selected in the least accessible places. Of course, there was no artillery in those days, and the towers therefore generally answered their purpose very well. An entrance could only be effected through a small opening, made in the wall at such a height above the earth that a ladder had to be used. The defenders were at the top, and could fire at the enemy through embrasures.

At 8 a.m. we started. After leaving kishlag Sendip the road descends abruptly to the banks of the Shakh-Dara, and crosses an immense tugai over rather marshy soil. The trees grow so thickly here that at some places we rode through long vaults of green formed by the interlacing branches. The tugai ends just opposite the kishlag Denkent, and the road then gets bad on account of the small pointed stones with which it is strewn.

A little after one, after passing the kishlag Bar-vo-oz, we approached the kishlag Vez-dara, where it was resolved to put up for the night. As it was still early, we determined to leave the baggage train and the foot soldiers with directions for them to halt near Vez-dara, while we ourselves would go a little further on and have a look at the fortress Rosh-kala. We had been informed by the Tajiks that an Afghan detachment of about 120 to 150 foot soldiers and a few cavalry were stationed here; hence our curiosity. We only got a sight of Rosh-kala at 4 p.m. from a topkhana, after a wearisome ascent, of which we had not dreamt, having been told that the fortress was "not far."

While we were passing the topkhana we heard the ringing notes of a trumpet from the fortress, sounding quick notes resembling our cavalry signals. This was followed first by a single volley, and then an irregular fusillade from the opposite side of the Shakh-Dara. The significant "ping" of bullets splintering the rocks and stones in our path made us aware of the fact that we were the objects of these little attentions from the Afghans; but it is somewhat incomprehensible that, notwithstanding the short distance and the large target we offered, not one of us was hurt. As we had the strictest orders to refrain from using our arms, we resolved to return. We were joined by our foot soldiers at the bottom of the descent. They had been hastening towards us on hearing the shooting from Vez-Dara, thinking we had fallen into some ambuscade. On the night of July 28, our prospects of bringing our reconnaissance to a successful issue were not brilliant. We were no more than 5 or 6 miles distant from an enemy, numbering five times our men; and of what their sentiments were toward us we had just had proofs. The Pamirsky Post, from which we could obtain reinforcements, was about 180 miles distant, besides which the country was strange to us. We heard all sorts of contradictory rumours as to the Afghans; and lastly, we had not even the means for effectively defending our bivouac in case of attack, as we could only muster twelve foot soldiers and twenty cossacks. However, we did our best, and arranged officers' guard, stationed our outlook posts and despatched cossack patrols, and also parties of Tajiks to reconnoitre. The Tajiks willingly offered their

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

services, which we were glad to accept. The night passed anxiously for all of us. When day broke we set about doing what we could to fortify our position, and to get reliable information as to the intentions of the Afghans. How serious our position really was, may be judged from the fact that, two days afterwards, the Afghans came to within a mile from us, and several times fired at us.

With July 28 began a series of wearisome days and nights, when we expected an attack at any moment. We had meanwhile received some reinforcements, which put us on a more business-like footing, and enabled us to organize a more satisfactory defence of the camp; but, nevertheless, we were not able to breathe freely until August 13, *i.e.* seventeen days later, when General Yonov arrived with a fresh detachment of infantry and cossacks.

On the following day, early in the morning, the Afghans, having learnt of the arrival of our reinforcements, hastily retreated first to Rosh-kala, and then further back to the left side of the Panj to the fortress Kala-i-Bar-Panja. As they had destroyed in transit the bridge over the Shakh-Dara at Rosh-kala, and the full state of the river rendered fording impossible, our detachment could only move on to rejoin the Gund river reconnoitring party on August 20, by which date the bridge had been roughly repaired by the Tajiks. We were now penetrating into a country more and more under cultivation, but many of the fields had been either burnt or trodden down by the Afghans, to revenge themselves on the proprietors for going over to the Russians.

The fortress Rosh-kala, near which the detachment crossed to the right side of the Shakh-Dara, stands on a steep cliff. The south part of the cliff, which faces the river, rises to 1500 and even 2000 feet above the surrounding country. From this side Rosh-kala is quite inaccessible, but from the east and west sides it is, though with great difficulty, accessible. The north side faces the mountains on the right bank of the river, and is the weakest; but the fortress walls, made of stone, mount here to a great height. This cliff was the scene of the execution of the last independent ruler of Shakh-Dara, Mir Atam Bek, and his numerous followers, who fought for their independence against the Shugnan ruler, Abdurhaim Khan. By order of the latter these unfortunate men were precipitated from the height of the cliff and dashed to pieces on the stones lying at the cliff's base. Rosh-kala has many shelters erected for men and horses. Having taken advantage of these, the Afghans had ensconced themselves to their own comfort and convenience, and we had many bitter regrets for not having arrived before them. An immense vista of surrounding country can be seen from this cliff, and the kishlags, picturesquely scattered on both sides of the Shakh-Dara, viewed from the great eminence, look like small toys.

The nearer we approached the mouth of the Shakh-Dara, the denser grew the population, and the more comfortable the roads. The two rivers, Shakh-Dara and Gund, on joining, form the river Kharokh, which runs its course of about 3 to 4 miles, and then joins the river Wakhan Daria, thus forming the river Panj. The valley of the Kharokh is cultivated in sections belonging to different proprietors, who separate their lands from each other by small stone walls.

To get over to the right side of the Kharokh one has to cross the Gund by a bridge situated a few thousand yards from the place where the Gund joins the Shakh-Dara.

Having joined the Gund reconnoitring expedition here, the whole detachment took up its position in several gardens 2 or 3 miles from the mouth of the Kharokh, and remained here until September 15, waiting for further orders. The interval was spent in reconnoitring the country, also the roads down the Panj to Roshan, and to the locally celebrated ruby-mines; and also in studying the Tajiks,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000037

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

their ways of life, and the numbers of the population in Shugnan, etc. The position we occupied in the valley of the Kharokh offered many conveniences, and if at some future time we should have to maintain a garrison in Shugnan, and to erect a fortified position there, this place should undoubtedly be chosen.

About 3 miles lower down the Panj, on the left bank of this river, stands the fortress Kala-i-Bar-Panja, the capital of Shugnan, which is also known as Ak-kurgan on account of the white (*ak*) cliff on which the fortress walls stand. These walls, as also the greater part of the interior of the fortress, can be easily seen from the right side of the river, as they stand within rifle-shot of the mountains. This latter fact nullifies the importance of Kala-i-Bar-Panja as a strategic position.

On the right (Russian) side of the Panj are about fourteen kishlags. The whole country is rather densely populated, and the inhabitants are fairly well-to-do. The climate is so mild that even vines grow here, and are cultivated by the Tajiks. A nearer acquaintance with the Tajiks, and the study of their customs and manners, forces us to sympathize with this persecuted nation, which has gone through so many trials. Indeed, it is a wonder how it is they have not disappeared from the face of the earth. In far-off times this nation turned their eyes towards the north, to the Russians, and waited patiently for the occasion when they might become subjects of the great white Tsar, and thus free themselves from the persecution of the Afghans. This desire to be under Russian government, which was one of the principal reasons why the Afghans persecuted them, did not weaken as time went on, notwithstanding that their hopes were not soon realized. With the appearance of the Russians on the borders of Shugnan in 1894, it seemed that the end of their miseries had come, but fate has once more mocked their hopes, for, as we could not gain permission to leave even a small garrison to winter in Shugnan, we had to return. This we did *viâ* the Gund valley on September 15, followed by a great number of Tajiks and their families. The latter were forced to migrate in anticipation of revengeful reprisals from the Afghans, which would undoubtedly follow their having extended such a friendly welcome to us.

The general character of the road in the Gund river valley is the same as in the Shakh-Dara river valley, but the river is impassable, and the inhabitants have therefore been obliged to erect bridges in several places. Our detachment soon arrived at the summit of Koi-Tezek and re-entered the inhospitable Pamir, and on September 24 reached again the Pamirsky Post from which it had started.

THE MONTHLY RECORD.

EUROPE.

The River System of North Wales.—An attempt has lately been made, in an article contributed by Mr. Philip Lake to the *Geological Magazine* (May and June, 1900), to elucidate the origin of the river system of North Wales, on the lines so successfully followed by Mr. Marr in reference to the English Lake District. The writer begins by a study of Bala lake (sounded by him in 1899) in its relation to the neighbouring valleys, showing that the discharge of the lake into the Dee is not what the general topography of the district would lead us to expect. The lake lies, in fact, not in the valley of the upper Dee, but in the well-defined valley which runs north-east from Barmouth to the town of Bala, and is shut off from the vale of Edeyrnion (the Dee valley between Llandderfel and Corwen) by a ridge of hills traversed by the gorge in which the Dee now flows. That the drainage of the district once flowed continuously from north-east to south-west, past the site

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000046

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of Bala lake, into the valley of the Wnion, is indicated also by the apparent slope of the lake-floor in that direction, and by the existence of an extensive alluvial plain at the present foot of the lake, even larger than that now being formed at its head. Mr. Lake shows that in the direction of the Wnion valley there is no evidence that the lake is rock-bound, but that the old channel was probably blocked by drift, the reversal of the drainage being due, however, in part, to Earth-movements. The lake and valley adjoining it to the south-west lie in a trough between faults, which seem to have played an unusually important part in the production of the present topography, the present low watershed across the valley corresponding in position with other, oblique, faults. Passing to the consideration of the general drainage system of North Wales, the writer draws attention to the important series of deep valleys running for long distances from north-east to south-west, although interrupted, in certain cases, by low watersheds. The most marked of these lie on a straight line running from Ogwen lake to the head of the Wnion valley, and their position is probably due to Earth-movements. The valleys referred to cut up the whole country into parallel strips drained (generally southwards) into those valleys by another system of streams, the units of which can frequently be traced from one strip to the next, and which appear to represent a former drainage system, radial in character, having its centre near the sources of the Conway. This system—very similar to that now in existence in the Lake District—seems to have been subsequently modified by the formation of the present transverse valleys, in one of which Bala lake was formed.

Influence of Latitude on Plant-life in Germany.—Prof. Ihne, of Darmstadt, who has paid much attention to the phenomena of plant-growth as influenced by locality, and has superintended a careful series of observations in Germany for the purpose of elucidating the question, sets forth, in the seventh number of the *Geographische Zeitschrift*, the results obtained as regards the influence of latitude on the dates at which spring is announced by the bursting into flower of various typical trees and shrubs. By the method adopted, which is described at the outset of the paper, the first appearance of the leaf (though recorded in the observations) has not been taken into consideration, owing to the greater difficulty of obtaining a trustworty record of this than of the dates of flowering, while, given careful observation, the results arrived at may be taken to be the same. Mathematical accuracy is, of course, not to be expected, and the results as a whole are not invalidated by the impossibility of selecting stations at which observations for a sufficient number of years have been carried out, and where other factors besides latitude—longitude, altitude, exposure, soil, etc.—are the same. In his present investigation, Prof. Ihne has chosen localities differing as little as possible in these respects. All lie more or less in a line from north to south, the average difference of longitude being only 46 kilometres (28½ miles); and from his previous researches into the influence of longitude on the phenomena in question, which showed that for stations of moderate elevation in Central Europe, the advent of spring is retarded by 0·95 day for every 111 kilometres (60 geographical miles) in an easterly direction, Prof. Ihne shows that such a difference may well be left out of consideration. From the differences observed in the case of eight pairs of stations, which, when reduced to the unit of 1° of latitude (111 kilometres), show intervals of time for that distance varying from 3·4 to 4·6 days, Prof. Ihne arrives at the conclusion that for every additional degree of latitude the advent of spring is retarded by about four days.

ASIA.

Burma-Sechuan Railway Survey.—Among the many railway projects set on foot within the past few years for the opening up of China, one of the most

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

important from the point of view of Great Britain is, as is well known, that for a line from Burma, in continuation of the railway already constructing to the Kunlong ferry on the Salwin, through Yunnan to the province of Sechuan, the wealth of which it is hoped to tap by this means. A survey of the proposed route was carried out about eighteen months ago on behalf of a British syndicate—"The Yunnan Company"—by Captain Davies and Lieut. Watts-Jones, working from the side of Burma, and Captain E. C. Pottinger starting from the Yangtse river. An account of his survey was given by the latter officer in February last at the Royal Artillery Institute, in the *Proceedings* of which body (April, 1900) a report of the lecture appears. Captain Pottinger was assisted in the work by Lieut. Hunter, R.E., and, until his death at Chungking from inflammation of the lungs, by Mr. L. Tucker, son of General Tucker, now in South Africa. Two native Indian surveyors also accompanied his party. During the voyage up the Yangtse, Captain Pottinger executed a survey of the rapids, while the surveyors landed frequently and sketched in as much as possible of the adjacent country. The serious work of the expedition began, however, only after arrival at Chungking, when it became necessary to decide on the line to be surveyed from the Yangtse to Yunnan-fu. The intervening country is exceedingly difficult, and the general consensus of opinion has hitherto been that it would be quite impassable for a railway. By the principal trade routes, the shorter of which reaches the river at Sui-fu, this seems to be the case, and even the telegraph route which starts from Lu-chao presents great difficulties, rising abruptly from 1000 to 5000 feet, falling to 2000, and again ascending to 8000. Tunnelling is out of the question, as what appear to be mountains are in reality the escarpments of tablelands, while the rivers often run in corkscrew gorges, with a drop, in places, of 500 feet in half a mile. However, by leaving the main road and exploring the adjacent country (of which existing maps are in places 40 miles out), Captain Pottinger at last found what he considers a practicable route. A tributary of the Yangtse was followed up as far as Yung-ning, beyond which the whole country begins to rise rapidly, the formation changing from sandstone to limestone, with coal outcrops all over the hills. The country becomes very irregular and broken, rivers and streams flowing in deep limestone gorges, disappearing underground and again emerging in the most confusing manner. There are many blind valleys and hollows, the drainage water escaping underground, and even from hill summits it was often impossible to estimate accurately the run of the rivers and ranges. Captain Pottinger was much struck by the absence of timber, every tree and shrub having been destroyed for firewood, so that stalks of poppies, sedges, etc., are now dried and used for that purpose. The people are, however, beginning to appreciate the advantages of coal. Bamboos are grown in the villages and used for all building purposes. In the mountains some of the Miao-tzu aborigines were met with, the women still retaining their tribal costume, though the men wear Chinese dress and are rapidly losing their original characteristics. The Burma party was finally met at Weining, and the main object of the expedition was completed. Captain Davies returned *viâ* Tongking, while Captain Pottinger and Lieut. Hunter worked their way back to the Yangtse by different routes, surveying as large a tract of country as possible. During the four months spent in the hills there had been hardly twenty days without rain.

Himalayan Ascents.*—In their recently published volume, Dr. and Mrs. Workman give a personal narrative of two summers' travel among the peaks,

* 'In the Ice World of the Himalaya.' By Fanny Bullock Workman and William Hunter Workman. London: Fisher Unwin. 1900.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

passes, and glaciers of the Western Himalayas, with a brief account of an abortive autumn expedition into Sikkim. In the first season, 1898, the travellers cycled to Srinagar, which they made their starting-point for a tour among the mountains of Ladakh, Nubra, and Suru. In 1899 they adopted a more ambitious programme, securing the services of the well-known guide, Mattia Zurbriggen, and accomplishing some pioneer ascents in Baltistan, in the vicinity of Askole, near the foot of the Great Biafo glacier. The peaks ascended varied in height from 18,600 to nearly 21,000 feet, and the difficulties encountered taxed all the energies of the travellers, experienced mountaineers as they were. The authors regard as a complete delusion the idea that, apart from their altitude, the Himalayas are easy mountains to ascend, giving it as their opinion that many of the peaks will never be scaled by any creature without wings. The book makes no pretensions to scientific value, but the views and descriptions give a good idea of the sublime scenery of the snowy Himalaya, while Dr. Workman's remarks on the physiological effects of high altitudes are of some interest. Some additions to and rectifications of the maps were made, especially by the discovery of a large crescent-shaped glacier south and west of Mango Guzor, the highest of the peaks ascended. In the absence of native names for the features described, the travellers have given to these names of their own, which are not always felicitous. The appellation Siegfriedhorn, bestowed on one of the peaks ascended, sounds decidedly out of keeping with its surroundings. The explanations of Indian terms given in a short glossary are in several cases inadequate, if not misleading.

The Trade of the Persian Gulf.—The report for 1899, by Lieut.-Colonel Meade, on the trade of the Persian gulf, records an improvement as compared with 1898, though less than had been anticipated, owing to failure of rain towards the end of the season. This affects the export of cereals, on which the trade of the region largely depends, and which will have assumed larger proportions during the present year, as an abnormal harvest was expected. At most of the Persian gulf ports India heads the list, both of imports and exports, while, except at Bushire, the direct trade with the United Kingdom is but small. Apart from local trade, the only other countries having any large dealings with the Persian gulf are China, which takes opium from Bushire to the value of £285,000; and Turkey, whose trade is principally carried on with Bahrain. From that port pearls were exported in 1899 to the value of £454,900, as compared with £299,500 in 1898; and from the Arab coast ports to the value of £516,600, as compared with £343,700 in the former year. As regards shipping, Great Britain still practically holds the monopoly in the gulf, that of all other European nations being quite insignificant. Turkish shipping is represented principally at Bahrain and Bushire, while the trade between the Arab coast and Persian ports (principally Lingah) is chiefly carried on by Persian vessels. The rest of the local trade is mainly in the hands of Arab and Muskati owners. The report of the Vice-Consul at Mohammerah announces the re-opening of the direct trade-route from the Karun to the north of Persia, and also the completion of the new Ahwaz-Ispahan mule road, so that an increase of trade by the Karun—which in 1899 showed a falling off—may now be expected.

Map of Afghanistan: Correction.—In the map of Afghanistan and Baluchistan published in the November number of the *Journal*, the Russian railway from Merv to the Afghan frontier is made to terminate at the Jamshidi capital Kushk. This is an error. It terminates at the Russian station of Kushk, which is on the river of that name, at (or near) the point where the river intersects the Russo-Afghan boundary. The two places are quite distinct, and it is unfortunate that they should be called by the same name, although doubtless the Jamshidi Kushk has long been overshadowed by the Russian settlement.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Cession of Spanish Islands to the United States.—By a convention signed in Washington on November 7, the small islands of Cagayan Sulu and Sibutu off the north of Borneo, which had remained in possession of Spain, are made over to the United States in consideration for the payment of $100,000. The islands formed the last remnant of the Spanish empire in the far East.

The Khotan River.—In Captain Deasy's paper, p. 513, *antea*, the title of the illustration should be the *Sources*, not the *Sands*, of the Khotan river.

AFRICA.

The Blanchet Expedition: Death of the Leader.—The fuller details now received respecting the detention of M. Blanchet and his European companions on the borders of Adrar (*ante*, p. 227) give the affair a somewhat different complexion from that suggested by the first reports. The travellers received throughout the cordial support of the King of Adrar, Moktar uld Aida, who did his utmost to protect them during the disturbances which led to the flight of the French escort. After a virtual captivity of over two months, the steps taken by the French authorities to secure their release proved successful, and the expedition returned to St. Louis at the end of September. We regret to state, however, that M. Blanchet almost immediately (October 6) succumbed to yellow fever contracted during the journey to Dakar. A short preliminary account of the journey, to which we hope to recur shortly, appears in the new number of the *Annales de Géographie*.

The Northern Territories of the Gold Coast.—This name has been given officially to the latest territorial acquisitions in the Gold Coast Protectorate, lying north of Ashanti roughly between 8° and 11° N. lat. A large amount of information on these territories—a *terra incognita* until quite recent years—has been collected by officers of the administration, but little has hitherto been published. The recent issue by the War Office of a report, compiled by Lieut.-Colonel H. P. Northcott, in which the information so collected has been embodied, is therefore particularly welcome. It begins with a clear sketch of the geography of the territories, which lie wholly outside the belt of forest which extends about 200 miles from the coast. They form a gently undulating plateau, gradually rising northward from Kintampo and ending abruptly in a scarp facing north and falling very steeply about 700 feet, through a break in which the White Volta passes in its southward flow. North of the scarp is another plateau of a character similar to the first, but rising frequently into definite hills from 100 to 500 feet in height. The whole area is covered with coarse rank grass, burnt down annually, and dotted over with dwarfed and shadeless trees. The absence of large trees is probably due to the fires, for nearly every village possesses its "shade tree" (baobab, cotton, etc.), where are held the market and village parliament. The main river-system is formed by the Black Volta and White Volta, the former of which has no important affluents, the latter only one—the Kulpawn. These carry running water all the year round, and for four months are noble streams, but at the end of January they shrink to modest dimensions. During the dry season a scarcity of water is experienced in many parts. The basis of the soil is sandstone, covered in the lower levels with a thin layer of alluvium. In the hills granite and quartz are found. The report contains some account of the history of the native kingdoms of the territories, the principal of which is Mamprusi. This seems to have been founded by one Tosogo, who came west from Gurma about the beginning of the century, and conquered, besides, Moshi and Dagomba, which he placed under his brother and nephew respectively. Until recent years, a yearly present was made to the king of Mamprusi by the king of Moshi, whose election had also to be confirmed by the former. The lesser states of Wa, Bole, and Daboya seem to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000091

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

have formed parts of the former kingdom of Yabum. The main trade of the region consists in the exchange of the cattle and sheep of the north for the kola-nuts of the south. There is some demand for European articles, and satisfactory results have followed from the establishment of Government stores at Wa and Gambaga, at which all payments are made in British currency. In the rainy season the White Volta would probably be navigable throughout the great part of its course by stern-wheel steamers, there being apparently only two sets of rapids forming a bar to navigation. The most important link in the chain of communication from the coast will be the proposed railway from Accra to Pong on the Volta, but motor cars, for which 70 miles of suitable road already exists, might prove of much value as a means of transport. Experimental gardens are needed to test the capability of the country to produce paying crops. The climate is appreciably better than on the coast, for though the heat is great in March, April, and May, the air is free from the oppressive moisture of the more southern districts. The report includes extensive vocabularies of the principal languages of the country. The map, which is based principally on the valuable work of the late Mr. Ferguson, shows the administrative subdivisions of the territory.

Organization of French Congo.—By a decree dated September 5 last, the northern territories of French Congo have been formed into an administrative province entitled "Territoire militaire des Pays et Protectorats du Tchad." This includes, firstly, the basin of the Kemo, a tributary of the Ubangi; and, secondly, the basin of the Shari and its affluents (excluding concessions already made), as well as the countries included within the French sphere by the Anglo-French conventions of 1898 and 1899, *i.e.* Bagirmi, Wadai, and Kanem. All these territories are placed under a commissioner, subordinate to the commissioner-general of French Congo. The latter functionary has under his immediate control all the territory of French Congo not included in the new province.

The Lemaire Expedition.—Captain Lemaire, leader of the Belgian Scientific Expedition to the Southern Congo basin, which left the mouth of the Zambezi in 1898, arrived on September 3 last at the mouth of the Congo, having effected the twenty-third crossing of Africa hitherto made in a little over two years. Some additional details respecting the geographical work done along the Congo-Zambezi watershed, with a map showing the routes followed, are given in the *Movement Géographique* for October 21 and 28. Captain Lemaire's Expedition from Lofoi, on the Lufira, to Lake Dilolo, was commenced on June 28, 1899, and on the return journey the watershed was followed with few intermissions from 22° to 27° E. long. (in part in company with Major Gibbons), being crossed no fewer than twenty-five times. The most important correction introduced into the map as regards the position of the watershed is its shifting to the north by more than a degree between the meridians of $24\frac{1}{2}°$ and $25\frac{1}{2}$ E. As is pointed out by M. Wauters, the stream crossed by Capello and Ivens in $25\frac{1}{2}°$, and taken by them to be the source of the Lualaba, must in reality bend back towards the Zambezi system, which thus receives a considerable northward extension. The sources of the Kapombo (Kabompo) and Lunga (not to be confounded with the Lunga of Capello) were found by Captain Lemaire to lie in about $11\frac{1}{2}°$ S. After the return to Lofoi, the expedition made its way by Mpweto to Lake Tanganyika, which was reached at Baudoinville on April 7 last. During his stay on the shores of the lake, Captain Lemaire took a series of astronomical observations which confirm the results gained by Mr. Fergusson, the surveyor attached to Mr. Moore's expedition. At Towa, the shore of the lake has to be shifted 50 kilometres (over 30 miles) to the west. From Tanganyika the expedition went west to the Congo by the usual route through the Manyuema country, which was found to be completely pacified,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006f

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [380r] (112/232)

BRITISH LIBRARY

the remainder of the journey to the Congo mouth being made by canoe, steamer, and railway. In addition to the careful surveys, the results of the expedition are of much value as regards meteorology, zoology, and botany.

AMERICA.

Currents in the Gulf of St. Lawrence.—The *régime* of the currents in the Gulf of St. Lawrence, as elucidated by surveys carried out during the years 1894 to 1896, is fully dealt with in a pamphlet published this year at Ottawa by order of the Minister of Marine and Fisheries. In the first half a description is given of the surface currents themselves, whether constant currents which run more or less continuously, in accordance with the general circulation of the water in the gulf area, or tidal currents produced or chiefly influenced by the tide. The second part treats of the causes which influence the currents in moving as they are found to do. The most important of the constant currents—one at the mouth of the St. Lawrence along the Gaspé coast, the other round Cape North on the west side of Cabot strait—are due to a general outward drift of the water of lower density, apparently derived from the outflow of the St. Lawrence river, which occupies the south-western half of the gulf. The Gaspé current usually occupies a belt of about 12 miles in width, lying from 2 to 14 miles off shore, in the vicinity of Fame point; but in certain cases it may be displaced or even reversed under the influence of abnormal winds. The Cape Breton current, on the west side of Cabot strait, flows almost constantly outwards to the south-east, while on the eastern side of the strait off Cape Ray there is usually a movement of the water to the north-west or inwards towards the gulf. On the west coast of Newfoundland there is an important current to the north-east, which is especially marked from the Bay of Islands to Rich point. In the strait of Belle Isle the current is essentially tidal in character, and there is no foundation for the belief that a constant current runs inwards towards the Gulf of St. Lawrence. At all three angles of the gulf the coldest water forms a layer between the depths of 30 and 50 fathoms, and this cold layer seems to extend very generally over the gulf area. Both this and the deeper water seem, however, to be quiescent. As regards surface density, the denser water, practically the same as that of the open Atlantic (1·0237 to 1·0242), occupies the north-eastern portion of the gulf, the dividing line running from Anticosti to the middle of Cabot strait. South-west of this line the density falls to 1·0220, and in the Gaspé current to 1·0210. In the deep layers it rises even here to 1·0261, which explains the fact that the colder water at 50 fathoms floats upon these. In tracing the general circulation of the gulf, the principle of the balance of flow must be kept in view. There is no confirmation to be found for the theory that a constant current enters the gulf by Belle Isle strait and leaves by Cabot strait. On the contrary, the total volume of water which leaves the gulf by the latter—vastly greater than the volume of fresh water received from the St. Lawrence, though this may be sufficient to dilute the water to the low observed density—is replaced principally by water which enters from the ocean at the same strait, in continuation of the general westward drift along the south coast of Newfoundland. The whole of such movements probably occur within a depth of 50 or 60 fathoms.

Influence of Wind on the Level of Lake Erie.—A recent number of the U.S. *Monthly Weather Review* (May, 1900) contains an interesting note by Prof. A. J. Henry on the fluctuations of level in Lake Erie brought about by the winds. In connection with the survey of the great lakes carried out by the Engineer Corps of the United States army, a continuous record of such fluctuations through a number of months has been kept, and as an equally full record of wind phenomena,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000067

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

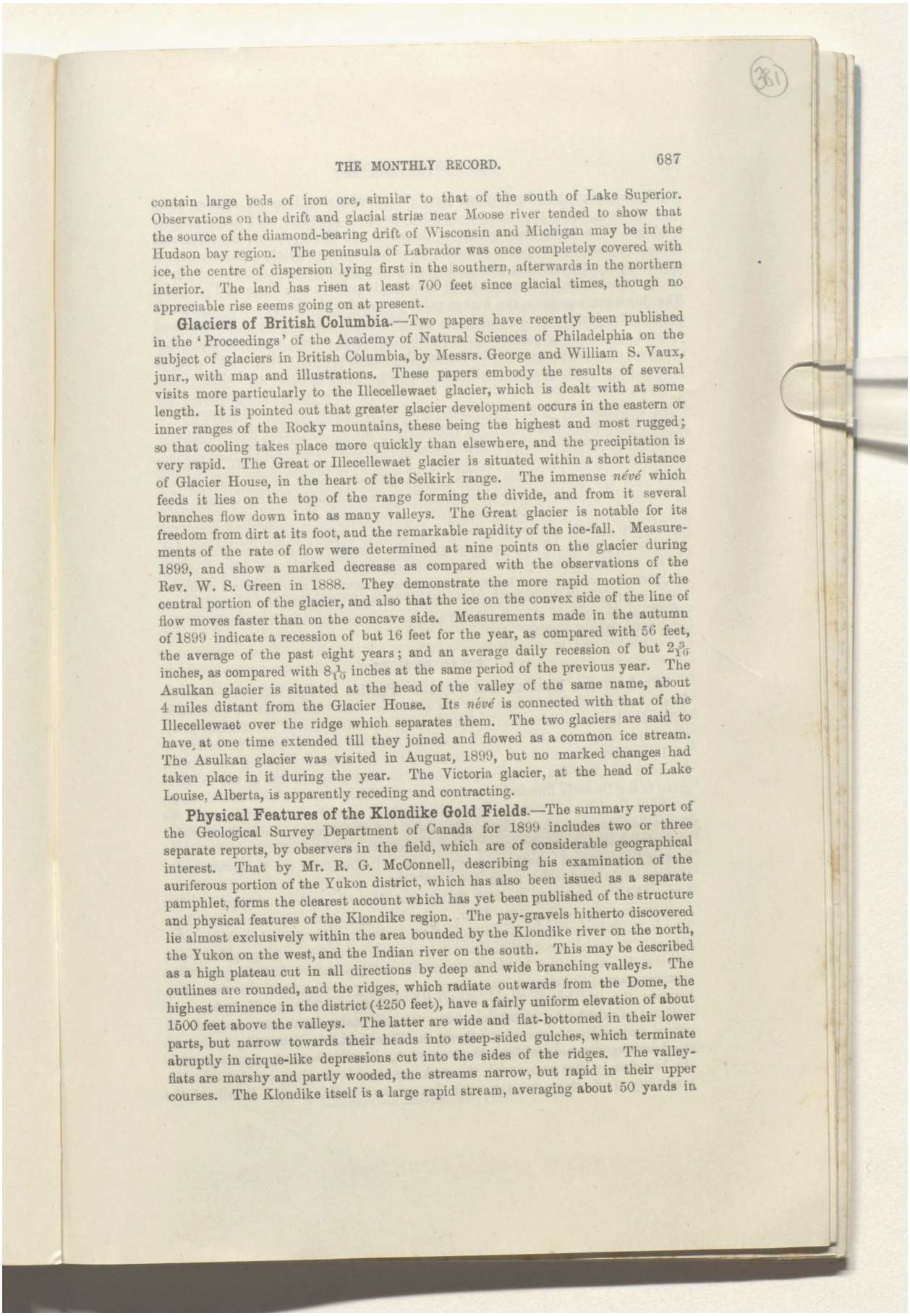
made at the Weather Bureau Offices at Detroit and Buffalo, is available, it is now possible to study the connection which exists between the two sets of facts. It has been known for some years that winds blowing parallel to the axis of the lake tend to heap up the water at the end towards which they blow, and to depress it at the opposite end, the heaping up of the waters in Buffalo harbour being at times a serious menace to wharf and dock property. The effect of the wind on the lake is well shown by the records kept during a storm moving north-east from the Mississippi valley. At Amherstburg the water first rose, then fell and rose again, while converse oscillations were recorded at Buffalo. The fall at the latter and rise at the former are due to the north-easterly winds in front of the advancing storm, while a second oscillation contrary to the first is caused by the shift of wind to a westerly quarter as the storm centre advances along the lake. The amplitude of the oscillations may reach an extreme value of 6 or 7 feet. In the case of a storm passing due east across the lake, with resulting north-west winds, the oscillation was rather transverse than longitudinal. Prof. Henry thinks we may conclude that the oscillations are stationary rather than progressive, no wave of water being propagated, but the whole lake oscillating about a nodal line, at which the fluctuations are zero.

Mr. A. P. Low's Explorations in Labrador.—In the *Journal* for 1899 (vol. xiii. p. 434), reference was made to Mr. A. P. Low's explorations, down to December, 1898, on the east coast of Hudson bay. During the following spring and summer, Mr. Low and his assistant, Mr. Young, who had wintered at Great Whale river, continued their work, both on the coast and in the northern interior of the Labrador peninsula, considerable additions to our knowledge of both being made. A sketch of the results appears in the summary report of the Canadian Geological Survey for 1899. On February 23, Mr. Low started northward, travelling over very rough ice, and meeting many parties of Eskimo on their way to the Hudson bay post. The northern tree limit on the coast was found to be just north of Richmond gulf. On March 2 the coast was left about 10 miles north of the Nastapoka river, the country rising rapidly to about 700 feet. A number of small lakes are surrounded by bare rocky hills, this barren region extending inland about 30 miles, beyond which the valleys contain some soil, supporting clumps of spruce and larch. After crossing the watershed between Hudson and Ongava bays, Mr. Low descended to Tasiagaluk, or Eskimo Seal lake, said to be over 100 miles long, though nowhere more than 15 miles across. It has several narrow bays, all, like the main body, with an east-and-west trend, and at its eastern end gradually narrows into the Leaf river, which is navigable by native umiaks down to Ungava bay. The surrounding country is comparatively flat, with low ridges of rocky hills. Failing to meet with caribou, Mr. Low was forced to return, and on April 3 started with Mr. Young and three others up Great Whale river. Progress was much hampered owing to the exceptionally mild and rainy weather, but the north branch of the river was surveyed to within a few miles of a large lake, which discharges both by this river and by the Little Whale river. The Abchigamich branch, which was surveyed for 15 miles, comes from the north-east, while the main branch makes a circuit from the south and west, its upper course being only 20 miles from the coast. After again returning to the coast, the explorers made ready their yacht for the summer's use, and in it surveyed the coast from Richmond gulf to Rupert river, near the south end of James bay. Summarizing the geological and other results, Mr. Low says crystalline schists, gneisses, and granite occupy the greater part of the area examined, and that a band of unaltered rocks belonging to the so-called Cambrian of Labrador occupies most of the coast and islands from Portland promontory to Cape Jones. At Nastapoka islands they

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



contain large beds of iron ore, similar to that of the south of Lake Superior. Observations on the drift and glacial striæ near Moose river tended to show that the source of the diamond-bearing drift of Wisconsin and Michigan may be in the Hudson bay region. The peninsula of Labrador was once completely covered with ice, the centre of dispersion lying first in the southern, afterwards in the northern interior. The land has risen at least 700 feet since glacial times, though no appreciable rise seems going on at present.

Glaciers of British Columbia.—Two papers have recently been published in the 'Proceedings' of the Academy of Natural Sciences of Philadelphia on the subject of glaciers in British Columbia, by Messrs. George and William S. Vaux, junr., with map and illustrations. These papers embody the results of several visits more particularly to the Illecellewaet glacier, which is dealt with at some length. It is pointed out that greater glacier development occurs in the eastern or inner ranges of the Rocky mountains, these being the highest and most rugged; so that cooling takes place more quickly than elsewhere, and the precipitation is very rapid. The Great or Illecellewaet glacier is situated within a short distance of Glacier House, in the heart of the Selkirk range. The immense *névé* which feeds it lies on the top of the range forming the divide, and from it several branches flow down into as many valleys. The Great glacier is notable for its freedom from dirt at its foot, and the remarkable rapidity of the ice-fall. Measurements of the rate of flow were determined at nine points on the glacier during 1899, and show a marked decrease as compared with the observations of the Rev. W. S. Green in 1888. They demonstrate the more rapid motion of the central portion of the glacier, and also that the ice on the convex side of the line of flow moves faster than on the concave side. Measurements made in the autumn of 1899 indicate a recession of but 16 feet for the year, as compared with 56 feet, the average of the past eight years; and an average daily recession of but $2\frac{3}{10}$ inches, as compared with $8\frac{1}{10}$ inches at the same period of the previous year. The Asulkan glacier is situated at the head of the valley of the same name, about 4 miles distant from the Glacier House. Its *névé* is connected with that of the Illecellewaet over the ridge which separates them. The two glaciers are said to have at one time extended till they joined and flowed as a common ice stream. The Asulkan glacier was visited in August, 1899, but no marked changes had taken place in it during the year. The Victoria glacier, at the head of Lake Louise, Alberta, is apparently receding and contracting.

Physical Features of the Klondike Gold Fields.—The summary report of the Geological Survey Department of Canada for 1899 includes two or three separate reports, by observers in the field, which are of considerable geographical interest. That by Mr. R. G. McConnell, describing his examination of the auriferous portion of the Yukon district, which has also been issued as a separate pamphlet, forms the clearest account which has yet been published of the structure and physical features of the Klondike region. The pay-gravels hitherto discovered lie almost exclusively within the area bounded by the Klondike river on the north, the Yukon on the west, and the Indian river on the south. This may be described as a high plateau cut in all directions by deep and wide branching valleys. The outlines are rounded, and the ridges, which radiate outwards from the Dome, the highest eminence in the district (4250 feet), have a fairly uniform elevation of about 1500 feet above the valleys. The latter are wide and flat-bottomed in their lower parts, but narrow towards their heads into steep-sided gulches, which terminate abruptly in cirque-like depressions cut into the sides of the ridges. The valley-flats are marshy and partly wooded, the streams narrow, but rapid in their upper courses. The Klondike itself is a large rapid stream, averaging about 50 yards in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

width, and interrupted by frequent bars. The Indian river is much smaller, being very shallow, while the channel is filled for long stretches with large angular boulders. The forest trees consist of the white and black spruces, the aspen and balsam poplars, and a species of birch; the white spruce (which, especially on the Klondike, is of surprising size and quality, considering the latitude, and can be easily floated down to Dawson) being the most important tree for general purposes. The ridges are, except on the higher points, covered with an open forest of small trees. The geology of the district is complicated, but four series of stratified and foliated rocks, mostly palæozoic, can be distinguished, as well as granite and other eruptives of tertiary age. Of the former, the Klondike river series, which occupies a zone from north-west to south-east between the Klondike and Indian rivers, without, however, touching either, is the most important, as it constitutes the country rock along the productive portion of all the richer creeks, and is apparently genetically connected with the occurrence of the gold. The rocks are mainly light-coloured and greenish micaceous schists, greatly crushed and altered, and almost certainly derived originally from eruptives. The gravels are classed by Mr. McConnell under four heads, viz., stream gravels (present); terrace gravels, river gravels, and old valley gravels, the last-named including the remarkable deposit, very uniform from top to bottom, known as the quartz drift. It is formed of a compact mixture of small clear quartz grains, minute scales of sericite, and rounded or wedge-shaped boulders of quartz. Gold in paying quantities occurs in the stream gravels, the terrace gravels, and the quartz drift, and the aggregate length of the paying portion of the creeks, as at present known, is estimated at some 50 miles, while a moderate estimate of the gold included gives a value of about £19,000,000. Other sources will, however, in time be utilized. The report is accompanied by a map on the scale of 2 miles to 1 inch.

POLAR REGIONS.

Work of the Russian and Swedish Parties in Spitsbergen.—Further details are now to hand respecting the scientific work carried out in connection with the degree measurement in Spitsbergen, especially that of the Russian party, which met with a cordial reception from the Academy of Sciences on its return to St. Petersburg on October 21. Some account of the operations during the winter, in which the observers were for nine months isolated from the rest of the world, is given in the *Deutsche Rundschau* (vol. 23, p. 45). Their work included astronomical, pendulum, and hourly meteorological observations, as well as a careful study of the aurora borealis, with photographs of the same and of its spectra, the latter of which had never before been obtained. After November, snow-storms of great violence became frequent and caused much annoyance. In December the temperature was comparatively high—the mean being 23° Fahr., or higher than at St. Petersburg. The coldest day (−25·6 Fahr.) was March 4, while on April 13 the temperature was still −18·4 Fahr. Geodetic operations were commenced on March 31, and were continued with great activity in spite of unfavourable conditions. The work accomplished, which is of much value from a geographical point of view, is summarized in the tenth number of *Petermanns Mitteilungen*. The southern part of Spitsbergen was crossed in a variety of directions, the connection between the two coasts being established by way of Mounts Hedgehog and Keibau, on which the signals necessary for the triangulation were erected. It proved impossible to proceed north up the Stor fjord, but Mount Chydenius and the Svenberg were reached from the west coast, and the necessary signals erected. As has already been announced, the work remained incomplete, owing to the impossibility of effecting a junction with that of the Swedish party. Details of the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000054

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

work of the latter are not yet to hand, but an interesting discovery was that of a mountain south of Treurenberg bay, which was found to have a height of 5580 feet, or 1180 feet higher than the Hornsundstind, hitherto supposed to be the highest summit in the whole of Spitsbergen. The new peak is said (*Globus*, vol. 78, p. 183) to belong to a range which appears to be connected with Mount Chydenius. Other unexpectedly great heights were found in the vicinity of Wijde bay.

Russian Expedition to Novaya Zemlya.—An expedition to the east coast of Novaya Zemlya has been undertaken by the Russian Lieut. Borissoff, who, after preparing winter quarters, passed through Matushkin strait into the Kara sea on August 13, for the purpose of establishing depôts of provisions for a sledge journey next spring. He hopes to make his way northwards along the coast, and complete the survey of the islands.

The Stein Arctic Expedition.—This expedition, as to the safety of which fears have been expressed in some quarters, has apparently extricated itself without mishap from its somewhat precarious position. The Austrian member of the party, Dr. Leopold Kann, arrived at Dundee on November 7, on board the whaler *Eclipse*, and from statements made by him it appears that the expedition has been fairly successful, having during the past summer made numerous excursions leading to an improved knowledge of Ellesmere Land. Details of Mr. Stein's movements have not transpired, but it appears that he was left by Dr. Kann at Cape York so far back as June 9. Visits seem to have been paid to his winter station, both by Peary and his assistants.

Suggested International Co-operation in Antarctic Research.—M. H. Arctowski repeats in *Ciel et Terre* the arguments which he brought before the British Association meeting at Dover,* as to the importance of wide international co-operation in the study of the atmospheric conditions of the antarctic area during the time when the forthcoming British and German expeditions are in the field. He points out that the laws governing atmospheric and oceanic circulation remain very obscure on account of the want of data from the antarctic area, and he emphasizes the importance of simultaneous and combined effort in obtaining records from a number of points on the margin of the south polar area. In 1902 the two expeditions will be supplemented in their work by the observatories of Melbourne and Cape Town, by the German station on Kerguelen, and by Argentine observers in the South Shetlands and at Staten island. He points out that there is still time to organize further co-operation, and that the need is urgent to investigate fully the meteorology of the stormy region of Cape Horn in particular. He suggests the establishment of a polygon of stations uniting South America and the antarctic lands, the suggested points being Punta Arenas, Staten island, Cape Pillar, one of the Diego Ramirez islands south-west of Cape Horn, the Falkland islands, South Georgia, the South Shetlands, and, finally, one or two stations in the lands discovered by the *Belgica*. He thinks that the Chilean government might be induced to send one or two meteorologists to the lighthouse at Cape Pillar; that France should send observers to Diego Ramirez; and that Russia, where neither men nor means are lacking for such an enterprise, should also co-operate.

MATHEMATICAL AND PHYSICAL GEOGRAPHY.

Currents in Australian Waters and the Southern Ocean.—In the fourth instalment of current-paper statistics, placed before the Royal Society of New South Wales, Mr. H. C. Russell has to record an unusually large list of such papers

* *Geographical Journal*, xiv. (1899), p. 584.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

received between September, 1898, and October, 1899. In the absence of north-west winds, which had, during the preceding period, apparently carried the bottles to the south of Australia and New Zealand, current papers had arrived unusually fast on the Australian coasts, two and sometimes even three per day having come in, giving a total during the period in question of 124. As regards the currents in the sea east of Australia, these papers confirm the suggestion previously made by Mr. Russell, that there is first a drift to the east, especially south of Sydney, then northwards until the great current from the east passing south of New Caledonia is reached. This idea is supported also by the drift of the *Perthshire* after she was disabled in the Tasman sea. The steady eastward drift from the vicinity of Cape Horn across the Southern ocean is again exemplified by the track of three papers, which, thrown overboard, one at that cape and two near the Falkland isles, were all picked up either on the west or south coasts of Australia. The current would seem to maintain a very uniform course slightly to the north of east. Bottles thrown overboard in the vicinity of Kerguelen and the Crozets were picked up on the coasts of New Zealand, and though the course followed could not be ascertained, the northward tendency of the current just mentioned would seem to favour the idea that they may have been carried round the great Australian bight before passing through Bass strait or south of Tasmania. The rate of drift seems to have been abnormally high during the period under review, particularly that northwards along the east coast of Australia, which is accounted for by the prevalence of southerly winds during the winter and spring of 1899. The Cape Horn papers, however, show a similar abnormal rate, one showing an average per day of 12·2 miles. The papers were fairly evenly distributed through the year, the relatively small number received during April and September being perhaps accounted for by equinoctial disturbances. The record kept by six ships of the total number of bottles thrown out shows that the proportion of those picked up to the total varies from 1 in 7 to 1 in 48.

Lord Dunraven's 'Navigation.' *—There are already so many excellent works on Navigation, both from a theoretical and practical standpoint, that it may at first appear surprising that Lord Dunraven has thought it advisable to add to the number. Raper, Norie, Inman, and others give a vast amount of information on all matters connected with the subject, together with tables for the necessary computations, whilst Lecky's 'Wrinkles,' and books of a similar character, form most useful supplements to these for the practical man. Still, there is doubtless truth in Lord Dunraven's statement in his preface, that "most writers have treated the subject from the point of view of addressing themselves either to the highly educated or to the totally uneducated," and there is, he thinks, room for a treatise designed to meet the requirements of those who lie between these two extremes. This work does not, therefore, presuppose any great amount of mathematical knowledge on the part of the student, nor is it, on the other hand, written on the assumption that it is sufficient to give a number of rules to be learnt off by heart, without any appeal to the reasoning powers, which has too often been done in the past by writers on this and kindred subjects; but by a series of diagrams, lucid explanations, and clearly expressed investigations of formulæ, Lord Dunraven has succeeded in producing a work that will not only be useful to those who are thinking of going up for the Board of Trade examinations, for whom it should possess a special value, but to all who are interested in practical astronomy and navigation. Unlike Raper,

* 'Self-instruction in the Practice and Theory of Navigation.' By the Earl of Dunraven, Extra Master. In two volumes. London: Macmillan & Co. 1900. *Price* 21*s*.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000055

مكتبة قطر الوطنية
Qatar National Library

Norie, and others, Lord Dunraven does not give tables of logarithms, logarithmic sines, tangents, cosines, etc., and his work cannot therefore be considered as superseding the standard works on the subject, but should be looked upon rather as supplementing them. In the examples given, Norie's tables have been generally used, but for those who are accustomed to the tables in Raper or Inman, a comparative statement is given at the commencement of the first volume. In order to prevent the work from being inconveniently large, it is divided into two volumes. The first contains, amongst other matters, chapters on logarithms and their use, the sailings, a day's work, the use of the compass, charts, and the simpler nautical astronomical problems. The second volume treats of the more advanced astronomical problems, magnetism and deviation, great circle sailing, tides, the law of storms, and the investigation of the formulæ employed. It further contains numerous exercises, together with the data from the Nautical Almanac of 1898 necessary to work them. There will doubtless be found those who are not altogether prepared to agree with Lord Dunraven in all the opinions he expresses, and would recommend different methods of working some of the problems; or perhaps some would, in certain examples, prefer to use other tables than those here employed. It is possible, too, that occasionally somewhat better and clearer diagrams might have been chosen to represent the cases under consideration; but, taken as a whole, Lord Dunraven may be congratulated on having produced a very practical and serviceable work. There is a full table of contents, but no index, which is certainly to be regretted.

GENERAL.

Memento of Captain Cook's Death.—As announced by the President at the opening meeting of the session, an interesting photograph of the club by which Captain Cook met his death at the hands of the Hawaiian savages has been presented to the Society by the present owner of the club. It is accompanied by an autograph letter of Sir Joseph Banks, the former owner of the relic, to whom it was given by Admiral John Hunter, and who in turn presented it to Thomas Legh, of Lyme Park, Cheshire. The latter was a traveller of some note in his day, publishing in 1816 a narrative of his journey in Egypt and beyond the cataracts. He was one of the founders of the Raleigh Club, the direct precursor of the Royal Geographical Society, and, on the formation of the latter, was one of its original Fellows. The donor of the photograph and letter is his daughter and only child, Mrs. Ellen J. Lowther, of Shigley Hall, Cheshire.

CORRESPONDENCE.

The Aurora Australis and Borealis.

80, Crescent Road, Toronto, Canada, October 24, 1900.

In the July number of the *Geographical Journal* I see recorded in a paper by Mr. Arctowski the observations on the auroræ australes made by the *Belgica* expedition in the antarctic. They possess special interest to me, for I have for years been wishing for just such observations. I send a paper of mine 'On the Magnetic Influence of the Sun on the Earth and on Comets,' and draw attention to a paragraph on p. 354, which shows the importance to be attached to auroral records in south polar regions.

Mr. Arctowski says it would be interesting to know if the northern auroræ correspond to the southern in general characteristics and in date, and invites investigations.

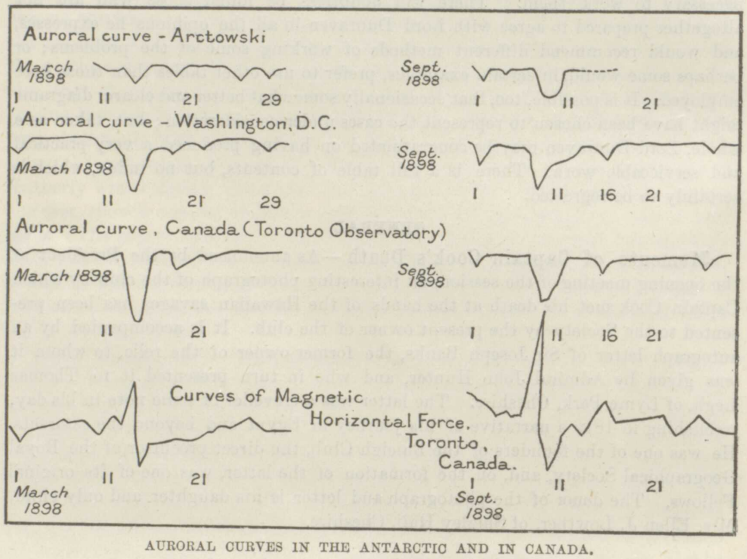
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

As to "characteristics," I may be permitted to say that the features of an auroral display are often so local that a concordance between those in both hemispheres is scarcely to be looked for. We may have a fine auroral arc here, and you may have only fine streamers in your hemisphere, or a rose aurora here with a crown, and you a pale lot of flashing merry-dancers. We may have a great magnetic disturbance, enough to work the telegraphic circuits by, along 10 or 15 degrees of longitude, but the aurora may be visible at one point only on the parallel. Therefore, I do not look for any similarity in the "characteristics" of an auroral display in the antarctic and the arctic regions, as noted in isolated localities.

But as for general excitement, I do expect a concordance, and Mr. Arçtowski's reports enable this to be established for the season of 1898.

We have two sets of observations which we can compare with his. One is to be found in the Weather Reports of the United States Bureau. The number of



AURORAL CURVES IN THE ANTARCTIC AND IN CANADA.

auroræ seen by the correspondents of that Bureau is published every month. The other is in the *Weather Review*, published in Toronto, which gives not only the numbers of auroræ seen by observers, but also the class of aurora, called first, second, third, and fourth.

Now, in examining both of these records, I find, as expected, a remarkable concordance with Mr. Arçtowski's figures. When I say "figures," I mean his observations as expressed in figures so as to make a curve of frequency and intensity.

The antarctic observations show a number of auroræ in March and in September, 1898, with but few in the intervening months. The same thing is noticeable both in the Washington and in the Toronto observations.

The intervening months show similar slight displays at identical times. And as to the two months mentioned, the data are enclosed in the form of curves, and will enable the reader to make the comparison, and establish the identity in times for himself.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000026

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

I give to Mr. Arctowski's classes a numerical value for each. It may not be correct, for the relative value of each class may not be accurate, but it cannot be far wrong, and is sufficient for the purpose.

The Washington observations can only be classified in time, *i.e.* by the mere numbers of auroræ seen. The Toronto observations are turned into figures by taking an aurora of the first class as four, one of the second as three, of the third as two, and of the fourth as one.

It may be added that, by the records of the Toronto Magnetic Observatory, the months between March and September, 1898, were very quiet, but on the days of the auroræ in those two months there were severe magnetic storms. It seems certain that if there were a good magnetic observatory in the furthest south accessible, the disturbances would be found to correspond to the day, and possibly to the hour, with those in the northern hemisphere.

ARTHUR HARVEY, F.R.C.S.,
Ex-President of the Canadian Institute and of the Astronomical and Physical Society of Toronto.

Mr. Grogan's Picture of Mount Ruwenzori.

Holland House, New York City, November 11, 1900.

It has been brought to my notice that there is a marked resemblance between the picture of Mount Ruwenzori in my paper (*Geographical Journal*) for August, p. 179, and the photograph in Dr. Stuhlmann's book 'Mit Emin Pasha ins Herz von Africa.' My outline of the mountains was made from the high plateau behind Mboga, when I had a momentary glimpse of the summits through a break in the clouds. On looking through Stuhlmann's book, Mr. McCormick and I noticed that the points of view of Stuhlmann and myself were practically identical, and in the picture Mr. McCormick may have utilized Stuhlmann's photograph for subsidiary detail. This should undoubtedly have been acknowledged, and I trust that Dr. Stuhlmann will attribute the omission to my difficulty in writing and arranging for the publication of the paper and book at a distance from my publisher and artist, due to my having been tied to Gosport by my militia duties. A German critic labours under the delusion that the view of Ruwenzori was taken from the foot-hills of the mass. The view is from the other side of the Semliki valley, where the banana is found to a height of 7000 feet.

EDWARD S. GROGAN.

MEETINGS OF THE ROYAL GEOGRAPHICAL SOCIETY, SESSION 1900-1901.

First Ordinary Meeting, November 12, 1900.—Sir CLEMENTS MARKHAM, K.C.B., President, in the Chair.

ELECTIONS.—*Thomas Inglis Binnie, C.E. Surveyor B.C.A. Protectorate; Lieut. Philip Lansdale, East Lancashire Regiment; Frederick W. Mayers, Imperial Chinese Customs; Montagu Charles Summers.*

The Papers read were:—

"Opening Address." By the President. "An Expedition between Lake Rudolf and the Nile." By Dr. Donaldson Smith.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000054

مكتبة قطر الوطنية
Qatar National Library

GEOGRAPHICAL LITERATURE OF THE MONTH.

Additions to the Library.

By HUGH ROBERT MILL, D.Sc., LL.D., *Librarian*, R.G.S.

THE following abbreviations of nouns and the adjectives derived from them are employed to indicate the source of articles from other publications. Geographical names are in each case written in full:—

A. = Academy, Academie, Akademie.
Abh. = Abhandlungen.
Ann. = Annals, Annales, Annalen.
B. = Bulletin, Bollettino, Boletim.
Com. = Commerce.
C. Rd. = Comptes Rendus.
Erdk. = Erdkunde.
G. = Geography, Geographie, Geografia.
Ges. = Gesellschaft.
I. = Institute, Institution.
Iz. = Izvestiya.
J. = Journal.
k. u. k. = kaiserlich und königlich.
M. = Mitteilungen.
Mag. = Magazine.
Mem. = Memoirs, Mémoires.
Met. = Meteorological.
P. = Proceedings.
R. = Royal.
Rev. = Review, Revue.
S. = Society, Société, Selskab.
Sitzb. = Sitzungsbericht.
T. = Transactions.
V. = Verein.
Verh. = Verhandlungen.
W. = Wissenschaft, and compounds.
Z. = Zeitschrift.
Zap. = Zapiski.

On account of the ambiguity of the words *octavo*, *quarto*, etc., the size of books in the list below is denoted by the length and breadth of the cover in inches to the nearest half-inch. The size of the *Journal* is 10 × 6½.

A selection of the works in this list will be noticed elsewhere in the "Journal."

EUROPE.

Alps. **Penck.**

Der Vernagtferner. Von A. Penck. (Separat-Abdruck aus dem Neuen Jahrbuch für Mineralogie, etc. 1898. Bd. ii.) Size 9 × 6, pp. [8]. *Presented by the Author.*

Alps. **Penck.**

Die vierte Eiszeit im Bereiche der Alpen. Vortrag, gehalten den 14 December 1898 von Albrecht Penck. (Vorträge des Vereines zur Verbreitung naturwissenschaftlicher Kenntnisse in Wien. XXXIX. Jahrg. Heft. 3.) Wien, 1899. Size 7½ × 4½, pp. 20. *Presented by the Author.*

Rumania. **Liddell.**

Trade of Roumania for the year 1899. Foreign Office, Annual No. 2486, 1900. Size 9½ × 6½, pp. 30. *Price* 2*d.*

Russia. *B. Comité Géolog. St. Pétersbourg* **18** (1899): 195–233. **Ballore.**

Description sismique de l'Empire Russe. Par F. de Montessus de Ballore. [In Russian, with *Résumé* in French.] *With Map.*

Russia—Lake Ladoga. *C. Rd.* **130** (1900): 1789–1793. **Schokalsky.**

Le lac Ladoga au point de vue thermique. Note de M. Jules de Schokalsky. *With Diagrams.*

See note in *Journal* for October, p. 471.

Scandinavia. **Ahlenius.**

Till kännedomen om Skandinaviens geografi och Kartografi under 1500-talets senare hälft. Af K. Ahlenius. (Mit einem Résumé in deutscher Sprache.) Upsala (C. J. Lundström); Leipzig: Otto Harrassowitz, (1900). Size 9½ × 6, pp. 140. *Presented by the Author.*

This is a study of the knowledge possessed by the geographers of Europe in the latter half of the sixteenth century as derived from maps and books. It is supplementary to the author's earlier work on Olaus Magnus.

Scandinavia—Ice Age. *J. Geology* **8** (1900): 326–332. **Reusch.**

A note on the last stage of the Ice Age in Central Scandinavia. By Hans Reusch. *With Illustrations.*

Spain—Barcelona. **Roberts.**

Trade of Barcelona for the year 1899. Foreign Office, Annual No. 2460, 1900. Size 10 × 6½, pp. 38. *Price* 2½*d.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Spain—Bilbao. **Larrea.**
Trade of Bilbao and District for the year 1899. Foreign Office, Annual No. 2445, 1900. Size 9½ × 6½, pp. 32. *Price* 2*d.*

Sweden. *B. Geolog. I. University Upsala* **4** (1899): 231–242. **Gavelin.**
On the glacial lakes in the upper part of the Ume river-valley. By Axel Gavelin. *With Map.*

Sweden—Climate. *La G., B.S.G. Paris* (1900): 199–208. **Egnel.**
Le climat de la Suède et les causes des variations de climat, d'après M. Ekholm. Par M. Egnel. *With Maps.*

The maps embrace the whole of Northern Europe. The article is a summary of the memoirs published in *Ymer* during 1899.

Sweden—Gothenburg. **Duff.**
Trade of Gothenburg for the year 1899. Foreign Office, Annual No. 2490, 1900. Size 10 × 6½, pp. 34. *Price* 2½*d.*

Switzerland. *Jahrb. Schweiz. Alpenclub* **35** (1899–1900): 187–202. **Correvon.**
La Vallée de Tourtemagne, en Valais. Par H. Correvon. *With Illustrations.*

Switzerland. *Le Globe B.S.G. Genève* **39** (1900): 109–112. **Rosier.**
Le milieu géographique Suisse considéré comme facteur du développement historique. (*Résumé.*) Par M. W. Rosier.

Turkey—Salonica. **Shipley.**
Trade of Salonica and District for the year 1899. Foreign Office, Annual No. 2468, 1900. Size 10 × 6, pp. 36. *Price* 2½*d.*

United Kingdom—England. **Barnes and Holroyd.**
Mém. S. Spéléologie No. **23** (1900): pp. 19.
La Blue-John-Mine à Castleton (Angleterre). Par MM. Barnes et Holroyd. *With Plans.*

United Kingdom—England. **Bosworth.**
Philips' County Readers. Kent, Past and Present. By George F. Bosworth. London: G. Philip & Son, 1901 [1900]. Size 7½ × 5, pp. x. and 268. *Maps and Illustrations. Price* 2*s. Presented by the Publishers.*

An excellent history of Kent adapted for use as a "reader" in the schools of that county. The geographical sections are subordinated to the historical.

United Kingdom—Ireland. *Economic P.R. Dublin S.* **1** (1899): 1–72. **Johnson.**
The Irish Peat Question. By T. Johnson, D.SC. *With Illustrations.*

United Kingdom—Orkneys. *T.R.S. Edinburgh* **39** (1897–98): 383–424. **Flett.**
The Old Red Sandstone of the Orkneys. By John S. Flett, M.B., etc. *With Map.*

United Kingdom—Scotland. *T.R.S. Edinburgh* **39** (1898–99): 779–826. **Buchanan.**
The Meteorology of Ben Nevis in Clear and in Foggy Weather. By J. Y. Buchanan. *With Diagrams.*

United Kingdom—Rainfall. **Wallis.**
British Rainfall, 1899. On the distribution of Rain over the British Isles during the year 1899, as observed at about 3500 Stations in Great Britain and Ireland, with articles upon various branches of Rainfall work. Compiled by H. Sowerby Wallis. London: E. Stanford, 1900. Size 9 × 5½, pp. 56 and 252. *Portrait, Charts, and Diagram. Price* 10*s. Presented by the Compiler.*

This volume is accompanied by a sketch of the career and an admirable portrait of Mr. G. J. Symons, the founder of the British Rainfall Organization. The work is one of national importance, although entirely organized by a private individual and carried out by the co-operation of a staff of volunteer unpaid workers, the magnitude of which is unexampled in modern scientific enterprise.

United Kingdom—Tide Tables. **Harris and Havergal.**
Tide Tables for the British and Irish Ports for the year 1901: also the times and heights of High Water at full and change for the principal places of the Globe. By Captain H. R. Harris and Commander A. Havergal. London: J. D. Potter, [1900]. Size 10 × 6½, pp. xl. and 262. *Price* 2*s. Presented by the Hydrographer, Admiralty.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000023

مكتبة قطر الوطنية
Qatar National Library

ASIA.

Central Asia. **Demidoff.**

After Wild Sheep in the Altai and Mongolia. By E. Demidoff. London: Rowland Ward, Limited, 1900. Size 9½ × 6½, pp. xii. and 324. *Map and Illustrations. Price* 21*s. net. Presented by the Publishers.*

Prince Demidoff and his wife, together with Mr. and Mrs. Littledale, made the journey which he describes in this volume during 1897. From Barnaul on the Ob the route led south-eastward to the sources of the Chuya river, and thence into Mongolia, up the Kobdo river almost to its source, and then along the northern slope of the Altai mountains. The book is excellently illustrated, and has a clear map.

Central Asia. **Hedin.**

Die geographisch-wissenschaftlichen Ergebnisse meiner Reisen in Zentralasien, 1894–1897. Von Dr. Sven Hedin (Dr. A. Petermanns Mitteilungen. Ergänzungsheft Nr. 131). Gotha: Justus Perthes, 1900. Size 11 × 7½, pp. 400. *Maps. Price* 20 *mark.*

The complete scientific geographical results of Dr. Sven Hedin's three years' work in Central Asia (1894–97).

Ceylon. **Leclercq.**

Un séjour dans l'Ile de Ceylan. Par Jules Leclercq. Paris: Plon-Nourrit et Cie, 1900. Size 7½ × 5, pp. 294. *Map and Illustrations. Price* 4 *fr. Presented by the Author.*

M. Leclercq visited Ceylon after having seen Java, in the hope that he might decide to which island belonged the distinction of being the earthly paradise, but after having tried both he is unable to pronounce for one or the other, so evenly balanced did he find their diverse excellences.

China. **Walton.**

China and the Present Crisis, with Notes on a Visit to Japan and Korea. By Joseph Walton, M.P. London: Low & Co., 1900. Size 8 × 5, pp. xii. and 320. *Map. Price* 6*s. Presented by the Publishers.*

The record of the travels, experiences, and opinions of a Member of Parliament after a tour of eight months' duration in China, and a brief visit to Japan and Korea.

India. **Hunter.**

A History of British India. By Sir William Wilson Hunter, K.C.S.I., etc., volume ii. To the Union of the old and new Companies under the Earl of Godolphin's Award. London: Longmans & Co., 1900. Size 9½ × 6, pp. 420. *Price* 16*s. Presented by Lady Hunter.*

This volume carries on the history of English enterprise in India from 1623 to 1708. The final chapter (1698–1708) had not been written at the time of the author's death, but is supplied following the indications of his notes by P. E. Roberts, who also contributes an introduction to the book.

India. **Sewell.**

A Forgotten Empire (Vijayanagar). A contribution to the History of India. By Robert Sewell. London: Sonnenschein & Co., 1900. Size 10½ × 6½, pp. xxii. and 428. *Maps and Illustrations. Price* 15*s. Presented by the Author.*

The history of the old kingdom which occupied the south of the Indian peninsula, and of the rise and fall of Portuguese power in India. An important part of the work is the translation for the first time of two important Portuguese documents, by Domingo Paes about 1520 and Fernão Nuniz about 1535. There are several maps and numerous photographs of ruins dating from the period of prosperity.

India—Burma. **Sherriff.**

Railway Communication with China. By William Sherriff. The Burmah-China Railway. [Reprinted from the *Manchester Guardian* of March 9, 1900.] Size 8½ × 6½, pp. 4. *Presented by the Author.*

India—Burma. _____

Tables for the Transliteration of Shan Names into English. Rangoon, 1900. Size 10 × 7, pp. 14. *Presented by the Government of Burma.*

India—Earthquake. *Mem. Geolog. Surv. India* **29** (1899): 380. **Oldham.**

Report on the Great Earthquake of June 12, 1897. By R. D. Oldham. *With Maps and Illustrations.*

This is an exhaustive report on the last great Indian earthquake, which is considered in all its aspects. The main memoir is supplemented by numerous special reports made by members of the Geological Survey deputed to investigate the phenomena in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000094

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [386r] (124/232)

special districts. The whole is richly illustrated by photographs, diagrams, and seismograph tracings.

India—Irrigation. *J.S. Arts* **48** (1900): 831–837. **Cotton.**

Irrigation in India.

A supplement to an article by General F. C. Cotton in *Blackwood's Magazine* for May, 1900.

India—Kashmir. *Globus* **78** (1900): 222–226. **Francke.**

Eine Besteigung des Karsongpasses (Kaschmir). Von Hermann Francke. *With Illustrations. Also a separate copy, presented by Herr G. Th. Reichelt.*

A summer trip from Leh to the summit of the Kasong pass.

India—North-West Frontier. **Walters.**

The operations of the Malakand Field Force and the Buner Field Force, 1897–98. Compiled in the Intelligence Branch . . . by Captain H. F. Walters. Simla, 1900. Size 13½ × 8½, pp. iv., 90, and 86. *Maps and Plates. Presented by the Intelligence Branch, Simla.*

India—Sikhim Himalayas. **Donaldson.**

Lepcha Land, or Six Weeks in the Sikhim Himalayas. By Florence Donaldson. London: Low & Co., 1900. Size 9 × 6, pp. xii. and 214. *Map and Illustrations. Price* 10*s.* 6*d. net. Presented by the Publishers.*

An excellent account of a six-weeks' journey in one of the least-known parts of the Indian frontier. The photographs are unusually well chosen and illustrative.

Japan—Hakodate. **Chalmers.**

Trade of Hakodate for the year 1899. Foreign Office, Annual No. 2503, 1900. Size 9½ × 6½, pp. 12. *Price* 1*d.*

Korea. *Rev Française* **25** (1900): 394–398. **Fauvel.**

Corée: Le port de Ma-San-Pho. Par M. A. A. Fauvel. *With Map.*

The position of this port, opened by Korea to foreign trade in 1899, was so little known that it is given erroneously in the supplement to Vivien de St. Martin's Gazetteer.

Malay Archipelago. *Nature* **62** (1900): 327–328. ———

The Cruise and Deep-Sea Exploration of the *Siboga* in the Indian Archipelago. *With Charts.*

Malay Archipelago—Amboina. **Vries.**

Tijds. K. Ned. Aard. Genoots. Amsterdam **17** (1900): 467–502, 593–621.

Reis door eenige eilandengroepen der Residentie Amboina. Door J. H. de Vries.

Malay Archipelago—Borneo. *Oester. Monats. Orient* **26** (1900): 76–79. **Breitenstein.**

Die Handelsverhältnisse auf Borneo und in Niederländisch-Indien. Von Dr. Heinrich Breitenstein.

Malay Archipelago—Borneo. **Keyser.**

Trade of Brunei and Sarawak for the Year 1899. Foreign Office, Annual No. 2491, 1900. Size 9½ × 6¼, pp. 12. *Price* 1*d.*

Malay Archipelago—Borneo and Java. **Breitenstein.**

21 Jahre in Indien. Aus dem Tagebuche eines Militärarztes. Erster Theil: Borneo. Zweiter Theil: Java. Von Dr. H. Breitenstein. Leipzig: Th. Grieben's Verlag (L. Fernau), 1899–1900. Size 9½ × 6, pp. (Theil i.) 264; (Theil ii.) xii. and 408. *Illustrations. Price* 12*s.*

The experiences and observations of an army surgeon who for twenty-one years was in the service of the Netherlands Government in Borneo and Java. The notes on the people and on the conditions as to health are of interest.

Malay Archipelago—Java. **Van der Stok.**

Tijds. K. Ned. Aard. Genoots. Amsterdam **17** (1900): 585–592.

Een nieuwe regenkaart van Java. Door Dr. J. P. Van der Stok. *With Map.*

A new rainfall map of Java on the scale of 1: 1,500,000. The distribution of rainfall is, as a rule, greatest on the watersheds between adjoining river-basins, but there are some curious anomalies, especially in the western half of the island.

Malay Archipelago—Sumatra. **Heldring.**

Tijds. K. Ned. Aard. Genoots. Amsterdam **17** (1900): 622–639.

Poeloe Weh; zijne topographische beschrijving en eenige opmerkingen met betrekking tot de beteekenis van het eiland. Door E. Heldring. *With Map.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Description of the small island off the northern extremity of Sumatra at the entrance to the Strait of Malacca.

Philippine Islands—Diseases. **Flexner and Barker.**

Johns Hopkins University Circulars **19** (1900): 13–16.

Report of a Special Commission sent to the Philippines by the Johns Hopkins University to investigate the prevalent diseases of the Islands. By Prof. S. Flexner, M.D., and Prof. L. F. Barker, M.D.

Russia—Siberia. *Petermanns M.* **46** (1900): 161–165. **Diener.**

Die geologischen Ergebnisse der Reisen von Baron E. Toll entlang der nordsibirischen Eismeerküste und nach den Neusibirischen Inseln. Von Prof. Dr. C. Diener. *With Map.*

Russian. *La G., B.S.G. Paris* (1900): 81–100. **Saint-Yves.**

Notes sur la distribution des plantes en Sibérie et dans l'Asie centrale. Par M. G. Saint-Yves. *With Illustrations.*

The author, in discussing the vegetation of Northern and Central Asia, points out the close relation of the botanical and physical conditions of the continent, and the influence which the vegetation exercises on the mode of life of the people.

Siam—Malay States. *Scottish G. Mag.* **16** (1900): 505–523. **Annandale.**

The Siamese Malay States. By Nelson Annandale. *With Illustrations.*

Mr. Annandale was junior zoologist on Mr. W. W. Skeat's expedition to the Malay peninsula, and he gives here a narrative of the expedition and a sketch of his impressions of Siam and the Siamese.

Turkey—Baghdad. **Melvill.**

Trade of Baghdad for the year 1899. Foreign Office, Annual No. 2459, 1900. Size 10 × 6, pp. 8. *Price* ½*d.*

Turkey—Erzerum. **Lamb.**

Trade of Erzeroum for the year 1899. Foreign Office, Annual No. 2477, 1900. Size 10 × 6, pp. 10. *Price* 1*d.*

Turkey—Palestine. **Wilson.**

Palestine Exploration Fund, Quarterly Statement (1900): 365–369.

The Dead Sea. By Major-General Sir Charles Wilson, K.C.B.

Sir Charles Wilson is not inclined to agree with Mr. Gray Hill's suggestion (see *Journal* for November, p. 555) that the bed of the Dead sea is being raised by volcanic agency. He shows that all the variations of level may be explained by the fluctuation of the rainfall.

Turkey—Palestine. **Boddy.**

Days in Galilee and Scenes in Judæa, together with some account of a solitary cycling journey in Southern Palestine. By the Rev. Alexander A. Boddy. London: Gay & Bird, 1900. Size 9 × 6, pp. xxii. and 354. *Illustrations. Price* 7*s.* 6*d. Presented by the Author.*

The author, in apologizing for the predominance of the human element in parts of his narrative, remarks that he "finds it very difficult to keep the natural man in his place for long, even when in the Holy Land." Despite the somewhat deprecatory preface, this volume in no way falls short of the others from Mr. Boddy's pen.

Turkey—Smyrna. **Cumberbatch.**

Trade of Smyrna and District for the years 1897–99. Foreign Office, Annual No. 2462, 1900. Size 10 × 6½, pp. 58. *Plan. Price* 6*d.*

Western Asia—Ararat. *Jahrb. Schweiz. Alpenclub* **35** (1899–1900): 157–183. **Oswald.**

Eine Besteigung des Ararat. Von Dr. Ad. Oswald. *With Illustrations.*

The ascent of Ararat here described was made in October, 1897.

Western and Central Asia. *J. Bombay Br. R. Asiatic S.* **20** (1899): 156–190. **Modi.**

The Cities of Irân as described in the old Palahavi treatise of Shatrôiha-i-Irân. By Jivanji Jamshedji Modi.

AFRICA.

Abyssinia. **Wellby.**

King Menelek's Dominions and the Country between Lake Gallop (Rudolf) and the Nile Valley. By the late Captain M. S. Wellby. (From the *Geographical Journal* for September, 1900.) Size 10 × 6½, pp. 16. *Map.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b7

مكتبة قطر الوطنية
Qatar National Library

Africa—Travel. **Grogan.**

Through Africa from the Cape to Cairo. By Ewart S. Grogan. (From the *Geographical Journal* for August, 1900.) Size 10 × 6½, pp. 22. *Map and Illustrations.*

Africa—Travel. **Grogan and Sharp.**

From the Cape to Cairo, the First Traverse of Africa from South to North. By Ewart S. Grogan and Arthur H. Sharp. London: Hurst & Blackett, 1900. Size 10 × 7½, pp. xvi. and 378. *Portrait, Maps, and Illustrations. Price* 21*s. net. Presented by the Publishers.*

A handsome volume, illustrated by drawings largely from the authors' photographs, and descriptive of the adventurous journey the geographical facts of which have been laid before the Society by Mr. Grogan, and published in the *Journal* for August, *ante*, p. 164.

Algeria. **Wilkin.**

Among the Berbers of Algeria. By Anthony Wilkin. London: T. Fisher Unwin, 1900. Size 9 × 6, pp. xiv. and 264. *Sketch-map and Illustrations. Price* 16*s. Presented by the Publisher.*

Records of an interesting journey, including visits to some of the mountainous and desert parts of Algeria not often visited by British travellers. The photographs are numerous, the subjects well chosen, they are admirably printed, and a fair proportion are good. The spelling of the place-names is French, with, however, a substitution of *w* for the consonantal *ou*, so that some of them will be difficult to trace on either French or English maps.

British East Africa—Zanzibar. **Cornish.**

Trade of Zanzibar for the year 1899. Foreign Office, Annual No. 2520, 1900. Size 9½ × 6½, pp. 14. *Price* 1*d.*

Comoro Group. **Vienne.**

Notice sur Mayotte et les Comores. Par Emile Vienne. (Exposition Universelle, 1900.) Size 9½ × 6½, pp. 200. *Illustrations. Presented by M. Charles Roux.*

So little has been written about the rarely visited islands of Mayotte and Comoro that this volume is relatively of greater importance than most of the other Exhibition memoirs of the French colonies.

Congo State. *Globus* **78** (1900): 93–96. ——

Die Entwickelung von Léopoldville am Stanley Pool. *With Illustration.*

A picture of the harbour at Leopoldville is given in this description of the growth of the great centre of river-trade on the Congo system.

Dahomey. **Fonssagrives.**

Notice sur le Dahomey, publiée à l'occasion de l'Exposition Universelle. . . . Par M. Jean Fonssagrives. [1900.] Size 9½ × 6½, pp. 408. *Map and Illustrations. Presented by M. Charles Roux.*

Egypt. **Kemeid.**

Cairo and Egypt and Life in the Land of the Pharaohs, being a Pictorial and Descriptive Guide to Cairo and the Nile. By Hallil J. Kemeid. Fourth Yearly Edition (Revised). London: Simpkin, Marshall, & Co., 1900. Size 7½ × 5, pp. 196. *Illustrations. Price* 1*s. Presented by the Publishers.*

Egypt—Port Said and Suez. **Cameron.**

Trade of Port Said and Suez for the year 1899. Foreign Office, Annual No. 2509, 1900. Size 10 × 6½, pp. 12. *Price* 1*d.*

Portuguese West Africa. **Sanders.**

Determination of the latitude of Ambriz and of San Salvador (Portuguese West-Africa). By C. Sanders. (K. Akad. van Wetenschappen te Amsterdam.) Reprinted from Proceedings of the Meeting of Saturday, January 27, 1900 (February 21, 1900). Size 10½ × 7½, pp. 10. *Presented by the Author.*

The author, as the mean of numerous observations, has fixed the latitude of the harbour light at Port Ambriz as 7° 49′ 48″ S., instead of 7° 52′ 9″ as given in the Admiralty chart; and for San Salvador do Congo he found 6° 15′ 16″, instead of the previously accepted value, 6° 20′ 10″.

Portuguese West Africa—Angola. **Hauser.**

Questions Dipl. et Colon. **10** (1900): 449–462.

Études sur les colonies portugaises. II. Angola. Par le Professeur Henri Hauser. *With Map.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000062

مكتبة قطر الوطنية
Qatar National Library

Réunion. **Garsault.**

Exposition Universelle de 1900. Colonies Françaises. Notice sur la Réunion rédigée sous la direction de M. A.-G. Garsault. Paris: J. André, 1900. Size 9½ × 6, pp. 308. *Map and Illustrations. Presented by M. Charles Roux.*

Rhodesia.

The British South Africa Company. Information as to Mining in Rhodesia, supplied to the British South Africa Company. 1900. Size 10½ × 8½, pp. 412. *Maps. Presented by the British South Africa Company.*

Reports of the work done by the numerous minor companies engaged in developing the resources of Rhodesia. The output of gold for the first six months of 1900 averaged over 5500 ozs. per month.

Sahara. *Rev. Française* **25** (1900): 415–420. **Vasco.**

Sahara: Le mission Foureau-Lamy. Par M. G. Vasco.

See also an account of this journey with illustrations in *A travers le Monde, Tour du Monde* 6 (1900), pp. 293–294.

Somaliland. **Swayne.**

Seventeen Trips through Somaliland and a Visit to Abyssinia. A Record of Exploration and Big Game Shooting, with descriptive notes on the Fauna of the Country. By Major H. G. C. Swayne. Second Edition. London: Rowland Ward, Limited, 1900. Size 8 × 5, pp. xxii. and 386. *Maps and Illustrations. Price 7s. 6d. net. Presented by the Publisher.*

A new edition of a well-known work of permanent interest.

Somaliland. *J. Manchester G.S.* **16** (1900): 1–30. **Kœttlitz.**

A Journey through Somaliland and Southern Abyssinia to the Shangalla or Berta Country and the Blue Nile, and through the Sudan to Egypt. By Dr. Reginald Kœttlitz. *With Illustrations.*

South Africa. **Colquhoun.**

The Renascence of South Africa. By Archibald R. Colquhoun. London: Hurst & Blackett, 1900. Size 8 × 5½, pp. viii. and 300. *Map. Price 6s. Presented by the Publishers.*

Six chapters deal with "The Land," "The People," "History," "The New Lands of Promise and Disappointment" (under which heading the author considers Mashonaland, Matabililand, British Central and East Africa), "The Economic Future," and "The Settlement." The author explains his object as being "to gather together and present in the simplest form the salient facts in the story of South Africa, and the principal features in the problem of settlement with which, as a nation, we are face to face."

South Africa—Boers. **Leclercq.**

Les Boers et leur état social. Par M. Jules Leclercq. (From 'La Reform Sociale, Bulletin de la Société d'Économie Sociale et des Unions de la Paix Sociale,' No. 931er Janvier 1900, pp. 70–82.) Paris, 1900. Size 10 × 6½. *Presented by the Author.*

Transvaal and Swazieland. *P.R. Dublin S.* **9** (1899): 12–21. **Lyburn.**

Mining and Minerals in the Transvaal and Swazieland. By E. St. John Lyburn. *With Plate.*

Tripoli—Bengazi. **Alvarez.**

Trade of Bengazi for the year 1899. Foreign Office, Annual No. 2456, 1900. Size 10 × 6, pp. 16. *Price 1d.*

Tunis. *Deutsche Rundschau G.* **22** (1900): 409–413, 486–491. **Levy.**

Die Grundlagen des französischen Protectorates in Tunesien. (Verwaltung, Justiz, Oeffentlicher Unterricht, Heerwesen.) Von Victor Levy. *With Illustrations.*

Tunis—Bizerta. *Rev. Maritime* **144** (1900): 473–508; **145** (1900): 50–79. **Castaing.**

Bizerte: Les souvenirs du passé. Par R. Castaing. *With Maps.*

This treatise traces the history of Bizerta from the Palæolithic period through the historic ages down to the present time.

West Africa. *Questions Dipl. et Colon.* **10** (1900): 412–423. **Hostains and d'Ollone.**

La Mission Hostains-d'Ollone. *With Map.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

NORTH AMERICA.

Alaska.

Eighth Annual Report of the Introduction of Domestic Reindeer into Alaska.—Annual Reports of the Department of the Interior, 1898. Report of the Commissioner of Education. Vol. ii. pp. 1773–1796. Washington, 1899.

Alaska. **Brady.**

Report of the Governor of Alaska.—Annual Reports of the Department of the Interior, 1898. Miscellaneous Reports. Pp. 181–227. *Plan.* Washington, 1898.

A frank statement of the condition of administration and economic development in Alaska.

Mexico and Guatemala. **Seler.**

Auf alten Wegen in Mexiko und Guatemala. Reiseerinnerungen und Eindrücke aus den Jahren 1895–1897. Von Cæcilie Seler. Berlin: Dietrich Reimer (Ernst Vohsen), 1900. Size 10 × 7, pp. xxiv. and 364. *Map and Illustrations. Price* 20 *mark. Presented by the Publisher.*

The record of a journey, "not to find novelties but to seek antiquities," in Central Mexico and Western Guatemala. The book is very richly illustrated, a number of hieroglyphic figures are even reproduced in colour in the text. There is a large-scale map of the route and many sketch-maps of particular localities.

St. Pierre and Miquelon. **Caperon.**

Les Colonies Françaises. Saint-Pierre et Miquelon. Par M. Maurice Caperon. Paris, 1900. Size 9 × 6, pp. 32. *Map and Illustrations. Presented by M. Charles Roux.*

United States. *G.Z.* 6 (1900): 417–434. **Deckert.**

Die Nordamerikanische Union als Weltmacht. (Ein Vortrag.) Von Dr. Emil Deckert.

On the United States as an expanding power.

United States. **Gardini.**

In der Sternenbanner-Republik. Reiseerinnerungen von Dr. Carlo Gardini. Nach der zweiten Auflage des italienischen Originals von M. Rumbauer. Oldenburg and Leipzig: A. Schwartz, [1900]. Size 8½ × 5½, pp. xvi. and 406. *Map and Illustrations. Presented by the Publisher.*

The translation of this excellent Italian work into German is justified, says the translator, because no books on travel in the United States have appeared in Germany for a long time. The book is in the form of a narrative of an extensive tour, with occasional appropriate digressions on the institutions and peculiarities of the country.

United States—Indians. **Grinnell.**

The North American Indians of To-day. By George Bird Grinnell, PH.D. London: C. Arthur Pearson, 1900. Size 12½ × 9, pp. 186. *Illustrations. Price* 21*s. net. Presented by the Publisher.*

On the present number and condition of the Red Indians in the United States. The book is illustrated by fifty-five splendid portraits of Indian chiefs, belonging to twenty-six tribes, in native dress.

CENTRAL AND SOUTH AMERICA.

Andes. **Burckhardt.**

Anales del Museo de la Plata. Seccion Geológica y Mineralógica. II.—Profils géologiques transversaux de la Cordillere Argentino-Chilienne, stratigraphie et tectonique. Par le Dr. Carl Burckhardt. Première Partie du Rapport définitif sur une Expédition géologique effectuée par Dr. Leo Wehrli et Dr. Carl Burckhardt. La Plata, 1900. Size 15 × 11, pp. viii. and 136. *Plates. Presented by the Museo de La Plata.*

This important work gives, in French, the full report of the researches carried on in 1897 by Drs. Burckhardt and Wehrli in the Argentino-Chilian Andes. It is richly provided with maps, sections, diagrams, and photographs.

Argentine-Chilian Boundary.

Argentine-Chilian Boundary. Report presented to the Tribunal appointed by Her Britannic Majesty's Government "To consider and report upon the Differences which have arisen with regard to the Frontier between the Argentine and Chilian

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000084

مكتبة قطر الوطنية
Qatar National Library

Republics," to justify the Argentine Claims for the Boundary in the Summit of the Cordillera de los Andes, according to the Treaties of 1881 and 1893. [4 vols.] London: Printed for the Government of the Argentine Republic by W. Clowes & Sons, Limited, 1900. Size 13½ × 10½, pp. xviii. and 1182. *Maps and Illustrations. Presented by the Argentine Government.*

These massive volumes contain a complete statement of the evidence for the Argentine case as to the boundary with Chile in Patagonia, including a collection of remarkably fine photographs and numerous maps.

Argentine Republic.

Annuaire Statistique de la Ville de Buénos-Ayres. IXme Année, 1899. Buénos-Ayres, 1900. Size 10½ × 7½, pp. xxxii. and 330. *Plan.*

Argentine Republic. *B.I.G. Argentino* **20** (1899): 483–496. **Chanourdie.**

Las Inundaciones en el Rio Negro. Medios de remediarlas. Por Enrique Chanourdie. *With Illustrations.*

Argentine Republic. *B.I.G. Argentino* **20** (1899): 475-482. **Cibils.**

Ferrocarriles proyectados en el Neuquen. Por F. R. Cibils. *With Map.*

Argentine Republic. *B.I.G. Argentino* **20** (1899): 317–341. **Vallejo.**

Departamento Chamical (Prov. de la Rioja). Por G. Vallejo.

Barbados. **Williams.**

Barbados. Report for 1899. Colonial Reports, Annual No. 294, 1900. Size 10 × 6, pp. 34. *Price* 2½*d.*

British Guiana. **King.**

British Guiana. Reports for 1897–98 and 1898–99. Colonial Reports, Annual No. 290, 1900. Size 10 × 6, pp. 56. *Price* 3*d.*

Chile. **Darapsky.**

Das Departement Taltal (Chile). Seine Bodenbildung und Schätze. Von L. Darapsky. Text and Maps. Berlin: Dietrich Reimer (Ernst Vohsen), 1900. Size 10½ × 7, pp. x. and 230. *Illustrations. Price* 30 *m. Presented by the Publisher.*

A full and careful account, with numerous detailed maps and illustrations, of the nitrate-yielding province of Taltal, in the north of Chile.

Porto Rico. **Churchward.**

Trade of Porto Rico for the year 1899. Foreign Office, Annual No. 2465, 1900. Size 10 × 6½, pp. 24. *Price* 1½*d.*

Tobago

Imperial Department of Agriculture for the West Indies. Hints and Suggestions on Planting in Tobago. Issued by the Commissioner of Agriculture, 1900. (Pamphlet Series, No. 2.) Size 7 × 5, pp. 20. *Presented by the Commissioner, Imperial Department of Agriculture for the West Indies.*

Trinidad. **Eversley.**

The Trinidad Reviewer for the year 1900. Compiled by T. Fitz-Evan Eversley. London: The Robinson Printing Co. Size 9 × 6, pp. 568. *Map, Plans, and Illustrations. Price* 3*s. Presented by the Publishers.*

This gives an account of the history of Trinidad, with full details of the present condition of the colony, brief biographies of the colonial officials, a directory of the island, and masses of other information, all practical and well arranged.

Venezuela—Caracas. **Andral.**

Trade of Caracas and District for the year 1899. Foreign Office, Annual No. 2466, 1900. Size 9½ × 6½, pp. 24. *Price* 1½*d.*

West Indies. **Millspaugh.**

Plantæ Utowanæ. Plants collected in Bermuda, Porto Rico, St. Thomas, Culebras, Santo Domingo, Jamaica, Cuba, the Caymans, Cozumel, Yucatan, and the Alacran Shoals. Dec. 1898 to Mar. 1899. The Antillean Cruise of the yacht *Utowana*. Mr. Allison V. Armour, Owner and Master. By C. F. Millspaugh, M.D. Part i.—Catalogue of the Species. (Field Columbian Museum. Publication 43, Botanical Series, vol. ii. No. 1.) Chicago, 1900. Size 10 × 6½, pp. 110. *Map.*

Botanical collections made on a yachting trip through the West Indies.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

AUSTRALASIA AND PACIFIC ISLANDS.

British New Guinea. **Winter.**

British New Guinea. Report for 1898–99. Colonial Reports, Annual No. 292, 1900. Size 10 × 6, pp. 56. *Price* 3*d.*

Cook Islands. **Gudgeon.**

Cook Islands. Report for 1899. Colonial Reports, Miscellaneous, No. 13, 1900. Size 10 × 6½, pp. 16. *Price* 1*d.*

French Pacific Islands. **Lemasson.**

Notice sur les Etablissements Français de l'Océanie. (Exposition Universelle de 1900.) Size 9½ × 6½, pp. 128. *Map and Illustrations. Presented by M. Charles Roux.*

This report passes in review all the Polynesian islands now under the French flag and gives statistics regarding them.

Melanesia. *Globus* **78** (1900): 69–78. **Luschan.**

R. Parkinsons Beobachtungen auf Bóbolo und Hún (Matty und Durour). Von Felix v. Luschan. *With Illustrations.*

These islands lying north of New Guinea in 2° S. and 143° E. are practically unvisited, and the observations of the people and their weapons here given is therefore of special interest.

POLAR REGIONS.

Antarctic—Belgian Expedition. **Cook.**

Through the First Antarctic Night, 1898–1899. A Narrative of the Voyage of the *Belgica* among Newly Discovered Lands and over an Unknown Sea about the South Pole. By Frederick A. Cook, M.D. With an Appendix containing a summary of the Scientific Results. London: W. Heinemann, 1900. Size 9½ × 6½, pp. xxiv. and 478. *Maps and Illustrations. Price* 20*s. net. Presented by the Publisher.*

This is the first account of the voyage of the *Belgica* published in book form. It gives a full description of the dreariness of the long drift in the antarctic pack, and makes clear several defects in the equipment of the expedition, which, however, notwithstanding exceptional drawbacks, did admirable scientific work. Dr. Cook's photographs and coloured illustrations are in every way admirable.

Arctic—Abruzzi Expedition. *National G. Mag.* **11** (1900): 411–413. ——

Nansen's 'Farthest North' Eclipsed. *With Portraits.*

With portraits of the Duke of the Abruzzi and Captain Cagni.

Arctic—Abruzzi Expedition. *B.S.G. Italiana* **1** (1900): 956–961. **Faustini.**

Il ritorno della Spedizione polare di S.A.R. il Duca degli Abruzzi.

MATHEMATICAL GEOGRAPHY.

Astronomy. *Indian Antiquary* **29** (1900): 189–190. **Jacobi.**

How to calculate the lagna. By Prof. Hermann Jacobi.

The term *lagna* means the point of the ecliptic upon the eastern horizon at a given time.

Cartography—Reliefs. *Mém. S.G. Genève* **39** (1900): 1–10. **Claparède.**

Les Reliefs Perron. Par Arthur de Claparède.

On the qualities desirable in relief models with special reference to M. Perron's great relief of Switzerland on the scale of 1 : 100,000.

Cartography—Reliefs. **Perron.**

Les Reliefs en général et du Relief au 1 : 100,000 de la Suisse en particulier. Par C. Perron. Genève: Librairie Stapelmohr, 1900. Size 8 × 5½, pp. 12. *Presented by the Author.*

On the principles of constructing reliefs on a true scale, and a short account of the new relief of Switzerland on the scale of 1 : 100,000. In this the heights are shown without exaggeration, and the whole is modelled to the true curvature of the Earth.

Navigation. **Dunraven.**

Self-Instruction in the Practice and Theory of Navigation. By the Earl of Dunraven. 2 vols. London: Macmillan & Co., 1900. Size 9 × 6, pp. (vol. i.) xxvi. and 354; (vol. ii.) x. and 390. *Diagrams. Price* 21*s. net. Presented by the Author.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

These volumes contain a statement of the methods of practical and theoretical navigation arranged for the use of students for the Board of Trade certificates, and with special reference to the needs of the yachtsman who is desirous of proving himself capable of commanding his own vessel. A special note is given, *ante*, p. 690.

Surveying. **Bertrand.**
Methods of Survey employed by the Chilean Boundary Commissions in the Cordillera of the Andes. By Prof. A. Bertrand. (From the *Geographical Journal* for September, 1900.) Size 10½ × 6½, pp. 16.

PHYSICAL AND BIOLOGICAL GEOGRAPHY.

Coast Forms. *J. Geology* **8** (1900): 481–484. **Branner.**
The Origin of Beach Cusps. By J. C. Branner. *With diagrams. Also a separate copy. Presented by the Author.*

The author comes to the conclusion that beach cusps are produced by the interference of two sets of waves of translation on the beach.

Geomorphology. **Benest.**
Fleuves sous-marins. Épanchements d'eaux douces au-dessous du niveau de la mer. Par Henry Benest. Extrait du *R. Geographical Journal*, du mois d'octobre 1899. (Université Nouvelle, Institut Géographique de Bruxelles. Publication No. 3.) Bruxelles, 1900. Size 10 × 6½, pp. 32. *Charts.*

Geomorphology. **Penck.**
Eduard Brückner, Die feste Erdrinde und ihre Formen. Ein Abriss der allgemeinen Geologie und der Morphologie der Erdoberfläche. Von Albrecht Penck. (Separatabdruck aus der "Zeitschr. f. d. österr. Gymn." 1899.) Heft 3. Size 9 × 6, pp. 6. *Presented by Dr. A. Penck.*

A review of Prof. Brückner's book.

Oceanography—Arctic Ocean. **Andréeff.**
Mém. S. Imp. Russe G. (G. Gén.) **34** (1900): 1-136.
Océan Arctique. Matériaux océanographiques rassemblés pendant les années 1889–1893. Par M. N. Andréeff. [In Russian.] *With Map.*

Oceanography—Atlantic. *P.R.S. Edinburgh* **22** (1897–99): 403–429. **Peake.**
On the Survey by the s.s. *Britannia* of the Cable Route between Bermuda, Turk's Islands, and Jamaica. By R. E. Peake. With Descriptions by Sir John Murray, K.C.B., F.R.S., of the Marine Deposits brought Home. *With Map.*

The map shows the marine deposits between the parallels of Bermuda and Barbuda, and is bounded by the meridians of 60° and 85° W.

Oceanography—Mediterranean. *B.S.G. Italiana* **1** (1900): 699–717, 757–776. **Bertacchi.**
L'Italia e il suo Mare. Come e quanto l'Italia possa aver contribuito alla conoscenza Scientifica del Mediterraneo. Memoria del Cosimo Bertacchi.

On the work done by Italians in the study of the Mediterranean sea.

Oceanography—North Sea. *P.R.S. Edinburgh* **22** (1897–99): 478–481. **Buchan.**
Tidal Currents of the North Sea. By Alexander Buchan, LL.D., F.R.S.

Phænology. **Ihne.**
Phänologische Mitteilungen (Jahrgang, 1899). Von E. Ihne. (Sonderabdruck aus dem xxxiii. Bericht der Oberhess. Ges. f. Natur- u. Heilkunde zu Giessen.) Size 9 × 6, pp. 30. *Presented by the Author.*

Instructions for observing the annual recurrence of seasonal changes in plants, with a special notation for recording the phenomena, a summary of recent literature on the subject, and a note on the influence of latitude on the date of the beginning of spring, which states that in Germany the commencement of spring is four days later for each degree of latitude towards the north. See note, *ante*, p. 680.

Phyto-Geography. *La G., B.S.G. Paris* (1900): 35–40. **Masclef.**
La Géographie botanique et son évolution au XIXe siècle. Par M. A. Masclef.

Sand-dunes. **Baschin.**
Die Entstehung der Dünen. Von Otto Baschin. (Centralblatt der Bauverwaltung. XX. Jahrg. Nr. 38, 16 Mai 1900, pp. 231–232.) Size 13½ × 10. *Presented by the Author.*

Seismology. *P.R.S. Edinburgh* **22** (1897-99): 573–585. **Knott.**
The Propagation of Earthquake Vibrations through the Earth. By Prof. C. G. Knott, D.Sc. (Abstract.)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000081

مكتبة قطر الوطنية
Qatar National Library

Terrestrial Magnetism. *Ann. Hydrographie* **28** (1900): 363–370, 435–445. ——

Bericht der Deutschen Seewarte über die Ergebnisse der magnetischen Beobachtungen in dem deutschen Küstengebiete und in den deutschen Schutzgebieten während der Jahre 1897, 1898, und 1899.

Tide. *Nautical Mag.* **69** (1900): 466–483. **Moxly.**

The New Theory of Tide. By Rev. J. H. S. Moxly.

Tides. *Nautical Mag.* **69** (1900): 549–553. **Plumstead.**

Moxly's Theory of the Tides. By E. Plumstead.

Volcanic Phenomena. *Rev. Maritime* **146** (1900): 55–69. **Thoulet.**

Les phénomènes volcaniques dans leurs rapports avec l'océanographie. Par J. Thoulet.

Refers to volcanoes in general, and goes on to deal specially with submarine eruptions and the influence of volcanic phenomena on oceanic deposits.

ANTHROPOGEOGRAPHY AND HISTORICAL GEOGRAPHY.

Ancient Empires. **Maspero.**

The Passing of the Empires, 850 B.C. to 330 B.C. By G. Maspero. Edited by A. H. Sayce. Translated by M. L. McClure. London: Society for Promoting Christian Knowledge, 1900. Size 11 × 7½, pp. xii. and 824. *Maps and Illustrations. Price* 25*s.*

This volume concludes Prof. Maspero's great work on the history of the ancient East down to the downfall of Assyria and Egypt.

Historical. **Beazley.**

New Light on some Mediæval Maps. (IV.) By C. Raymond Beazley, M.A. (From the *Geographical Journal* for September, 1900.) Size 10 × 6½, pp. 12. *Facsimile Map.*

Statistics. *J.R. Statistical S.* **63** (1900): 459–479. **Craigie.**

Address to the Economic Science and Statistics Section of the British Association, held at Bradford, 1900. By Major P. G. Craigie, President of the Section.

On the collection of statistics, especially with regard to the census of the United Kingdom and to agricultural statistics in general.

BIOGRAPHY.

Gerlache and Lecointe. *Deutsche Rundschau G.* **22** (1900): 470–471. ——

Capitän Adrien de Gerlache und Lieutenant Georges Lecointe. *With Portraits.*

The commandant and captain of the Belgian Antarctic expedition.

Grabowsky. *Deutsche Rundschau G.* **22** (1900): 516–519. ——

Friedrich J. Grabowsky. *With Portrait.*

Herr Grabowsky made a journey of exploration in Borneo in 1880, and subsequently travelled extensively in the Malay archipelago and New Guinea, making ethnographical collections.

Jagor. *Deutsche Rundschau G.* **22** (1900): 520–521. ——

Dr. Friedrich Jagor. *With Portrait.*

Born in 1817, the son of an hotel-keeper; died in 1900, a distinguished ethnologist and scientific traveller.

Oswell. **Oswell.**

William Cotton Oswell, Hunter and Explorer. The Story of his Life, with certain correspondence and extracts from the private journal of David Livingstone, hitherto unpublished. By his eldest son, W. Edward Oswell. With an Introduction by Francis Galton, D.C.L., etc. 2 vols. London: W. Heinemann, 1900. Size 9 × 6, pp. (vol. i.) xxiv. and 268; (vol. ii.) xii. and 290. *Portraits, Maps, and Illustrations. Price* 25*s. net. Presented by the Publisher.*

This biography gives for the first time full details of the part played by the late Mr. Oswell in promoting and facilitating the early travels of Dr. Livingstone.

Smith. *Scottish G. Mag.* **16** (1900): 597-599. **[Geddes.]**

Robert Smith, B.Sc. By P. G. *With Portrait.*

A sympathetic notice of the life of Robert Smith, who, though only twenty-six years of age at his death, had qualified himself in a remarkable manner for the study

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of botanical distribution, and whose botanical surveys of two of the 1-inch map-sheets of Scotland published this year are examples of how such work should be carried out.

GENERAL.

Astral Gravitation. **Jordan.**

Essays in illustration of the action of Astral Gravitation in Natural Phenomena. By William Leighton Jordan. London: Longmans & Co., 1900. Size 9 × 6, pp. xvi. and 192. *Diagrams. Presented by the Author.*

"Astral gravitation is a convenient term, and seems to me the most appropriate possible term, for representing generally the *resisting force* of gravitation opposing all motion. . . . It is the combined action of the gravitation of the universe, *excepting* the force whose action it opposes. . . . Newton excluded this force . . . but, I say, it has effective action in every detail of terrestrial phenomena." Such is the author's definition of the power in Nature whose effects he proceeds to trace.

Bibliography. **Baschin.**

Bibliotheca Geographica, herausgegeben von der Gesellschaft für Erdkunde zu Berlin. Bearbeitet von Otto Baschin. Band vi. Jahrgang 1897. Berlin: W. H. Kühl, 1900. Size 9½ × 6, pp. xvi. and 444. *Price* 8 *mark.*

This exhaustive geographical bibliography contains over 9000 titles of works published in 1897, including for the first time those appearing in Japanese.

Educational. **Pettipice.**

The Intermediate School Geography (Junior Grade). By T. W. Pettipice. Dublin: Blackie & Son [not dated]. Size 6½ × 4½, pp. 144. *Maps and Illustrations. Price* 1*s. Presented by the Publishers.*

Maps and diagrams, accompanied by lists of names of capes, bays, and similar features, with numerous small-type notes.

Educational. **Pettipice.**

The Irish School Geography for Elementary and Intermediate Schools. By T. W. Pettipice. Part iii. Dublin: Blackie & Son [not dated]. Size 6½ × 4½, pp. 96. *Maps and Illustrations. Price* 6*d. Presented by the Publishers.*

Highly compressed information illustrated by good sketch-maps.

Educational—Geography Chains. **Penck.**

Die Begründung der Lehrkanzel für Geographie und des geographischen Institutes an der Universität Wien. Von Dr. Albrecht Penck. Wien: Ed. Hölzel, 1898. Size 10½ × 7, pp. 14. *Presented by the Author.*

On the foundation of the Chain of Geography in the University of Vienna.

Medical Geography. **Newman.**

Bacteria, especially as they are related to the economy of nature to industrial processes and to the public health. By George Newman, M.D., etc. Second Edition, with additional matter, including New Chapters on Tropical Diseases and the Bacterial Treatment of Sewage. London: John Murray, 1900. Size 8½ × 6, pp. xvi. and 398. *Illustrations. Price* 6*s. Presented by the Publisher.*

The chapter on the Bacteriology of Tropical Diseases deals with the causes and mode of transmission of malaria, plague, leprosy, cholera, and yellow fever.

Parliamentary Reports, etc.

Catalogue of Parliamentary Peports, Papers, etc., relating to Miscellaneous Subjects, 1800 to 1879. Part ii. London: P. S. King & Son [1900]. Size 8½ × 5½, pp. 20.

Place-names. *B.S.G. Lyon* **16** (1900): 365–436. **Steyert.**

Étymologies Lyonnaises. Réponse à M. l'Abbé Devaux. Par M. A. Steyert.

On place-names and their transformations in passing from one language to another.

Rumanian Geographical Society.

Societatea Geografică Romînă. Buletin Număr Jubilar pentru împlinirea a 25 anĭ 1875, 15 Junie, 1900. Bucureşti, 1900. Size 9½ × 7, pp. vi. and 126. *Portraits. Presented by the Rumanian Geographical Society.*

The Rumanian Geographical Society, in celebration of its semi-jubilee, has published a special number of its *Bulletin*, giving an account of the work of the Society, a summary of the contents of the *Bulletin* from the beginning, a list of members, and portraits of the King and leading officers of the Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000027

مكتبة قطر الوطنية
Qatar National Library

Travel. **Baring-Gould.**

With Note-book and Camera. A Winter Journey in Foreign Lands. By Edith M. E. Baring-Gould. With Preface by Sir W. Mackworth Young, K.C.S.I., Lieut.-Governor of the Punjab. London: Church Missionary Society, 1901 [1900]. Size 8½ × 6½, pp. viii. and 104. *Illustrations.* *Price* 1*s.* 6*d.* *Presented by the Church Missionary Society.*

Snapshots taken on a journey to India and back.

Travel. *B.S.G. Lyon* **16** (1900): 509–540. **Groffier.**

Explorations et travaux géographiques des Missionnaires Catholiques en 1899. Par M. Valérien Groffier.

Travel. **Selous.**

Sport and Travel East and West. By Frederick Courteney Selous. London: Longmans & Co., 1900. Size 9½ × 6½, pp. x. and 312. *Illustrations.* *Price* 12*s.* 6*d.* *net.* *Presented by the Publishers.*

In this volume Mr. Selous describes a series of hunting-trips in Asia Minor and North America, with a number of photographs and drawings of game and incidents of travel. The book is divided about equally between Asia Minor, which was visited in 1894–95, and the Rocky mountains, in which two trips were made in 1897 and 1898, and from both parts of the world there are many notes bearing on natural history, and especially on ornithology.

Tropical Agriculture. *Imp. and Asiatic Quarterly Rev.* **10** (1900): 246–251. **Wallace.**

The Garton lectures on Colonial and Indian Agriculture in Edinburgh University. By Robert Wallace.

NEW MAPS.

By E. A. REEVES, *Map Curator*, R.G.S.

EUROPE.

England and Wales. **Ordnance Survey.**

Publications issued since October 8, 1900.

1-inch—General Map:—

ENGLAND AND WALES (revision):—128, hills engraved in black or brown. 1*s.*

6-inch—County Maps:—

ENGLAND AND WALES (revision):—**Berkshire,** 33 S.W., 37 N.E., 42 N.W., S.W. **Bucks,** 9 N.E., 10 N.W., 12 N.W., 13 N.E., 15 S.E. **Cumberland,** 41 N.W., S.W., S.E., 42 S.W., 48 S.W., 49 N.W., S.W., 50 N.W., N.E., 55 N.E., 58 N.W., 61 S.W., S.E., 62 N.E., S.W., S.E., 63 N.W., S.E., 64 complete, 65 N.E., S.W., S.E., and 71 N.E., 66 N.W., 67 S.W., S.E., 68 S.W., S.E., 69 N.E., 70 N.E., 72 complete, 73 S.E., 77 S.E., 78 S.W., S.E., 79 N.W., S.W., S.E., 82 N.W., 83 N.W., 88 N.E., 90 S.W. **Denbighshire,** 6 S.W., 8 S.E., 12 S.W., 17 N.W., 19 N.W., 24 N.W., 25 S.W., 26 N.W., 27 S.E., 34 S.W., 38 S.E. **Derbyshire,** 36 N.W., 40 N.W. **Glamorganshire,** 4 S.W., 8 S.E., 14 N.E., 15 S.W., 17 S.W., 23 S.E., 25 N.W., S.W., 26 S.W., S.E., 31 N.E., 33 N.W. and 33A N.E., 33 S.W., S.E., 34 N.W., S.W., 35 N.E., S.E., 39 N.W., N.E., 40 N.E., S.E., 42 S.W., S.E., 44 N.W., S.W., and S.E., 45 S.W. **Northamptonshire,** 61 N.E., 62 N.E., 63 N.W., S.W. **Nottinghamshire,** 14 S.W., 15 N.E., 16 N.W., S.W., 27 N.E., 28 N.W., 30 N.W., S.W., S.E., 31 N.W. **Oxfordshire,** 3 N.W., 6 S.W., 10 S.E., 11 S.W., 13 N.E., 14 S.W., 58 N.E. **Staffordshire,** 1 S.W., 3 N.W., N.E., S.W., 8 S.W., 9 N.W., S.W., 11 N.W., N.E., S.W., 12 N.W., N.E., S.E., 13 S.W., N.E., 14 N.W., S.W. **Wiltshire,** 30 S.W. 1*s. each.*

25-inch—Parish Maps:—

ENGLAND AND WALES (revision):—**Anglesey,** XI. 2, 16; XVIII. 3; XXII. 1, 8, 10; XXIII. 6. **Carnarvonshire,** VI. 16; IX. 1, 5; XI. 6, 13, 14, 15; XII. 1, 5, 9, 10; XIII. 4; XIV. 6, 9, 11, 15; XV. 11; XVI. 11, 12, 14, 15, 16; XVII. 1, 13; XVIII. 16; XX. 6, 14; XXI. 3, 8, 11, 12, 13; XXII. 14, 15; XXIII. 13, 14, 15, 16; XXIV. 5, 6, 11, 13; XXV. 8, 11; XXVI. 5, 6, 7, 8, 9, 10, 13, 15; XXVII. 1, 3, 4, 9, 10; XXIX. 8; XXX. 1, 7; XXXIII. 1, 2; XXXIV. 2, 6; XXXIX. 4. **Cumberland,** XIV. 12; XXVII. 14; XXVIII. 13, 14, 15, 16; XXIX. 13, 14, 15, 16; XXX. 13, 14, 15, 16; XXXI. 13, 14, 15, 16; XXXII. 14; XXXVI. 2, 3, 4;

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

XXXVII. 1, 2, 3, 4, 5, 6, 7, 8; XXXVIII. 1, 2, 3, 4, 5, 6, 7, 8, 11; XXXIX. 1, 2, 3, 4, 5, 6, 10, 12; XLI. 6, 10; XLIV. 8; LX. 5. **Derbyshire**, XL. 13; XLI. 1; XLV. 3, 4, 6, 7, 9, 10, 11, 12, 14, 15, 16; XLVII. 3; LVI. 1, 2. **Glamorganshire**, V. 16; VI. 10; XI. 15; XII. 11; XIX. 3, 14; XXVIII. 2, 7, 14; XXXVII. 5, 11, 13, 15; XLIII. 1; XLVII. 7, 9, 10, 11, 14, 15; L. 8; LVII. 3, 5. **Northamptonshire**, XVI. 3, 4, 10, 11, 13, 14; XXII. 3, 4, 6; XXIII. 2, 3, 5, 6, 7, 8, 14; XXIV. 1, 2, 3, 5, 6, 10, 11; XXXI. 4, 6, 9; XXXII. 1, 3, 4, 12; XXXIII. 1, 3, 9, 10, 13, 14, 15, 16; XXXIV. 9, 13; XXXIX. 2, 4, 7, 8, 11, 12, 13, 16; XL. 2, 3, 4, 5, 7, 8, 11, 13, 14, 15; XLI. 1; XLIV. 16; XLV. 4, 8, 15; XLVI. 1; XLVII. 2, 6; LVI. 6. **Nottinghamshire**, XXXII. 1; XXXIV. 3; XXXV. 3, 4; XXXVIII. 1, 3, 4, 6, 7, 8, 10, 11, 12; XXXIX. 5, 13; XLIII. 1, 7, 9, 15; XLV. 2; XLVI. 14, 15; XLVII. 1, 2, 3, 14, 15; XLVIII. 5; L. 1, 2, 3, 4, 7, 8, 10, 11, 12; LI. 2, 3, 5, 6, 9, 10 and 11, 13; LIV. 1. **Wiltshire**, X. 15, 16; XI. 13; XV. 2, 6, 9, 10, 11, 12, 13, 14, 15, 16; XXII. 2, 3, 4; XXV. 10, 11; XXVI. 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16; XXVII. 6, 13, 14; XXVIII. 13; XXXV. 1, 14, 15, 16; XLII. 1; XLVIII. 1, 3, 4, 7, 8, 12; XLIX. 1, 5. *3s. each.*
(*E. Stanford, Agent.*)

England and Wales. **Bartholomew.**

Reduced Ordnance Survey of England and Wales. Scale 1 : 126,720 or 2 stat. miles to an inch. Sheet 23, Hereford. J. Bartholomew & Co., Edinburgh, 1900. *Price 2s. Presented by the Publishers.*

Historical Atlas. **Poole.**

Historical Atlas of Modern Europe from the Decline of the Roman Empire, comprising also maps of parts of Asia and of the New World connected with European History. Edited by Reginald Lane Poole, M.A., PH.D., Lecturer in Diplomatic in the University of Oxford. Part xxvii. Oxford: The Clarendon Press; London, Edinburgh, Glasgow, and New York: Henry Frowde, M.A.; Edinburgh: W. & A. K. Johnston. 1900. *Price 3s. 6d. Presented by the Clarendon Press.*

This part contains the following maps: No. 8, Europe at the accession of the Emperor Charles VI., 1519, by C. Oman, M.A.; No. 24, England and Wales, showing the Parliamentary Representation according to the Reform Act of 1832, by the Editor; No. 65, Italy, circa 1060–1167, by Miss Lina Eckenstein. Each map is accompanied by brief explanatory letterpress.

Spain. **Deposito de la Guerra, Madrid.**

Mapa Militar de la Capitania General del Norte. Scale 1 : 500,000 or 7·8 stat. miles to an inch. Deposito de la Guerra, Madrid, 1900. Part vi. *Price 1.50 pts.*

This map forms one of a series of military maps of Spain now in course of publication by the Spanish War Office, and includes the provinces of Santander, Vizcaya, Guipuzcoa, Alava, Navarra, Lugroño, and Burgos. No hill work is shown, but roads are indicated in red, and many place-names are given.

ASIA.

Asia Minor. **Huber.**

Empire Ottoman, Division Administrative. Scale 1 : 1,500,000 or 23·6 stat. miles to an inch. Par R. Huber. Paris: F. Lœffler. 4 sheets.

China. **Richthofen.**

Karte des nordöstlichen China von F. v. Richthofen. Scale 1 : 3,000,000 or 47·3 stat. miles to an inch. Berlin: Dietrich Reimer (Ernst Vohsen), 1900. *Price 1 mark.*

This is No. 3 of a series of maps of China now in course of publication in connection with the present military operations, based upon the surveys of Baron F. von Richthofen, with additional information. The present sheet includes Pekin, the Liau-tung and Shan-tung peninsulas, the entrance to the Yang-tse-kiang, and the region to the west as far as Sechuan and Kansu. It is coloured to show physical features, the lowlands being tinted green and the highlands brown, in addition to the usual hill shading.

AFRICA.

Egypt. **Schweinfurth.**

Aufnahmen in der Östlichen Wüste von Ägypten, von Georg Schweinfurth. 1 Serie (10 Blätter). Blatt IV., Die südliche Galâla. Scale 1 : 200,000 or 3·1 stat. miles to an inch. Blatt V., Die krystallinischen Küstengebirge am Roten Meer

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000046

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

zwischen dem Uadi Qeneh und Gebel Sēt. Scale 1:200,000 or 3·1 stat. miles to an inch. Berlin: D. Reimer (Ernst Vohsen), 1900.

The first portfolio of maps belonging to this series appeared last year, and was noticed in the *Geographical Journal* for June, 1899. This second issue contains only two maps, Nos. IV. and V., which include that portion of the desert between the Nile and the Red Sea situated approximately within the parallels of 27° and 29° 10′ N. lat., and between long. 31° 50′ E. and the coast. They show the results of Dr. Georg Schweinfurth's explorations and surveys undertaken in the years 1876–77–78, 1884–85, and 1887, and furnish a valuable addition to our knowledge of the geography of this region. The maps are printed in four colours—hill work brown, dry beds of streams green, water blue, and outline, routes and lettering black. Numerous notes on the character of the country traversed are added, and on Sheet V. there is a section showing the geological features of the region from Mount Om Mangul to the sea, along the parallel of 27° 15′ N. lat. Information obtained from the explorations of other travellers is fully acknowledged.

South Africa. **Bower.**

Large-scale Map of the Southern Transvaal and Northern Orange River Colony, with inset of Lydenburg District. Scale 1:253,440 or 4 stat. miles to an inch. Compiled from original surveys and official sources by Thomas Bowyer Bower, A.M.I.C.E., M.I.M.M., F.R.G.S. London: George Philip & Son, 1900. 3 sheets and index. *Price* £2 12*s.* 6*d.* *Presented by the Author.*

Up to the present time this is, doubtless, the best map that has been published of the area it represents, and its scale, 4 miles to an inch, is sufficiently large to admit of a considerable amount of detail being shown without overcrowding. It includes the country from Heilbron, in the Orange River Colony, on the south, to Wolvekraal on the Elands river, on the north, and from Klerksdorp, on the west, to the borders of Swaziland on the east. Pretoria and Johannesburg thus appear in about the centre of the map. On the western sheet there is an inset of part of the Lydenburg district on the same scale as the map itself. The map is printed in colours, and, in addition to the general topographical features and information usually contained on such maps, it shows farms with their official numbers, proclaimed goldfields, and gold reefs.

Mr. Bowyer Bower, the compiler of the map, has had exceptional opportunities for obtaining accurate information, and has himself surveyed a considerable extent of this area, besides which he has made good use of the surveys of others; thus his map will be most serviceable at the present time, although before long it is to be hoped that the country will be systematically triangulated and surveyed on a large scale. A useful index to the names of farms which appear on the map is given as a supplement.

AMERICA.

Argentine. **Buenos Aires and Pacific Railway Co., Ltd.**

Argentine Railways, 1900. Issued by the Buenos Aires and Pacific Railway Co., Ltd., London. Scale 1: 2,534,400 or 40 stat. miles to an inch. Inset map of Buenos Aires. Scale 1: 300,000 or 4·7 stat. miles to an inch. *Presented by the Buenos Aires and Pacific Railway Co.*

A roughly produced map, lithographed in colours, but showing very clearly the different railways and railway systems of the Argentine Republic up to date.

GENERAL.

French Colonies. **Pelet.**

Atlas des Colonies Françaises. Dressé par ordre du Ministère des Colonies. Par Paul Pelet. Paris: Armand Colin & Cie. Livraison iii. *Price* 3 *fr.*

The three maps contained in this part of Pelet's atlas of the French colonies are as follows: No. 9, Afrique Occidentale, I. Sénégal, 1: 3,000,000; No. 12, Congo (feuille sud), 1: 300,000; and No. 26, Polynésie: Établissements français de l'Océanie, on various scales. Like those previously published, these maps have been carefully produced, and are printed in colours. Considerable time has, however, been allowed to elapse between the time of their engraving and that of their publication, as the first is dated April, 1899; the second October, 1899; and the third 1898. Statistical and descriptive information accompanies each map.

Map Slides. **Dickinson and Andrews.**

The "Diagram" Series of Geographical Lantern Slides of Maps. By B. B. Dickinson, M.A., and A. W. Andrews, M.A. To be obtained from G. Philip & Son, London. *Price* 1*s.* 6*d. each* (*coloured*).

Messrs. Dickinson and Andrews deserve the thanks of all geographical lecturers

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and teachers for having produced a series of most useful and effectively coloured lantern slides of maps of all parts of the world, which deserve to be more widely known and generally used than they are at present. The following is a list of those recently published, in addition to others which were noticed in the *Geographical Journal* for June, 1899 :—

The World.—(1) Orographical; (2) Mean annual rainfall; (3) Rainfall, December, January, February; (4) Rainfall, March, April, May; (5) Rainfall, June, July, August; (6) Rainfall, September, October, November; (7) Wind systems, January; (8) Wind systems, July; (9) Isobars, January; (10) Isobars, July; (11) Cables and telegraph lines; (12) Steamship routes and principal railways; (13) Strategic importance of the Canadian Pacific Railway.

Europe.—(14) British Isles, orographical; (15) England and Wales, orographical; (16) Wales, orographical; (17) Scotland, orographical; (18) Ireland, orographical; (19) France, political, 1789; (20) France, chief wine districts; (21) France, orographical; (22) German Empire, river basins; (23) German empire, orographical; (24) Holland and Belgium, river basins; (25) Holland and Belgium, political; (26) Netherlands, orographical; (27) Iberian peninsula, political; (28) Iberian peninsula, river basins; (29) Italy, river basins; (30) Italy, orographical; (31) Balkan peninsula, political; (32) Balkan peninsula, river basins; (33) Balkan peninsula, orographical; (34) Russia, river basins; (35) Austrian empire, orographical; (36) Austrian empire, river basins; (37) Switzerland, chief passes; (38) Switzerland, political; (39) Switzerland, river basins.

Asia.—(40) Asia, orographical; (41) South-East Asia, means of communication; (42) South-East Asia, commercial; (43) South-East Asia, orographical; (44) Indian empire, orographical; (45) North-West Frontier, political.

Africa.—(46) Means of communication; (47) Orographical; (48) Africa in 1884, before Berlin conference; (49) Africa in 1885, after Berlin conference; (50) Africa at the close of the Brussels conference, 1890; (51) Cape Colony, commercial; (52) Cape Colony, communications; (53) Cape Colony, south-west, orographical; (54) Cape Colony, east, orographical; (55) Cape Colony, west, orographical and political; (56) Cape Colony, west, political; (57) Natal, orographical; (58) British Central Africa, orographical.

America.—(59) North America, orographical; (60) North America, river basins; (61) North America, economic (minerals); (62) Canada, political; (63) Canada, mean temperature, June, July, August; (64) North-West Canada; (65) British North America, orographical; (66) British North America, zones of vegetation; (67) United States, historical, 1782; (68) United States, orographical; (69) United States, river basins; (70) United States, political; (71) Central America, political; (72) South America, orographical.

Australia.—(73) Orographical; (74) New Zealand, mean annual rainfall; (75) New Zealand, means of communication.

World. **Philip.**

Philips' London School Board Atlas. A series of forty coloured plates, containing over ninety maps and plans, printed in colours, and 8 pages of introductory letterpress. Edited by G. Philip, Junr., F.R.G.S. London: George Philip & Son, 1900. *Price* 1*s*. *Presented by the Publishers.*

This is a commendable attempt to produce a school atlas at a low price on the more enlightened and improved system of teaching geography, and certainly it is a great advance on the cheap school atlases published fifteen or twenty years ago. It has been compiled by Mr. George Philip, Junr., according, as it is stated in the introductory remarks, to the recommendations of a special advisory committee of the London School Board. The maps are both physical and political, and in some cases the latter are drawn on the same scale as the former. The relief is shown by hill-shading and tints of colouring, but occasionally the difference between the latter is not sufficient to be clearly distinguished. One commendable feature of the atlas is that the scales on which the maps are drawn all bear a fixed and simply expressed proportion to one another; that of the maps of the British Isles (1 : 5,000,000) has been taken as the unit, and as many maps as possible have been drawn on this scale. Insets of England or the British Isles, on the scale of the general maps, have been given on all the maps dealing with regions lying outside Europe. Care seems to have been taken in the selection of place-names, and in their spelling the system recommended by this Society has been taken as the guide. Preceding the maps are several pages of introductory letterpress, giving information on map-reading, scales of maps, projections, and matters of a kindred character, which in some respects might be improved and corrected. For instance, in reference to Mercator's projection it is stated that on it "the shortest distance between any two places on the Earth's surface can be found by simply connecting them with a straight line," and that "it is this feature

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000079

مكتبة قطر الوطنية
Qatar National Library

which makes Mercator's projection so useful to sailors." This is evidently a mistake. What is doubtless intended is that the correct bearing between any two places is shown by connecting them by a straight line, which is quite a different thing from the "shortest distance" between them.

Although there is room for improvement, still, bearing in mind the low price of the atlas, it must be considered, on the whole, to be a really creditable production, and furnishes additional evidence of the fact that the efforts of this Society in the direction of geographical education are beginning to bear fruit.

World. **Vivien de Saint Martin and Schrader.**

Atlas Universel de Géographie. Ouvrage commencé par M. Vivien de Saint Martin et continué par Fr. Schrader. Paris: Librairie Hachette et Cie. Sheets: 21, Italie; 40, Russie Orientale et Caucasie. *Price 2 fr. each sheet. Presented by the Publishers.*

CHARTS.

Admiralty Charts. **Hydrographic Department, Admiralty.**

Charts and Plans published by the Hydrographic Department, Admiralty, July and August, 1900. *Presented by the Hydrographic Department, Admiralty.*

No.	Inches.	
2640		The World, showing currents (republication). 2*s.* 6*d.*
883	m = 6·8	Scilly isles:—St. Mary's road and Crow sound. 2*s.* 6*d.*
1839	m = 6·75	Scotland, west coast:—Portree harbour. 1*s.* 6*d.*
2260	m = 1·4	Norway, south coast:—Songvaar fiord to Lillesand, including Christiansand fiord. 2*s.* 6*d.*
1327	m = 1·4	Norway, south-east coast:—Portör to Neolunghavn. 2*s.* 6*d.*
3130	m = 1·4	Norway, west coast:—Utvœr to Atleö, including Bue or Aspö fiord. 2*s.* 6*d.*
1145	m = 1·4	Norway, west coast:—Vaagsö to Skorpen. 2*s.* 6*d.*
1145	m = 1·4	Norway, west coast:—Rövde and adjacent fiords. 2*s.* 6*d.*
1633	m = 0·8	New Brunswick:—Chaleur bay, eastern part. 2*s.* 6*d.*
1673	m = 3·0	Brazil:—Port Angra dos Reis and Jacuacanga bay (reproduction). 1*s.* 6*d.*
1930	m = 0·8	Mexico, west coast:—Magdalena bay. 2*s.* 6*d.*
333	m = {2·4 / 8·0}	Vancouver island:—Baynes sound and approaches, Union bay. 2*s.* 6*d.*
3127	m = 12·0	Vancouver island:—Port Augusta (Comox). 2*s.*
3132	m = 1·8	Alaska:—Saginaw and Security bays. 1*s.* 6*d.*
3143	m = 0·35	Plans in Alaska:—St. Michael bay. 1*s.* 6*d.*
3134	m = 0·28	Lake Nyasa (northern portion). 3*s.*
3135	m = 0·28	Lake Nyasa (southern portion). 3*s.*
1401	m = 3·0	Mauritius:—Grand port. 2*s.*
543	m = 2·4	Red sea:—Kamaran passage and southern approach. 2*s.* 6*d.*
3032	m = 0·5	Upper Yang tse Kiang:—Kwei chau fu to Chung King fu. 2*s.* 6*d.*
2823	m = 2·0	China, north coast:—Wei hai wei and approaches. 2*s.*
1798	m = 0·75	China, north-east coast:—Kwang tung peninsula and approaches to Port Arthur. 2*s.* 6*d.*
3112	m = 5·9	Japan:—Misumi ko Fukin. 1*s.* 6*d.*
2680	m = 0·25	Japan:—Approaches to Kobé. 1*s.* 6*d.*
120		River Schelde:—Plan added, Vlissingen or Flushing.
426		Greece, east coast:—Plan added, Port Kumi.
2834		Newfoundland:—Plans added, Green cove, Trout river bay.
922		British Columbia, Burrard inlet:—Plan added, First narrows.
2089		Africa, east coast, Tugela river to Delagoa bay:—Plan added, entrance to Kosi river.
1235		Persian gulf, mouth of the Euphrates, Shatt al Arab and Bahmishir river:—Plan added, Karun river.
2678		Yang tse Kiang:—Plan added, Anchorage off Nanking.

Charts Cancelled.

No.		Cancelled by	No.
2640	The World, showing currents.	New chart. The World, showing currents	2640
2260	Christiansand and Songvaar fiords.	New chart. Songvaar fiords to Lillesand	2260

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000074

مكتبة قطر الوطنية
Qatar National Library

No.		Cancelled by	No.
1673	Jacuacanga bay.	New plan. Port Angra dos Reis and Jacuacanga bay	1673
1930	Magdalena bay.	New plan. Magdalena bay	1930
585	Plan of Union wharf and anchorage.	New plan. Union bay	333
585	Plan of Port Augusta on this sheet.	New Plan. Port Augusta	3127
1578	Lake Nyasa (southern portion).	New chart. Lake Nyasa (southern portion)	3135
1401	Grand port.	New plan. Grand port	1401
3032	Kwei chau fu to Chung king fu.	New chart. Kwei chau fu to Chung king fu	3032
2823	Wei hai wei harbour.	New plan. Wei hai wei and approaches	2823
1798	Kwang tung peninsula, etc.	New chart. Kwang tung peninsula	1798
2827	Ta lien hwan, Odin cove.		
14	Plan of Kamaran bay on this sheet.	New plan. Kamaran passage	543

Charts that have received Important Corrections.

No. 2973, England, south coast:—Cowes harbour. 2693, England, east coast:—Orwell and Stour rivers. 108, England, east coast:—The Wash, Skegness to Blakeney. 1770, Baltic:—Port of Libau. 199, Adriatic:—Brindisi to Ortona. 1559, Adriatic:—Gulf of Trieste. 1561, Adriatic:—Ports and anchorages in the gulf of Quarnero. 1581, Adriatic:—Approaches to Port Sebenico. 1612, Adriatic:—Ports and anchorages in Dalmatia. 1238, South Shetland and South Orkney islands. 852, United States, east coast:—Sapelo sound to St. Andrew sound. 1289, South America, west coast:—Guaytecas islands to Cape St. Antonio. 579, British Columbia:—Fraser river to north-east point of Texada island. 22, Persian gulf:—Kuweit harbour. 1419, Andaman islands:—Long island to Port Blair. 942B, Eastern Archipelago, eastern portion. 2194, Anchorages in northern part of Celebes. 2759A, Australia, northern portion. 1043, Australia, north coast:—Gulf of Carpentaria. 1044, Australia, north coast:—Gulf of Carpentaria to Cape Ford. 1042, Australia, north coast:—Cape Stewart to Port Essington. 613, Australia, north coast:—Melville island. 475, North-west coast of Australia. 1047, Australia, west coast:—Cape Ford to Buccaneer archipelago. 1055, Australia, west coast:—Bedout island to Cape Cuvier. 917, Harbours and anchorages on west coast of Australia. 413, Australia, south coast:—Cape Mentelle to White point. 2130, Tasmania:—Port Davey. 447, Western approaches to Torres strait. 1970, New Zealand:—Auckland harbour entrances. 981, Caroline islands:—Seniavina islands. (*J. D. Potter, Agent.*)

United States Charts. **U.S. Hydrographic Office.**

Pilot Charts of the North Atlantic Ocean for October, and North Pacific Ocean for November, 1900. U.S. Hydrographic Office, Washington, D.C. *Presented by the U.S. Hydrographic Office.*

PHOTOGRAPHS.

Sierra Leone. **Weller.**

Eight Photographs of Sierra Leone, taken by C. L. Weller, Esq., 1900. *Presented by C. R. Weller, Esq.*

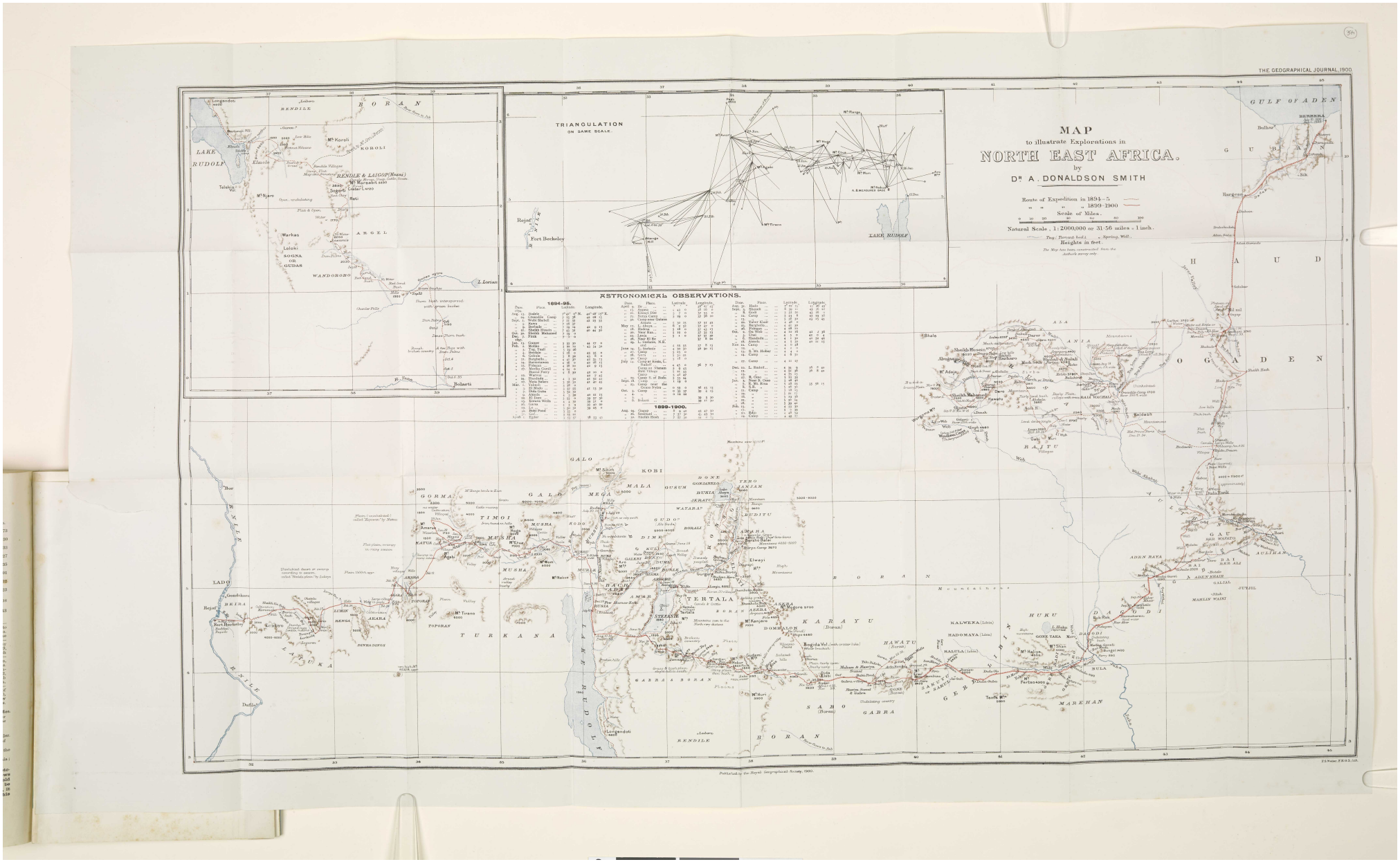
These are whole-plate photographs, and serve to illustrate the character of the scenery and native life of Sierra Leone. The following is a list of their titles:—

(1) Village of Ybeng; (2) Rokelle river; (3, 4) Village of Rokon; (5) River Taia; (6) Natives building houses; (7) Group of natives; (8) Natives burning bush.

N.B.—It would greatly add to the value of the collection of Photographs which has been established in the Map Room, if all the Fellows of the Society who have taken photographs during their travels, would forward copies of them to the Map Curator, by whom they will be acknowledged. Should the donor have purchased the photographs, it will be useful for reference if the name of the photographer and his address are given.

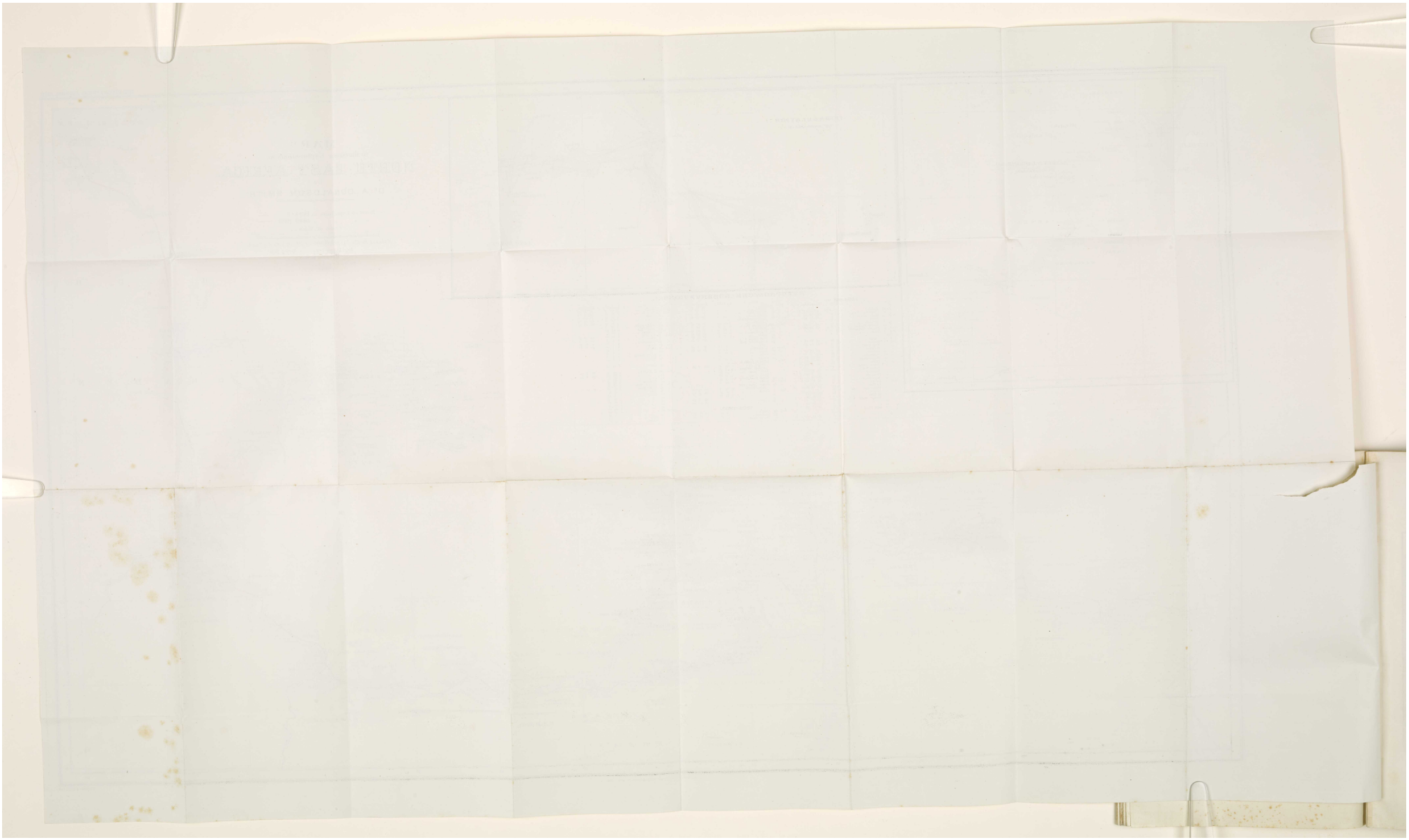
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000070

مكتبة قطر الوطنية
Qatar National Library


THE GEOGRAPHICAL JOURNAL, 1900.
MAP
to illustrate Explorations in
NORTH EAST AFRICA.
by
Dr A. DONALDSON SMITH
Route of Expedition in 1894–5.
" " 1899–1900
Scale of Miles.
Natural Scale, 1:2,000,000 or 31·56 miles = 1 inch.
Heights in feet.
TRIANGULATION
ON SAME SCALE.
ASTRONOMICAL OBSERVATIONS.
1894-95.
1899-1900.
LAKE RUDOLF
GULF OF ADEN
BERBERA
Bulhar
Hargeisa
Sheikh Hussein
Almugga
Sheikh Mahamed
Sheikh Hash
Baidoa
Dadab
Sheikh
Gebiley
Burao
Sheikh Ibrahim
Kalabaydh
Sheikh Hash
Bohotle
Galadi
Dadab Burak
Bohotle
Galadi
Dadab Burak
Bohotle
Galadi
Dadab Burak

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004d

مكتبة قطر الوطنية
Qatar National Library

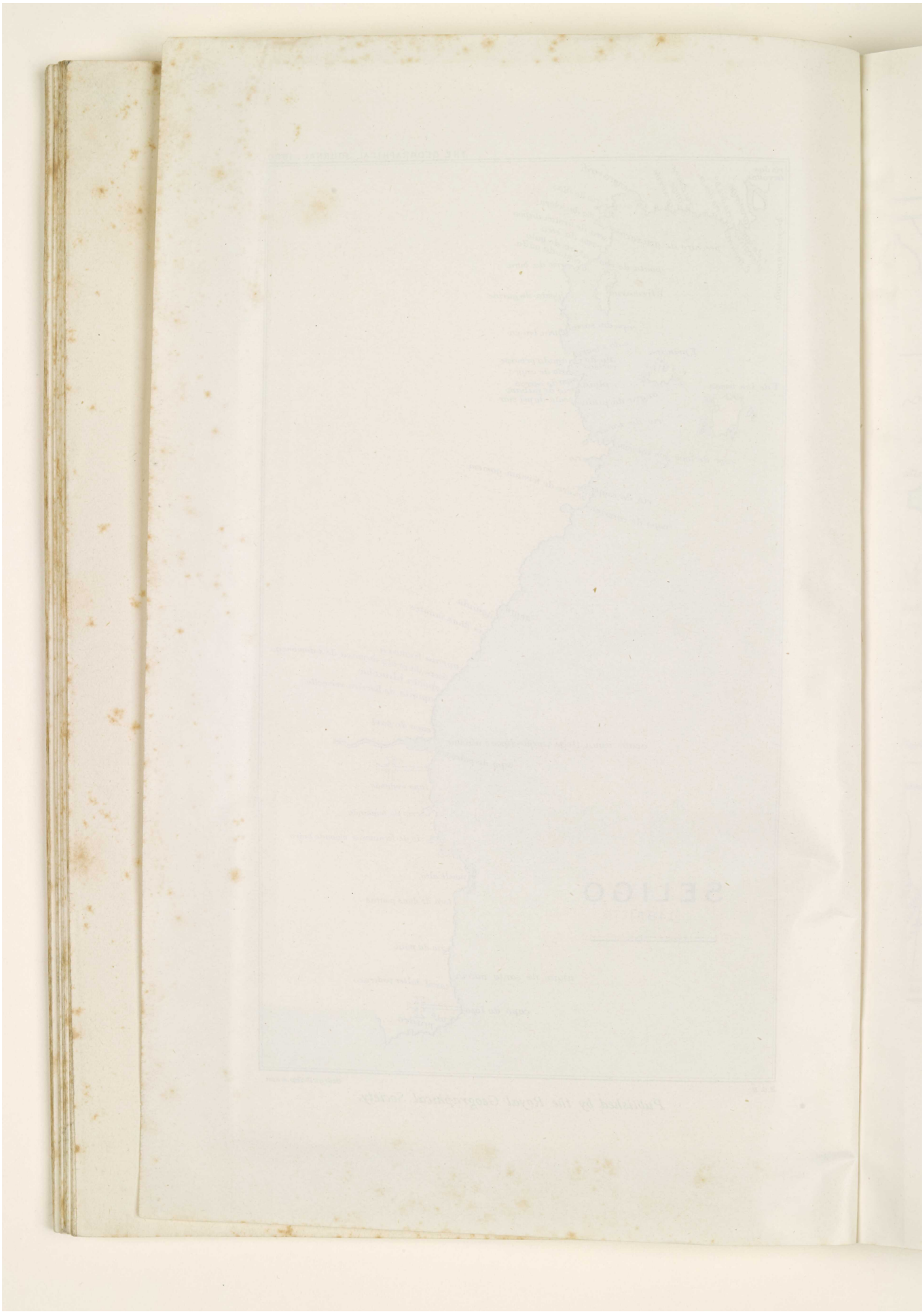
BRITISH LIBRARY



Published by the Royal Geographical Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000ba

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009b

مكتبة قطر الوطنية
Qatar National Library

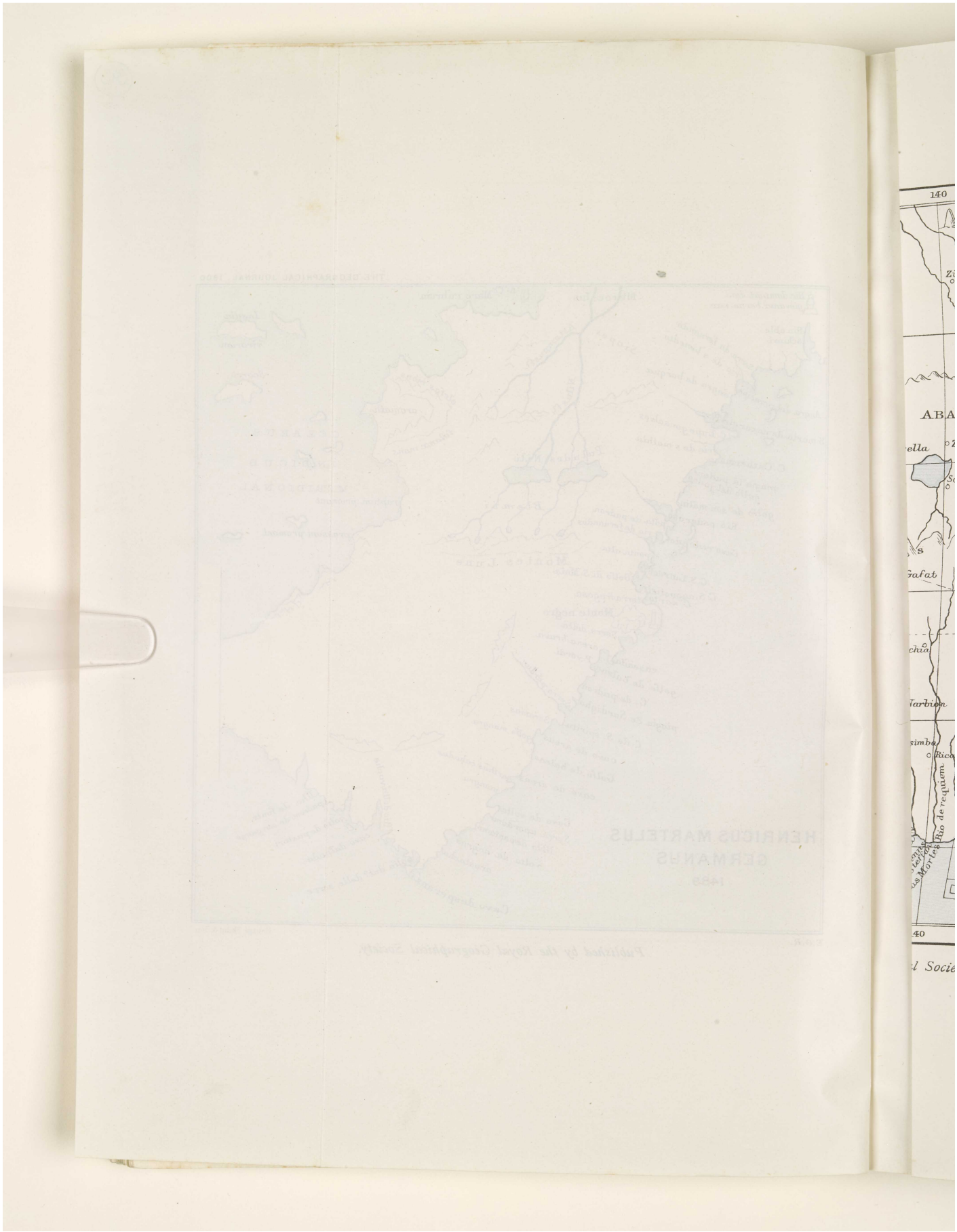
BRITISH LIBRARY



Published by the Royal Geographical Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b7

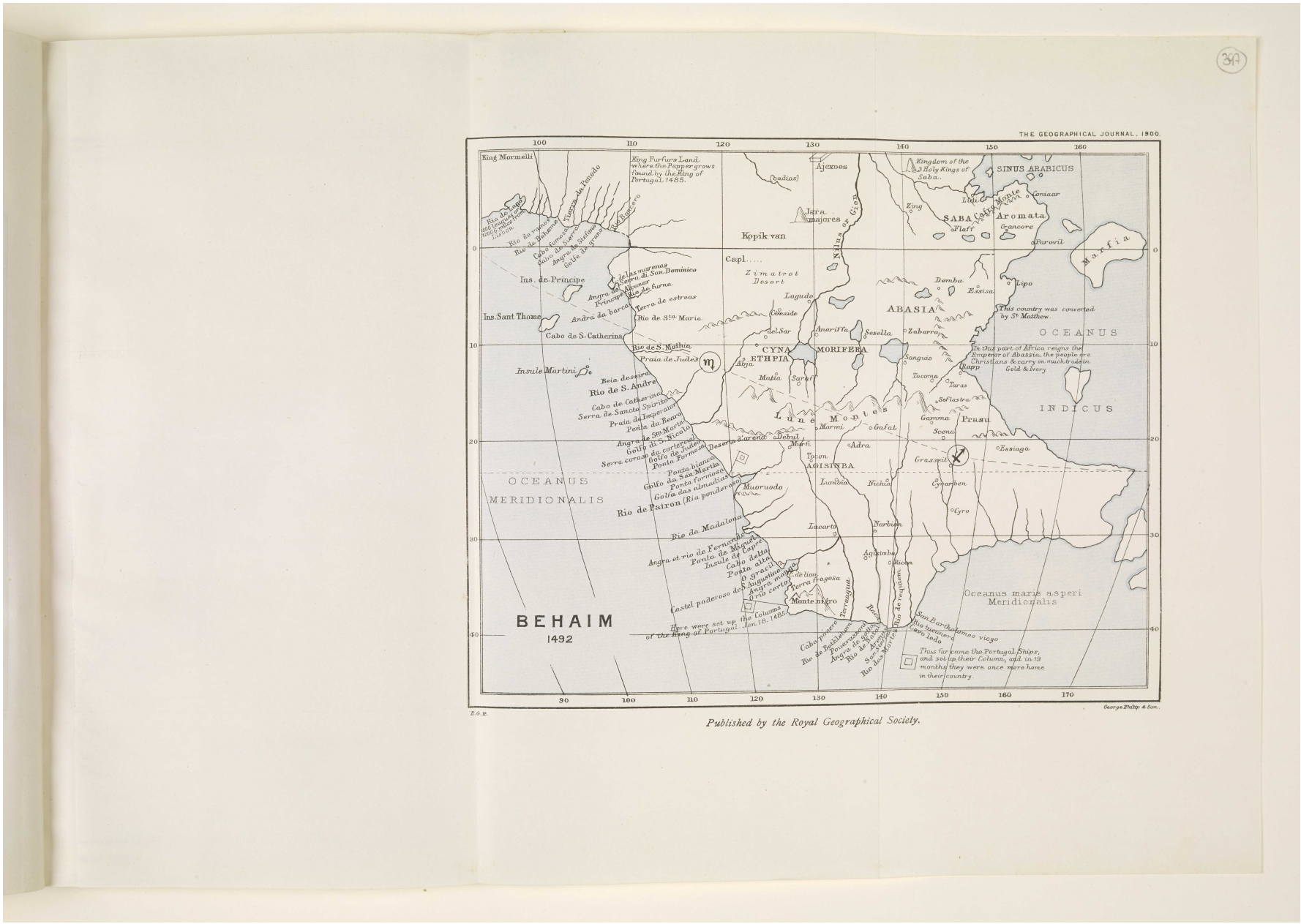
مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000064

مكتبة قطر الوطنية
Qatar National Library

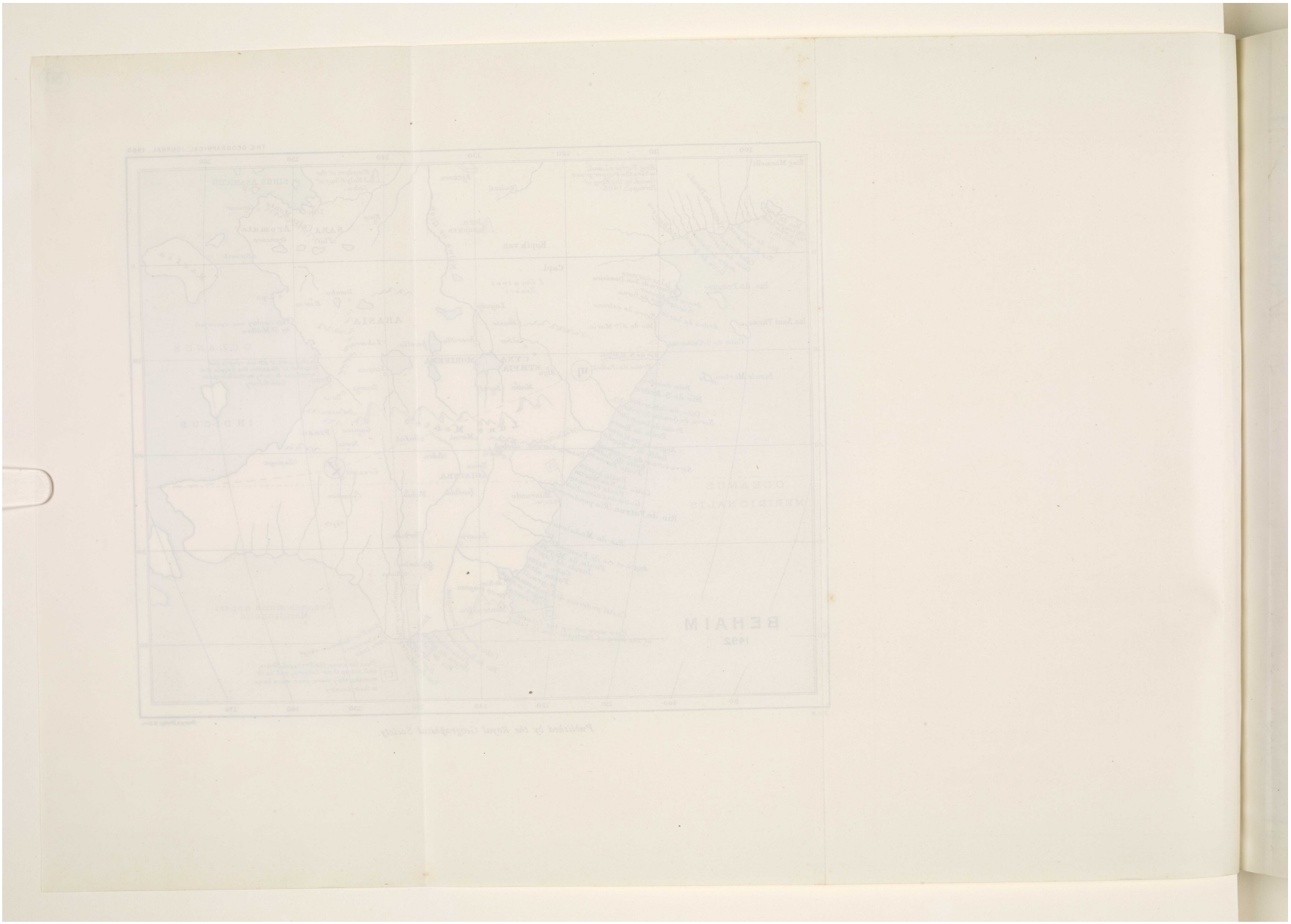
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000043

مكتبة قطر الوطنية
Qatar National Library

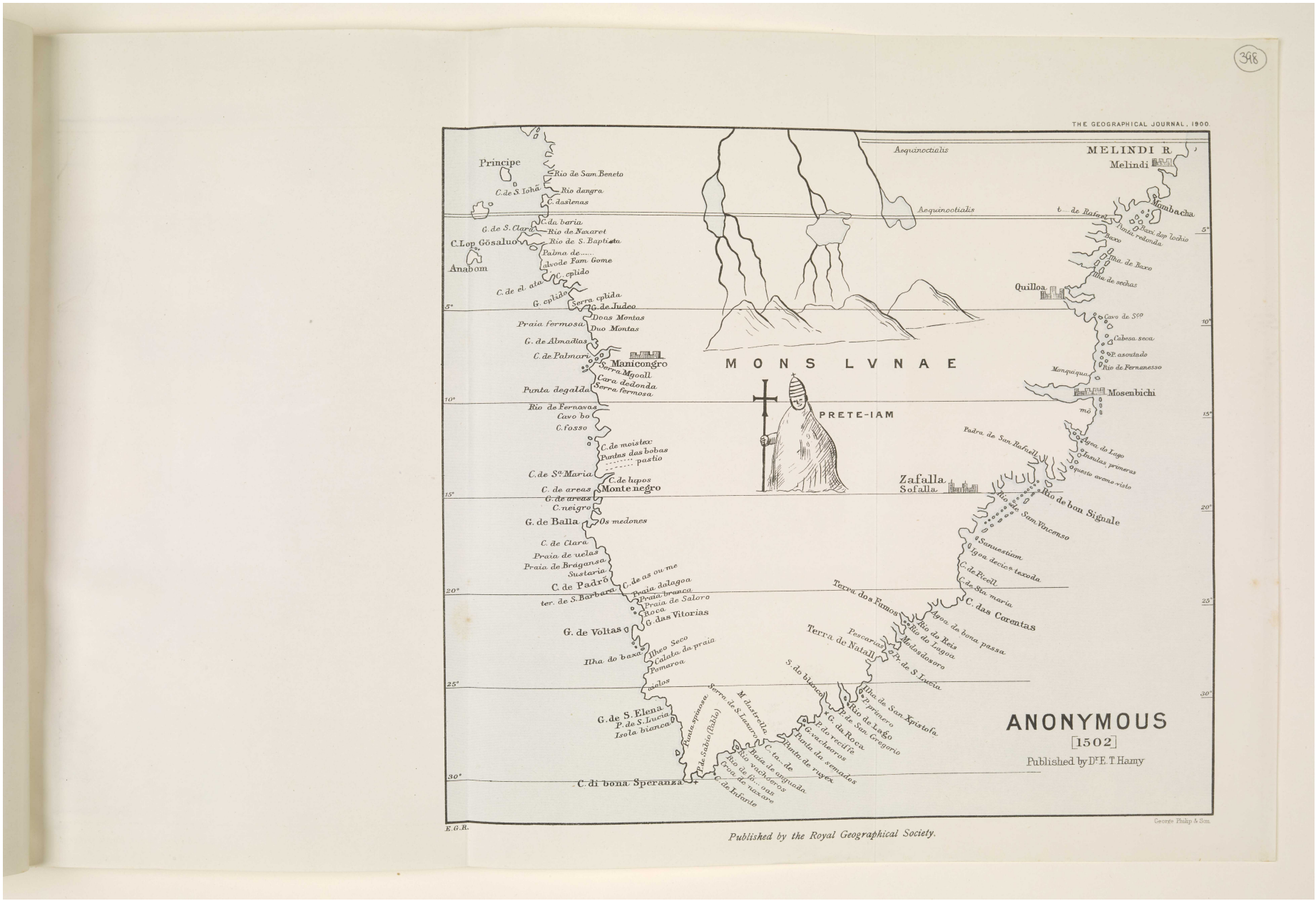
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

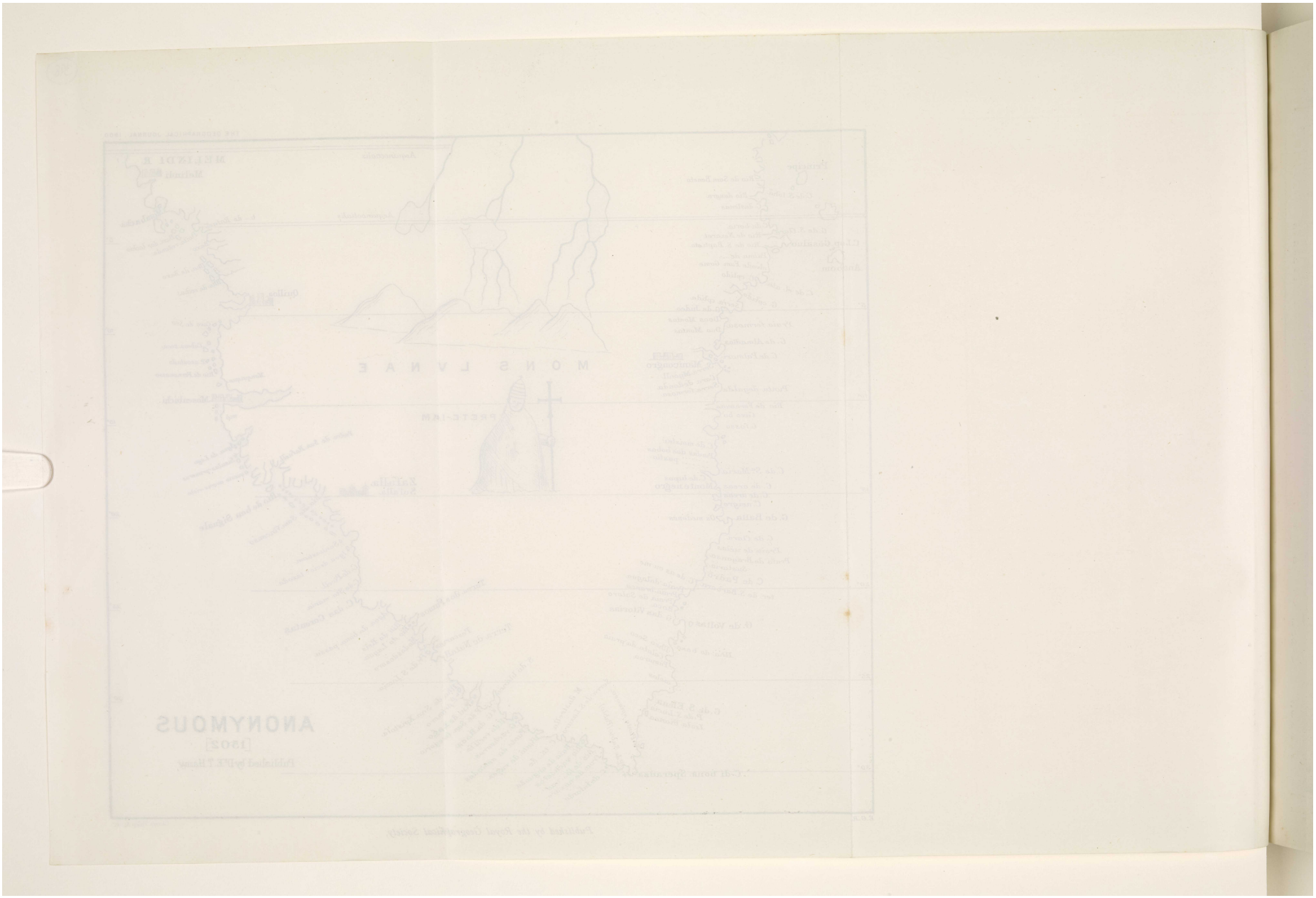
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000a

مكتبة قطر الوطنية
Qatar National Library

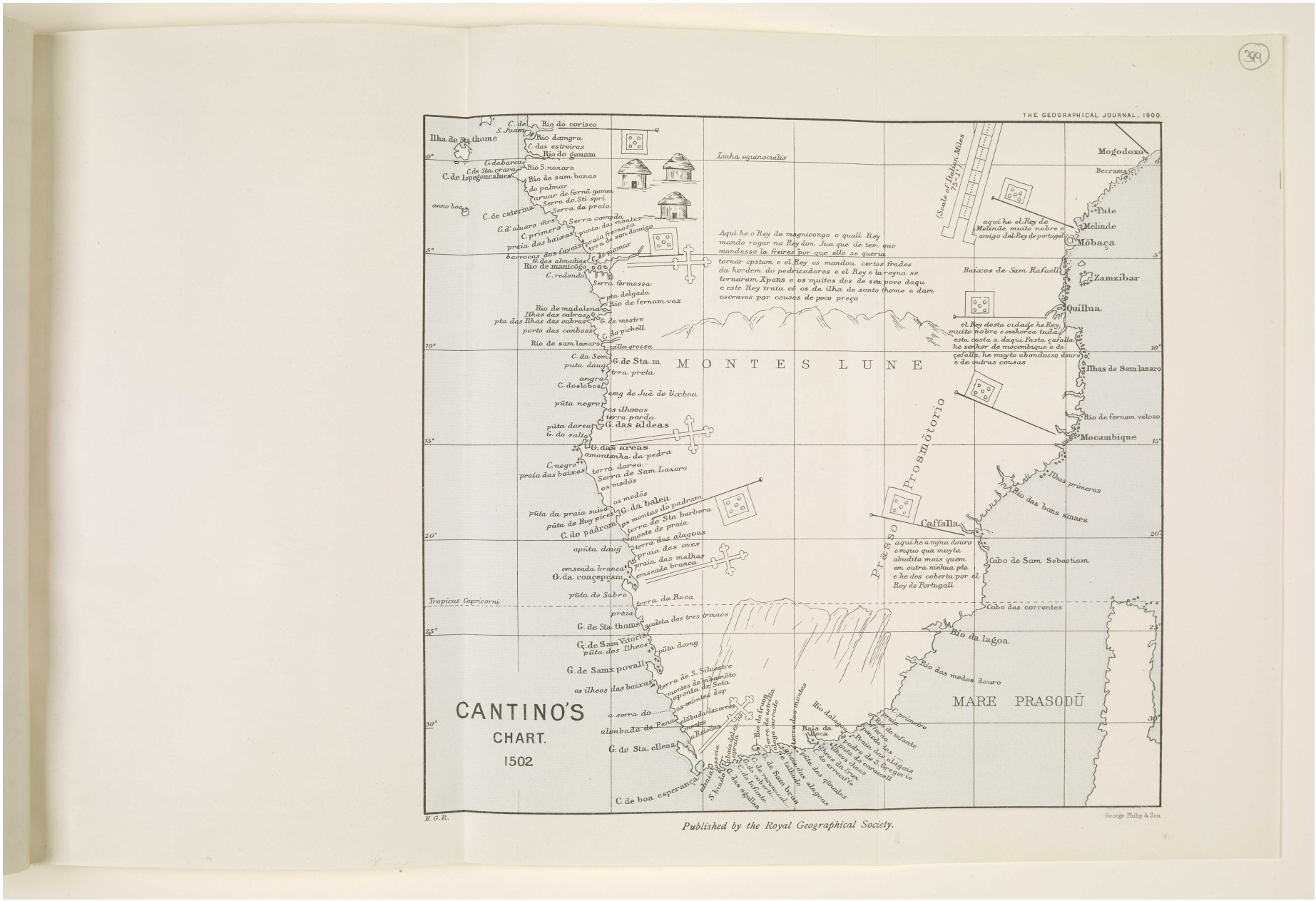
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000057

مكتبة قطر الوطنية
Qatar National Library

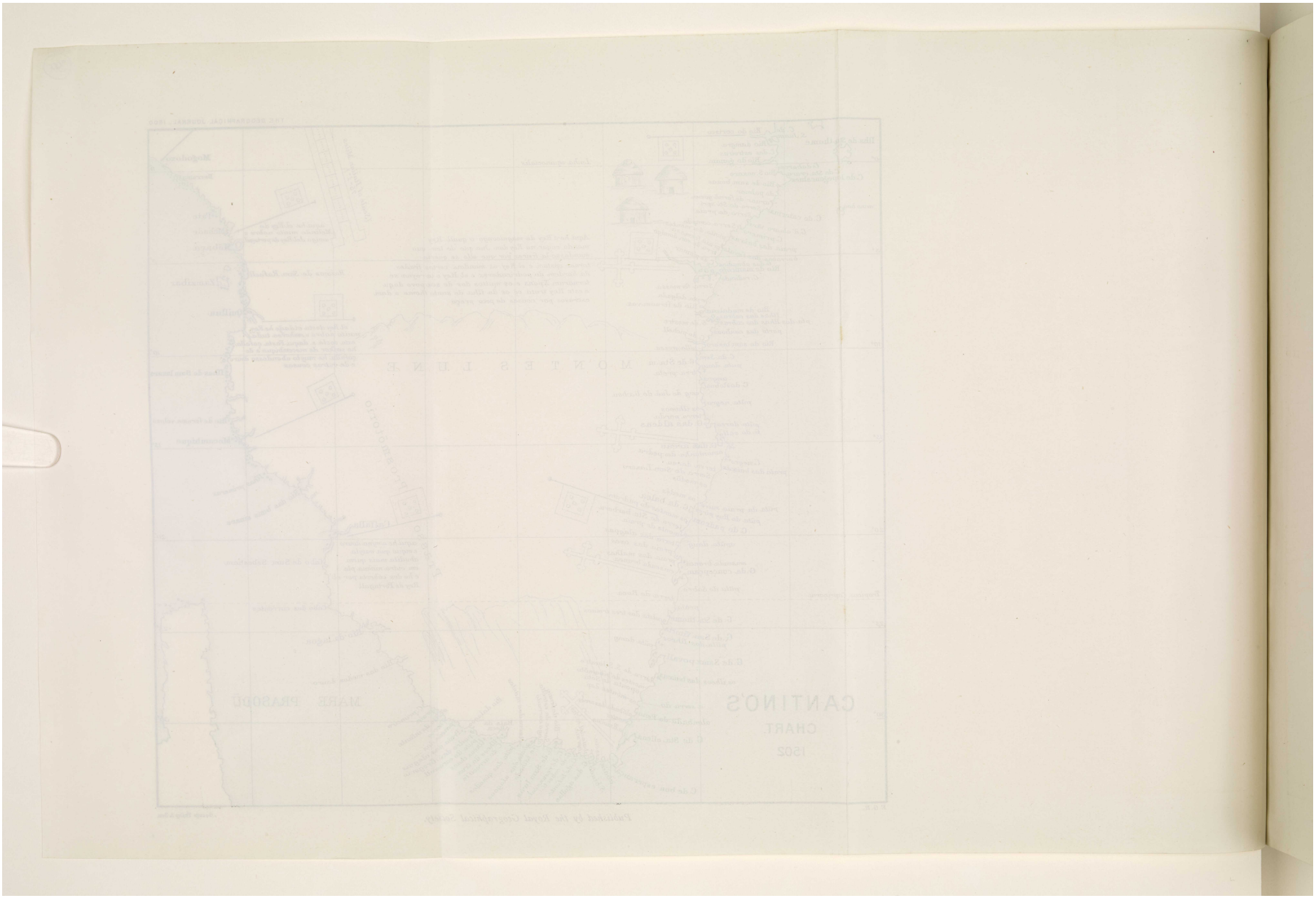
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001c

مكتبة قطر الوطنية
Qatar National Library

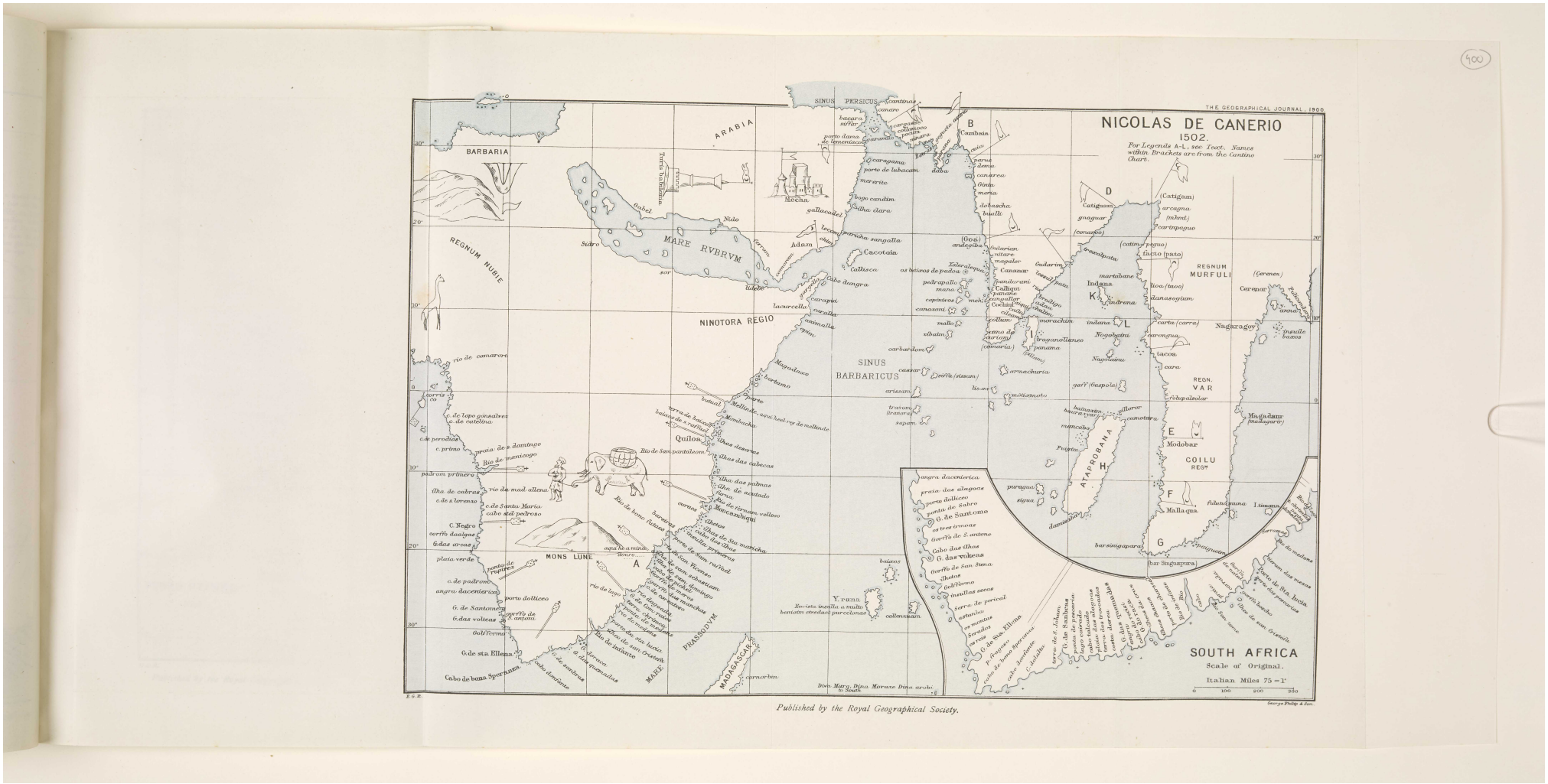
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

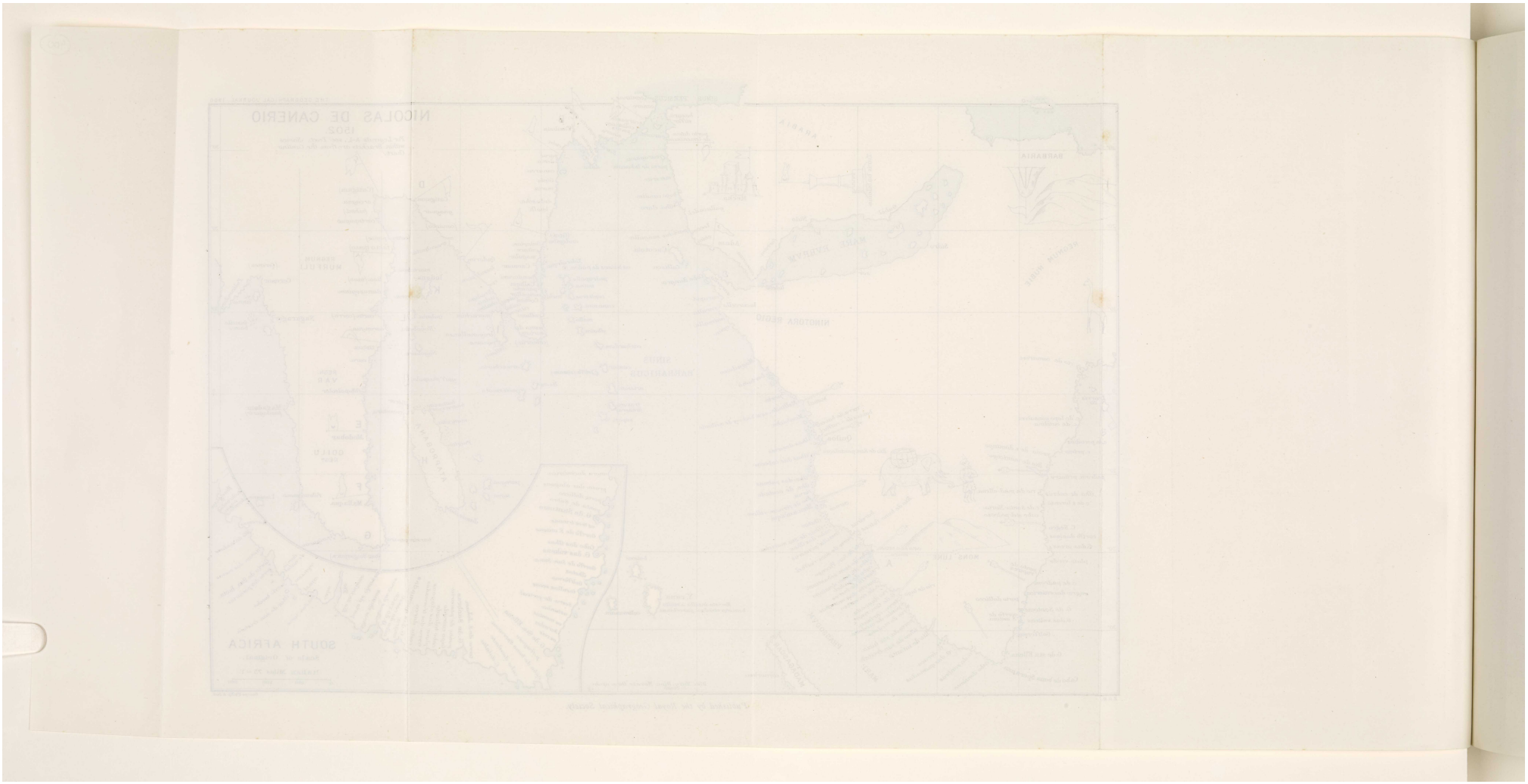
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000025

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



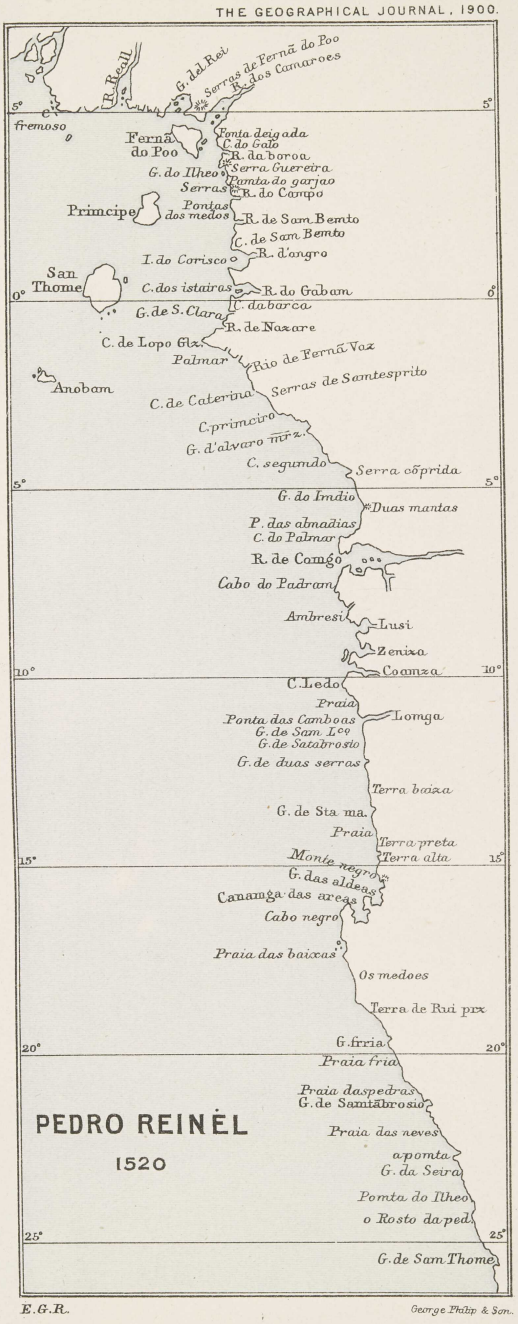
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

401

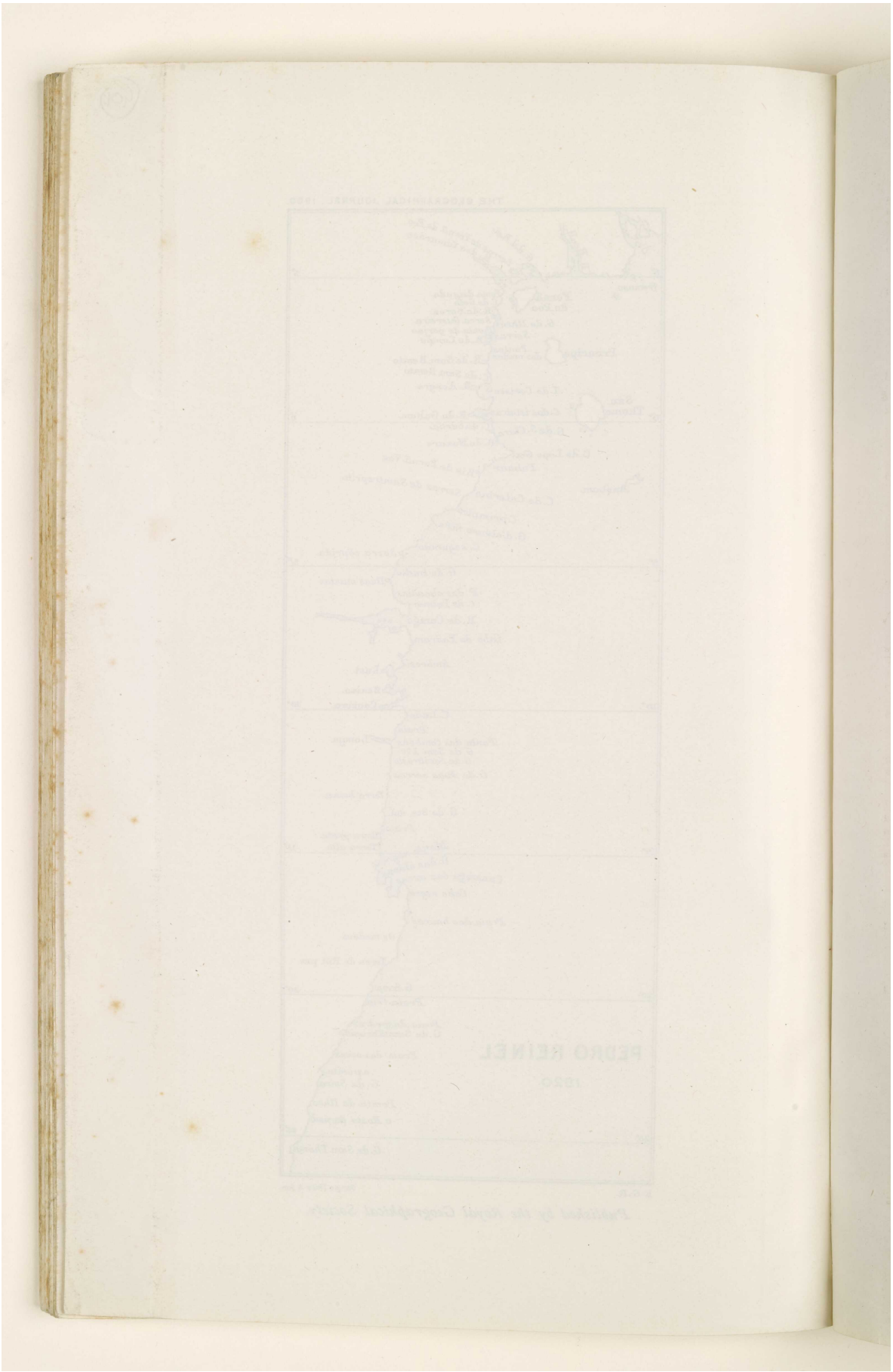
THE GEOGRAPHICAL JOURNAL, 1900.



Published by the Royal Geographical Society.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007f

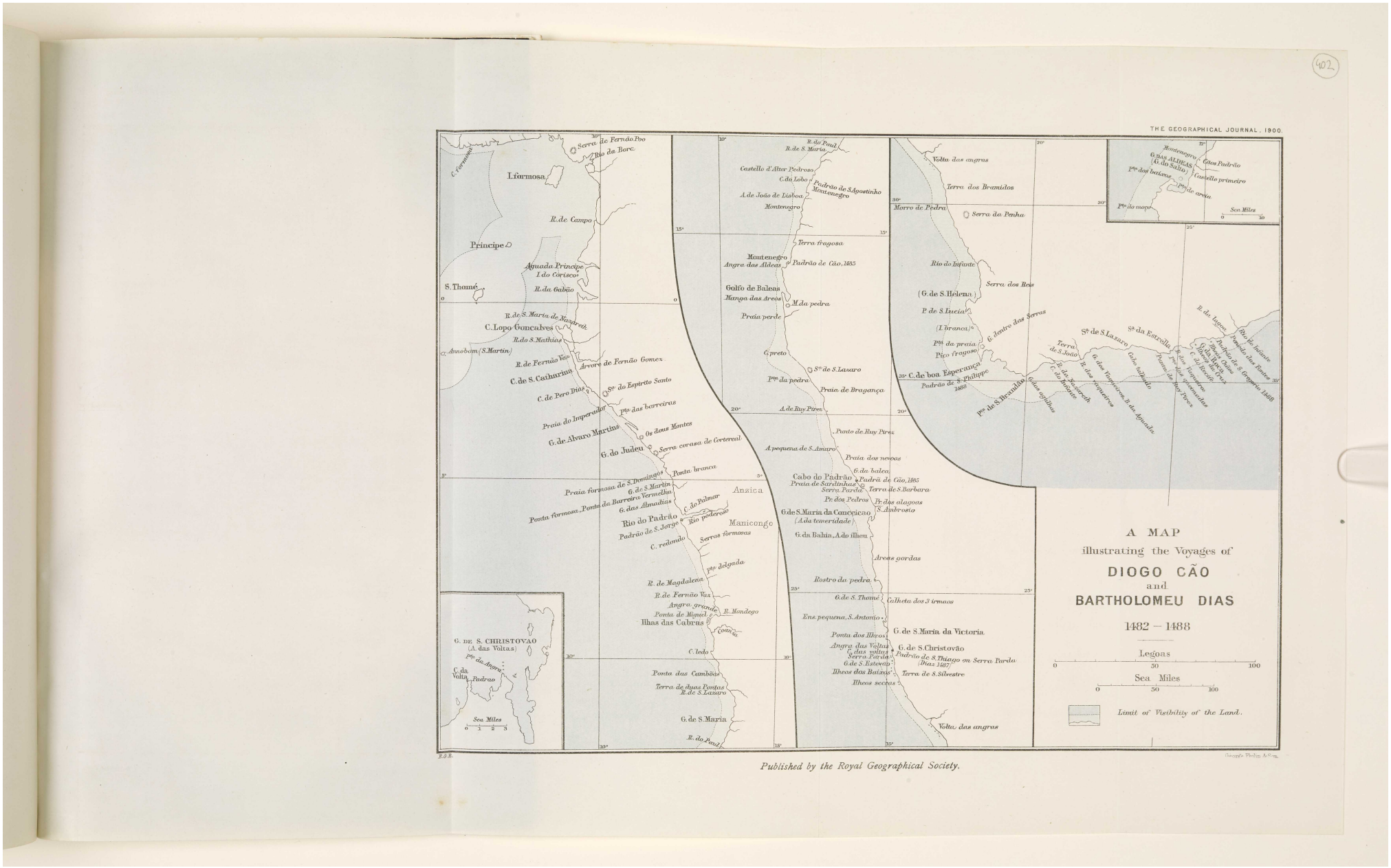
مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000007

مكتبة قطر الوطنية
Qatar National Library

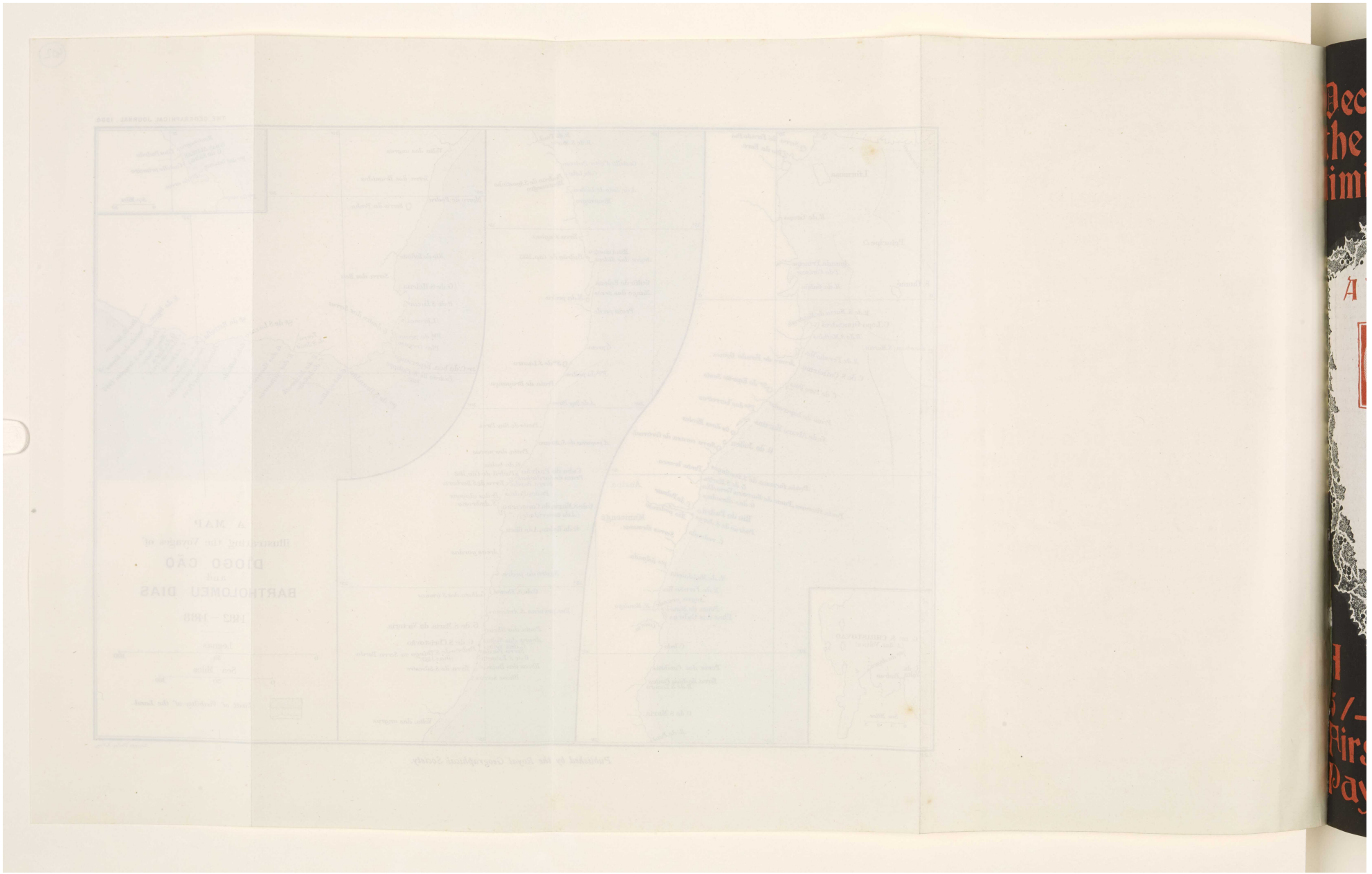
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000078

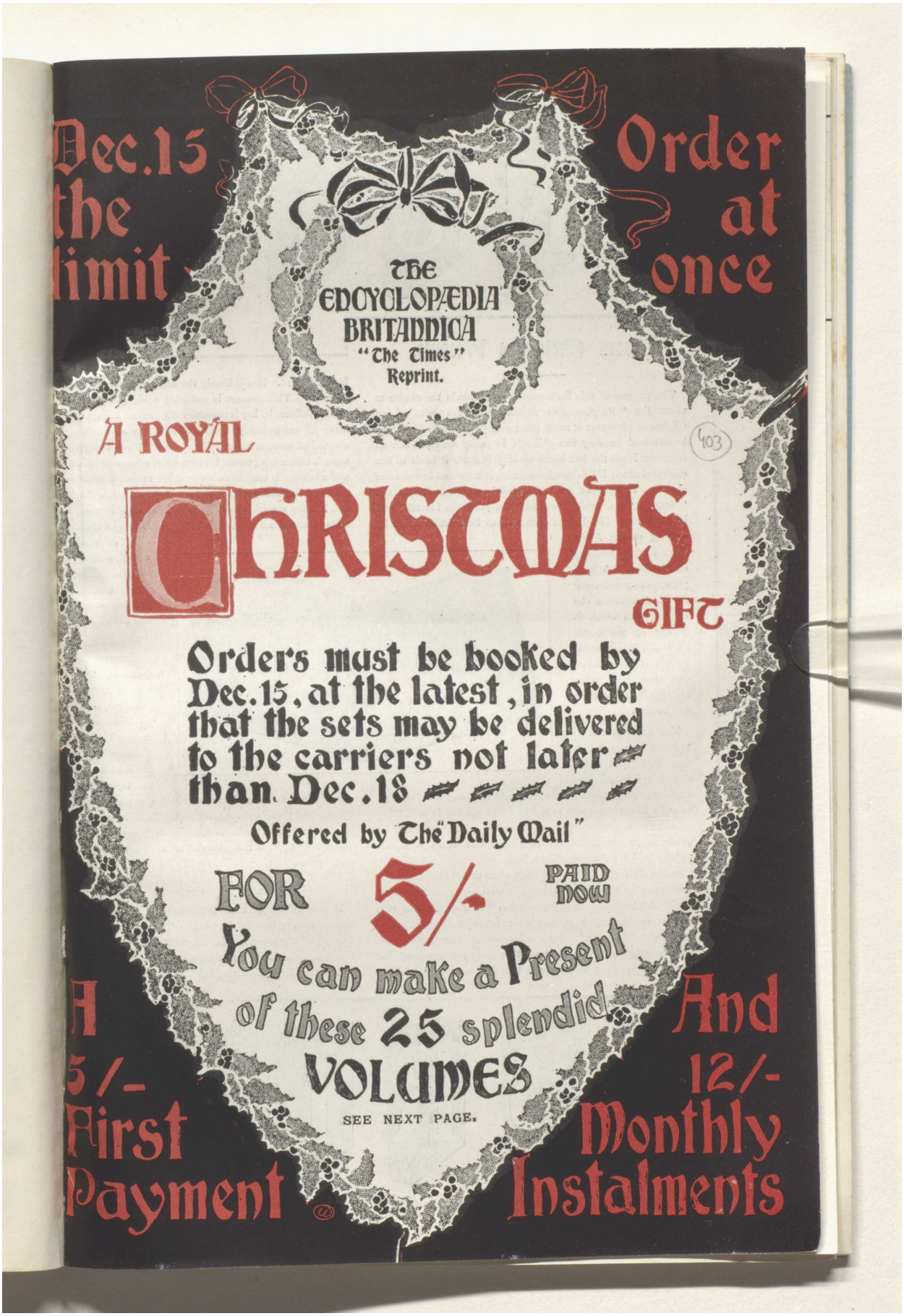
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001a

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000047

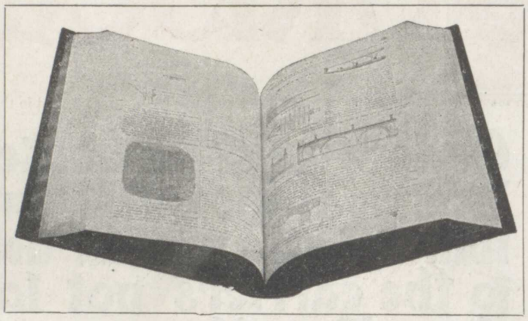
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ENCYCL

About Christmas Presents.

The purpose of this little note is to persuade the reader to select the "Encyclopædia Britannica"—the best of all Christmas presents: a royal gift; and yet a gift which may be obtained for only five shillings in ready money. But an argument is not the less worth reading because it leads to but one conclusion; if it is sound reasoning it must end in some one upshot. Here, then, are some brief statements about the "Encyclopædia" which the reader will judge for himself; and if they interest him he can obtain much fuller information by sending to the *Daily Mail* for the particulars of the offer. A half-penny stamp will carry to its destination the enquiry form which is printed on the fourth page of this advertisement, and by return of post specimen pages and details of the offer will be sent.



You are not asked to make up your mind now that you will choose this particular Christmas present—you are asked only to spend a half-penny in order to see what sort of a Christmas present it is. This advertisement cannot tell you that—the whole magazine is hardly large enough to describe a book that contains 22,000 pages: a library, rather than a book.

In the first place, this very fact that the "Encyclopædia Britannica" is the *biggest* book in the world is an argument in itself. A Christmas gift ought to arrive "with a bump," as the children say, it ought to make a place for itself among the other presents; and a box of 25 large volumes—weighing nearer two hundredweight than one—with another great package containing a revolving book-case, is a gift that does not permit itself to be overlooked. Nor is it only the first impression that one must consider. This present is not only a big present when the carrier delivers it, but it remains a big present always; a proud array of sumptuously bound volumes, in a substantial and convenient case; a present He or She will see every time the room is entered, a present that everyone who comes to the house will admire. It may seem undignified to speak of so authoritative and scholarly a work as the "Encyclopædia Britannica" as if it were a mere piece of furniture, but it is that, besides being a useful and dignified book. It makes of the drawing-room in which it is placed, a library as well as a drawing-room, a richer and more impressive room than it had been before.

In the second place, a Christmas Gift, whatever it is, should be the best of its kind; all shoddy things, all pinchbeck and "Brummagem" and sham is a sin against the spirit of Christmas. You are not trying to get the upper hand of Him or Her at Christmas, to pass off something second best; you want a genuine solid article, whether it is to be a modest gift or an important gift, and you would rather send an important gift if the price and terms of sale bring it within your means.

BEST IN THE WORLD.

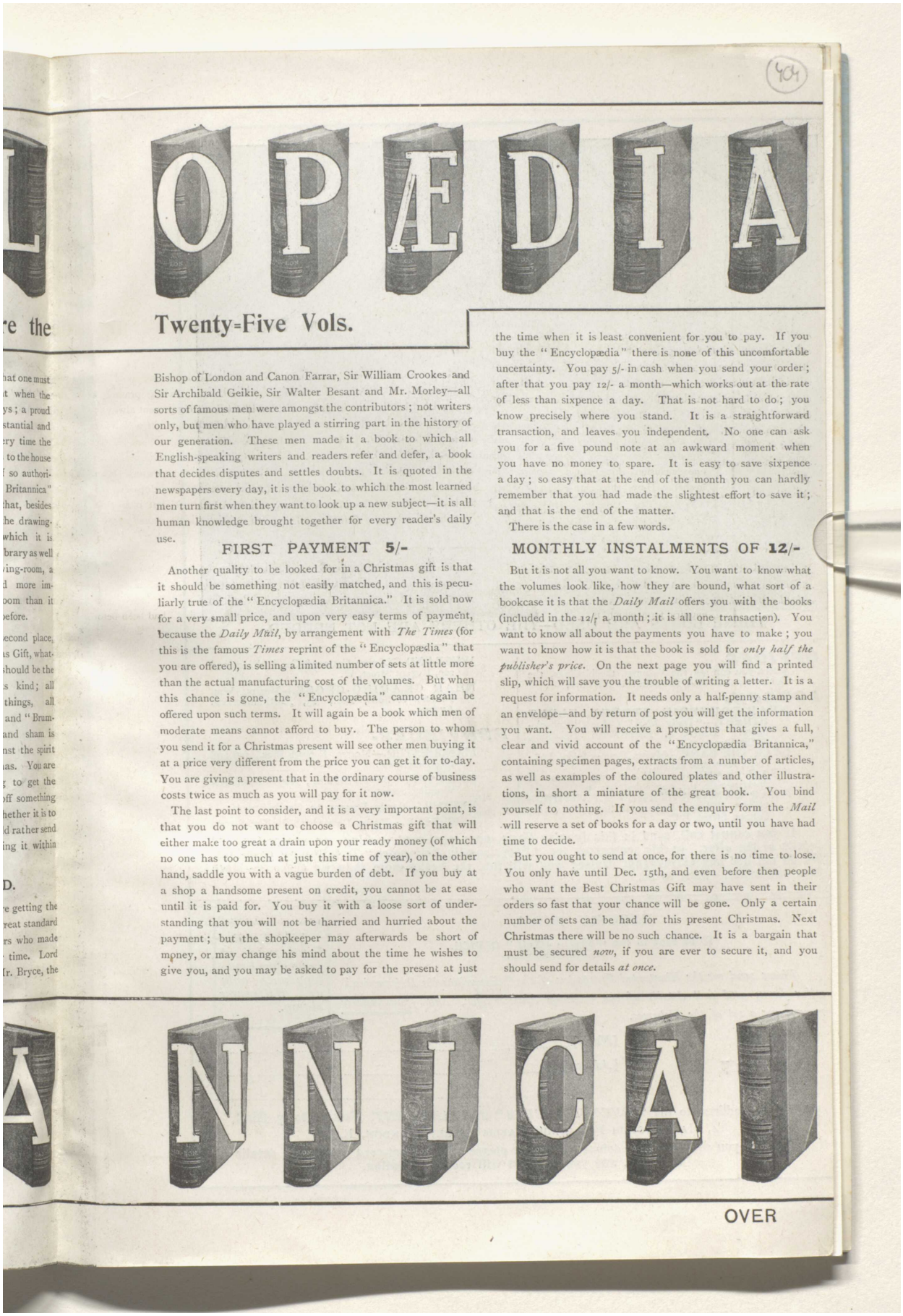
If you decide upon the "Encyclopædia" you are getting the best—the very best in the world. It is the one great standard Library of Reference. The eleven hundred writers who made the "Encyclopædia" are the greatest men of our time. Lord Kelvin and Mr. Swinburne, Lord Rayleigh and Mr. Bryce, the

These are the

BRITA

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005e

مكتبة قطر الوطنية
Qatar National Library



OPÆDIA

Twenty-Five Vols.

Bishop of London and Canon Farrar, Sir William Crookes and Sir Archibald Geikie, Sir Walter Besant and Mr. Morley—all sorts of famous men were amongst the contributors; not writers only, but men who have played a stirring part in the history of our generation. These men made it a book to which all English-speaking writers and readers refer and defer, a book that decides disputes and settles doubts. It is quoted in the newspapers every day, it is the book to which the most learned men turn first when they want to look up a new subject—it is all human knowledge brought together for every reader's daily use.

FIRST PAYMENT 5/-

Another quality to be looked for in a Christmas gift is that it should be something not easily matched, and this is peculiarly true of the "Encyclopædia Britannica." It is sold now for a very small price, and upon very easy terms of payment, because the *Daily Mail*, by arrangement with *The Times* (for this is the famous *Times* reprint of the "Encyclopædia" that you are offered), is selling a limited number of sets at little more than the actual manufacturing cost of the volumes. But when this chance is gone, the "Encyclopædia" cannot again be offered upon such terms. It will again be a book which men of moderate means cannot afford to buy. The person to whom you send it for a Christmas present will see other men buying it at a price very different from the price you can get it for to-day. You are giving a present that in the ordinary course of business costs twice as much as you will pay for it now.

The last point to consider, and it is a very important point, is that you do not want to choose a Christmas gift that will either make too great a drain upon your ready money (of which no one has too much at just this time of year), on the other hand, saddle you with a vague burden of debt. If you buy at a shop a handsome present on credit, you cannot be at ease until it is paid for. You buy it with a loose sort of understanding that you will not be harried and hurried about the payment; but the shopkeeper may afterwards be short of money, or may change his mind about the time he wishes to give you, and you may be asked to pay for the present at just the time when it is least convenient for you to pay. If you buy the "Encyclopædia" there is none of this uncomfortable uncertainty. You pay 5/- in cash when you send your order; after that you pay 12/- a month—which works out at the rate of less than sixpence a day. That is not hard to do; you know precisely where you stand. It is a straightforward transaction, and leaves you independent. No one can ask you for a five pound note at an awkward moment when you have no money to spare. It is easy to save sixpence a day; so easy that at the end of the month you can hardly remember that you had made the slightest effort to save it; and that is the end of the matter.

There is the case in a few words.

MONTHLY INSTALMENTS OF 12/-

But it is not all you want to know. You want to know what the volumes look like, how they are bound, what sort of a bookcase it is that the *Daily Mail* offers you with the books (included in the 12/- a month; it is all one transaction). You want to know all about the payments you have to make; you want to know how it is that the book is sold for *only half the publisher's price*. On the next page you will find a printed slip, which will save you the trouble of writing a letter. It is a request for information. It needs only a half-penny stamp and an envelope—and by return of post you will get the information you want. You will receive a prospectus that gives a full, clear and vivid account of the "Encyclopædia Britannica," containing specimen pages, extracts from a number of articles, as well as examples of the coloured plates and other illustrations, in short a miniature of the great book. You bind yourself to nothing. If you send the enquiry form the *Mail* will reserve a set of books for a day or two, until you have had time to decide.

But you ought to send at once, for there is no time to lose. You only have until Dec. 15th, and even before then people who want the Best Christmas Gift may have sent in their orders so fast that your chance will be gone. Only a certain number of sets can be had for this present Christmas. Next Christmas there will be no such chance. It is a bargain that must be secured *now*, if you are ever to secure it, and you should send for details *at once*.

NNICA

OVER

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



THESE BOOKS ARE USED—THE OTHERS ARE NOT NEEDED.

OFFICES
where you can see the Volumes, the bindings, the Bookcase, and obtain full details of this offer.

LONDON.

NEAR BOUVERIE STREET, FLEET STREET.—"Daily Mail" Office ("Encyclopædia" Dept.), 4, Harmsworth Buildings, Tallis Street, E.C.

NEAR THE BANK.—Messrs. Cramer & Co., Ltd., 46-49, Moorgate Street, E.C.

NEAR MARK-LANE.—Messrs. Eyre & Spottiswoode, 101, Leadenhall Street.

NEAR CANNON STREET STATION.—Messrs. William Dawson & Sons, Ltd., 121, Cannon Street, E.C.

WEST-END.—Messrs. Cramer & Co., Ltd., 207 and 209, Regent Street, W.

NEAR CHARING-CROSS.—Messrs. Wm. Dawson & Sons, Ltd., 23, Northumberland Avenue.

PROVINCES.

MANCHESTER.—Messrs. Forsyth Bros., 126 and 128, Deansgate.

CARDIFF.—Messrs. Dawson, Hayes Buildings, Working Street.

EXETER.—Messrs. Dawson, 22, Gandy Street.

LEICESTER.—Messrs. Dawson, 7b, Halford Street.

If you cannot call, send in this Inquiry Form, or a post-card, asking for prospectus and details of the offer. In this prospectus the "Encyclopædia Britannica" is faithfully described. We do not use any extravagant praise; you will find the books more than we describe—more than you expect—them to be.

ENQUIRY FORM.

To be sent to the "Daily Mail," OFFICE.

This Enquiry Form can be sent in an open Envelope with only a Halfpenny stamp.

Please send me the Illustrated Prospectus of the "Encyclopædia Britannica," order form, and full details of the "Daily Mail" offer, and provisionally reserve me a set of the Volumes.

[*Name*] .....

GJ 7 [*Address*] .....

.....

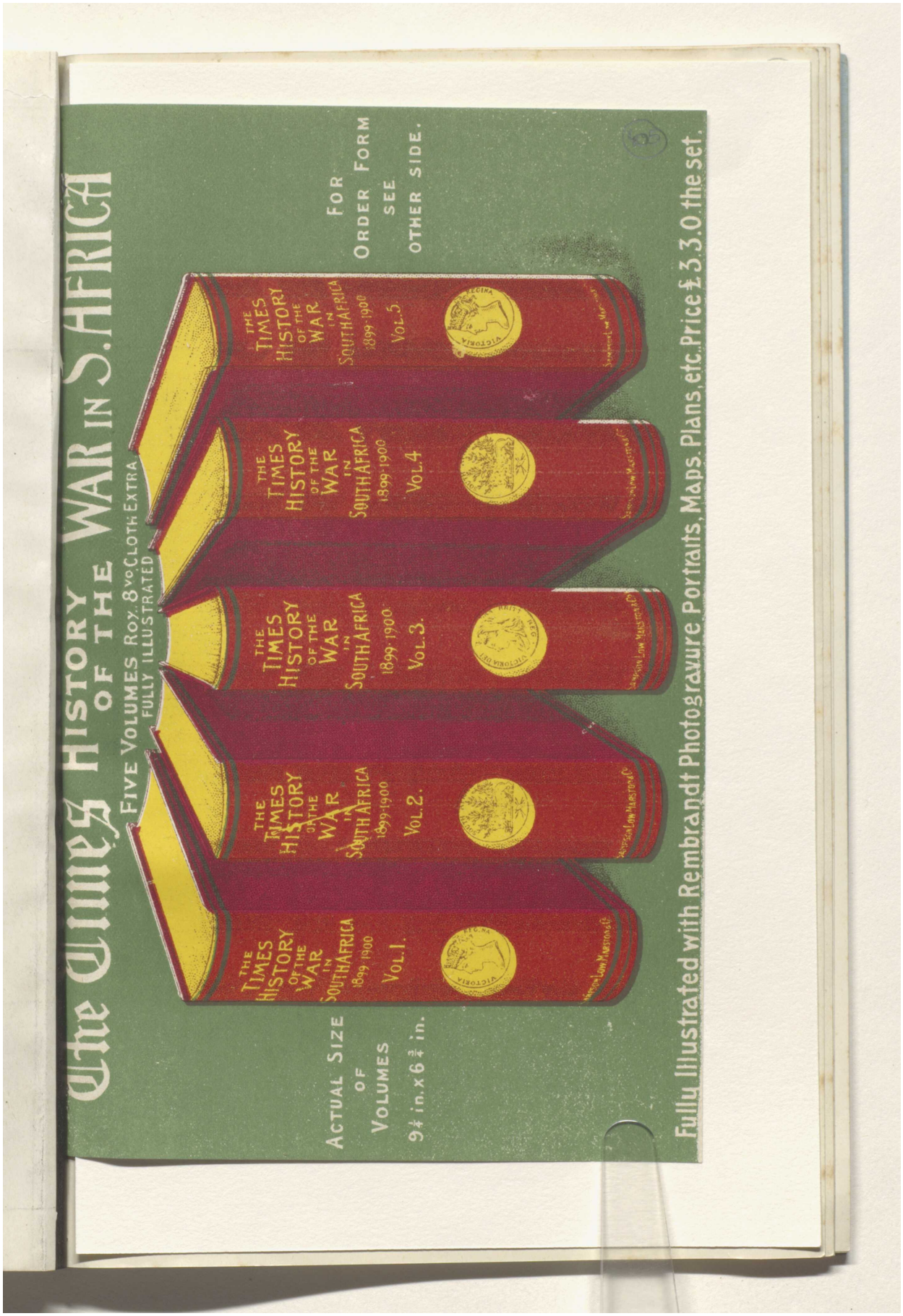
☞ Please address to the "*ENCYCLOPÆDIA*" *DEPARTMENT*, THE "Daily Mail," 4, HARMSWORTH BUILDINGS, TALLIS STREET, LONDON, E.C.

N.B.—Should you prefer not to deface this page, please send a post-card asking for details of the offer, and your request will receive attention.

The Times HISTORY OF THE WAR IN S. AFRICA

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008a

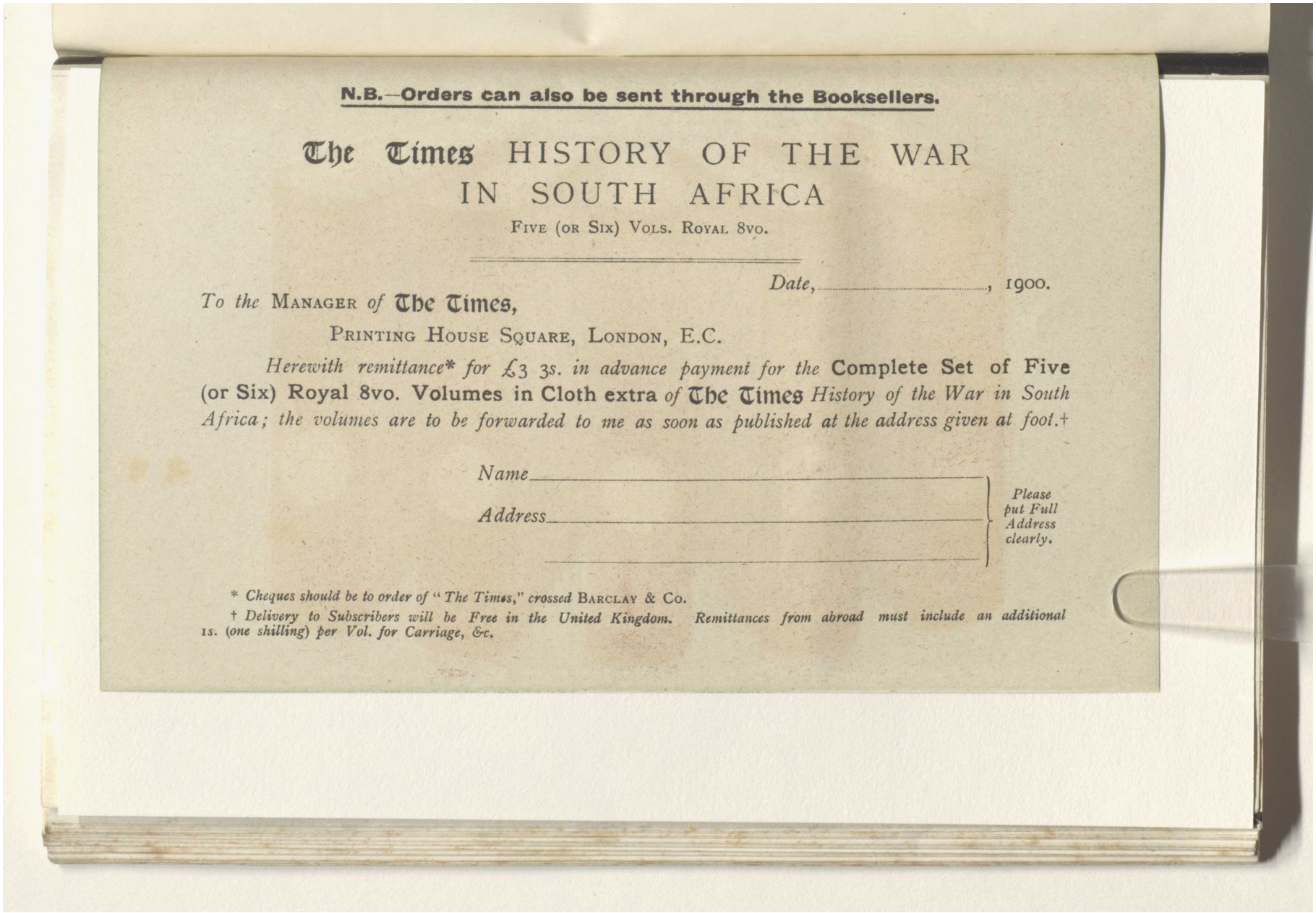
مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c1

LIBRARY BRITISH

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [405v] (163/232)



N.B.—Orders can also be sent through the Booksellers.

The Times HISTORY OF THE WAR IN SOUTH AFRICA

FIVE (OR SIX) VOLS. ROYAL 8VO.

Date, ..., 1900.

To the MANAGER *of* **The Times**,

PRINTING HOUSE SQUARE, LONDON, E.C.

Herewith remittance for £3 3s. in advance payment for the* **Complete Set of Five (or Six) Royal 8vo. Volumes in Cloth extra** *of* **The Times** *History of the War in South Africa; the volumes are to be forwarded to me as soon as published at the address given at foot.†*

*Name*_____

*Address*_____

Please put Full Address clearly.

* *Cheques should be to order of "The Times," crossed* BARCLAY & CO.

† *Delivery to Subscribers will be Free in the United Kingdom. Remittances from abroad must include an additional* 1s. *(one shilling) per Vol. for Carriage, &c.*

Qatar National Library مكتبة قطر الوطنية

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000000c

مكتبة قطر الوطنية
Qatar National Library

INDEX.

* Denotes Articles and Papers.

† New Publications and Maps.

A.

Abbadi natives, 547
Abruzzi, Duke of, Arctic Expedition of, 480, 597; The Missing Members of, 566; Il ritorno della Spedizione polare di il Duca degli Abruzzi, 703 †
Abyssinia—
  Bonchamps Mission, Résultats géographiques de, par C. Michel, 487 †
  Exploration des provinces équatoriales d'Abyssinie, par le Comte de Léontieff, 579 †; note on, 558
  Journey through Abyssinia to the Nile, by H. W. Blundell, 124 †
  Menelek's Dominions and the Country between Lake Gallop (Rudolf) and the Nile Valley, by the late Captain Wellby, 292,* 698 *
  Provinces équatoriales d'Abyssinie, 579 †
Adamaua—
  Land und Leute an der Südgrenze Westadamauas, 580 †
Adare, Cape, Antarctic, 383
Addis Abeba, 293, 294
Address to the R.G.S., by Sir C. R. Markham, 1 *; on opening Session 1900–1901, by Sir C. R. Markham, 597
Admiralty Charts, 138 †, 499 †, 711 †
Admiralty Surveys during 1899, Report, 90
Adrar, Expedition to, under M. Blanchet, 227, 683
Afghan Frontier, On the, A Reconnaissance in Shugnan, From journal of Lieut.-Colonel Serebrennikov, 666 *
Afghanistan—
  Afghanistan, the key to India, by A. R. Colquhoun, 246 †, 485 †
  Afghanistan and Baluchistan, An Orographic Map of, by Sir T. Holdich, 527*, correction to, 682
Africa—
  Animals, Wild, Preservation of, 105
  British Central Africa Protectorate, Mr. A. Sharpe's Report on, 475
  British East: Handbook to, by J. B. Purvis, 487 †; A Missionary Journey through Nkole, by Bishop Tucker, 249 †
  British South Africa Company, Reports, 487 †

Africa—*continued.*
  British South: Geodetic Surveys in, 474, 488 †; The Matabele Campaign, 1896, by Colonel R. S. S. Baden-Powell, 249 †
  Central: Coupe de l'Afrique équatoriale du sud-est au nord-ouest, par E. Foa, 579 †; Expédition Lemaire aux sources du Congo, 249 †; Report of the Universities' Mission to, 249 †; Au Katanga: la traversée des monts Kibala, 249 †
  Chiuta, Lake, and the River Luli, Notes on the Country between, by Captain F. B. Pearce, 367 †
  Climatology of, 249 †
  Daily Telegraph Expedition from the Cape to Cairo, under Mr. L. Dècle, 351
  Délimitation franco-espagnole en Afrique, 582 †
  De l'Océan Indien à l'Océan Atlantique, par E. Foa, 124 †
  East: Climatic conditions of, 611; Erklärung einiger ostafrikanischer Ortsnamen, von C. Velten, 488 †; German Pendulum Expedition in, 352; Herr Strandes on the Period of Portuguese Influence in, 353; Photographs of, by E. J. Mardon, 140 †
  Ethnology of the Tribes met with during progress of the Juba Expedition, by Lieut.-Colonel Macdonald, 580 †
  Expeditions: M. Dècle's, 558; Dr. Kandt's, 559; Dr. Donaldson Smith's, 102; The Harrison-Whitehouse, 103; Major Gibbons', 104; M. M. Hostains and D'Ollone from the Ivory Coast to the Sudan, 348; Captain Lemaire's, from the Zambezi to the Congo Mouth, 684
  French West: Développement économique de nos Colonies de l'Afrique occidentale, par F. Bohn, 368 †; De la Côte d'Ivoire au Soudan et la Guinée française, par E. Hostains, 368 †; note on, 348; Trente Mois au Continent Mystérieux, par M. Payeur-Didelot, 488 †; Région des concessions dans le bassin de la Sanga, par A. J. Wauters, 250 †

N.B.—Orders can also be sent through the Booksellers.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000058

مكتبة قطر الوطنية
Qatar National Library

Africa—*continued.*
Geographical Progress in, 599
Geographischen Forschungen und Reisen in 1899, von O. Lenz, 579 †
German East: Ancient Ruins in, Herr Perrot's explorations of, 561; Trade of Coast Towns(Foreign Office Rep.), 368 †; Reise durch die hamitischen Sprachgebiete um Kondoa, von Hauptman Kannenberg, 368 †; Notizen über Lebensweise . . . des Bezirks Bukoba, von Hauptmann Richter, 368 †; Geographische Ortsbestimmungen in Ostafrika, von R. H. Schmitt, 368 †; Fortschritte der Pendel Expedition, 250 †, 368 †; Die Warangi, von Lieut. Baumstark, 250 †; Ergebnisse der geologischen Expedition des Bergassessors Dr. Dantz, 250 †; note on, 106; Vegetationsverhältnisse des Ulugurugebirges in Deutsch-Ostafrika, von A. Engler, 250 †; Photographieen aus Deutsch-Ostafrika, von H. Siedel, 250 †; Bericht über meine Reisen . . . in Deutsch-Ostafrika, von Dr. R. Kandt, 580 †; note on, 559; Resultate . . . meteorologischer Registrirapparate in Deutsch-Ostafrika, von Dr. H. Maurer, 580 †; Die Konigsgräber der Wahehe, von J. Stierling, 488 †
German South-West: Bericht über eine Reise nach dem Okavangogebiet, von Lieut. Eggers, 580 †; note on, 561; Das Land zwischen Inachab und Bethanien, von F. Gessert, 250 †; Buren in Deutsch-Südwest-Afrika, von Paul Langhans, 251 †; Die Eingeborenen Deutsch-Südwest-Afrikas, von P. H. Brincker, 488 †; Meteorologischen Beobachtungen in Swakopmund, 368 †; Notes on a Journey in, by J. C. Watermeyer, 368 †
German West: Land und Leute an der Südgrenze Westadamauas, 580 †; Zur Harmattan-Frage, von F. Gessert, 251 †
In Dwarf Land and Cannibal Country, by A. B. Lloyd, 369 †
Journey from Fort Jameson to Old Chitambo and the Tanganyika Plateau, by R. Codrington, 124 †
Komati River, M. A. Grandjean's explorations on the, 350
Maps: Carte d'Afrique (Service Géo. de l'Armée), 262 †; Stanford's map of Marocco, Algeria, etc., 378 †; Northern Portion of the Transvaal, etc., by Wood and Ortlepp, 378 †; Southern Transvaal and Northern Orange River Colony, by T. B. Bower, 709 †
North-East: Reise in Nordost-Afrika, von C. v. Erlanger und O. Neumann, 581 †
Portuguese East: Le bassin du Nkomati, par A. Grandjean, 124 †; La cartographie de la province de Lourenço Marques, par A. Grandjean, 125 †; Le Zambése et le Shire, par M. Levéque, 369 †; Macombe's Country, by Dr. Carl Peters, 369 †; Trade of Mozambique and Quilimane, 251 †;
Portuguese Province of Gaza, report on, by Captain Gomes da Costa, 350
Scoperte geografiche del Secolo XIX. del Prof. F. Porena, 579 †
Slavery and the Slave Trade in, Correspondence respecting, 580 †
South: Boers and Uitlanders, by Yves Guyot, 251 †; Further Correspondence respecting, 251 †; Geographisches uber den Kriegsschauplatz in Südafrika, von Prof. Dr. Dove, 251 †; Durch die Karroo nach Kimberley, von Dr. S. Passage, 251 †; Transvaal and South Africa, by Cotgreave, 125 †; Les Premiers Boers, par E. Fournier de Flaix, 125 †; De Oranje Vrijstaat, door D. Aitton, 370 †; South African Reconstruction, by Ed. Dicey, 370 †; Influence of Geographical Conditions on Military Operations in, by Major W. A. Simpson, 370 †; The Climate of, by A. J. Herbertson, 370 †; Coal Measures at Vereeniging, Transvaal, etc., by E. J. Dunn, 370 †; Two Thousand Miles through South Africa, by Rev. W. T. McCormick, 581 †; Renascence of, by A. R. Colquhoun, 700 †; Boers et leur état social, par J. Leclercq, 700 †
Through Africa from the Cape to Cairo, by E. S. Grogan, 164 *, 699 †; From the Cape to Cairo, etc., by E. S. Grogan and A. H. Sharp, 699 †
West: Franco-Spanish Boundaries in, 225; Mission Hostains-d'Ollone, 700 †
Agamennone, G., Sismoscopio elettrico a doppio effetto per le scosse sussultorie, 258 †
Agassiz, A., Explorations of the *Albatross* in the Pacific, 128 †, 255 †
Ahlenius, K., Till kännedomen om Skandinaviens geografi och Kartografi, 694 †
Aisen river and valley, Patagonia, 24, 201
Aitton, D., De Oranje Vrijstaat, 370 †
Akar river, Borneo, 42
Akara tribe, East Central Africa, 618
Alanso river, Patagonia, 21
Alaska—
Ascent of Mount St. Elias by H.R.H. the Duke of the Abruzzi, by F. de Filippi, 252 †
Domestic Reindeer, Annual Report of the Introduction of, 701 †
Minder fra Alaska af ingeniør Ole Falk Moe, 489 †
Report of the Governor of, 701 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000ab

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [407r] (166/232)

Alaska—*continued.*
Russian-American Mining and Exploration Company, 125 †
Albania—
Itinerari albanesi, del A. Baldacci, 574 †
Albert Edward Nyanza, shrinkage and geysers of, 175
Albrecht, T., Bericht über den Stand der Erforschung der Breitenvariation am Schlusse des Jahres 1899 .. 256 †
Alexandria—
Temple du Césaréum et l'Église patriarcale d'Alexandrie, par S. B. Monseigneur Kyrillos II., 249 †
Alford, C. J., A Report on Ancient and Prospective Gold Mining in Egypt, 367 †; explorations for gold in Egypt, 557
Algeria—
Algérischen Atlasgebirge, Aus dem, von Dr. R. Zeller, 579 †
Among the Berbers of, by A. Wilkin, 699 †
Maps: Carte d'Algérie (Service Géo. de l'Armée), 263 †
Trade of (Foreign Office Rep.), 579 †
Algiers—
Illustrated Guide to, by J. C. Hyam, 249 †
Algué, J., Les cyclones aux Philippines et dans les mers de Chine, 486 †
Alichur valley, Pamirs, 668
Alldridge, A. T., Award to, 117
Allingham, W., Time and its Curious Contradictions, 256 †
Alpine Club, A Letter addressed to the Members of the, 376 †
Alps—
Eastern: Erinnerung an die vorgeschichtlichen Bewohner der Ostalpen, von J. Ranke, 242 †
Eiszeit im Bereiche der Alpen, Die verte, von A. Penck, 694 †
Ghiacciai italiani del gruppo del Pizzo Bernina, del Prof. L. Marson, 483 †
Glaciers des Alpes, Variations périodiques des, par Drs. Forel, Lugeon, et Muret, 569 †
Scrambles amongst the Alps in the years 1860-69, by Ed. Whymper, 569 †
Scrambles in the Eastern Graians, by G. Yeld, 483 †
Simplon Tunnel, The Construction of the, by C. B. Fox, 483 †
Travels through the, by the late J. D. Forbes, 242 †
Tunnels, Great Alpine, by F. Fox, 483 †
Vernagtferner, Der, von A. Penck, 694 †
Altai and Mongolia, After Wild Sheep in the, by E. Demidoff, 696 †
Alton, Dr. J., Enneberg in seinen wirthschaftlichen und socialen Verhältnissen, 242 †
Altyn Tagh, M. Bonin's journey in the, 99
Amatovo, Lake, Macedonia, 218
Amazon—
A Thousand Miles up the, by J. Jones, 490 †
Amazonas, State of (Foreign Office Rep.), 584 †
Amboina—
Reis door einige eilandengroepen der Residentie Amboina, door J. H. de Vries, 697 †
Ambriz and San Salvador, Determination of the latitude of, by C. Sanders, 699 †
Amdrup, Lieut., Expedition to East Greenland, 231, 481, 597; The Danish East Greenland Expedition in 1900 .. 662 *
America—
Central: Convention . . . relative to the Establishment of a Communication by Ship Canal between the Atlantic and Pacific, 254 †; Hieroglyphic Inscriptions of, by J. Campbell, 585 †; Volcanic Studies in, by Dr. Sapper, 478
North: Discovery of:—Zum neunhundertjährigen Jubiläum der erster Entdeckung Amerikas, von Franz Stock, 131 †; Epicontinental Sea of Jurassic Age, by W. N. Logan, 582 †; Geology, Paleontology, etc., Bibliography and Index of, by F. B. Weeks, 489 †; Lakes of, Shipping and Shipbuilding on the (Foreign Office Rep.), 489 †; note on, 353; Map: Relief Map of Canada and the United States (Geological Survey of Canada), 137 †; Territoire d'Alberta à l'État d'Iowa par le Far-West, par M. E. Petitot, 371 †
South: Commercial Map of, by J. Bartholomew, 263 †; Geographische Erforschung Südamerikas im 19 Jahrhundert, von W. Sievers, 372 †; note on, 478
Amoy, Trade of (Foreign Office Rep.), 576 †
Amsterdam, Trade of (Foreign Office Rep.), 485 †
Amundsen, E., A Journey through South-West Sechuen, 531 *
Anadyr, The Territory of, by E. Olssufjev, 578 †
Anderson, Dr. John, obituary of, 481
Andersson, G., Physische Geographie von Schweden, 121 †
Andes—
Chilenische Reñihué-Expedition, von Dr. Paul Krüger, 585 †
Estudios de orografia Andina, por M. V. Ballivian, 584 †
Methods of Survey employed by the Chilean Boundary Commissions in the Cordillera of the, by Prof. A. Bertrand, 329 *
Profils géologiques transversaux de la Cordillere Argentino-Chilienne, par Dr. C. Burckhardt, 701 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

Andes—*continued.*
Southern: an Orographical Sketch, by Sir Martin Conway, 253 †
Andine region of Patagonia, 27
Andrée's buoy, discovery of, 481
Andréeff, M. N., Océan Arctique, 704 †
Angola—
Etudes sur les colonies portugaises, par Prof. H. Hauser, 699 †
Angra das Voltas, 645
Animals, Wild, in Africa, Preservation of, 105
Annandale, N., The Siamese Malay States, 698 †
Anniversary Meeting of the R.G.S., 115; Dinner, 117
Antarctic—
Animaux et plantes dans l'Antarctique, la vie des, par E. G. Racovitza, 492 †
Antarctic Regions, The, by Dr. K. Fricker, 586 †
Aufgaben der geplanten Südpolar Expeditionen, von Sir Clements R. Markham, 128 †
Aurora Australis or Polaris, 410
Belgian Expedition: Géographie physique de la région antarctique visitée par l'Expédition de la *Belgica*, par H. Arçtowski, 492 †; Travaux scientifiques de l'Expédition antarctique belge, par G. Lecointe, 128 †, 492 †; Hydrographie dans le détroit de la *Belgica*, par G. Lecointe, 492 †; Expédition antarctique belge, 492 †
Deutsche Südpolar-Expedition, 255 †
Deutsche Tiefsee-Expedition auf dem *Vaidivia* im südlichen Eismeer, von Dr. G. Schott, 491 †
Fossils, Notes on some, collected by Dr. Donald and Captain Larsen, by G. Sharman and E. T. Newton, 586 †
Fünfzehn Monate im südlichen Eismeer, von A. Stefan, 586 †
Geology and Physical Geography of, 400
Glaciers, Sur l'ancienne extension des, par H. Arçtowski, 586 †
Ice Conditions in the, 401
International Co-operation in Antarctic Research, M. H. Arçtowski on, 689
Magnetism of the, 408
Marine Floras of the Arctic and Antarctic, by Prof. D'Arcy Thompson, 587 †
Meteorology of the, 404
National Expedition, 98, 598; Prospects of the, 8
Rocks, Notes on some Specimens of, by Sir A. Geikie, 586 †
Scottish National Antarctic Expedition, The Proposed, 255 †
Southern Cross Expedition to the, 1899–1900, by C. E. Borchgrevink, 381 *, 569
Sydpolarforskningens nuvarande Ställning och mal, af Otto Nordenskjöld, 128 †
Antarctic—*continued.*
Through the First Antarctic Night, by F. A. Cook, 703 †
Zoology of, 402
Anthropogeography—
British New Guinea, Studies in the Anthropogeography of, by Prof. A. C. Haddon, 265 *, 414 *
Census-taking and its Limitations, by J. A. Baines, 131 †
Development of Habitable Lands, by H. R. Mill, 131 †
Homme et la Terre cultivée, par Jean Brunhes, 131 †
New Lands, by H. R. Mill, 568, 592 †
Primitive Nature Study, by A. F. Chamerlain, 590 †
Races et les Peuples de la Terre, par J. Deniker, 493 †
Anton, Dr. G. K., La régime foncier dans l'État indépendant du Congo, 580 †
Arabia—
Arabia: the Cradle of Islam, by Rev. S. M. Zwemer, 574 †
Southern Arabia, by Mr. and Mrs. Theodore Bent, review, 101
Ararat—
Besteigung des Ararat, von Dr. A. Oswald, 698 †
Ararat, Der, von Max Ebeling, 247 †
Arbo, C. O. E., Er der foregået nye invandringer i Norden? 120 †
Arc of the Meridian, Remeasurement of an, in Ecuador, 356
Arctic—
Abruzzi, Duca degli, Il retorno della Spedizione polare di, 703 †
Andrée buoy, discovery of, 481
Andrée, Le sort de l'Expédition, par M. Zimmermann, 586 †
Crociera nel Mar Polare Artico, dal G. Schoch, 128 †
Estudios sobre las Regiones árticas, por D. José G. Sobral, 128 †
Expeditions: Baron Toll's Auxiliary Arctic Expedition, 567; Captain Bade's and Captain Bauendal, 356; Duke of Abruzzi's, 480, 566; Lieut. Amdrup's, 481
Marine Faunas of the Arctic and Antarctic, On a supposed resemblance between the, by Prof. D'Arcy Thompson, 587 †
Nansen and his Scientific Results, by E. Plumstead, 256 †
Nansen's 'Farthest North' Eclipsed, 703 †
Peary Expedition of 1900..109; Peary's Work, Mr. H. L. Bridgman on, 492 †
Relics of Sir G. Nares' Expedition, 109
Windward, Voyage of the, 357, 566
Arçtowski, Henryk, Award to, 116; Géographie physique de la région antarctique visitée par l'Expedition de la *Belgica*, 492 †; Notice sur les aurores australes, 257 †; Observations on the Aurora Australis, 92 *, 493 †; Sur

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006c

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [408r] (168/232)

l'ancienne extension des glaciers dans la région des terres découvertes par l'expédition antarctique belge, 586 †; on International Co-operation in Antarctic Research, 689
Argentine and Chili—
Argentine-Chilian Boundary, Report, 701 †
Profils géologiques transversaux de la Cordillere Argentino-Chilienne, par Dr. C. Burckhardt, 701 †
Argentine Republic—
Agricultural and Commercial Condition of (Foreign Office Rep.), 584 †
Anuario de la Direccion General de Estadistica, 490 †
Departamento Chamical, por G. Vallejo, 702 †
El Barco y Santiago del Estero, por S. A. Lafone Quevedo, 126 †
Etnologia en el Rio de la Plata, Progresos de la, por S. A. Lafone Quevedo, 126 †
Forrocarriles proyectados en el Neuquen, por F. R. Cibils, 702 †
Inundaciones en et Rio Negro, Las, por E. Chanourdie, 702 †
La Plata - Länder, Geschichte der Eroberung und Besiedelung der, von Prof. J. Rein, 253 †
Llanura argentina, por D. E. A. Bavio, 584 †
Maps: Railways of (Buenos Aires and Pacific Railway Co.), 709 †
Tehuelches et sur les indigénes de la République Argentine, par M. P. Moncousin, 253 †
Argentine Republic and Uruguay—
Allevamento del bestiame e l'industria delle carni al Plata, del M. Garrou, 254 †
Ark-e-leenik river, North Canada, 68
Armenia—
Reisebriefe von der Armenischen Expedition der Dr. Belck und Dr. Lehmann, 579 †
Russisch Armenien und der Ararat, von Dr. Max Friederichsen, 248 †, 578 †
Armstrong, —, Trade of Lombardy, 244 †
Army Medical Department, Report, 259 †
Arracan Expedition, 1825, The, 365 †
Artillery lake, North Canada, 70
Ashanti—
Downfall of Prempeh, by Major-General R. S. S. Baden-Powell, 367 †
Asia—
After Wild Sheep in the Altai and Mongolia, by E. Demidoff, 696 †
Calcutta, Life of, as a seaport and the Mercantile Capital of Asia, letter from Major-General Forlong on, 238
Central: M. Bonin's journey in, 99; Geographisch-wissenschaftlichen Ergebnisse meiner Reisen in Zentralasien, von Dr. Sven Hedin, 696 †; Dr. Sven Hedin's journeys in, 472;
Asia—*continued*.
Journeys in, by Captain H. H. P. Deasy, 141 *, 501 *; Northern China and the Nan Shan, Report of Expeditions, etc., by V. A. Obrucheff, 121 †; Note sur les anciennes Chrétientés nestoriennes, par C. E. Bonin, 575 †; Résultats . . . du voyage de M. M. Roborovsky et Kozlov, par J. Deniker, 247 †
Central and Western, Etymology of a few towns of, by J. J. Modi, 485 †
Eastern: Russische Arbeiten über Ostasien, von W. Barthold, 486 †; Cyclones aux Philippines et dans les mers de Chine, par J. Algué, 486 †; Ueber Bildungsstätten . . . der Orkane des "Fernen Ostens," von P. Bergholz, 122 †
Journey of William of Rubruck to the Eastern Parts of the World, translated, etc., by W. W. Rockhill, 485 †
Luftdruck und die atmosphärische Cirkulation in Asien, von A. Woeikof, 247 †
Maps: Asie (Service Géo. de l'Armée), 136 †, 262 †
Melbourne to Tokio, by W. Daish, 486 †
Mittelmeer zum Persischen Golf, Vom, von Dr. Max von Oppenheim, 367 †
Pamir-Expedition, Den anden danske, by Lieut. Olufsen, 366 †
Phénicie et les Phéniciens, par E. Reclus, 124 †
Photographs taken during journey from Quetta to Europe, by Captain Benn, 596 †
Photographs taken in Mongolia and Russian Central Asia, by I. Morse, 380 †
Russian Central: Countries and People, by A. R. Colquhoun, 248 †
Russian Railways in, 223
Tian Chan Russe, Dans le, par G. Saint-Yves, 123 †
Travels in the East of Nicholas II., Emperor of Russia, by Prince E. Ookhtomsky, 575 †
Western: Russische Arbeiten über Westasien, von W. Barthold, 579 †
Asia Minor—
Dr. Schaffer's expedition to, 556
Maps: Empire Ottoman, Division Administrative, par R. Huber, 708 †
Asilli tribe, Abyssinia, 297, 298
Asphaltum (Philadelphia Museum), 591 †
Assam—
Lac Industry of, Note on, by B. C. Basu, 365 †
Rail and River-borne Trade of, Returns of, 365 †
Report on the Administration of the Province of, 123 †
Assyut, The Oases of the Mudirieh of, by A. R. Guest, 655 *
Astral Gravitation, Essays in illustration of the Action of, by W. L. Jordan, 706 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00003b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Astronomy—
Declination und Eigenbewegungen der Sterne für den Internationalen Breitendienst, von Dr. F. Cohn, 587 †
How to calculate the lagna, by Prof. H. Jacobi, 703 †
Asturias, Spain, Devonian Iron Ores of, by J. A. Jones, 245 †
Atlantic Ocean—
Pilot Charts of the, 139 †, 500 †, 595 †, 712 †
Atlases—
Atlas Universel de Géographie, par M. Vivien de Saint Martin et F. Schrader, 711 †
Colonies Françaises, by P. Pelet, 379 †, 709 †
Historical Atlas of Modern Europe, by R. L. Poole, 377 †, 708 †
Historischer Schul-Atlas, von F. W. Putzger, 263 †
Philips' London School Board Atlas, 710 †
Royal Atlas of Modern Geography, by W. & A. K. Johnston, 498 †
Times Atlas, 264 †
Atmosphere—
Thermodynamik der Atmosphaere, von W. von Bezold, 130 †
At To pass, Kwen Lun range, 506
Aurora—
Aurora Australis, Observations on the, by H. Arçtowski, 92 *, 493 †
Aurora Australis and Borealis, Letter from Arthur Harvey on, 691–693
Aurora Australis or Polaris, description of, 410
Aurores australes observées pendant l'hivernage de l'expédition antarctique belge, par H. Arçtowski, 257 †
Australasia—
Wragge's Australasian Almanac and Weather Guide for Land and Sea, 585 †
Australia—
Aborigines of, Rev. John Mathew on, 229
Cook's Voyage, Illustrations of the Botany of, by Sir J. Banks and Dr. D. Solander, 254 †
Currents in Australian Waters, Mr. H. C. Russell's observations on, 689
Federation of the Australian Colonies, Papers relating to the, 127 †
Maps: Route and Discoveries of the Calvert Exploring Expedition in Western Australia, by L. A. Wells, 379 †
Participation des Néerlandais á la découverte de l'Australie, par E. Janssens, 127 †
Quiros and the Discovery of, Cardinal Moran on, 479
South: Divisions of the South Australian Aborigines, by R. H. Mathews, 373 †; Fossil Remains of Lake Callabonna, by E. C. Stirling and A. H. C. Zietz, 128 †
Australia—*continued.*
Western: Native tribes of, by R. H. Mathews, 373 †; Western Australia in 1899, by Hon. E. H. Wittenoom, 128 †; Year-Book for, by M. A. C. Fraser, 586 †
Year-Book of, edited by the Hon. E. Greville, 254 †
Austria—
Enneberg in seinen wirthschaftlichen und socialen Verhältnissen, von Dr. J. Alton, 242 †
Entwickelung des slavischen Speichers, von Karl Rhamm, 119 †
Lingue in Austria, La Questione delle, del C. V. A. Gonzaga, 242 †
Meteorologie und Erdmagnetismus, Jahrbücher der k.k. Central-Anstalt für, 119 †
Railways of, Extent of, 221
Austria-Hungary—
Astronomischen Gradmessungsarbeiten des k. u. k. militär-geographischen Institutes, von F. Netuschill, 483 †
Eastern Trade with, Dr. W. Schwaighofer on, 553
Gletscher der Mur und Mürz, von Dr. A. Böhm, 483
Hypsometrische Karte von Oesterreich-Ungarn, 261 †
Lothungen im Hallstätter See, Bemerkungen über alte und neue, von Dr. A. Penck, 483 †
Präcisions-Nivellement in der österreichisch-ungarischen Monarchie, von F. Lehrl, 483 †
Trade of (Foreign Office Rep.), 569 †
Austrian Explorations in the Solomon Islands, 230
Avalanches—
Grundlawinenstudien, von F. W. Sprecher, 588 †
Azimuth Tables—
Star's true bearing or Azimuth Tables, by P. L. H. Davis, 492 †
Sun's true bearing or Azimuth Tables, by P. L. H. Davis, 492 †

B.

Bacon, Rev. J. M., Fogs and their Teaching, 257 †
Bacteria, especially as they are related to the economy of nature, etc., by George Newman, 706 †
Baddeley, M. J. B., Thorough Guide Series, English Lake District, 363 †; Scotland, Part I., 364 †
Bade, Captain, Arctic Expedition of, 356
Baden-Powell, B. H., The Village of Goa in the Early Sixteenth Century, 123 †
Baden-Powell, Major-General R. S. S., The Downfall of Prempeh, 367 †; The Matabele Campaign, 249 †
Badjan-Dara, Shugnan, 676

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000046

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [409r] (170/232)

BRITISH LIBRARY

Baedeker, Karl, Handbook for Travellers, Northern Germany, 484 †; London and its Environs, 574 †; Paris and Environs, with Routes from London to Paris, 361 †; The Rhine from Rotterdam to Constance, 365 †
Baghdad, Trade of (Foreign Office Rep.), 698 †
Bahia, Trade of (Foreign Office Rep.), 584 †
Baillaud, E., explorations on the Niger, 227; Les territories français du Niger, leur valeur économique, 488 †; note on, 477
Baines, J. A., On Census-taking and its Limitations, 131 †; The Industrial Development of India, 365 †
Baker channel, Patagonia, 204
Baker, F. C., The Mollusca of the Chicago Area, 583 †
Baker lake, North Canada, 67
Baker, Marcus, The Anglo-Venezuelan Boundary Dispute, 254 †
Bako, town of, South Abyssinia, 558
Bala, Lake, North Wales, 679
Balch, E. S., Glacières or Freezing Caverns, 373 †
Baldacci, Dr. A., Itinerari albanesi, 574 †
Balik Papan bay, East Borneo, 474
Balkans—
Frage der Vergletscherung des Central-Balkan, von Dr. W. Götz, 569 †
Morphologische und glaciale Studien aus Bosnien, der Hercegovina und Montenegro, von Dr. J. Cvijić, 483 †
Période glaciaire dans la péninsule des Balkans, par M. J. Cvijić, 483 †
Ballantine, Mr., journey in British New Guinea, 107
Balleny island, Antarctic, 382
Ballivian, M. V., Estudios de orografia Andina, 584 †; y B. Saavedra, El Estaño en Bolivia seguido de un Apéndice y de Apuntes sobre el bismuto, 584 †
Ballore, F. de Montessus de, Description sismique de l'Empire Russe, 694 †
Baltic—
Mittelwasser der Ostsee bei Travemünde, etc., von Dr. A. Westphal, 484 †
Waterway from the, to the Black Sea, Mr. Woodhouse on the, 555
Baluchistan and Afghanistan, An Orographic Map of, by Sir T. Holdich, 527 *
Banda island and sea, 111, 550, 551
Bandar Abbas, Persian Gulf, 211
Banks, Sir J., and Dr. D. Solander, Illustrations of the Botany of Captain Cook's Voyage Round the World, 254 †
Baram district, Borneo, 39, 53
Baratta, M., Sullo stato presente dei vulcani eolici, 572 †
Barbadoes, Report for 1899 (Colonial Rep.), 702 †
Barbour, E. H., Glacial Grooves & Striæ in South-Eastern Nebraska, 584 †
Barcelona, Trade of (Foreign Office Rep.), 694 †
Baring-Gould, Edith, With Note-book and Camera, 707 †
Barnes et Holroyd, MM., La Blue-John-Mine à Castleton (Angleterre), 695 †
Baro river, Sobat basin, 476
Baroda district, Abyssinia, 297
Barometer—
Ein neues Barometer, von Dr. K. T. Fischer, 493 †
Barré, P., La Chine entr'ouverte, 122 †; Djibouti et Obock, 367 †
Barrett, R. L., The Sundal Drainage System in Central Norway, 572 †
Barrows, D. P., The Colorado Desert, 582 †
Barthold, W., Russische Arbeiten über Ostasien, 486 †; Russische Arbeiten über Westasien, 579 †
Bartholomew, J., Commercial Map of South America, 263 †; Special Map of China, Japan, and Korea, 262 †; Reduced Ordnance Survey of England and Wales, 134 †, 708 †; Reduced Ordnance Survey of Ireland, 262 †
Baschin, O., Bibliotheca Geographica, 706 †; Die Entstehung der Dünen, 704 †
Bastard, G., Une ville du Niger, Dienné, 250 †
Bastion mountains, Patagonia, 36
Basu, B. C., Note on the Lac Industry of Assam, 365 †
Basutoland—
Expedition to the Mont Aux Sources, by T. L. Fairclough, 124 †
Report for 1898 (Col. Reports), 124 †
Batavia—
Map: Topographische Kaart der Residentie Batavia (Netherlands Government), 137 †
Batoum and District, Trade of (Foreign Office Rep.), 366 †
Batu Lawei peak, Borneo, 39
Bauendal, Captain, Arctic Expedition of, 356
Baumann, Dr. Oskar, von Dr. M. Haberlandt, 494 †
Baumstark, Lieut., Die Warangi, 250 †
Bavaria—
Trade, Agriculture, and Finances of (Foreign Office Rep.), 570 †
Bavio, D. E. A., La Llanura argentina, 584 †
Baxendell, J., The Fernley Observatory, Southport, Report, etc., 246 †
Baye, Baron de, En nouvelle Russie, 363 †
Beach Cusps, The Origin of, By J. C. Branner, 704 †
Bear island—
Oberdevonische Flora der Bären Insel, von A. G. Nathorst, 586 †
Beazley, C. R., New Light on some Mediæval Maps, 319 *, 375 †, 705
Behaim's account of Diogo Cão's second voyage, 633

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [409v] (171/232)

Behrens, Dr. W., Am Nordrande der Sahara, 251 †
Beira, Trade of (Foreign Office Rep.), 369 †, 581 †; note on, 351
Beirut and Coast of Syria, Trade of (Foreign Office Rep.), 579 †
Belck, Dr. W., und Dr. C. Lehmann, Reisebriefe von der Armenischen Expedition der, 579 †
Bell, C. N., Macquarie Harbour, 586 †
Bell, Dr. R., The Geological History of Lake Superior, 582 †
Benadir coast of Somaliland, 104
Benest, H., Fleuves sous-marins, 704 †
Bengazi, Trade of (Foreign Office Rep.), 700 †
Benham, —, Trade of Italy, 244 †
Benn, Captain R. A. E., Photographs taken during Journey from Quetta to Europe, 596 †
Ben Nevis, Meteorology of, in clear and foggy weather, by J. Y. Buchanan, 695 †
Bennigsen, Herr v., Reise zum Zwecke der Uebernahme des Inselgebietes der Karolinen, Palau und Marianen, 127 †; visit to the North Coast of New Britain, 565
Bent, Mr. and Mrs. Theodore, Southern Arabia, review, 101
Bentley, Rev. W. H., Pioneering on the Congo, 367 †
Berg, A., Litteraturbericht zur Landes- und Volkskunde Thüringens, 243 †
Bergamo Alps—
Guida-Itinerario alle Prealpi Bergamasche, by M. Hoepli, 362 †
Bergholz, P., Ueber Bildungsstätten . . . der Orkane des "Fernen Ostens," 122 †
Bergmann, Dr. K., Die Volksdichte der Hessischen Provinz Starkenburg, 243 †
Bering Sea—
Ice and Ice Movements in, by J. Page, 373 †; note on, 110
Bermuda—
Geology of the Bermudas, Notes on the, by A. E. Verrill, 125 †
Bernal, —, Trade of Pomerania, 243 †
Bertacchi, C., L'Italia e il suo Mare, 704 †
Bertolini, Prof. G. L., Della linea e dei fiumi di resorgiva in relazione al territorio veneto, 572 †
Bertrand, Marcel, Déformation tétraédrique de la Terre, 130 †; New Geomorphological Theory of, 232
Bertrand, Prof. A., Methods of Survey employed by the Chilean Boundary Commission in the Cordillera of the Andes, 329 *, 704 †; remarks on "The Patagonian Cordillera and its Main Rivers," 210
Berzeviczy, G. F. von, von S. Weber, 590 †
Betz, Dr. H., Ein Ausflug nach den Yangtze-Grotten, 486 †
Bevan, T. F., Did De Quiros land in Queensland? 494 †, 479
Bezold, W. von, Zur Thermodynamik der Atmosphaere, 130 †
Bibliography—
Americana, Iles Philippines, 590 †
Neuvième Bibliographie Géographique Annuelle, par L. Raveneau, 591 †
Société de Géographie de Lille, Liste des Conférenciers, par E. Cantineau, 591 †
Bibliotheca Geographica, von O. Baschin, 706 †
Bigelow, F. H., Work of the Meteorologist for the Benefit of Agriculture, Commerce, and Navigation, 584 †
Big Game—
Sette Anni di Caccia Grossa e Note di Viaggio in America, Asia, etc., by F. Scheibler, 133 †
Bilbao and District, Trade of (Foreign Office Rep.), 695 †
Biography—
Dictionary of National Biography, edited by Sidney Lee, 132 †, 494 †
Geographische Nekrologie für die Jahre 1898 und 1899, von Prof. Dr. W. Wolkenhauer, 132 †
Biology—
New Creatures for Old Countries, 493 †
Birdwood, Sir George, Etymology of Africa and Ophir, 134 †
Bishop, Mrs. J. F., The Art of Travelling, 592 †
Bizerta—
Bizerte, Les souvenirs du passé, par R. Castaing, 700 †
Blanchet, M., Expedition to Adrar, 227, 683
Bleicher, M., Sur la dénudation de l'ensemble du plateau lorrain, etc., 243 †
Blücher mountains, New Guinea, 269
Bludau, A., Erdumrisskarte in flächentreuer Planisphäre, 137 †
Blumentritt, F., Die Igorroten von Pangasinan, 578 †
Blundell, H. W., A Journey through Abyssinia to the Nile, 124 †
Blunt, G., General Intelligence Papers, 375 †
Boddy, Rev. A. A., From the Egyptian Ramleh, 124; † Days in Galilee and Scenes in Judæa, 698 †
Boegner et Germond, M. M., Rapport sur la Délégation à Madagascar, 581 †
Boers—
Premiers Boers, Les, par E. Fournier de Flaix, 125 †
Bogdanovich, M., Expedition to Okhotsk and Kamchatka, 222
Bohemia, North-West, German and Czech in, Dr. J. Zemmrich on, 553
Böhm, Dr. A., Die alten Gletscher der Mur und Mürz, 483 †
Bohn, F., Le développement économique de nos Colonies de l'Afrique occidentale, 368 †
Bokhara, by W. R. Rickmers, 366 †; A Journey through the Khanate of Bokhara, by Mrs. Rickmer Rickmers, 248 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000029

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

410

Boldt, R., Ortbeskrifningen i Finland på 16- och 1700-talen, 245 †
Bolivia—
Cordillera Real of Bolivia, Notes on a Map of Part of the, by Sir Martin Conway, 126 †
Eastern: M. Cerceau's Explorations in, 564
Estaño en Bolivia seguido de un Apéndice y de Apuntes sobre el bismuto, por M. V. Ballivian y B. Saavedra, 584 †
Memoria que presenta el Secretario General de Estado a la Convencion Nacional, 126 †
Road to Bolivia, by W. E. Curtis, 490 †
Southern: Railway Project in, 565
Bonaventure, Père, L'Islande, 571 †
Bonchamps, M., Résultats géographiques de la mission de, par C. Michel, 580 †; note on, 476
Bonin, C. E., journey in Central Asia, 99; Note sur les anciennes Chrétientés nestoriennes de l'Asie Centrale, 575 †
Bonney, Prof. T. G., Colonel Feilden's Contributions to Glacial Geography, 495 †
Bonnier, G., Remarques sur les variations des limites de la région méditerranéenne, 245 †
Boran highlands, East Africa, 604
Borchgrevink, C. E., The *Southern Cross* Expedition to the Antarctic, 381*, 569; map of South Victoria Land, note on, 567
Bordeaux—
Bordeaux et l'esprit Colonial, par M. P. Foncin, 243 †
Trade of (Foreign Office Rep.), 243 †
Bordeaux Geographical Society—
Vingt-cinq années de la Société de géographie commerciale de Bordeaux, par M. J. Manès, 259 †
Borelli, G., Le Dahomé, ressources économiques et avenir commercial, 368 †
Börgen, Dr. C., Ueber die Auflösung des Zweihöhen-Problems nach einer Näherungsmethode von Raper, 256 †
Borissoff, Lieut., expedition to Novaya Zemlya, 689
Borneo—
Balik Papan, Bay of, Mr. H. Richards' account of, 474
Brunei and Sarawak, Trade of (Foreign Office Rep.), 697 †
Handelsverhältnisse auf Borneo und in Niederlandisch-Indien, von Dr. H. Breitenstein, 697 †
In the Heart of, by Ch. Hose, 39*, 578 †
Tweede reis van Pontianak naar Samarinda, door Dr. A. W. Nieuwenhuis, 366 †
Borneo and Java—
21 Jahre in Indien, Erster Theil: Borneo, Zweiter Theil, Java, von Dr. H. Breitenstein, 697 †
Bosnia and Hercegovina—
Morphologische und glaciale Studien aus Bosnien und Hercegovina, von Dr. J. Cvijić, 483 †
Reisebilder aus Bosnien und der Hercegovina, von Dr. M. Bräss, 483 †
Boston—
Trade of (Foreign Office Rep.), 583 †
Bosworth, G. F., Philips' County Readers: Kent, Past and Present, 695 †
Botanical Geography—
Géographie botanique et son évolution au XIXe siècle, par M. A. Masclef, 493 †
Boussinesq, J., Problème du refroidissement de la croûte terrestre, 373 †
Bower, T. B., Large-scale Map of the Southern Transvaal and Northern Orange River Colony, 709 †
Bowes, Alderman I., Barrage of the Nile, 488 †
Bracq, Prof. J. C., The Colonial Expansion of France, 376 †
Brady, —, Report on Alaska, 701 †
Brahmaputra—
Wild Tribes of the Brahmaputra Valley, Physical Types . . . of the, by Major L. A. Waddell, 247 †
Branner, J. C., Ants as Geologic Agents in the Tropics, 126 †; The Origin of Beach Cusps, 704 †
Bräss, Dr. Martin, Reisebilder aus Bosnien und der Hercegovina, 483 †
Brazil—
Ants as Geologic Agents in the Tropics, by J. C. Branner, 126 †
Céará et Amazonie, por D. Guilmot, 127 †
Italiani nel sud dello Stato di Sta. Caterina, del G. Pio di Savoja, 372 †
Minas Geraes nel Brasile, Lo stato di, del E. Negri, 127 †
Revista commemorativa do Quarto Centenario do Brazil, 490 †
Voyage au Trombetas, par O. Coudreau, 490 †
Breitenstein, Dr. H., Die Handelsverhältnisse auf Borneo und in Niederlandisch-Indien, 697 †; 21 Jahre in Indien, 697
Bremer, O., Ethnographie der germanischen Stämme, 484 †
Brenkelman, J. B., De beslissing in het Britisch Venezuelaansch Grensgeschil, 127 †
Bretschneider, Dr. E., Potanins letzte Reise in West-China, 122 †; The Russian Territory in the Liao-tung Peninsula, 486 †
Brick, Dr. C., Die Provinz Westpreussen und ihre Naturdenkmäler, 485 †
Bridgman, H. L., on Peary's Work, 492 †
Bright, Major R. G. T., remarks on "An Expedition between Lake Rudolf and the Nile," 624
Brincker, P. H., Die Eingeborenen Deutsch-Südwest-Afrikas nach Geschichte, Charakter, etc., 488 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008f

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [410v] (173/232)

British Agreement with Tonga, 108
British Association, Bradford, Proceedings of, 441; Address to the Geographical Section of the, by Sir G. S. Robertson, 447 *
British Colonies—
Statistical Tables relating to the Colonial and other Possessions of the United Kingdom, 133 †
British Columbia—
Glaciers in, Additional Observations on, by G. and W. Vaux, 252 †; note on, 687
Illicilliwaet, Great Glacier of the, by George and W. S. Vaux, 125 †
Mining Districts near Kamloops Lake, by G. F. Monckton, 125 †
British Guiana and Venezuela—
Britisch Venezuelaansch Grensgeschil, door Mr. J. B. Brenkelman, 127 †
British Islands: *see* United Kingdom
Brittlebank, C. C., The Rate of Erosion of some River Valleys, 589 †
Broden, Dr. A., De l'influence des températures élevées sur l'organisme humain, 591 †; La Malaria d'après les dernières recherches des Italiens, 134 †
Brosch, G. R. von, Prof. Dr. Nansen und Payer's Karte von Franz Josef-Land, 128 †; on Payer's Map of Franz Josef Land, 109
Brose, M., Die deutsche Koloniallitteratur im Jahre 1898..260 †
Bruce, W. S., Proposed Scottish National Antarctic Expedition, 255 †; Spitsbergen 1898 and 1899..587 †
Brückner, Dr. E., Die Schweizerische Landschaft einst und jetzt, 573 †
Brunhes, Jean, L'Homme et la Terre cultivée, 131 †
Bruun, D., Arkæologiske Undersøgelser paa Island, 244 †
Buchan, Dr. A., The Annual Rainfall of Scotland from 1800 to 1898..364; Tidal Currents of the North Sea, 704 †
Buchanan, J. Y., The Meteorology of Ben Nevis in Clear and Foggy Weather, 695 †
Buchenstein Valley, Wedges of lower and middle Trias above the Plane of Overthrust in, 462
Buchet, G., Planktonmétre pour pêches pélagiques à grande vitesse, 374 †
Buddhist Monastery at Sohnag, by V. A. Smith, 487 †
Buenos Ayres—
Annuaire statistique de la ville de, 702 †
Trade of Consular District of (Foreign Office Rep.), 584 †
Bulgaria—
Trade of (Foreign Office Rep.), 570 †
Bülow, W. V., Die Namen der Samoa-Inseln, 491 †
Burckhardt, Dr. C., Profils géologiques transversaux de la Cordillere Argentino-Chilienne, 701 †
Burma—
Arracan Expedition, 1825..365 †
Burma, by Max and Bertha Ferrars, 365 †
Burmah-China Railway, by W. Sherriff, 696 †
Burma-Sechuan Railway, Captain E. C. Pottinger's surveys for the, 680, 681
Geology of the Country along the Mandalay-Kunlon Ferry Railway route, by P. N. Dutta, 577 †
Tables for the Transliteration of Shan Names into English, 696 †
Bussorah, Trade of (Foreign Office Rep.), 367 †

C.

Cables—
Projets de Cables, Les, par M. G. Demanche, 131 †
Cabot—
El "Sebastian Gaboto" de Henry Harrisse, por S. A. Lafone Quevedo, 131 †
Cagayan Sulu and Sibutu islands, Cession of, to the United States, 683
Caix, R. de, La marche vers le Touât, 251 †
Calbuco volcano, Patagonia, 33
Calcutta as a Seaport, The Life of, letter from Major-General J. G. R. Forlong on, 238
California—
Alpine Glaciers of the Sierra Costa Mountains in, by O. H. Hershey, 252 †
Basse-Californie d'après M. L. Diguet, 371 †
Earthquakes in, by C. D. Perrine, 490 †
International Competition for the Phœbe Hearst Architectural Plan for the University of California, 133 †
Calvert, Ed., Gaping Ghyll Hole, 246 †
Cameroons—
Southern, Baron von Stein's surveys in the, 562
Campbell, Dr. John, Decipherment of the Hieroglyphic Inscriptions of Central America, 585 †
Camperio, Manfredo (Biography), 132 †; par Dr. E. Schweinfurth, 590 †
Canada—
Chesterfield Inlet to Great Slave Lake, Journey from, by David T. Hanbury, 63 *, 479, 489 †
Ethnological Survey of, Report of the Committee, 252 †
Geological Survey of: Catalogue of Canadian Birds, by J. Macoun, 370 †; Preliminary Report on the Klondyke Gold Fields, by R. G. McConnell, 370 †; Summary Report of the, 489 †
Historical Publications relating to, edited by Prof. G. M. Wrong and H. H. Langton, 252 †
Interior, Department of the, Annual Report, 582 †; note on, 563

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a5

مكتبة قطر الوطنية
Qatar National Library

Canada—*continued.*
Iroquois Beach, The, by Prof. A. P. Coleman, 582 †
Maps: Sectional Map of, 379 †
Minerals of Canada, Descriptive Catalogue of a Collection of the, in the Paris Exhibition, 582 †; Economic Minerals, Paris International Exhibition, by G. M. Dawson, 489 †
Photographs of the North-West Territories of, by D. T. Hanbury, 139 †
Surveys and Museums, by B. E. Walker, 489 †
Tides and Currents in Canadian Waters, Survey of, by W. Bell Dawson, 582 †
Voyages au Canada du Baron de La Hontan, par F. de Nion, 489 †
Yukon River in Canada, The Basin of the, by J. B. Tyrell, 370 †
Canada and the United States, Relief Map of (Geological Survey of Canada), 137 †
Canary Islands, Trade of the (Foreign Office Rep.), 488 †
Cantineau, E., Société de Géographie de Lille, Liste des Conférenciers, 591 †
Cão, Diogo, and Bartholomeu Dias, Voyages of, 1482–88 .. 625 *; Appendix on the Maps illustrating the, 649; List of Place-names, 651
Cape Colony—
Cape National Forests, by D. E. Hutchins, 367 †
Cape of Good Hope, Report of Her Majesty's Astronomer at the, 474, 488 †
Cape to Cairo, *Daily Telegraph* Expedition from, 351, 558
Capenny, S. H. F., An Indo-European Highway, 575 †
Caperon, M., Sainte-Pierre et Miquelon, 701 †
Caracas & District, Trade of (Foreign Office Rep.), 702 †
Carles, W. R., The Grand Canal of China, 247 †
Carlheim-Gyllensköld, V., Die Aufgabe der modernen Geodäsie, 129 †; Travaux de l'expédition suédoise au Spitzbergen, 256 †
Carmichael and Tomassini, Trade of Leghorn and Ancona, 244 †
Carne, J. E., Mercury or "Quicksilver" in New South Wales, 491 †
Carolina, South, Trade and Industry of, Report on, 354
Caroline Islands—
Núkuóro oder Monteverde-Inseln (Karolinen), von J. Kubary, 491 †
Reise zum Zwecke der Uebernahme des Inselgebietes der Karolinen, Palau und Marianen, von Bennigsen, 127 †
Carter, Prof. O. C. S., Coastal Topography of the United States, 126 †
Cartography—
Bevölkerungsstatistische Grundkarten, von Prof. Dr. A. Hettner, 129 †
Cartography of the Terra Australis and New Holland, by J. B. Walker, 590 †
Cartography—*continued.*
Eisenbahnnetzes, Berechnung der Dichte des, von Dr. L. Henkel. 129 †
Foreign Topographic Maps, by Colonel Sir John Farquharson, 129 †
Notice Historique succincte sur la Cartographie, par M. A. Lejeaux, 587 †
Proiezioni cartografiche cicloidali, Nota di M. Fiorini, 129 †
Table des Légendes latines, hollandaises et italiennes d'un Atlas Ancien contenant des Cartes hydrographiques, etc., 492 †
Ueber Historiche Grundkarten, von K. Lamprecht und R. Kötzschke, 492 †
Unechtcylindrische und unechtkonische flächentreue Abbildungen, von Prof. Dr. E. Hammer, 129 †
War Maps, by Colonel Sir T. H. Holdich, 492 †
Casablanca, Bearbeitet nach dem Reisebericht S.M.S. *Charlotte*, 369 †
Castaing, R., Bizerte: Les souvenirs du passé, 700 †
Castello de S. Jorge da Mina, 626
Catalogue—
Inventaire Sommaire des Archives historiques, Ministère de la Guerre, 133 †
Caucasia, Railway in, 224
Caucasus—
Batum and District, Trade of (Foreign Office Rep.), 366 †
Pflanzenverbreitung in den Kaukasusländern, von Dr. Gustav Radde, 123 †
Sammlungen des Kaukasischen Museums, von Dr. G. Radde, 366 †
Celebes sea, depths of the, 551
Census-taking and its Limitations, On, by J. A. Baines, 131 †
Cerceau, M., explorations in Eastern Bolivia, 564
Ceylon—
Anurádhapura sous les rois cinghalais, par J. Leclercq, 575 †
Séjour dans l'Ile de Ceylan, par J. Leclercq, 696 †
Chaco Boreal, the Land and the People, by W. B. Grubb, 491 †
Chad, Lake—
Autour de lac Tchad, 582 †
French Explorations in the Region of, 349
M. Foureau's route round, 557
Chaix, Paul, Marco Polo, 494 †
Chamberlain, A. F., Primitive Nature Study, 590 †
Chamberlin, Prof. T. C., An attempt to test the Nebular Hypothesis by the relations of masses and moments, 129 †
Chamonix and the Range of Mont Blanc, by Ed. Whymper, 119 †
Champlain, Samuel, Vie de, par G. Gravier, 494 †
Chanourdie, E., Las Inundaciones en el Rio Negro, 702 †
Charleston and District, Trade of (Foreign Office Rep.), 253 †; note on, 354

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000074

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Charts, New—
Admiralty, 138, 499, 711
Cancelled, 139, 499, 711
Corrected, 139, 499, 712
United States Hydrographic, 139, 264, 500, 595, 712
Chatelier, A. Le, Le Bassin minier du Niari, 580 †
Chattanooga District, Physiography of the, by C. W. Hayes, 371 †
Chefoo, Trade of (Foreign Office Rep.), 576 †
Chekiang—
Escursione nel Ce-kiang settentrionale, del L. Vannutelli, 486 †
Chesterfield Inlet to Great Slave Lake, A Journey from, by D. T. Hanbury, 63 *, 479, 489 †
Che-tang plain, Sechuen, 532
Chevalier, Père, geographical work of, in China, 556
Chewings, Hannah, Amongst Tropical Islands, 491 †
Chicago—
Mollusca of the Chicago Area, The Pelecypoda, by F. C. Baker, 583 †
Trade of (Foreign Office Rep.), 253 †
Chile—
Chilenische Reñihué-Expedition, von Dr. Paul Krüger, 372 †
Departement Taltal, von L. Darapsky, 702 †
Ferrocarriles de Chile, por J. V. Jiménez, 585 †
Spanish explorations in, 15
Trade of (Foreign Office Rep.), 585 †
Chilean Boundary Commissions in the Cordillera of the Andes, Methods of Survey employed by the, by Prof. A. Bertrand, 329 *
Chi-li, Province of, Short Military Report on the, 486 †
Chiloe island, South America, 16
China—
A Sárkányok Országából, by M. Cholnoky, 575 †
Anthropologie des Chinois du Nord, Notes sur l', par J. de Talko-Hryncewicz, 122 †
Aufstand der Boxer, von H. Feigl, 575 †
Bevölkerungsfrage Chinas, Kritische Studien zur, von E. M. Köhler, 122 †
Chemin de fer de Peking à Nieoutchouang, par M. A. Fauvel, 486 †
Chi-li province, Short Military Report on the, 486 †
China and Her People, by Commander H. Webster, 575 †
China and the Present Crisis, by J. Walton, 696 †
China, the Long-lived Empire, by Eliza R. Scidmore, 486 †
Chine entr'ouverte, par Paul Barré, 122 †
Chine d'après des auteurs récents, par G. de Leval, 122 †
Chine qui s'ouvre, par R. Pinon, 486 †
China—*continued.*
Fleuve Bleu de Sui-fou à la hauteur de Tali-fou, par le Vicomte de Vaulserre, 247 †
French Jesuits, Geographical Work of the, in China, 556
Géographie générale des provinces Chinoises voisines du Tonkin, par M. A. Leclère, 122 †
Gordon's Campaign in China, by Himself, with Introduction, etc., by Colonel Vetch, 576 †
Grand Canal of, by W. R. Carles, 247 †
Imperial Maritime Customs, Medical Reports, 576 †
Kustenkunde von China, Zur, von Kapt. Lans, 486 †
Maps: Atlas de l'Empire Chinois, par C. Madrolle, 262 †; W. & A. K. Johnston's Map to illustrate the Chinese Question, 378 †; Imperial Railways of North China, by C. W. Kinder, 378 †; Nordöstlichen China, von F. v. Richthofen, 708 †; Théâtre des Opérations en Chine, Environs de Pekin (Service Geo. de l'Armée), 594 †
"Overland" to China, The, by A. R. Colquhoun, 485 †
Peking nach Ch'ang-an und Lo-yang, Vom, von A. Forke, 486 †
Population of, Herr E. M. Köhler's estimate of, 100
Potanins letzte Reise in West-China, von Dr. E. Bretschneider, 122 †
Problem in China and British Policy, by A. R. Colquhoun, 485 †
Problems in China, by J. M. Hubbard, 575 †
Railway Surveys in, 345
Resources of, Development of the, Mr. G. Chisholm on, 445
San-tou-ao, Le nouveau port de, par M. A. Fauvel, 247 †
Sphères d'influence en Chine, 575 †
"Things Chinese," by Captain W. A. S. Wingate, 122 †
Western China, A Recent Survey in, by Captain E. C. Pottinger, 575 †
Yangtse Valley and Sechuan, Photographs of the, by R. L. Jack, 500 †
Zi-ka-wei, Mission de, L'œuvre géographique de la, par A. A. Fauvel, 575 †; note on, 556
China, Japan, and Korea—
Bartholomew's Special Map of, 262 †
Stanford's Map of, 378 †
China Seas—
En Croisière: Deux ans dans les mers de Chine, 576 †
Chinde, Trade of (Foreign Office Rep.), 581 †
Chinkiang, Trade of (Foreign Office Rep.), 576 †
Chiperoni, Central Africa, 166
Chisholm, G. G., on the Development of the Resources of China by modern methods, 445

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000045

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [412r] (176/232)

BRITISH LIBRARY

Cholnoky, M., A Sárkányok Országából, 575 †
Christiansen, Cape, East Greenland, 664
Christy, Miller, The Silver Map of the World, review, 113
"Chronometer" Tables, by P. L. H. Davis, 587 †
Church Missionary Society, Proceedings of the, for Africa and the East, 495 †
Cibils, F. R., Ferrocarriles proyectados en el Neuquen, 702 †
Cisneros, C. B., and R. E. Garcia, El Perú en Europa, 491 †
Cisnes river, Patagonia, 198
Ciudad Bolivar, Trade of (Foreign Office Rep.), 254 †
Claparède, A. de, Corfou et les Corfiotes, 361 †; Les Reliefs Perron, 703 †
Classical Maps—
Murray's Handy Classical Maps, edited by G. B. Grundy, 134 †, 234
Clements, J. M., and H. L. Smyth, The Crystal Falls Iron-bearing District of Michigan, 371 †, 583 †
Cleve, P. T., On the Origin of "Gulf Stream Water," 130 †; On the Seasonal Distribution of some Atlantic Plankton-organisms, 130 †
Climatological Maps—
Methode zur Berechnung klimatologischer Mittelwerthe von Flächen, von Dr. W. Meinardus, 493 †
Climatology—
Climat des Hauteurs de l'Europe occidentale, par A. Woeikof, 257 †
Comparative Studies in Climate, Prof. Hildebrandsson on, 234
Clinton Golden Lake, North Canada, 70
Coast-dwellers—
Kustfolks olika sjoduglighet, af H. H. von Schwerin, 375 †
Cochamo valley, Patagonia, 35
Codrington, Robert, award to, 117; A Journey from Fort Jameson to Old Chitambo and the Tanganyika Plateau, 124 †
Cöetlogon, —, Trade of Charleston and District, 253 †
Cohn, Dr. F., Ableitung der Declinationen und Eigenbewegungen der Sterne für den Internationalen Breitendienst, 587 †; Geographische Ortsbestimmungen von Dr. Kersting im Hinterlande von Togo, 368 †
Coleman, Prof. A. P., The Iroquois Beach, 582 †
Coles, John, award to, 99; retirement of, 2
Colin, P., Positions géographiques . . . sur la côte orientale de Madagascar, 368 †
Collection of Insects, etc., made in Somaliland by C. V. A. Peel, 370 †
Colombia and Costa Rica, The Boundary between, 564
Colonial Publication, New, 358
Colorado—
Life on the Colorado Plateaus, by R. Dodge, 252 †
Colorado Desert, The, by D. P. Barrows, 582
Colquhoun, A. R., Afghanistan: the key to India, 246 †, 485 †; The "Overland" to China, 485 †; The Problem in China and British Policy, 485 †; Russian Central Asia: Countries and People, 248 †; The Renascence of South Africa, 700 †
Comoro Group—
Notice sur Mayotte et les Comores, par E. Vienne, 699 †
Compass—
Appunti storici intorno all' uso topografico ed astronomico della bussola, del P. T. Bertelli, 259 †
Congo—
Bend of the Congo, M. Rue's Explorations within the, 562
Bilans Congolais, par A. Poskin, 249 †
Cão's voyage to the, 629 †
Currents of the mouth of, Commander Purey-Cust on, 349
Expédition aux sources du, par Capt. Lemaire, 249 †
Expedition to the Mouth of the Congo, under Captain Lemaire, 684
Frontier, Congo-German, in the Kivu Region, 105
French: La Mission Fourneau, 250 †; Le problème du Wam, par A. J. Wauters, 250 †; Les sources du Chari, 251 †; Organization of, 684
Léopoldville am Stanley Pool, Die Entwickelung von, 699 †
Padrõe of St. Jorge erected by Cão, 630
Pioneering on the Congo, by Rev. W. H. Bentley, 367 †
Régime foncier dans l'État Indépendant du Congo, par Dr. Anton, 580 †
Région des bas-fonds de l'ancienne mer intérieure du haut Congo, 367 †
Sources du, par A. J. Wauters, 580 †
Telegraph on the, progress of the, 229
Conway, Sir Martin, Hudson's Voyage to Spitsbergen in 1607..256 †; Notes on a Map of Part of the Cordillera Real of Bolivia, 126 †; remarks on "Methods of Survey employed by the Chilean Boundary Commissions," 344; Some unpublished Spitsbergen MSS., 373 †; The Southern Andes: an Orographical Sketch, 253 †
Coode, J. C., and W. Matthews, Dover Harbour Works, 363 †
Cook Archipelago, Annexation of, 565
Cook, Captain, Memento of the death of, 691
Cook, F. A., Through the First Antarctic Night, 703 †
Cook Islands, Report for 1899 (Colonial Rep.), 703 †
Cook's Voyage round the World, Illustrations of the Botany of, by Sir J. Banks and Dr. D. Solander, 254 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Cooke, —, Coal Crisis in Russia, 245 †
Cooke, John, Handbook for travellers in Ireland, 574 †
Copenhagen, the capital of Denmark, published by the Danish Tourist Society, 242 †
Cordeiro, F. J. B., Tropical Hurricanes, 493 †
Corfu—
Corfou et les Corfiotes, par A. de Claparède, 361 †
Cornish, Vaughan, award to, 117; Formation des Dunes de Sable, 258 †; On Desert Sand-dunes bordering the Nile Delta, 250 †
Corona and Coronet, being a narrative of the Amherst Eclipse Expedition to Japan, by Mabel L. Todd, 592 †
Correvon, H., La Vallée de Tourtemagne, en Valais, 695 †
Corsica—
Trade of (Foreign Office Rep.), 243 †
Corunna and District, Trade of (Foreign Office Rep.), 245 †
Costa Rica and Colombia, The Boundary between, 564
Cotton, General F. C., Irrigation in India, 697 †
Coudray, M. Lallier du, Madagascar au point de vue économique, 251 †
Coudreau, O., Voyage au Trombetas, 490 †
Courtaux, E., y F. V. Guzmán, Tratado de Geografia Commercial, 591 †
Craigie, Major P., Address to the Economic Science and Statistics Section of the British Association, 705 †
Crawford, R. F., The Food Supply of the United Kingdom, 121 †; note on, 220
Creak, Captain, remarks on the *Southern Cross* Expedition to the Antarctic, 412
Crepy, M. Paul, Vingt ans de présidence de, Société de Géographie de Lille, 132 †
Crimea—
In the Haunted Crimea, by M. M. Norman, 363 †
Cromer, Lord, report on Finances, etc., of Egypt in 1899.. 102
Cross, Cape, Cão's padrõe erected at, 633, 634
Crust-torsion, The Origin of Land-forms through, by M. M. Ogilvie Gordon, 457 *
Cuba—
Census, Results of the, by H. Gannett, 491 †
Trade of (Foreign Office Rep.), 585 †
Cuinet, Vital, La Turquie d'Asie, 248 †
Cupet, Captain, work of, in the Pavie Mission in Indo-China, 473; Voyages au Laos et chez les Sauvages du sud-est de l'Indo-Chine, 248 †
Curaçoa, Trade of (Foreign Office Rep.), 254 †
Currents—
Australian Waters and the Southern Ocean, Mr. H. C. Russell's Observations on currents in, 689
Currents—*continued*.
Current Papers, No. 4, by H. C. Russell, 374 †; note on, 689
Gulf of St. Lawrence, *Régime* of the currents in the, 685
Under-currents in the River Congo, Report on the, by Commander H. E. Purey-Cust, 258 †
Curtin, Margaret H., Some Common Geographical Definitions, 260 †
Curtis, W. E., The Road to Bolivia, 490 †
Curtius, E., und J. A. Kaupert, Karten von Attika, 496 †
Curzon, Baron, Ancient Monuments in India, 577 †
Cvijić, Prof. J., Die Macedonischen Seen, 246 †; La période glaciaire dans la péninsule des Balkans, 483 †; Morphologische und glaciale Studien aus Bosnien, der Hercegovina und Montenegro, 483 †; Researches in Macedonia and Southern Albania, 215 *
Cyclades, Trade of the (Foreign Office Rep.), 244 †
Cyclones—
Combinaison des effets des révolutions synodique et tropique de la Lune, par M. A. Poincaré, 493 †
Tropical Hurricanes, by F. J. B. Cordeiro, 493 †
Czirbusz, Dr. G., Am Ozernya-See, 571 †

D.

Dahome—
Dahomé, ressources économiques et avenir commercial, par G. Borelli, 368 †
Notice sur le, par J. Fonssagrives, 699 †
Daily Telegraph Expedition in Central Africa, 331, 558
Daish, W., Melbourne to Tokio, 486 †
Dakhilah, Oasis of, 655
Dakota—
South, Moraines of, by J. E. Todd, 584 †
Dale, T. N., The Slate Belt of Eastern New York and Western Vermont, 371 †
Dal Piaz, Dr. G., Grotte e fenomeni carsici del Bellunese, 571 †
Dampier, William, Leben und Werke, von Dr. P. Verbeek, 494 †
Danckelman, Dr. A. v., Klima von Neu-Guinea, 255 †
Danga Bash or Tashkurgan river, 519
Danish Expedition to the Pamirs under Lieut. Olufsen, 99
Danish Expedition to East Greenland, 231; Danish East Greenland Expedition in 1900, by Lieut. G. C. Amdrup, 662 *
Danish Ingolf-Expedition, 374 †
Dantz, Dr., Ergebnisse der geologischen Expedition der, 250 †; Geological work in Northern Nyasaland, 106
Darapsky, L., Das Dapartement Taltal, 702 †
Darton, N. H., Report on the Geology and Water Resources of Nebraska, 371 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [413r] (178/232)

Date-Line—
Where the Day Changes, by Dr. W. Downing, 587 †
Davis, A. P., Water Supply for the Nicaragua Canal, 585 †
Davis, P. L. H., "Chronometer" Tables, 587 †; Star's and Sun's true bearings or Azimuth Tables, 492 †
Davis, Prof. W. M., Glacial Erosion in the Valley of the Ticino, 121 †; The Fresh-water Tertiary Formations of the Rocky Mountain Region, 371 †; Practical Exercises in Geography, 260 †
Davison, C., On some Minor British Earthquakes, 121 †
Dawson, G. M., Economic Minerals of Canada, 489 †
Dawson, S. E., The Lines of Demarcation of Pope Alexander VI., 494 †
Dawson, W. Bell, Illustrations of Remarkable Secondary Tidal Undulations . . . in the Region of Nova-Scotia, 125 †; Survey of Tides and Currents in Canadian Waters, 582 †
Dead Sea, The, by Gray Hill, 579 †; note on, 555; Dead Sea, The, by Major-General Sir C. Wilson, 698 †
Deane, H., Suggestions for depicting diagrammatically the Character of Seasons, etc., 588 †
Dearmer, Percy, Highways and Byways in Normandy, 120 †
Deasy, Captain H. H. P., Journeys in Central Asia, 141,* 501 *; remarks on receiving Medal, 115
De Barros, João, account of Bartholomeu Dias' voyage, 639
Deckert, Dr. E., Die Nordamerikanische Union als Weltmacht, 701 †
Dècle, M., expedition in Central Africa, 351, 558
Deep-sea Expedition, Dutch, 111, 549
Degree-measurement in Spitsbergen, 111, 567, 688
Delagoa Bay—
Delagoa-Bucht, Die, 125 †
De la Métherie's Contributions to the Science of Physical Geography, Prof. S. Günther on, 110
Delbrel, G., De Fez à l'Oranie à travers le pays des Ghiata, 581 †
Delgado, J. F. N., e P. Choffat, Carta Geologica de Portugal, 136 †
Demanche, M. G., Les projets de Cables, 131 †; Occupation d'In-Salah, 251 †
Demidoff, E., After Wild Sheep in the Altai and Mongolia, 696 †
Dempster, H. G., Railway Surveying with the Tacheometer, 256 †
Deniker, J., Les Races de l'Europe, 119 †; Les Races et les Peuples de la Terre, 493 †; Résultats . . . du voyage de M.M. Roborovsky et Kozlov en Asie centrale, 247 †
Denmark—
Copenhagen, the Capital of (Danish Tourist Society), 242 †
Danske Turistforenings Aarsskrift, 119 †
Nautical-Meteorological Annual, 119 †
Trade and Agriculture of (Foreign Office Rep.), 570 †
Depéret et Fourtau, MM., Sur les terrains neogènes de la Basse-Égypte, 580 †
Deposits—
Analyse mécanique des sols sous-marins, par J. Thoulet, 589 †
De Quiros—
Did De Quiros land in Queensland? by T. F. Bevan, 479, 494 †
d'Escayrac de Lauture, Comte, voyageur et explorateur français, par P. Durand-Lapie, 494 †
Devon and Cornwall—
Thorough Guide Series, North Devon and North Cornwall, etc., by C. S. Ward, 574 †
Dhofar, Mr. and Mrs. Bent's explorations in, 101
Dias, Bartholomeu, and Diogo Cão, Voyages of, 1482–88..625 *; Appendix on the Maps illustrating the, 649; List of Place-names, 651
Dicey, E., South African Reconstruction, 370 †
Dickenson, B., and A. Andrews, The "Diagram" Series of Geological Lantern Slides of Maps, 709 †
Dickson, H. N., The Circulation of the Surface Waters of the North Atlantic, 589 †; The Mean Temperature of the Surface Waters of the Sea round the British Coasts, 130 †
Diener, Prof. Dr. C., Ueber . . . die Structur der Südosttirolischen Dolomitstöcke, 119 †; Die geologischen Ergebnisse der Reisen von Baron E. Toll, 698 †
Dietel, Dr. P., Einiges über die geographische Verbreitung der Rostpilze, 374 †
Diguet, L., La Basse-Californie, 371 †
Diller, J. S., The Coos Bay Coal Field of Oregon, 371 †; Educational Series of Rock Specimens collected . . . by the U.S. Geological Survey, 490 †
Dinka tribe, Central Africa, 179
Djaushankuz valley, Shugnan, 671
Doby, M. V., La Navigabilité de la Loire, 360 †
Dodge, R., Life on the Colorado Plateaus, 252 †
Dolomites, Torsion Structure of the, 462, 463
Donaldson, Florence, Lepcha Land, or Six Weeks in the Sikhim Himalayas, 697 †
Donaldson Mountains, New Guinea, 269
Dorset—
Rainfall, etc., of, by H. S. Eaton, 574 †
Douglas, Hon. John, Past and Present of Thursday Island and Torres Straits, 128 †
Dove, Dr., Geographisches über den Kriegsschauplatz in Südafrika, 251 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000022

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Dover Harbour Works, by J. C. Coode and W. Matthews, 363 †
Downing, Dr. A., Where the Day Changes, 587 †
Doyle, P. J., Tifones del Archipiélago Filipino y mares circumvecines, 248 †
Doyle, K. D., The Rio Del Fuerte of Mexico, 582 †
Drapeyron, L., Le général Tricoche, 590 †
Duke of York island, Antarctic, 390
Dundas, —, Trade of German East African Coast Towns, 368 †
Dunn, E. J., Notes on the Dwyka Coal Measures at Vereeniging, Transvaal, 370 †
Dunraven, Earl of, Self-instruction in the Practice and Theory of Navigation, 703 †; note on, 690
Dunstan, B., Report on the Geological Features of the Country between Warren and Mount Lion, 586 †
Duponchel, A., Les actions planétaires et la température terrestre, 588 †; Les inondations et la charité collective, 120 †; Questions de politique coloniale, 590 †
Dupuy, Paul, Le Sol et la croissance de Paris, 484 †
Durand-Lapie, P., Le Comte d'Escayrac de Lauture, 494 †
Dutch East Indies—
Études scientifiques concernant les possessions Néerlandaises aux Indes Orientales, par C. M. Kan, 365 †
Guide à travers la section des Indes Néerlandaises, 375 †
Dutch *Siboga* Expedition to the Malay Archipelago, 111, 549 *
Dutta, P. N., Notes on the Geology of the country along the Mandalay-Kunlon Ferry Railway Route, 577 †

E.

Earth—
Configuration of the Earth's Surface, by Sir J. Lubbock, 257 †
Déformation tétraédrique de la Terre, par M. Bertrand, 130 †
Face de la Terre, par Ed. Suess, 130 †
Geological Age of the Earth, An Estimate of the, by J. Joly, 373 †, 588 †
Symétrie tétraédrique du globe terrestre, par M. de Lapparent, 130 †
Earthquakes—
Large Earthquakes recorded in 1899, by Prof. J. Milne, 443
Earth Temperature—
Jordtemperatur bestämningar, af T. Homén, 493 †
East Indies—
Maps: Atlas der Nederlandsche Bezittingen in Oost-Indie (Netherlands Government), 137 †
Eaton, H. S., Returns of Rainfall, etc., in Dorset, 574 †
Ebeling, Max, Der Ararat, 247 †
Ebers, G., Aegyptische Studien und Verwandtes, 488 †
Ebstorf Map—
Ebstorfkarte, eine Weltkarte aus dem 13 Jahrhundert, von Dr. Konrad Miller, 131 †
Eclipse—
Local Particulars of the Total Eclipse of the Sun, 1901..256 †
Total Eclipse of the Sun, 1900, by Prof. H. D. Todd and Prof. S. J. Brown, 260 †
Economics—
Comparaison du travail à la main et du travail à la machine, par E. M. Levasseur, 260 †
Ecuador—
Arc méridien de Quito, Reconnaissance de l', par E. Maurain, 491 †; Rapport sur le projet de revision de l', par M. Poincaré, 491 †; note on, 356
Education—
General Intelligence Papers, by G. Blunt, 375 †
Edwards, Alphonse Milne, par M. A. Grandidier, 259 †
Egerton, H. E., Sir Stamford Raffles, 590 †
Eggers, Lieut., Bericht über eine Reise nach dem Okavangogebiet, 580 †; note on, 561
Egnel, M., Le climat de la Suède et les causes des variations de climat, 695 †
Egypt—
Aegyptische Studien und Verwandtes, von G. Ebers, 488 †
Art de la fortification dans la haute antiquité égyptienne, par R. Weill, 367 †
Cairo and Egypt and Life in the Land of the Pharaohs, by H. J. Kemeid, 699 †
Desert Sand-dunes bordering the Nile Delta, by Vaughan Cornish, 250 †
From the Egyptian Ramleh, by Rev. A. A. Boddy, 124 †
Gold Mining in Egypt, Ancient and Prospective, by C. J. Alford, 367 †; note on, 557
Maps: Aufnahmen in der Östlichen Wüste von Ägypten, von G. Schweinfurth, 708 †; General Map of (Survey Department Public Works Ministry), 136 †; The Dakhla Oasis (Survey Department, Cairo), 595 †; The First or Assuan Cataract (Survey Department, Cairo), 595 †
Recensement Général de l'Égypte, 488 †
Redemption of, by W. Basil Worsfold, 367 †
Report by Lord Cromer on Egypt in 1899..102
Senussi and his threatened Holy War, by T. R. Threlfall, 124 †
Stone Implements, On a Collection of, made by Mr. Seton-Karr, by H. O. Forbes, 250 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009e

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [414r] (180/232)

Egypt—*continued.*
Terrains néogénes de la Basse-Egypte, par MM. Depéret et Fourtau, 580 †
Egypt and the Sudan—
Finances, Administration and Condition of, Reports . . . on, 488 †
Egyptian Text—
Mythological - Geographical Text, by Prof. Dr. A. Wiedemann, 494 †
Ekman, W., Ein Beitrag zur Erklärung und Berechnung des Stromverlaufs an Flussmündung, 258 †
Elba, Trade of (Foreign Office Rep.), 571 †
Elbe—
Elbestrom, sein Stromgebiet, etc., 571 †; review, 552
Ellesmere Land, Mr. Stein's expedition to, 689
Ellet, F., Long Kin Hole, 246 †
Emerald Mines of Northern Etbai, by D. A. Mac Alister, 537 *
Emerson, B. K., The Geology of Eastern Berkshire County, Massachusetts, 583 †
Empires, 850 B.C. to 330 B.C., The Passing of the, by G. Maspero, 705 †
Endlich, Dr. R., Zur Etymologie des Wortes "Paraguay," 254 †
England—
Blue-John-Mine à Castleton (Angleterre), par MM. Barnes et Holroyd, 695 †
Constitutional Relations of England and Her Dependencies, by Sir C. Roe, 375 †
Dover Harbour Works, by J. C. Coode and W. Matthews, 363 †
Expansion of, by E. D. Mead, 495 †
Fragment of the Geography of, by H. R. Mill, 246 †
Gaping Ghyll Hole, by Ed. Calvert, 246 †
Lake District, Thorough Guide Series, by M. J. B. Baddeley, 363 †
Long Kin Hole, by F. Ellet, 246 †
England and Wales—
Ordnance Survey Maps, 134 †, 261 †, 377 †, 496 †, 592 †, 707 †
Reduced Ordnance Survey of, by J. Bartholomew, 134 †, 708 †
Engler, A., Ueber die Vegetationsverhältnisse des Ulugurugebirges in Deutsch-Ostafrika, 250 †
Englisch, K. R. von, Die Hohe Tátra und die Alpen, 570 †
Enneberg, Crust-torsion at, 458
Erebus and Terror, Mounts, Antarctic, 398
Erie, Lake, Influence of Wind on the Level of, Prof. A. J. Henry on, 685
Erk, F., Die wichtigsten Bergobservatorien, 374 †
Erlanger, C. v., und O. Neumann, über ihre Reise in Nordost-Afrika, 581 †
Erskine, T., Report on the Shipping and Shipbuilding on the American Lakes, 353
Erzeroum, Trade of (Foreign Office Rep.), 698 †
Esch, Dr. E., Ueber das Küstengebiet von Kamerun, 580 †
Eskimo Seal Lake, Labrador, 686
Esmeralda or Todos los Santos lake, 33
Estrine, L., Un port franc à Marseille, etc., 360 †
Etbai, Northern, The Emerald Mines of, by D. A. Mac Alister, 537 *
Etymology of Africa and Ophir, by Sir George Birdwood, 134 †
Euphrates and Tigris—
Am Euphrat und Tigris, von E. Sachau, 578 †
Europe—
Astronomische Arbeiten des k. k. Gradmessungs-Bureau, von Dr. E. Weiss und Dr. R. Schram, 483 †
Commercial Relations of the United States with Foreign Countries (Europe), 570 †
Early Metallurgy of Copper, etc., in Europe, by W. Gowland, 119 †
Hohe Tátra und die Alpen, von K. R. von Englisch, 570 †
Kopfformen in Europa, Die Verteilung der, von Emil Schmidt, 119 †
Korstoge fra Norden til den spanske Halvø, af A. Fabricius, 484 †
Maps: Luftdruck und Temperatur-Verteilung über Europa in verschiedenen Höhen am Marz 1899, von Dr. Hergesell, 135 †; Orographical map of, by H. J. Mackinder, 593 †
Memel-, Pregel- und Weichselstrom, von H. Keller, 570 †
Memel-, Pregel- und Weichsel-Gebietes, Klimatischen Verhaltnisse des, von V. Kremser, 570 †
Militär - topographischen Arbeiten in den europäischen Staaten, Organisation der, von V. Haardt, 484 †
Popolazione dell' Europe, del F. M. Pasanisi, 242 †
Races de l'Europe, par J. Deniker, 119 †
Sailing Directions for the West Coasts of France, Spain, and Portugal, 364 †
Strategic Geography of Europe, etc., by T. M. Maguire, 119 †
Eversley, T., The Trinidad Reviewer, 702 †
Eyssèric, J., Exploration et Captivité chez les Gouros, 251 †

F.

Fabre, L. A., Les ensablements du littoral gascon et les érosions sous-pyrénéennes, 484 †
Fabricius, A., Korstoge fra Norden til den spanske Halvø, 484 †
Faivre and Potter, MM., Explorations in the Sobat Basin, 476
Fallot, E., La situation économique de la Tunisie, 370 †
Farquharson, Colonel Sir John, Foreign Topographic Maps, 129 †; remarks on "Methods of Survey employed by the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000070

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Chilean Boundary Commissions," 344; Twelve Years' Work of the Ordnance Survey, 364 †
Farrell, R. C., Railway Flood-Works in the Punjab and Sind, 577 †
Fasquelle, E., Plan de l'Exposition Universelle de 1900 .. 262 †
Fauvel, A. A., Corée: Le port de Ma-San-Pho, 697 †; Le chemin de fer de Peking à Nieou-tchouang, 486 †; La Découverte des îles Seychelles d'après des Documents inédits, 247 †; Le nouveau port de San-tou-ao, 247 †; L'œuvre géographique de la mission de Zi-ka-wei, 556, 575 †
Feigl, H., Der Aufstand der Boxer, 575 †
Feilden, Colonel, Contributions to Glacial Geography, by Prof. T. G. Bonney, 495 †
Ferrars, Max and Bertha, Burma, 365 †
Field Testing for Gold and Silver, by W. H. Merritt, 495 †
Filippi, F. de, The Ascent of Mount St. Elias by the Duke of Abruzzi, 252 †
Finland—
Finland i utländsk historisk literatur, af R. Lagerborg, 363 †
Ortbeskrifningen i Finland på 16- och 1700-talen, af R. Boldt, 245 †
Pflanzen-phänologische Beobachtungen in, von A. O. Kihlman, 363 †
Primitiva formationernas geologi . . . Finlands, af F. J. Wiik, 363 †
Rakennustyppejä Reski-Suomen pohjoisosasta, by O. A. Joutsen, 245 †
Sääksmäki Socken, af J. E. Rosberg, 120 †
Självmorden i Finland, 1861–1895, af F. W. Westerlund, 363 †
Thierphänologische Beobachtungen in, von K. E. Stenroos, 363 †
Trapa-förande torfmosse på Åland, af P. H. Olsson, 245 †
Fiorini, M., Proiezioni cartografiche cicloidali, 129 †
Fischer, Dr. K. T., Ein neues Barometer, 493 †
Fjords—
Topographisch-geologische Studien in Fjordgebieten, von O. Nordenskjöld, 588 †
Flamand, G. B. M., Mission au Tidikelt, archipel Touatien, 224, 369 †; Une Mission d'exploration scientifique au Tidikelt, 369 †
Fletcher, H., Descriptive Note on the Sydney Coal Field, Nova Scotia, 252 †
Flett, J. S., The Old Red Sandstone of the Orkneys, 695 †
Flexner, Prof., and Prof. Barker, Report on a special Commission sent to the Philippines . . . to investigate prevalent diseases, 698 †
Fly river, Natives of the, 414
Foa, E., Coupe de l'Afrique équatoriale du sud-est au nord-ouest, 579 †; De l'Océan Indien á l'Océan Atlantique, 124 †
Fogs and their Teaching, by Rev. J. M. Bacon, 257 †
Foncin, M. P., Bordeaux et l'esprit Colonial, 243 †
Fonssagrives, J., Notice sur le Dahomey 699 †
Foochow, Trade of (Foreign Office Rep.), 247 †
Forbes, H. O., On a collection of Stone Implements made by Mr. Seton-Karr, 250 †
Forbes, J. D., Travels through the Alps, 242 †
Foreign Missions, Seventieth Report on, to the General Assembly of the Free Church of Scotland, 495 †
Forel, Dr. F. A., et Dr. Lugeon, Les variations périodiques des glaciers des Alpes, 569 †
Forke, A., von Peking nach Ch'ang-su und Lo-yang, 486 †
Forlong, Major-General J. G. R., letter from, on the Life of Calcutta as a Seaport and the Mercantile Capital of Asia, 238
Foster, C. Le Neve, Mines and Quarries: General Reports and Statistics, 258 †
Foureau and Lamy, MM., Expedition in the Lake Chad Region, 349, 557
Fourneau, La Mission, 250 †
Fournier, A., Des noms de lieux ayant pour racine les noms du dieu *Belen*, *Bel*, 120 †
Fournier de Flaix, E., Les premiers Boers, 125 †
Fournier, E., Les réseaux hydrographiques du Doubs et de la Loue, etc., 360 †
Fournier et Magnin, MM., Recherches spéléologiques dans la chaine du Jura, 244 †
Fournier, J., Une Société de Géographie à Marseille en 1801 .. 131 †
Fox, C. B., The construction of the Simplon Tunnel, 483 †
Fox, Dr. R., Die Pässe der Sudeten unter besonderer Berücksichtigung der Zentralsudeten, 243 †
Fox, F., The Great Alpine Tunnels, 483 †
Fox, G. H., Selangor Government Railway, 578 †
France—
Antibes, Le port et le quartier maritime d', par M. Vinson, 570 †
Aven Armand, les Grottes de Ganges, etc., par E.-A. Martel, 243 †
Cambrésis, Le, par M. A. Malotet, 570 †
Canal de jonction du Rhône à Marseille, par M. J. C. Roux, 360 †
Divisions administratives de la France actuelle, par P. Gaffarel, 360 †
Doubs et de la Loue, Les réseaux hydrographiques du, par E. Fournier, 360 †
Ensablements du littoral gascon et les érosions sous-pyrénéennes, par L. A. Fabre, 484 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000028

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [415r] (182/232)

BRITISH LIBRARY

France—*continued.*
Ethnologie de la Savoie et de Haute-Savoie, par Dr. E. Pittard, 484 †
Fumades, Les (près Alais, Gard), par P. G. de Rouville, 120 †
Gravenoire, Le volcan de, par P. Glangeaud, 360 †
Inondations et la charité collective, par M. A. Duponchel, 120 †
Lorraine, Sur la dénudation de l'ensemble du plateau lorrain, par M. Bleicher, 243 †
Lyon et la Colonisation française, par prof. M. Zimmermann, 484 †
Maps: Plans of Paris and the Exhibition, with map of France, by W. and A. K. Johnston, 135 †
Monnaie de Paris à l'Exposition Universelle, 360 †
Naufrages pour l'année, 1896, Rapport sur la Statistique des, 361 †
Noms de lieux ayant pour racine les noms du dieu *Belen*, *Bel*, par A. Fournier, 120 †
Orange, Une ancienne Capitale, par M. E. Roussel, 570 †
Padirac, Étude d'hydrologie souterraine, par M. E.-A. Martel, 360 †
Padirac, Sur de nouvelles constatations dans la rivière souterraine de, par M. E.-A. Martel, 484 †
Redon, Cartes agronomiques du canton de, par M. G. Lechartrie, 243 †
Vents dans les golfes du Lion et de Gascogne, par M. Hautreux, 361 †
France and Belgium—
Géographie physique du Nord de la France et de la Belgique, par J. Gosselet, 120 †
Francke, H., Eine Besteigung des Karsongpasses (Kaschmir), 697 †
Franco-Spanish Boundaries in West Africa, 225
François, Curt v. (Biography), 132 †
Frankenfield, H. C., Vertical Gradients of Temperature, Humidity, and Wind Direction, 583 †
Frankfield, H. C., Kite Work of the Weather Bureau, 257 †
Frankfort-on-Main, Trade of (Foreign Office Rep.), 571 †
Franz Josef Land—
Duke of Abruzzi's expedition to, 597
Nansen und Payer's Karte von, von G. R. von Brosch, 109, 128 †
Fraser, M. A. C., Western Australian Year-Book, 586 †
Frazer, J. G., Pausanias and other Greek Sketches, 571 †
French Colonies—
"Atlas des colonies françaises," Un nouvel, par P. Pelet, 137 †, 376 †, 379 †, 709 †
Colonial Expansion of France, by Prof. J. C. Bracq, 376 †
Conférence de M. le Col. Monteil sur le Domaine colonial de la France, 376 †
French Colonies—*continued.*
Exploitation de notre Empire colonial, par L. Vignon, 495 †
French Colonies (Foreign Office Rep.), 376 †
French Explorations in the Sobat Basin, 476
French Islands and New Britain, Herr v. Bennigsen's visit to, 565
French Jesuit Mission in China, Geographical work of the, 556
Fricker, Dr. K., The Antarctic Regions, 586 †
Friederichsen, Dr. M., Russisch Armenien und der Ararat, 248 †, 578 †
Fuchau: *see* Foochow.
Fuchs, Prof. T., Kritische Bemerkungen zu Dr. Natterer's "Chemisch-Geologischen Tiefseeforschungen," 589 †
Fülleborn, Dr. F., Ueber Untersuchungen im Nyassa-See und in den Seen im nördlichen Nyassa-Land, 579 †; note on, 561
Fulst, Dr. O., Kohlenstationen und Flottenstützpunkte, 494 †; Zur Höhenberechnung, 587 †
Fundy, Bay of—
Sprungwelle und Fluthgrösse im oberen Theil der Fundy-Bai, von Dr. G. Schott, 125 †
Futaleufú river, Patagonia, 192

G.

Gaffarel, P., Le capitaine Paulmier de Gonneville, 375 †; Les divisions administrative de la France actuelle, 360 †
Gallop (Rudolf), Lake, 292, 298
Gallouédec, L., La Navigation intérieure en Allemagne, 361 †
Galvão, Antonio, voyages of, 625
Gambier Islands, Mangareva Dictionary, by E. Tregear, 255 †
Game—
An Age of Extermination, 134 †
Preservation of, in Africa, 105
Gamo district, Abyssinia, 297
Ganges, changes of the, 238
Gannett, H., A Dictionary of Altitudes in the United States, 490 †; A Gazetteer of Kansas, 583 †; The Results of the Cuban Census, 491 †
Gaping Ghyll Hole, by Ed. Calvert, 246 †
Garcia, Father José, voyages of, 19
Garde, Cape, East Greenland, 663
Gardini, Dr. C., In der Sternenbanner-Republik, 701 †
Garofalo, F. P., Contributi alla storia delle provincie occidentali dell' impero Romano, 361 †
Garrou, M., Argentina ed Uruguay, 254 †
Garsault, A. G., Notice sur la Réunion, 700 †
Gaspé Current of the Gulf of St. Lawrence 685

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Gastrell, —, Economic Position of the German Empire in 1900..243 †
Gautier, E. F., Les Hova sont-ils des Malais? 369 †
Gavelin, Axel, On the glacial lakes in the upper part of the Ume river-valley, 695 †
Gaza, Province of, Portuguese East Africa, Captain Gomes da Costa on, 350
Geikie Land, Antarctic, 394
Geikie, Sir A., Notes on some Specimens of Rocks from the Antarctic Regions, 586 †; Presidential Address by, Section C. Geology, 257 †
Gennes, A. de, et A. Bonard, Les roches volcaniques du Protectorat des Somalis, 488 †
Geodesy—
Aufgabe der modernen Geodäsie, von V. Carlheim-Gyllensköld, 129 †
Præcisionsnivellementet over Øresund, af General-Major G. Zachariæ, 129 †
Recent Progress in Geodesy, by Dr. J. F. Huyford, 129 †
Veröffentlichung des Konigl. Preussischen Geodätischen Institutes, 587 †
Geodetic Survey in British South Africa, 474, 488 †
Geographical and Geological Terminology, Signor O. Marinelli on, 113
Geographical Congress—
Congrès National des Sociétés Françaises de Géographie, 376 †
Septième congrès international de géographie à Berlin, par J. Leclercq, 134 †, 260 †
Geographical Discovery—
Scoperte geografiche del secolo XIX. del Prof. F. Porena, 375 †
Geographical Index to Books, Periodicals, etc., compiled by A. Knox, 495 †
Geographical Literature of the Month—
Africa, 124, 249, 367, 487, 579, 698
America, 125, 252, 370, 489, 582, 701
Anthropogeography and History, 131, 258, 375, 493, 590, 705
Asia, 121, 246, 365, 485, 574, 696
Australasia and Pacific Islands, 127, 254, 372, 491, 585, 703
Biography, 132, 259, 494, 590, 705
Europe, 119, 242, 360, 483, 569, 694
General, 133, 259, 360, 375, 495, 590, 706
Mathematical Geography, 129, 256, 492, 587, 703
Physical and Biological Geography, 129, 257, 373, 493, 588, 704
Polar Regions, 128, 255, 373, 491, 586
Geographical Society—
Société de Géographie à Marseille en 1801, par Joseph Fournier, 131 †
Geographical Year-book—
Geographisches Jahrbuch, von H. Wagner, 376 †
Apperception in Geography, by M. E. Kelton, 376 †
Geography—
Begründung der Lehrkanzel für Geographie und des geographischen Institutes an der Universität Wien, von Dr. A. Penck, 706 †
British Association, Bradford, Proceedings of, 441
Conception actuelle de la Géographie, par M. G. Lespagnol, 260 †
Deutschen Hochschulen im Sommersemester, Geographische Unterricht an den, 260 †
Elementary Schools, Progress of Geographical Instruction in, Mr. T. G. Rooper on, 442
Enseignement de la géographie dans les collèges, par Raymond de Girard, 133 †
Enseignement de la Géographie, Réforme de l', par Dr. J. Vincent, 375 †
Entwicklung der Geography im xix Jahrhundert in einigen Merkzahlen, von W. Wolkenhauer, 260 †
Historical: Ueber Identifizierung antiker Oertlichkeiten, von W. Ruge, 131 †
Intermediate School Geography, by T. W. Pettipice, 706 †
Irish School Geography, by T. W. Pettipice, 706 †
Kohlenstationen und Flottenstützpunkte, von Dr. O. Fulst, 494 †
London University, Study of Geography in the, 112
Middelskolen, Geografi for, af Dr. Hans Reusch, 133 †
Mythological-Geographical Text, by Prof. Dr. A. Wiedemann, 494 †
Oxford School of, Scholarship of, 567; Programme for Michaelmas Term, 357
Oxford University, Diploma instituted, 112
Physical: Bedeutung de la Métherie's für die Entwicklung der physikalischen Erdkunde, von Dr. S. Günther, 258 †; note on, 110
Political Geography and the Empire, by Sir G. S. Robertson, 447 *
Practical Exercises in Geography, by Prof. W. M. Davis, 260 †
Progrès de la Géographie en 1899, Rapport sur les, par le Baron Hulot, 260 †
Some Common Geographical Definitions, by Margaret H. Curtin, 260 †
Superficie geologiche e superficie geografiche, por O. Marinelli, 113, 260 †
Tea, Geography of, 494 †
Tratado de Geografia Commercial de las cinco partes del Mundo, por E. Courtaux y F. V. Guzmán, 591 †
Geology—
Geological and Faunal Relations of Europe and America during the Tertiary Period, etc., by Prof. H. F. Osborn, 130 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000078

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [416r] (184/232)

BRITISH LIBRARY

Geology—*continued.*
Geological Literature added to the Geological Society's Library, 375 †
Presidential Address by Sir A. Geikie, Brit. Association, Section C, Geology, 257 †
Geomorphology—
Brückner, Ed., Die Feste Erdrinde und ihre Formen, von A. Penck, 704 †
Déformation tétraédrique de la Terre et déplacement du pole, note de M. M. Bertrand, 130 †; note on, 232
Face de la Terre, La, par Ed. Suess, 130 †
Fleuves sous-marins, par H. Benest, 704 †
Gebirgshebung und Thalbildung, von E. Richter, 373 †
Idee morfologiche di Carlo Gemmellaro, by O. Marinelli, 257 †
Morfologia della superficie terrestre nella Geografia, del Prof. E. Porena, 493 †
Oeuvre de M. Suess, par A. de Lapparent, 373 †
Symétrie tétraédrique du globe terrestre, Sur la, par M. de Lapparent, 130 †
Valli aperte, frammenti di geografia fisica e sociale del colonnello C. Borzino, 493 †
Geophysics—
Problème du refroidissement de la croûte terrestre, etc., Note de J. Boussinesq, 373 †
Gerlache, Capt. Adrien de, und Lieut. Georges Lecointe (Biography), 705 †
German Arctic Expeditions, 356
German Colonies—
Colonial Publication, New, 358
Deutsche Koloniallitteratur im Jahre 1898, von M. Brose, 260 †
Deutschen Kolonialgesellschaft, Jahresbericht der, 495 †
Deutschen Schutzgebiete, Jahresbericht über die Entwickelung der, 495 †
Études d'Économie Coloniale, par H. Hauser, 495 †
German Colonial Estimates (Foreign Office Rep.), 260 †
German Colonies for year ending June, 1899 (Foreign Office Rep.), 591 †
Koloniale Zeitschrift, note on, 358
Weissbuch, Zwanzigster Theil, 495 †
German Limnological Investigations in Lake Nyasa, 561
German Pendulum Expedition in East Africa, 352
Germany—
Bad Nauheim and its Thermal Salt-Springs, Geology of, by A. V. Jennings, 571 †
Deutsche Nordseeküste in physikalisch-geographischer und morphologischer Hinsicht, von R. Haage, 361 †
Deutschen Dünen und ihr Bau, von Dr. E. Roth, 484 †
Germany—*continued.*
Economic Position of the German Empire in 1900 (Foreign Office Rep.), 243 †
Elbstrom, Der, 571; note on, 552
Ethnographie der germanischen Stämme, von O. Bremer, 484 †
Geodätischen Institutes, Königl. Preussischen, Veröffentlichung des, 361 †
Ground-plan of Towns in, Dr. Otto Schlüchter on, 235
Maps: Murray's Handy Classical Maps, edited by G. B. Grundy, 496 †; Karte des Deutschen Reiches (Konigl. Preuss. Landes-Aufnahme), 135 †; Wirtschaftlichen Beziehungen der deutschen Küsten zum Meere, von P. Langhans, 135 †
Meteorologischen Instituts, Veröffentlichungen des K. Preussischen, 484 †
Navigation intérieure en Allemagne, par M. L. Gallouédec, 361 †
Northern Germany, Handbook for travellers, by Karl Baedeker, 484 †
Pflanzen der Kunstbestande Norddeutschlands, etc., von Dr. F. Höck, 570 †
Plant-life in, Influence of Latitude on, Prof. Ihne's observations, 680
River-basins of North Germany, Geography of, 552
Warum hat jedermann im Volk ein Interesse an einer starken deutschen Flotte? von H. Hartmann, 570 †
Wirtschaftlichen Beziehungen der deutschen Küsten zum Meere, von P. Langhans, 361 †; note on, 220
Gessert, F., Das Land zwischen Inachab und Bethanien, 250 †; Zur Harmattan-Frage, 251 †
Giacomelli, F., Sulla latitudine di Monte Mario, 362 †
Gibbons, Major, Expedition in Central Africa, 104
Giglio Island—
Insel Giglio, Die, by the Archduke Ludwig Salvator, 572 †
Gilgit, Notes on the Geology of, by Lieut.-General C. A. McMahon, 365 †
Girard, J., Les fluctuations du niveau des mers, 589 †
Girard, Raymond de, Sur l'enseignement de la géographie dans les collèges, 133 †
Giraud, H., Itinéraires de Mogador à Marrakech, 369 †
Glacial Deposits—
Bewegungsrichtungen des diluvialen Inlandeises, von Dr. J. Petersen, 493 †
Glacières or Freezing Caverns, by E. S. Balch, 373 †
Glaciers—
Gletscher und Firnmeere, von R. E. Petermann, 257 †
Gletscher conferenz im 1899, von Dr. E. Richter, 233, 257 †
Glangeaud, P., Le volcan de Gravenoire, 360 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000049

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [416v] (185/232)

Glass, J. G. H., Railway Surveying in China, 346
Glauning, Lieut., and Dr. Kohlschütter, Pendulum Observations in East Africa, 352
Goa—
Trade of (Foreign Office Rep.), 577 †
Villages of, in the Early Sixteenth Century, by B. H. Baden-Powell, 123†
Gold Coast—
Northern Territories of the, Report on, by Lieut.-Colonel Northcott, 368 †; note on, 683
Gold-mining in Egypt, Mr. Alford's report on, 367 †, 557
Gombaz, Central Asia, 507
Gombroon, Persian gulf, 213, 214
Gomes da Costa, Captain, on the Province of Gaza, Portuguese East Africa, 350
Gonneville, Le capitaine Paulmier de, par P. Gaffarel, 375 †
Gonzaga, C. V. A., La Questione delle Lingue in Austria, 242 †
Good Hope, Cape of, Discovery of, 639
Gordon, General Sir Thomas, The Problem of the Middle East, 123 †
Gordon, M. M. Ogilvie, The Origin of Land-forms through Crust-torsion, 457 *
Gordon's Campaign in China by Himself, with an Introduction, etc., by Colonel Vetch, 576 †
Gore, Colonel, On the Projection for a map of India and Adjacent Countries, 577 †; note on, 473
Gorges, Captain G. H., A Journey from Lake Naivasha to the Victoria Nyanza, 78 *, 487 †
Gorili, Somaliland, 603
Gorman, M. W., Ice-cliffs on White River, Yukon Territory, 125 †
Gosling, —, Trade of Paraguay, 372 †
Gosselet, J., Géographie physique du Nord de la France et la Belgique, 120 †
Gothenburg—
Göteborgs Turistförenings Årsskrift, 363 †
Trade of (Foreign Office Rep.), 695 †
Götz, Dr. W., Die Frage der Vergletscherung des Central-Balkan, 569 †
Götzen, Mount, and Mount Sharp, Central Africa, 170
Gourdet, P., Le chemin de fer en Asie Centrale, 366 †
Gowland, W., The Early Metallurgy of Copper, etc., in Europe, 119 †
Grabowsky, Friedrich J. (Biography), 705 †
Graian Alps, Scrambles in the Eastern, by G. Yeld, 483 †
Grandidier, G., Voyage de la Reine Ranavalona Ire à Manarinerina, 369 †
Grandidier, M. A. (Biography of), Alphonse Milne Edwards, 259 †
Grandjean, A., Le bassin du Nkomati et sa communication avec le Limpopo, 124 †; note on, 350; La cartographie de la province de Lourenço Marques, 125 †
Grasso, Prof. G., Metodo e misura nelle ricerche di toponomastica, 592 †
Gravier, G., Vie de Samuel Champlain, 494 †
Great Slave Lake, A Journey to, by D. T. Hanbury, 63 *
Greece—
Handbook for Travellers in, by John Murray, 485 †
Maps: Karten von Attika, von E. Curtius und J. A. Kaupert, 496 †
Pausanias and other Greek Sketches, by J. G. Frazer, 571 †
Peloponnesian Journeys, by C. H. Young, 244 †
Greenland—
Aperçu des "Meddelelser om Grönland," par T. Kornerup, 373 †
East: Danish Expedition to, under Lieut. Amdrup, 231, 481, 597; Prof. Kolthoff's expedition in, 566
Danish East Greenland Expedition in 1900, by Lieut. G. C. Amdrup, 662 *
Lakes and Valleys of the Upper Nugsuak Peninsula, by T. L. Watson, 256 †
Myskoxen och myskoxjagter på Ost-Grönland, af A. G. Nathorst, 587 †
Polarvargens invandring till östra Grönland, 255 †
Svenska expeditionen till nordöstra Grönland, af A. G. Nathorst, 492 †
Gregory, Prof. J. W., The Geology of Mount Kenya, 249 †
Greville, Hon. E., The Year-Book of Australia, edited by, 254 †
Greville, —, Trade of Mozambique and Quillimane (Foreign Office Rep.), 251 †
Grierson, G. A., On the Languages spoken beyond the North-Western Frontier of India, 577 †
Griffin, Sir Lepel, Persia, 248 †
Grinnell, G. B., The North American Indians of To-day, 701 †
Groffier, Prof. V., La production de la soie dans le monde, 131 †; note on, 357; Explorations et travaux géographiques des Missionnaires Catholiques, 707 †
Grogan, E. S., Through Africa from the Cape to Cairo, 164 *, 699 †; letter from, on his Picture of Mount Ruwenzori, 693
Grogan, E. S., and A. H. Sharp, From the Cape to Cairo, 699 †
Gros, M. G., La Salvetat et ses environs, 119 †
Grosvenor, E. A., The Growth of Russia, 363 †
Ground Waters—
Principles and Conditions of the Movement of, by F. H. King, 373 †
Theoretical Investigations of the Motion of, by C. S. Slichter, 374 †
Grubb, W. B., The Chaco Boreal; the Land and the People, 491 †
Grundy, C. B., Murray's Handy Classical Maps, Germania, etc., 496 †; Italia and Sicilia, 134 †; Palestine, etc., 498 †; note on, 234

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000019

مكتبة قطر الوطنية
Qatar National Library

Guatemala—
Café, La Culture du, par F. W. Morren, 254 †
Caoutchouc au, 254 †
Trade, Agriculture, and Finance of (Foreign Office Rep.), 585 †
Guatemala and Salvador—
Maps: Vulkan-Skizzen aus Guatemala und Salvador, von Dr. C. Sapper, 498 †
Vulkane von, von Dr. Carl Sapper, 585 †; note on, 478
Guénot, M. S, Les inondations de 1897 et les effets du déboisement des Pyrénées, 362 †
Guest, A. R., The Oases of the Mudirieh of Assyut, 655 *
Guglielmo, G., Intorno ad alcuni nuovi areometri ad immersione totale, 258 †
Guiana—
British: British Guiana and its Boundary, by E. F. im Thurn, 254 †; L'Arbitrage Anglo-Vénézuelien, par M. G. Vasco, 254 †; Reports for 1897-99 (Colonial Rep.), 702 †
Guilmot, D., Céará et Amazonie, 127 †
Guinea—
French: Les Simons, par J. Leprince, 250 †; La Guinée française, étude et souvenirs, par M. Maclaud, 250 †
Guinea española, La, 251 †
Guise, R. E., Photographs of scenery in vicinity of Kemp Welsh River, British New Guinea, 596 †
Gulbentian, C. S., Photographs taken in the neighbourhood of Aras and Kur Rivers in Transcaucasia, 380 †
Gulf Stream Water, On the Origin of, by P. T. Cleve, 130 †
Günther, Prof. Dr. S., Die Bedeutung De la Métherie's für die Entwicklung der physikalischen Erdkunde, 258 †; note on, 110
Günther, R. T., and J. J. Manley, On the Waters of the Salt Lake of Urmi, 123 †
Guyot, Yves, Boers and Uitlanders, 251 †
Gwaso Nyiro, Central Africa, 79

H.

Haage, R., Die deutsche Nordseeküste in physikalisch-geographischer und morphologischer Hinsicht, 361 †
Haardt, V., Notizen über die organisation der militär-topographischen Arbeiten in den europäischen Staaten, 484 †
Haberlandt, Dr. M., Dr. Oskar Baumann (Biography of), 494 †
Haddon, Prof. A. C., Studies in the Anthropogeography of British New Guinea, 265 *, 414 *; remarks on "In the Heart of Borneo," 59
Hadhramut, Mr. and Mrs. Bent's explorations in, 101
Hagari people, New Guinea, 282
Hague, A., Geology of the Yellowstone National Park, 584 †
Haiti, Through, by H. Prichard, 306 *
Hakodate, Trade of (Foreign Office Rep.), 697 †
Hall, C. W., The Gneisses . . . of South-Western Minnesota, 583 †
Hamburg and District, Trade of (Foreign Office Rep.), 361 †
Hammer, Prof. Dr. E., Die Genauigkeit der Flächenangaben in der Geographie, 129 †; Unechtcylindrische und unechtkonische flachentreue Abbildungen, 129 †
Hammerich, A., Studier over islandsk Musik, 244 †
Hanbury, David T., A Journey from Chesterfield Inlet to Great Slave Lake, 63 *, 479, 489 †; Photographs of the North-West Territories of Canada, 139 †
Hangchow, Trade of (Foreign Office Rep.), 122 †, 486 †
Hanno, The Log-book of, by J. D. White, 590 †
Hansen, R., Zur geographischen Verteilung der Personennamen Schleswig-Holsteins, 485 †
Harding, Major Colin, Expedition to the Source of the Zambezi, 349
Harding, Rev. T., In Yorubaland, 251 †
Harmer, F. W., on the climate of interglacial and glacial periods, 446
Harris, Captain H. R., and Commander A. Havergal, Tide Tables for the British and Irish Ports, 695 †
Harris, W. B., The Morocco Scare, 581 †
Harrison-Whitehouse Expedition to countries south of Abyssinia, 103
Harrisse, Henry, Per Amerigo Vespucci, 133 †
Hartley, Sir C., A short history of the Engineering Works of the Suez Canal, 580 †
Hartmann, H., Warum hat jedermann im Volk ein Interesse an einer starken deutsche Flotte?, 570 †
Harvey, A., The Magnetic Influence of the Sun on the Earth and on Comets, 588 †; letter from, on the Aurora Australis and Borealis, 691-693
Hasse, Dr. Ernst (Biography), 132 †
Hasselt, A. L. van, De inlijving der V. Kota-Kampar, 123 †
Hassert, Dr. K., Tracce glaciali negli Abruzzi, 485 †
Hatcher, J. B., Some Geographic Features of Southern Patagonia, 254 †; Sedimentary Rocks of Southern Patagonia, 254 †
Haupt, L. M., Efforts made to demonstrate the Practicability of the Reaction Breakwater at Aransas Pass, Texas, 253 †; The Reaction Breakwater . . . of the Mississippi River, 583 †; note on, 477
Hausaland, The Expedition to, Letters from Bishop Tugwell, and Narrative of Rev. A. E. Richardson, 581 †
Hauser, Prof. H., Études d'Économie Coloniale, 495 †; Études sur les colonies portugaises, Angola, 699 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000043

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [417v] (187/232)

Hautreux, M., Les vents dans les golfes du Lion et de Gascogne, 361 †
Hawaii—
Hawaii and its People, by A. S. Twombly, 372 †
Trade of Hawaiian Islands (Foreign Office Rep.), 585 †
Hayes, C. W., An Assumed Inconstancy in the Level of Lake Nicaragua, 254 †; Physiography of the Chattanooga District, 371 †
Hayes, C. W., and A. H. Brooks, Ice Cliffs on White River, 371 †
Hayford, Dr. J. F., Recent Progress in Geodesy, 129 †
Hearn, —, Trade of Bordeaux and District, 243 †
Heawood, E., on the commercial resources of Tropical Africa, 446
Hedin, Dr. Sven, Explorations in the Lob Nor Region, 345, 472, 598; Die geographisch-wissenschaftlichen Ergebnisse meiner Reisen in Zentralasien, 696 †
Heilprin, A., The Nicaragua Canal in its Geographical and Geological Relations, 127 †
Heimbrod, G., Topographic Surveying, etc., 587 †
Hein, Dr. W., Zur Erinnerung an Dr. P. Paulitschke, 590 †
Heldring, E., Poeloe Weh, 697 †
Hellmann, Prof. Dr. G., Regenkarte der Provinz Ostpreussen, 120 †
Henkel, Dr. L., Berechnung der Dichte des Eisenbahnnetzes, 129 †
Henrique, M. L., on Jibuti as a Port, 227
Henry, Prof. A. J., on the Influence of Wind on the Level of Lake Erie, 685
Herbertson, A. J., The Climate of South Africa, 370 †
Hergesell, Prof. Dr. H., Luftdruck und Temperatur-Verteilung über Europa in verschiedenen Höhen am Marz 1899.. 135 †; Die Temperatur der freien Atmosphäre, 374 †
Herrmann, J., Valparaiso, 490 †
Hershey, O. H., Ancient Alpine Glaciers of the Sierra Costa Mountains in California, 252 †
Hesse—
Volksdichte der Provinz Starkenburg, von Dr. K. Bergmann, 243 †
Hettner, Prof. Dr. A., Ueber bevölkerungsstatistische Grundkarten, 129 †
Hildebrandsson, Prof. H. H., on Comparative Studies in Climate, 234; Quelques recherches sur les centres d'action de l'atmosphère, II. La Pluie, 257 †
Hill, R. T., Geology and Geography of Jamaica, 354; Map of Texas, 263 †
Hill, Mr. Gray, on the Rise of the Dead Sea, 555
Himalaya—
Conformation of the, 527, 529
In the Ice World of, by F. B. and W. H. Workman, 577 †; review, 681
Hirn, Y., Skildringar ur Pueblofolkens Konstlif, 253 †
Historical Atlas of Modern Europe, by R. L. Poole, 377 †, 708 †
Hjort, Dr., O. Nordgaard and H. H. Gran, Report on Norwegian Marine Investigations, 131 †
Höck, Dr. F., Eine Pflanzengeographische Untersuchung, 570 †
Hoepli, M., Guida-Itinerario alle Prealpi Bergamasche, 362 †
Hoghton, Captain F. A., Operations of the Mohmand Field Force, 123 †
Holdich, Colonel Sir T. H., An Orographic Map of Afghanistan and Baluchistan, 527*; Railway Connection with India, 444; remarks on "Journeys in Central Asia," 524; remarks on "King Menelek's Dominions, etc.," 305; War Maps, 492 †
Holland—
Hollande, La, géographique ethnologique, etc., by M. F. Bernard and Others, 485 †
Holmsen, A., Vore største indsjøer, 572 †
Homén, T., Om jordtemperatur bestämningar, 493 †
Honan and Shansi, coal mines in, 346
Honduras, Trade of (Foreign Office Rep.), 585 †
Hope, W. H. St. John, Notes on the Walls of Southampton, 121 †
Hose, Charles, In the Heart of Borneo, 39*, 578 †
Hostains, E., De la Côte d'Ivoire au Soudan et à la Guinée française, 368 †
Hostains-d'Ollone, La Mission, 700 †
Hostains and D'Ollone, MM., Expedition from the Ivory Coast to the Sudan, 348
Houdaille, Commandant, Le port et le chemin de fer de la Côte d'Ivoire, 580 †
Howarth, O. H., The Cordillera of Mexico, 371 †
Hualas range, Patagonia, 188
Hubbard, J. M., Problems in China, 575 †
Huber, R., Empire Ottoman, Division Administrative, 708 †
Hübl, A. von, Die photogrammetrische Terrainaufnahme, 587 †
Hugli river, 240
Huichol Indians, Symbolism of the, by C. Lumholtz, 582 †
Hulot, Baron, Rapport sur les progrès de la Géographie en 1899..260 †
Hultzsch, E., Miscellaneous Inscriptions from the Tamil Country, 487 †
Hungary—
Am Ozernya-See, von Dr. G. Czirbusz, 571 †
Wanderungen im Siebenbürgischen Erzgebirge und im Bihar-Kodru-Gebirge, von K. Siegmeth, 571 †
Hunter, Sir W. W., A History of British India, 696 †
Hunter, Sir W. W., and his Work, by J. A. R. Marriott, 259 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

Hupfeld, F., Die Erschliessung des Kaburelandes in Nordtogo, 251 †
Hutchins, D. E., Cape National Forests, 367 †
Hyam, J. C., The Illustrated Guide to Algiers, 249 †

I.

Iberian Peninsula—
Contributi alla storia delle provincie occidentali dell' impero Romano, por F. P. Garofalo, 361 †
Ice-breaker—
Steamers for Winter Navigation and Ice-breaking, by R. Runeberg, 591 †
Yermak Ice-breaker, by Vice-Admiral Makaroff, 260 †
Ice in Bering Sea, Mr. James Page on, 110
Iceland—
Arkæologiske Undersøgelser paa Island, af D. Bruun, 244 †
Glacial Palagonite-Formation of Iceland, by Helgi Pjetursson, 244 †
Islande, L', par le Père Bonaventure, 571 †
Islands Siedelungsgebiete während der landnámatitš, von O. Schumann, 361 †
Jordskjaelv i Islands sydlige Lavland, af Dr. T. Thoroddsen, 362 †
Studier over islandsk Musik, af A. Hammerich, 244 †
Ichang, Trade of (Foreign Office Rep.), 247 †
Ihne, E., Phänologische Mitteilungen, 704 †
Ihne, Prof., on the Influence of Latitude on Plant-life in Germany, 680
Ikoro people, New Guinea, 285
Illicilliwaet, The Great Glacier of the, by G. and W. S. Vaux, 125 †; note on, 687
Illinois—
Glacial Lobe of, by F. Leverett, 490 †
Im Thurn, E. F., British Guiana and its Boundary, 254 †
Incas, The—
Ojos de Imaymana y el Señor de la Ventana, por S. A. Lafone Quevedo, 127 †
India—
Ancient Monuments in, by Baron Curzon, 577 †
Bahmani Dynasty, History of the, by Major J. S. King, 365 †
Bewässerungssystem in Britisch-Indien, von Dr. C. E. Jung, 247 †
Buddhist Monastery at Sohnāg, by V. A. Smith, 487 †
Carte de l'Inde d'après Pomponius Mela, par L. Malavialle, 365 †
Colaba Observatory, Note on the Disturbance of the Magnetical . . . Instruments at the, by N. A. Moos, 577 †
Earthquake of June, 1897, Report on the, by R. D. Oldham, 696 †
India—*continued.*
Forgotten Empire (Vijayanagar), A Contribution to the History of India, by R. Sewell, 696 †
Geological Survey of, General Report, 487 †
Goa, Villages of, in the Early Sixteenth Century, by B. H. Baden-Powell, 123 †
Haramouk, Ascent of, by Dr. E. F. Neve, 365 †
History of British India, by Sir W. W. Hunter, 696 †
Industrial Development of, by J. A. Baines, 365†
Irrigation in India, by General F. C. Cotton, 697 †
Languages spoken beyond the North-Western Frontier of India, by G. A. Grierson, 577 †
Madras Meridian Circle, Observations of the Fixed Stars made with the, by C. M. Smith, 365 †
Malakand Field Force, Operations of the, by Captain H. F. Walters, 697 †
Map of India and adjacent countries, On the Projection for a, by Colonel Gore, 577 †; note on, 473
Maps: Government Surveys, 497 †, 594 †
Missions de Wang Hiuen-ts'e dans l'Inde, par M. S. Lévi, 577 †
Mohmand Field Force, Operations of the, compiled by Captain F. A. Hoghton, 123 †
North-West Provinces and Oudh, Report on the Administration of the, 123 †
Railway Connection with, by Sir T. Holdich, 444
Sixty Years of Frontier Warfare, by Major A. C. Yate, 247 †
South Indian Inscriptions, edited, etc., by E. Hultzsch, 487 †
Survey of India Department, General Report of the Operations of the, 577 †
Tochi Field Force, Operations of the, compiled by Major G. V. Kemball, 123 †
Water of the Great Rivers of, Value of the, 366 †
Western Glacis of India, 366 †
Indian Ocean—
Maps: Waarnemingen in den Indischen Ocean (K. Nederlandsch Meteorologisch Institut), 498 †
Indo-China—
A travers l'Indo-Chine, Cochinchine, etc., par E. Lagrillière-Beauclerc, 122 †
A travers le Tonkin: La rivière Claire, par G. Lhomme, 122 †
Pavie Mission in, Results of, 473; Mission Pavie Indo-Chine, III. Voyages au Laos, etc., par Captain Cupet, 248 †
Trade of French Indo-China (Foreign Office Rep.), 577 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003b

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [418v] (189/232)

Indo-European Highway, An, by S. H. F. Capenny, 575 †
In-Salah, Occupation d', par M. G. Demanche, 251 †
Iowa—
Constitution and Admission of Iowa into the Union, by J. A. James, 490 †
Irân, The Cities of, by J. J. Modi, 698 †
Irawadi river, silting of delta of, 241
Ireland—
Fauna and Flora of Valencia Harbour, 574 †
Handbook for Travellers in, edited by John Cooke, 574 †
Irish Peat Question, by T. Johnson, 695 †
Reduced Ordnance Survey Map of, by J. Bartholomew, 262 †
Iroquois Beach, The, by Prof. A. P. Coleman, 582 †
Issel, A., Essai sur l'origine et la formation de la mer Rouge, 589 †
Italian Somali Coast, condition and prospects of, 104
Italy—
Alpi Piemontesi, del V. Novarese, 485 †
Annali Idrografici, 362 †
Grotte e fenomeni carsici del Bellunese, del Dr. G. Dal Piaz, 571 †
Handbook for Travellers in Central Italy, by Rev. H. H. Jeaffreson, 483 †
Maps: Carte d'Italia (Istituto Geografico Militare), 135 †
Monte Mario, Sulla latitudine di, nota di F. Giacomelli, 362 †
Nero's Great Canal, etc., by A. Marks, 571 †
Primi materiali per la storia della cartografia marchigiana di O. Marinelli, 572 †
Produzione dell' acido borico . . . in Italia, del Prof. C. de Stefani, 571 †
Southern, Trade of (Foreign Office Rep.), 244 †
Tracce glaciali negli Abruzzi, del Dr. K. Hassert, 485 †
Trade of (Foreign Office Rep.), 244 †
Ivory Coast—
Côte d'Ivoire, par Captain Thomasset, 124 †; note on, 104
De la Côte d'Ivoire au Soudan, par E. Hostains, 348, 368 †
Exploration et Captivité chez les Gouros, par M. J. Eysséric, 251 †
Port et le chemin de fer de la Côte d'Ivoire, par Commandant Houdaille, 580 †

J.

Jack, R. L., Photographs of the Yangtse Valley and Sechuen, 500 †
Jacobi, Prof. H., How to calculate the lagna, 703 †
Jäger, J., Steinach am Brenner, 483 †
Jagor, Dr. Friedrich (Biography), 705 †
Jamaica—
Finances and Government of, Further Correspondence relating to, 372 †
Geology and Geography of, by R. T. Hill, 354
Handbook for 1900, by T. L. Roxburgh and J. C. Ford, 127 †
Trade, etc., of (Colonial Rep.), note on, 355
James, J. A., Constitution and Admission of Iowa into the Union, 490 †
Janissa, Mount, Somaliland, 605
Jankó, Dr. J., Ethnographic Researches in Siberia, 347
Janssen, J., Sur l'observatoire du Mont Etna, 572 †
Janssens, E., La participation des Néerlandais à la découverte de l'Australie, 127 †
Japan—
Bamboos, Cultivation of, by Sir E. Satow, 578 †
Earthquake Investigation Committee, Publications of the, 578 †
Hiogo and Osaka, Trade of (Foreign Office Rep.), 248 †
Trade of (Foreign Office Rep.), 577 †; note on, 346
Java—
Facts and Fancies about, by Augusta de Wit, 123 †
Regenkaart van Java, Een nieuwe, door Dr. J. P. van der Stok, 697 †
Trade of (Foreign Office Rep.), 578 †
Jeaffreson, Rev. H. H., A Handbook for Travellers in Central Italy, 483 †
Jennings, A. V., The Geology of Bad Nauheim and its Thermal Salt-springs, 571 †
Jerusalem ancienne, par T. Neville, 124 †
Jibuti as a Port, M. L. Henrique on, 227
Jiménez, J. V., Los ferrocarriles de Chile, 585 †
Joalland, Lieut., expedition in the Lake Chad Region, 349
Johnson, T., The Irish Peat Question, 695 †
Johnston, W. and A. K., Map to illustrate the Chinese Question, 378 †; Plans of Paris and the Exhibition, 135 †; The Royal Atlas of Modern Geography, 498 †; War Map of the Orange Free State, 136 †
Jokea and Biaru people, New Guinea, 271, 272
Joly, J., An Estimate of the Geological Age of the Earth, 588 †; The Geological Age of the Earth, 373 †, 446
Jones, J. A., The Devonian Iron Ores of Asturias, Spain, 245 †
Jones, Joseph, A Thousand Miles up the Amazon, 490 †
Jordan, W. L., Essays in Illustration of the Action of Astral Gravitation, 706 †
Jorga, D. N., Documento geografice, 362 †
Joutsen, O. A., Rakennustyyppejä Reski-Suomen pohjoisosasta, 245 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [419r] (190/232)

Jumelle, H., Les forêts et les essences forestières exploitables à Madagascar, 369 †
Jung, Dr. C. E., Das Bewässerungssystem in Britisch-Indien, 247 †
Jura Mountains—
Recherches spéléologiques dans la chaine du Jura, par Mm. Fournier et Magnin, 244 †

K.

Kach tribe, Central Africa, 85
Kagera river, Central Africa, 559, 560
Kairuan, von H. Schurtz, 252 †
Kalabit district, Borneo, 51
Kala-i-Bar-Panja, Shugnan, 679
Kalo, New Guinea, 288
Kambata hot Springs, Galla Country, 296
Kamchatka, M. Bogdanovich's Expedition in, 222
Kamerun (*see also* Cameroons)—
Erläuterungen zu meinen Reisen in Süd-Kamerun, von Oberleutnant v. Stein, 368 †, 562
Küstengebiet von Kamerun, von Dr. E. Esch, 580 †
Maps: Das Konzessionsgebiet der Gesellschaft Nordwest-Kamerun, von M. Moisel, 379 †
Regenmessungen aus Kamerun, von H. Matzat, 251 †
Kampffmeyer, G., Material zum Studium der arabischen Beduinendialekte Innerafrikas, 581 †
Kan, C. M., Les colonies Néerlandaises dans les Indes Occidentales, 372 †; Les études scientifiques concernant les possessions Néerlandais aux Indes Orientales, 365 †
Kandt, Dr. R., Bericht über meine Reise . . . in Deutsch-Ostafrika, 580 †; note on, 559
Kannenberg, Hauptmann, Reise durch die hamitischen Sprachgebiete um Kondoa, 368 †
Kansas—
Gazetteer of, by H. Gannett, 583 †
Karasu river, Pamirs, 668
Kashmir—
Ancient Geography of, Memoir on Maps illustrating the, by M. A. Stein, 487 †
Besteigung des Karsongpasses, von H. Francke, 697 †
Kasr Dakhil, 660
Katanga, Au, la traversée des monts Kibala, 249 †
Katua tribe, East Central Africa, 616
Keller, A., Voyage au mont Sinai, 578 †
Keller, H., Memel-, Pregel- und Weichselstrom, 570 †
Keltie, Dr. J. Scott, and I. P. Renwick, The Statesman's Year-Book, 134 †
Kelton, M. E., Apperception in Geography, 376 †
Kemball, Major G. V., Operations of the Tochi Field Force, 123 †
Kemeid, H. J., Cairo and Egypt and Life in the Land of the Pharaohs, 699 †
Kennion, Captain, remarks on "Journeys in Central Asia," 524
Kent—
Philips' County Readers. Kent, Past and Present, by G. F. Bosworth, 695 †
Kenya, Mount—
A Journey to the Summit of, by H. J. Mackinder, 124 †
Ascent of, by H. J. Mackinder, 249 †
Geology of, by Prof. J. W. Gregory, 249 †
Kerp, H., Der Einfluss der Eiszeit auf das Natur- und Kulturbild der skandinavischen Länder, 120 †
Kesin Pass, Central Asia, 520
Khandar Dawan, Central Asia, 507
Kharjah, Oasis of, 655, 659
Khorassan, Trade of (Foreign Office Rep.), 248 †
Khotan river, Central Asia, 506
Kiauchau—
Kiautchou, 576 †
Kihlman, A. O., Pflanzen-phänologische Beobachtungen in Finland, 363 †
Kilimanjaro—
Kilimandscharo-Besteigung bis zu 5500 m. Höhe, von A. Widenmann, 488 †
Reisen und Studien, von Dr. Hans Meyer, note on, 352
Kilwa Kisiwani, East Africa, 561
Kimberley—
Climate of Kimberley, Do the mining operations affect the, by J. R. Sutton, 367 †
Winds of, by J. R. Sutton, 367 †
Kimsonoi river, Sotik country, 82
Kindberg, N. C., Nya bidrag till Vermlands och Dals bryogeografi, 246 †
Kinder, C. W., Map showing the Imperial Railways of North China, 378 †
King, Major J. S., History of the Bahmani Dynasty, 365 †
Kingsley, Miss Mary H., obituary of, 114
Kiria river, Central Asia, 504
Kiriwina people, New Guinea, 271
Kishlags of the Shugnans, 676, 677
Kiukiang, Trade of (Foreign Office Rep.), 576 †
Kiungchau, Trade of (Foreign Office Rep.), 576 †
Kivu, Lake, Central Africa, 168; Volcanoes near, 170, 172
Kivu Region, Congo-German Frontier in the, 105
Klondike—
Chemin de fer du Klondyke, par G. Labadie-Lagrave, 252 †
Gold Fields of, Preliminary Report on, by R. G. McConnell, 370 †; note on, 687
Klose, Heinrich, Togo unter Deutsche Flagge, review, 106
Knapp, C., und M. Boral, Geographisches Lexikon der Schweiz, 573 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000072

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [419v] (191/232)

Knibbs, G. H., Observations on the Determinations of Drought-Intensity, 588 †
Knott, Prof. C. G., The Propagation of Earthquake Vibrations through the Earth, 704 †
Knox, A., Geographical Index to Books, Periodicals, etc., 495 †
Knudsen, Dr. M., Ein hydrographischer Lehrsatz, 589 †; On the physical and chemical constants of sea-water, 445
Koettlitz, R., A Journey through Somaliland and Southern Abyssinia, 581 †, 700 †
Köhler, E. M., Kritische Studien zur Bevölkerungsfrage Chinas, 122 †; note on, 100
Kohlschütter, Dr., and Lieut. Glauning, Pendulum Expedition in East Africa, 352
Koi-Tezek, Mount, Shugnan, 669
Kolthoff, Prof., expedition in East Greenland, 566
Komati river, South-East Africa, M. A. Grandjean on the system of the, 350
Korea—
Corée: Le port de Ma-San-Pho, par A. A. Fauvel, 697 †
Korea—the Hermit Nation, by Commander H. Webster, 248 †
Korea, the Pearl of the Orient, by Charlotte M. Salwey, 366 †
Kornerup, T., Aperçu des "Meddelelser om Grönland," 373 †
Kosova tribe, Central Africa, 80, 86
Kosova Vilayet, Dr. Karl Oestreich on the geography of, 222
Kozloff, M., Expedition to Mongolia, 100
Krahmer, General, Bogdanowitsch' Ochotskisch-Kamtschatkasche Bergexpedition, 366 †
Krämer, Dr. A., Die angeblichen Hebungen und Senkungen in Samoa, 255 †
Kremser, V., Die klimatischen Verhältnisse des Memel-, Pregel- und Weichsel-Gebietes, 570 †
Kropotkin, P., Baron Toll on New Siberia and the Circumpolar Tertiary Flora, 95
Krüger, Dr. Paul, Die chilenische Reñihué-Expedition, 372 †, 585 †
Kubary, J., Beitrag zur Kenntniss der Núkuóro oder Monteverde-Inseln, 491 †
Kungur mountain, Pamirs, 522
Kuramut Dawan, Central Asia, 519
Kurse, Dr. G., Die Samoaner in der heidnischen Zeit, 255 †
Kuskh, Afghanistan, 682
Kyrillos II., S. B. Monseigneur, Le temple du Césaréum, 249 †

L.

Labadie-Lagrave, G., Le Chemin de fer du Klondyke, 252 †
Labrador—
Explorations in, by A. P. Low, 686
Ladoga, Lake—
Lac Ladoga au point de vue thermique, par M. Jules de Schokalsky, 694 †; note on, 471
La Ferrière fortress, Haiti, 313, 314
Lagerborg, R., Finland i utländsk historisk literatur, 363 †
Lagna, How to calculate the, by Prof. H. Jacobi, 703 †
Lagos, Report for 1898 (Colonial Reports), 368 †
Lagrillière-Beauclerc, E., A travers l'Indo-Chine, Cochinchine, etc., 122 †
Lake, P., Bala Lake and the River System of North Wales, 364 †
Lake, Philip, on the River System of North Wales, 679
Lamprecht, K., Ueber Historische Grundkarten, 492 †
Lanak La, Tibet, 142
Land-Forms, Origin of, through Crust-Torsion, by M. M. Ogilvie Gordon, 457 *
Lane, A. C., The Geothermal Gradient in Michigan, 371 †
Langhans, Dr. Paul, Buren in Deutsch-Sudwest-Afrika, 251 †; Die wirtschaftlichen Beziehungen der deutschen Küsten zum Meere, 135 †, 361 †; note on, 220
Lans, Kapt., Zur Kustenkunde von China, 486 †
Lantern Slides of Maps, "Diagram" Series of, by B. Dickenson and A. Andrews, 709 †
Laporte, Commandant, Carte de la Nouvelle Calédonie, 595 †
Lapparent, A. de, L'œuvre de M. Suess, 373 †; Sur la symétrie tétraédrique du globe terrestre, 130 †
Las Heras or Baker River, Patagonia, 206
Lata river, Borneo, 43
Latham, B., The climatic conditions necessary for the propagation and spread of plague, 591 †
Latitude—
Determinazione astronomica di latitudine e di azimut eseguita a Monte Pisarello, del Prof. V. Reina, 256 †
Stand der Erforschung der Breitenvariation am Schlusse des Jahres 1899, von T. Albrecht, 256 †
La Touche, T. D., Preliminary Report on the Geology of the Northern Shan States, 577 †
La Vaulx, Comte Henry de, Voyage en Patagonie, 372 †
Leblond, M., Mahé de La Bourdonnais, 132 †
Lecce, Province of, Trade of the (Foreign Office Rep.), 572 †
Lechartrie, M. G., Cartes agronomiques du canton de Redon, 243 †
Leclercq, J., Anurádhapura sous les rois cinghalais, 575 †; Le septième congrès international de géographie à Berlin, 134 †, 260†; Les Boers et leur état

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [420r] (192/232)

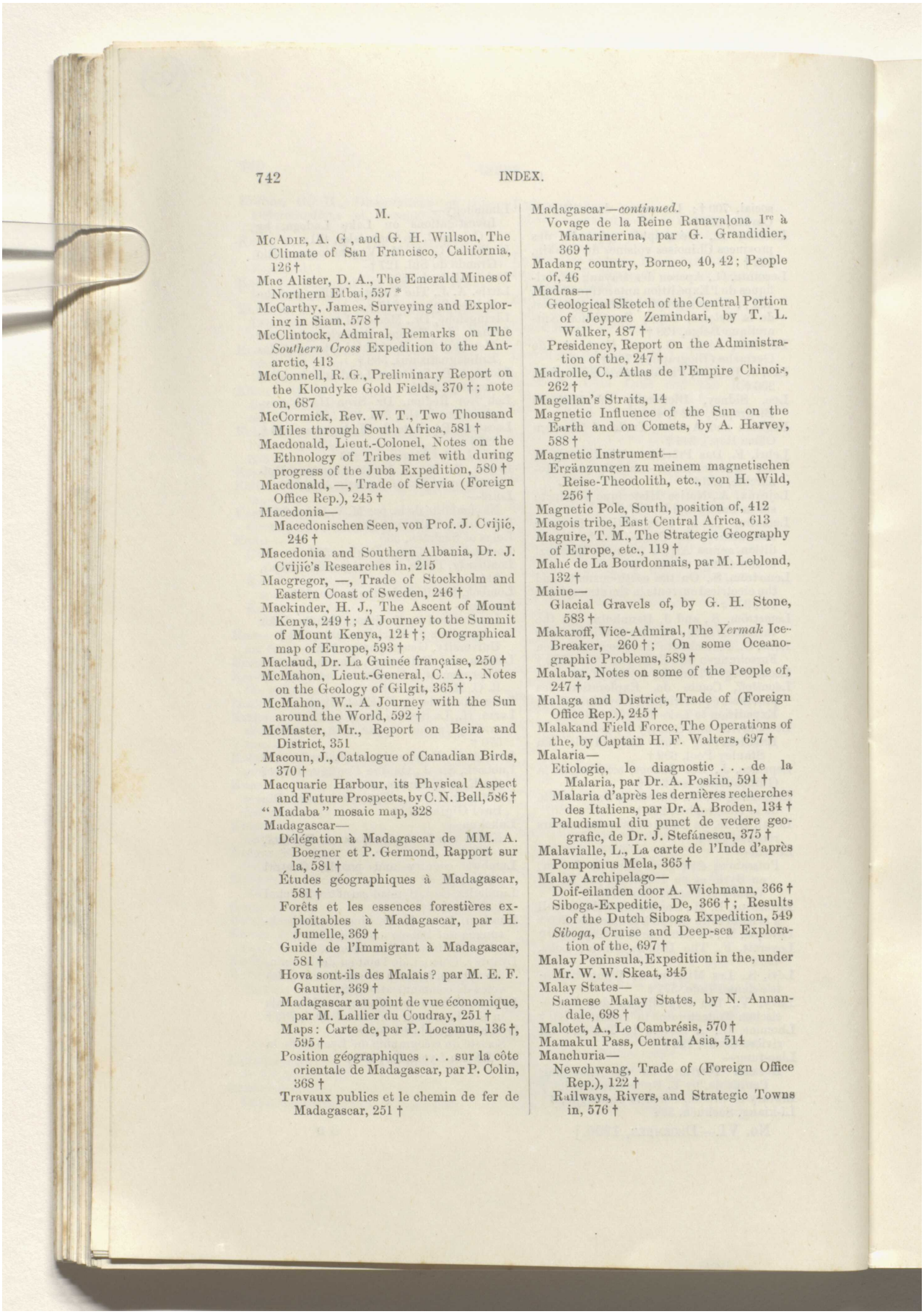
BRITISH LIBRARY

social, 700 †; Un séjour dans l'Ile de Ceylan, 696 †
Leclére, A., Géographie générale des provinces Chinoises voisines du Tonkin, 122 †
Lecointe, G., Apercu des travaux scientifiques de l'Expédition antarctique belge, 492 †; L'hydrographique dans le détroit de la *Belgica*, 492 †; Expédition Antarctique Belge, 128 †
Lecointe, Lieut. G., und Capt. A. de Gerlache (Biography), 705 †
Lee, J. Bridges, Photographic Surveying, 256 †
Lee, Sidney, Dictionary of National Biography, 132 †, 494 †
Leghorn and Ancona, Trade of (Foreign Office Rep.), 244 †
Lehrl, F., Das Präcisions-Nivellement in der österreichisch - ungarischen Monarchie, 483 †
Lejeaux, A., Notice Historique succincte sur la Cartographie, 587 †
Lemaire, Capt., L'expédition Lemaire aux sources du Congo, 249 †; Expedition across Africa from the Zambezi to the Congo mouth, 684
Lemström, S., On the earth-currents and the electrical currents in the atmosphere, etc, 375 †
Lemström, S., and J. Dannholm, On the variations in the velocity of Winds, 588 †
Lenz, O., Fortschritte der geographischen Forschungen und Reisen im 1899..579 †
Leon, Diego Flores de, voyage of, 18
Léontieff, Comte de, Exploration des provinces équatoriales d'Abyssinie, 579†; Expedition to Lake Rudolf, 103, 558
Leopoldville and Stanley Pool—
Entwickelung von Léopoldville am Stanley Pool, 699 †
Leprince, J., Les Simons, sorciers de la Guinée française, 250 †
Lespagnol, M. G., La conception actuelle de la Géographie, 260 †
Leval, G. de, La Chine d'après des auteurs récents, 122 †
Levant—
Puissances étrangères dans le Levant en Syrie et en Palestine, par M. M. Verney et Dambmann, 579 †
Levasseur, E. M., Comparaison du travail à la main et du travail à la machine, 260 †
Levêque, M., Le Zambèse et le Shire, 369 †
Leverett, F., The Illinois Glacial Lobe, 490 †
Lévi, S., Les Missions de Wang Hiuen-ts'e dans l'Inde, 577 †
Levy, V., Die Grundlagen des französischen Protectorates in Tunesien, 700 †
Lhomme, G., A travers le Tonkin: La rivière Claire, 122 †
Liao-tung—
Russian Territory on the Liao-tung Peninsula, by E. Bretschneider, 486 †
Library of R.G.S., Subjects Catalogue, 3
Li-kiang, Sechuen, 534
Limnology—
Investigations on Lake Ladoga, by Colonel J. de Shokalsky, 471
Lindman, C. A. M., Vegetationen i Rio Grande do Sul, 127 †
Lisbõa, João de, 627
Little, A. J., The Yangtze Valley and the British Sphere, 247 †
Livingstone, Dr., Memorial to, 6
Liznar, J., Einige Bemerkungen zur Messung der Horizontal-intensität des Erdmagnetismus, 589 †
Lloyd, A. B., In Dwarf Land and Cannibal Country, 369 †
Lob Nor Region, Dr. Sven Hedin's explorations in the, 345, 472, 598
Locamus, P., Carte de Madagascar, 136 †, 595 †
Loch, Lord, Obituary of, 236
Logan, W. N., A North American Epicontinental Sea of Jurassic Age, 582 †
Loire—
Navigabilité de la, par M. V. Doby, 360 †
Loka tribe, Gallaland, 300
Lolos of Sechuen, 535
Lomami river, Congo Region, 562
Lombardy, Trade of (Foreign Office Rep.), 244 †
Lombok, Strait of, depths in the, 551
London—
London and its Environs, Handbook for travellers by Karl Baedeker, 574 †
University, Geography at, 112
London and Edinburgh, Barometric and Thermometric Gradients between, by R. C. Mossman, 364 †
Long Kiu Hole, by F. Ellet, 246 †
Lorin, H., Le Soudan français, 250 †
Lorraine, Un coin de, par M. A. Merchier, 570 †
Low, A. P., Explorations in Labrador, 686
Lubbock, Sir J., On the Configuration of the Earth's Surface, 257 †
Ludwig Salvator, The Archduke, Die Insel Giglio, 572 †
Lukchun—
Klima von Luktschun, von A. Woeikof, 365 †
Lumbwa country and people, Central Africa, 79, 84
Lumholtz, Carl, Symbolism of the Huichol Indians, 582 †
Luschan, F. v., R. Parkinson's Beobachtungen auf Bóbolo und Hún, 703 †
Lyakhovski island, New Siberia, 96
Lyautey, Colonel, de l'emploi de la main-d'œuvre militaire à la construction des voies de communication, 591 †
Lyburn, E. St. John, Mining and Minerals in the Transvaal and Swazieland, 700 †
Lyons Geographical Society—
Société de Géographie de Lyon et de la Région Lyonnaise, 260 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000052

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [420v] (193/232)



M.

McAdie, A. G., and G. H. Willson, The Climate of San Francisco, California, 126 †
Mac Alister, D. A., The Emerald Mines of Northern Etbai, 537 *
McCarthy, James, Surveying and Exploring in Siam, 578 †
McClintock, Admiral, Remarks on The *Southern Cross* Expedition to the Antarctic, 413
McConnell, R. G., Preliminary Report on the Klondyke Gold Fields, 370 †; note on, 687
McCormick, Rev. W. T., Two Thousand Miles through South Africa, 581 †
Macdonald, Lieut.-Colonel, Notes on the Ethnology of Tribes met with during progress of the Juba Expedition, 580 †
Macdonald, —, Trade of Servia (Foreign Office Rep.), 245 †
Macedonia—
  Macedonischen Seen, von Prof. J. Cvijić, 246 †
Macedonia and Southern Albania, Dr. J. Cvijić's Researches in, 215
Macgregor, —, Trade of Stockholm and Eastern Coast of Sweden, 246 †
Mackinder, H. J., The Ascent of Mount Kenya, 249 †; A Journey to the Summit of Mount Kenya, 124 †; Orographical map of Europe, 593 †
Maclaud, Dr. La Guinée française, 250 †
McMahon, Lieut.-General, C. A., Notes on the Geology of Gilgit, 365 †
McMahon, W., A Journey with the Sun around the World, 592 †
McMaster, Mr., Report on Beira and District, 351
Macoun, J., Catalogue of Canadian Birds, 370 †
Macquarie Harbour, its Physical Aspect and Future Prospects, by C. N. Bell, 586 †
"Madaba" mosaic map, 328
Madagascar—
  Délégation à Madagascar de MM. A. Boegner et P. Germond, Rapport sur la, 581 †
  Études géographiques à Madagascar, 581 †
  Forêts et les essences forestières exploitables à Madagascar, par H. Jumelle, 369 †
  Guide de l'Immigrant à Madagascar, 581 †
  Hova sont-ils des Malais? par M. E. F. Gautier, 369 †
  Madagascar au point de vue économique, par M. Lallier du Coudray, 251 †
  Maps: Carte de, par P. Locamus, 136 †, 595 †
  Position géographiques . . . sur la côte orientale de Madagascar, par P. Colin, 368 †
  Travaux publics et le chemin de fer de Madagascar, 251 †
Madagascar—*continued.*
  Voyage de la Reine Ranavalona 1re à Manarinerina, par G. Grandidier, 369 †
Madang country, Borneo, 40, 42; People of, 46
Madras—
  Geological Sketch of the Central Portion of Jeypore Zemindari, by T. L. Walker, 487 †
  Presidency, Report on the Administration of the, 247 †
Madrolle, C., Atlas de l'Empire Chinois, 262 †
Magellan's Straits, 14
Magnetic Influence of the Sun on the Earth and on Comets, by A. Harvey, 588 †
Magnetic Instrument—
  Ergänzungen zu meinem magnetischen Reise-Theodolith, etc., von H. Wild, 256 †
Magnetic Pole, South, position of, 412
Magois tribe, East Central Africa, 613
Maguire, T. M., The Strategic Geography of Europe, etc., 119 †
Mahé de La Bourdonnais, par M. Leblond, 132 †
Maine—
  Glacial Gravels of, by G. H. Stone, 583 †
Makaroff, Vice-Admiral, The *Yermak* Ice-Breaker, 260 †; On some Oceanographic Problems, 589 †
Malabar, Notes on some of the People of, 247 †
Malaga and District, Trade of (Foreign Office Rep.), 245 †
Malakand Field Force, The Operations of the, by Captain H. F. Walters, 697 †
Malaria—
  Etiologie, le diagnostic . . . de la Malaria, par Dr. A. Poskin, 591 †
  Malaria d'après les dernières recherches des Italiens, par Dr. A. Broden, 134 †
  Paludismul diu punct de vedere geografic, de Dr. J. Stefánescu, 375 †
Malavialle, L., La carte de l'Inde d'après Pomponius Mela, 365 †
Malay Archipelago—
  Doif-eilanden door A. Wichmann, 366 †
  Siboga-Expeditie, De, 366 †; Results of the Dutch Siboga Expedition, 549
  Siboga, Cruise and Deep-sea Exploration of the, 697 †
Malay Peninsula, Expedition in the, under Mr. W. W. Skeat, 345
Malay States—
  Siamese Malay States, by N. Annandale, 698 †
Malotet, A., Le Cambrésis, 570 †
Mamakul Pass, Central Asia, 514
Manchuria—
  Newchwang, Trade of (Foreign Office Rep.), 122 †
  Railways, Rivers, and Strategic Towns in, 576 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000070

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [421r] (194/232)

BRITISH LIBRARY

Manchuria—*continued.*
Russia's Sphere of Influence; or, a Thousand Years of Manchuria, by E. H. Parker, 122 †
Manés, M. J., Les vingt-cinq années de la Société de géographie commerciale de Bordeaux, 259 †
Mangstza lake, No. 1 Peak, Tibet, 142
Mañiuales river, Patagonia, 201
Manley, J. J., and R. T. Günther, On the Waters of the Salt Lake of Urmi, 123 †
Mapia Islands—
Les îles Mapia, 373 †
Mapia-oder Bunai-Inseln, von Prof. Dr. A. Wichmann, 127 †
Map Areas, Measurement of—
Genauigkeit der Flächenangaben in der Geographie, von Prof. Dr. E. Hammer, 129 †
Map-reading—
Einiges über Kartenlesen, von Herr Obermair, 256 †
Map Slides—
"Diagram" Series of Geographical Lantern Slides of Maps, by B. Dickenson & A. Andrews, 709 †
Maps—
Bevölkerungsstatistische Grundkarten, von Prof. Dr. A. Hettner, 129 †
Cartography of the Terra Australis and New Holland, by J. B. Walker, 590 †
Foreign Topographic Maps, by Colonel Sir J. Farquharson, 129 †
New Light on some Mediæval Maps, by C. R. Beazley, 319 *, 375 †, 705 †
Randteckningar i gamla handskrifter af Datis La Sfera, af A. E. Nordenskiöld, 132 †
Wechselnden Phasen im geschichtlichen Sehkreis occidentalischer Cultur, 494 †
Maps, New—
Africa, 136, 262, 378, 595, 708
America, 137, 263, 379, 498, 595, 709
Asia, 136, 262, 378, 497, 594, 708
Australasia, 379
Charts, 138, 499, 595, 711
Europe, 134, 261, 377, 496, 592, 707
General, 137, 263, 379, 498, 709
Marcet, Dr. William, by Dr. F. W. Tunnicliffe, 132 †
Marco Polo, by Paul Chaix, 494 †; Marco Polo's Itinerary through Persia, Captain Sykes on, 472 †
Mardon, E. J., Photographs of East Africa, 140 †
Marine Deposits—
Analyse de fonds marins recueillis dans l'Iroise, par M. J. Thoulet, 258 †
Marine Economy of the German Coasts, Dr. P. Langhans on, 220
Marinelli, Giovanni (Biography), 259 †; by Prof. G. Dalla Vedova, 495 †
Marinelli, O., Conche lacustri dovute a suberosioni nei gessi in Sicilia, 362 †; on Geographical and Geological Terminology, 113; Idee morfologiche di Carlo Gemmellaro, 257 †; Primi materiali per la storia della cartografia marchigiana, 572 †; Superficie geologiche e superficie geografiche, 260 †
Mariong valley, Central Asia, 508
Markham, Sir C. R.—
Address to the R.G.S., 1 *
Address on opening Session 1900-1901 .. 597
Die Aufgaben der geplanten Südpolar Expeditionen, 128 †
Remarks on: "An Expedition between Lake Rudolf and the Nile," 624; "In the Heart of Borneo," 59, 62; "Journeys in Central Asia," 523, 526; "King Menelek's Dominions, etc.," 304, 306; "Methods of Survey Employed by the Chilean Boundary Commissions," 345; "Patagonian Cordillera and its main rivers," 209, 210; Presenting Medals, etc., 115, 116; *Southern Cross* Expedition to the Antarctic, 411, 413; "Studies in the Anthropogeography of British New Guinea," 441; "Through Africa from the Cape to Cairo," 183, 184
Marks, A., Nero's Great Canal, etc., 571 †
Marocco—
Casablanca, Bearbeitet nach dem Reisebericht S.M.S. *Charlotte*, 369 †
Études géographiques sur le Maroc, par Dr. Weisgerber, 369 †
Fez à l'Oranie à travers le pays des Ghiata, De, par G. Delbrel, 581 †
Itinéraires de Mogador à Marrakech, par H. Giraud, 369 †
Mogador, Bearbeitet nach dem Reisebericht S.M.S. *Charlotte*, 369 †
Morocco Scare, The, by W. B. Harris, 581 †
Marr, John E., The Scientific Study of Scenery, Review, 112; on Moels, 446
Marriott, J. A. R., Sir W. W. Hunter and his Work, 259 †
Marseilles—
Marseille port colonial, par P. Masson, 360 †
Port franc à Marseille, etc., par J. Estrine, 360 †
Marson, Prof. L., Sui ghiacciai italiani del gruppo del Pizzo Bernina, 483 †
Martel, E. A., L'Aven Armand, les Grottes de Ganges, les Gouffres de Sauve, 243 †; Padirac, Etude d'hydrologie souterraine, 360 †; La Spéléologie ou Science des Cavernes, 374 †; Sur de nouvelles constatations dans la rivière souterraine de Padirac, 484 †
Martin Behaim—
Martin de Bohemia (Martin Behaim), por E. G. Ravenstein, 590 †
Martinique, Trade of (Foreign Office Rep.), 585 †
Martonne, E. de, Sur la période glaciaire dans les Karpates méridionales, 362 †; Sur l'histoire de la vallée du Jiu, 362 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Martonne, M. de, et M. Murgoci, Sondage et analyse des boues du lac Galcescu, 120 †
Mascardi, Lake, Patagonia, 36
Masclef, A., La Géographie botanique et son évolution au XIXe siècle, 493 †, 704 †
Maspero, G., The Passing of the Empires, 850 B.C. to 330 B.C...705 †
Massachusetts—
Geology of Eastern Berkshire County in, by B. K. Emerson, 583 †
Masson, P., Marseille port colonial, 360 †
Matabeleland—
Matabele Campaign of 1896, by Colonel R. S. S. Baden-Powell, 249 †
Mathew, Rev. John, on the Australian Aborigines, 229
Mathews, E. B., The Granitic Rocks of the Pikes Peak Quadrangle, 583 †
Mathews, R. H., Divisions of the South Australian Aborigines, 373 †; Native Tribes of Western Australia, 373 †
Matteucci, Prof. R. V., Photographs showing Eruption of Mount Vesuvius, 264 †
Matthew Paris' ancient Maps, 319–326
Matzat, H., Regenmessungen aus Kamerun, 251 †
Maudslay, A. P., Biologia Centrali-Americana, Archæology, 372 †
Mauler, Captain J. von, Explorations in the Solomon Islands, 230
Maurain, E., Reconnaissance de l'arc du méridien de Quito, 491 †; note on, 356
Maurain and Lacombe, Captains, Geodetic Work of, in Ecuador, 356
Maurer, Dr. H., Prüfung eines neuen Anemometers, 257 †; Resultate . . . meteorologischer Registrirapparate in Deutsch-Ostafrika, 580 †
Maxwell, Sir H., Names of Places, 261 †; The Valley of Enchantment, 572 †
Mayer river, Patagonia, 208
Mayr, Dr. A., Pantellaria, 244 †
Mead, E. D., The Expansion of England, 495 †
Mead, Elwood, Rise and Future of Irrigation in the United States, 490 †
Meade, Lieut.-Colonel, The Trade of the Persian Gulf (Foreign Office Rep.), 578 †; note on, 682
Medal of the Queensland Branch of the Royal Geographical Society of Australasia, 568
Medals and Awards of the R.G.S., Presentation of, 115
Medical Geography—
Influence des températures élevées sur l'organisme humain, par Dr. A. Broden, 591 †
Mediterranean Region—
Variations des limites de la région méditerranéene, par M. G. Bonnier, 245 †
Meetings of R.G.S., Session 1899–1900.. 115, 241, 693
Meinardus, Dr. W., Eine einfache Methode zur Berechnung klimatologischer Mittelwerthe von Flächen, 493 †
Mekeo District, British New Guinea, 266, 271; People of, 275
Melanesia—
Amongst Tropical Islands, by Hannah Chewings, 491 †
Parkinson's Beobachtungen auf Bóbolo und Hún, von F. v. Luschan, 703 †
Melbourne, Mount, Antarctic, 397
Melbourne to Tokio, Notes by the Way, by W. Daish, 486 †
Melvill, E. H. V., Map of the Vereenigning-Pretoria portion of the Transvaal, 378 †
Menelek's Dominions and the Country between Lake Gallop (Rudolf) and the Nile Valley, by the late Captain Wellby, 292 *
Menendez, Father Francisco, journeys of, 22
Merchier, A., Un coin de Lorraine, 570 †
Merlin, —, Trade and Agriculture of Thessaly (Foreign Office Rep.), 244 †
Merritt, W. H., Field Testing for Gold and Silver, 495 †
Mersey, River, Report on the Present State of the Navigation of the, by Sir G. S. Nares, 364 †
Meteorological Congress—
Atti del IV. Congresso Meteorologico Italiano, 260 †
Meteorology—
Kite Work of the Weather Bureau, by H. C. Frankenfield, 257 †
Note sur le dépouillement des journaux météorologiques des bâtiments de commerce, 493 †
Prüfung eines neuen Anemometers, von Dr. H. Maurer, 257 †
Temperatur der freien Atmosphäre, von Dr. H. Hergesell, 374 †
Wichtigsten Bergobservatorien, von F. Erk, 374 †
Wo ist der höchste Luftdruck der Erde, mit und ohne Reduktion auf das Meeres-niveau? von A. Woeikof, 374 †
Mexico—
Cordillera of, by O. H. Howarth, 371 †
Deutschtum in Mexiko, 582 †
Folklore of, Catalogue of a Collection of Objects illustrating the, by F. Starr, 489 †
Geographical Sketch of (Bureau of American Republics), 489 †
Huichol Indians, Symbolism of the, by Carl Lumholtz, 582 †
Rio Del Fuerte of Western Mexico and its Tributaries, by K. D. Doyle, 582 †
Mexico and Guatemala—
Auf alten Wegen in Mexiko und Guatemala, von C. Seler, 701 †
Meyer, Dr. Hans, Der Kilimanjaro, Reisen und Studien, Note on, 352
Meyer, Dr. Hermann (Biography), 132 †
Mfumbiro, Mount, Central Africa, 172, 184, 228, 560

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b0

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [422r] (196/232)

BRITISH LIBRARY

Michel, C., Résultats géographiques de la mission de Bonchamps, 487 †; note on, 476
Michigan—
Crystal Falls Iron-bearing District of, by J. M. Clements and H. L. Smyth, 371 †, 583 †
Geothermal Gradient in, by A. C. Lane, 371 †
Preglacial Drainage in, Further Notes on, by E. H. Mudge, 583 †
Middlemiss, C. S., Report on a geological reconnaissance in parts of the Southern Shan States, 577 †
Mill, Dr. H. R., Fragment of the Geography of England, 246 †; Development of Habitable Lands, 131 †; New Lands: their Resources and Prospective Advantages, 592 †; note on, 568; Pettersson-Nansen Insulating Water-bottle, 446, 469; Town Sites, from a Geographical Point of View, 590 †
Miller, A. M., Swaziland, 251 †
Miller, Dr. Konrad, Die Ebstorfkarte, 131 †
Millspaugh, C. F., Plantæ Utowanæ, 702 †
Milne, Prof. J., Large Earthquakes recorded in 1899..443
Mines and Quarries: General Report and Statistics, edited by C. Le Neve Foster, 258 †
Minnesota—
Geological and Natural History Survey of, 126 †
Gneisses . . . of South-Western Minnesota, by C. W. Hall, 583 †
Mississippi—
Reaction Breakwater of the, by L. M. Haupt, 583 †; note on, 477
South-west Pass of the, Proposed Improvement of the, 477
Missouri—
Fossil Flora of the Lower Coal Measures of, by D. White, 583 †
Moaripi people, New Guinea, 271
Modi, J. J., The Cities of Irân as described in the old Pahalavi treatise of Shatrôiha-i-Irân, 578 †, 698 †; The Etymology of a few towns of Central and Western Asia, 485 †
Moe, O. F., Minder fra Alaska, 489 †
Mogador, Bearbeitet nach dem Reisebericht S.M.S. *Charlotte*, 369 †
Mohn, H., Klima-Tabeller for Norge, 362 †
Moisel, M., Das Konzessionsgebiet der Gesellschaft Nord-west-Kamerun (map), 379 †
Monaco, Prince de, Résultats des Campagnes Scientifiques accomplies sur le Yachte de, 588 †
Monckton, G. F., Mining Districts near Kamloops Lake, British Columbia, 125 †
Moncousin, M. P., Notes sur les Tehuelches, 253 †
Mongolia—
Expedition to, under M. Kozloff, 100
Orkhon, Inscriptions de l', par E. H. Parker, 247 †
Mont Blanc—
Chemin de fer du pied au sommet du Mont-Blanc, par J. et H. Vallot, 360 †
Monteil, Colonel, Conférence sur le Domaine colonial de la France, 376 †
Moore, Mr., Expedition to the Central African Lakes, 228
Moos, N. A., A Short Note on the Disturbance of the Magnetical . . . Instruments at the Colaba Observatory, 577 †
Moraleda, Don José de, journey in Patagonia, 21
Moran, Cardinal, on Quiros and the Discovery of Australia, 479
Moravian Missions, Periodical Accounts relating to, 376 †
Morren, F. W., La Culture du Café au Guatemala, 254 †
Morse, I., Photographs taken in Mongolia and Russian Central Asia, 380 †
Mossman, R. C., Barometric and Thermometric Gradients between London and Edinburgh, 364 †
Motu tribe, New Guinea, 416
Mountaineer's Equipment, Catalogue of, 261 †
Moxly, Rev. J. H. S., The New Theory of Tide, 705 †
Mozambique and Quilimane, Trade of (Foreign Office Rep.), 251 †
Msimanga, Mount, Central Africa, 559
Mudge, E. H., Further Notes on Preglacial Drainage in Michigan, 583 †
Mudirieh of Assyut, The Oases of the, by A. R. Guest, 655
Mulhall, M. G., Imports and Exports of 40 Years (United Kingdom), 364 †
Müller, F. Max, The Sacred Books of the East, 591 †
Mulu Mount, Borneo, 39, 57
Murray, John, Handbook for Travellers in Greece, 485 †; Handy Classical Maps, edited by G. B. Grundy, 134 †, 496 †, 498 †; note on, 234
Murray and Kimens, Messrs., Trade of Poland and Lithuania, 363 †
Murray, Sir John, Presidential Address to Section E, Brit. Association, 374 †
Murray, Sir John, and F. P. Pullar, A Bathymetrical Survey of the Fresh-water Lochs of Scotland, 121 †, 246 †
Mursu and Murle Tribes, East Central Africa, 609
Mut, Oasis of Dakhilah, 659, 660
Müttrich, Dr., Ueber den Einfluss des Waldes auf die Lufttemperatur, etc., 588 †
Muz Tagh Ata, Central Asia, 508, 524
Mweru, Lake, Mr. Weatherley's observations on, 475

N.

Naivasha Lake, Journey from, to the Victoria Nyanza, by Captain G. H. Gorges, 78 *, 487 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000058

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [422v] (197/232)

Nansen, Dr., and his Scientific Results, by E. Plumstead, 256 †; observations of, 109
Nansen, Dr., and Prof. Pettersson, Insulating Water-bottle of, 469
Nares, Sir G., Relics of Arctic Expedition of, 109; Report on the Present State of the Navigation of the River Mersey, 364 †
Narragansett, Basin, Geology of the, by N. S. Shaler, J. B. Woodworth, and A. F. Foerste, 583 †
Nathorst, A. G., Den svenska expeditionen till nordöstra Grönland, 492 †; Om myskoxen och myskoxjagter på Ost-Grönland, 587 †; Ueber die oberdevonische Flora der Bären Insel, 586 †
Nautical Almanac and Astronomical Ephemeris for 1903 .. 256 †
Navigation—
Self-instruction in the Practice and Theory of, by the Earl of Dunraven, 703 †; note on, 690
Nebraska—
Geology and Water Resources of, by N. H. Darton, 371 †
Glacial Grooves and Striæ in, by E. H. Barbour, 584 †
Nebular Hypothesis, An attempt to test the, by T. C. Chamberlin, 129 †
Negri, E., Lo stato di Minas Geraes nel Brasile, 127 †
Nerman, G., Studier öfver vattenförhållandena i svenska sjöar, 246 †
Nero's Great Canal, etc., by A. Marks, 571 †
Netuschill, F., Die astronomischen Gradmessungsarbeiten des k. u. k. militär-geographischen Institutes, 483 †
Neuhaus, G., Der Obstreichthum der insel Zanzibar, 487 †
Neve, Dr. E., The Ascent of Haramouk, 365 †
Neville-Rolfe, —, Trade of Southern Italy (Foreign Office Rep.), 244 †
Neville, T., Jérusalem ancienne, 124 †
New Britain—
North Coast of, Herr v. Bennigsen's visit to, 565
South Coast of, Dr. Schnee's voyage along the, 107
New Caledonia—
Colonisation en Nouvelle-Calédonie, par M. L. de Sainte-Marie, 373 †
Maps: Carte de la Nouvelle Calédonie, par Commandant Laporte, 595 †
Newchwang, Trade of (Foreign Office Rep.), 122 †, 576 †
Newell, F. H., Report of Stream measurements (U.S. Geological Survey), 372 †
New Guinea—
British: Annual Report, 107; Anthropogeography of, Studies in the, by Prof. A. C. Haddon, 265 *, 414 *; Customs, Arts, and Crafts in, 417–437; Photographs of scenery in vicinity of Kemp Welsh River in, by R. E. Guise, 596 †; Report for 1898–99 (Colonial Rep.), 703 †
German: Bericht über eine Bereisung Neu-Mecklenburgs, 585 †
Klima von Neu Guinea, von Dr. A. v. Danckelman, 255 †
New Lands: their Resources and Prospective Advantages, by H. R. Mill, 592 †; review, 56*
Newman, George, Bacteria, especially as they are related to the economy of nature, etc., 706 †
Newnes Land, Antarctic, 401
New Orleans and District, Trade of (Foreign Office Rep.), 253 †
New Siberia Islands, expeditions to, under Baron Toll and M. Volossovitch, 232, 567; and the Circumpolar Tertiary Flora, Baron Toll on, by P. Kropotkin, 95
New South Wales—
Darling River, Rapid Preliminary Surveys on the, by W. Poole, 255 †
Mercury or "Quicksilver" in, by J. E. Carne, 491 †
Rain . . . Observations made in, Results of, by H. C. Russell, 586 †
Rock Temperatures, Records of, by Rae, Pittman and David, 586 †
Statistical Register, 255 †
Statistics, History, and Resources, 585 †
Trawling Expedition of H.M.C.S. *Thetis*, Scientific Results of the, 128 †
New York—
Physical Geography of New York State, by E. T. Turner, 253 †
Slate Belt of Eastern New York and Vermont, by T. N. Dale, 371 †
Trade of (Foreign Office Rep.), 253 †
New Zealand—
Bush of, Canon P. Walsh on the Future of the, 108
Nianam river, 607
Niari, Le bassin minier du, par A. Le Chatelier, 580 †
Nicaragua Canal—
Nicaragua Canal in its Geographical and Geological Relations, by A. Heilprin, 127 †
Water Supply for the, by A. P. Davis, 585 †
Nicaragua, Lake—
An Assumed Inconstancy in the Level of, by C. W. Hayes, 254 †
Nice and District, Trade of (Foreign Office Rep.), 361 †
Nielsen, Dr. Y., Das neueste Werk über die geographische Onomatologie Norwegens, 362 †
Nieuwenhuis, Dr. A. W., Tweede reis van Pontianak naar Samarinda, 366 †
Niger—
Coast Protectorate, Report for 1898–9 (Colonial Rep.), 124 †
Explorations by M. Baillaud on the, 227
French Niger Territory, M. Baillaud on the economic value of, 477

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000083

مكتبة قطر الوطنية
Qatar National Library

Niger—*continued.*
Territoires français du Niger, par E. Baillaud, 488 †
Nile—
Barrage of the, by Alderman I. Bowes, 488 †
Dam and reservoirs of the, 103
Major Gibbons' Expedition on the, 104
Southern Nile Watershed, 559
White, Removal of "Sudd" from, 103
Ningpo, Trade of (Foreign Office Rep.), 122 †
Nirehuan river, Patagonia, 201
Nkole, A Missionary Journey through, by Bishop Tucker, 249 †
Nordenskiöld, A. E., Randteckningar i gamla handskrifter af Datis La Sfera, 132 †
Nordenskjöld, Otto, Sydpolarforskningens nuvarande ställing och mal, 128 †; Topographisch-geologische Studien in Fjordgebieten, 588 †
Nordgaard, O., The Norwegian North-Atlantic Expedition, 258 †
Norman, Ménie Muriel, In the Haunted Crimea, 363 †
Normandy—
Highways and Byways in, by Percy Dearmer, 120 †
Northcott, Lieut.-Colonel H. P., Report on the Northern Territories of the Gold Coast, 368 †; note on, 683
Norway—
Braesjørste i fordums tid af dr. H. Reusch, 572 †
Et brev til pave Nicolaus den 5te om Norges beliggenhed og undre af Prof. G. Storm, 572 †
Geographische Onomatologie Norwegens, von Dr. Y. Nielsen, 362 †
Klima-Tabeller for Norge, af H. Mohn, 362 †
Paris Exhibition, Official Publication for the, 572 †
Stykke af det Timanske bjergk-jaedesystem i Norge af dr. H. Reusch, 572 †
Sundal Drainage System in Central Norway, by R. L. Barrett, 572 †
Trade of (Foreign Office Rep.). 572 †
Valley of Enchantment, by H. Maxwell, 572 †
Vore største indsjøer af, A. Holmsen, 572 †
Norway and Spitsbergen—
Sulle coste di Norvegia e delle Spitzberghe, 573 †
Norwegian North-Atlantic Expedition, by O. Nordgaard, 258 †
Novarese, N., Le Alpi Piemontesi, 485 †
Nova Scotia—
Sydney Coal Field in, Descriptive Note, etc., by Hugh Fletcher, 252 †
Tidal Undulations, Secondary, in the region of, by W. Bell Dawson, 125 †
Novaya Zemlya—
Expedition by Lieut. Borissoff to, 689
Nuer tribe, Central Africa, 182, 303
Nuevo, Valle, Patagonia, 189, 190
Nyasa, Lake—
Untersuchungen im Nyassa-See und in den Seen im nordlichen Nyassa-Land, von Dr. F. Fülleborn, 579 †; note on, 561
Work in region of, 476
Nyasaland, Northern, Dr. Dantz' geological work in, 106
Nyavarongo river, Central Africa, 560
Nyiro river, Central Africa, 79

O.

Obermair, Herr, Einiges über Kartenlesen, 256 †
Obrucheff, V. A., Central Asia, Northern China and the Nan Shan, 121 †
Oceanic Life—
Résultats des Campagnes Scientifiques accomplies sur son Yacht par le Prince de Monaco, 588 †
Oceanography—
Cable Route between Bermuda and Jamaica, On the Survey of the, by R. E. Peake, 704 †
Campagnes Scientifiques de Prince de Monaco, par Dr. J. Richard, 589 †
Chimie Océanique, Les études nouvelles, par J. Thoulet, 589 †
Circulation of the Surface Waters of the North Atlantic, by H. N. Dickson, 589 †
Danish Ingolf-Expedition, 374 †
Eisschmelzung auf die Oceanische Cirkulation, Ueber den Einfluss der, von O. Pettersson, 130 †
Erklärung und Berechnung des Stromverlaufs an Flussmündungen, von W. Ekman, 258 †
Fluctuations du niveau des mers, par J. Girard, 589 †
Fonds marins recueillis dans l'Iroise, Analyse de, par M. J. Thoulet, 258 †
Gulf Stream Water. On the Origin of, by P. T. Cleve, 130 †
Hydrographischen Untersuchungen des Nordatlantischen Ozeans, by Dr. O. Pettersson, 258 †
Hydrographischer Lehrsatz, von M. Knudsen, 589 †
Intorno ad alcuni nuovi areometri ad immersione totale, di G. Guglielmo, 258 †
Italia e il suo Mare, del C. Bertacchi, 704 †
Kritische Bemerkungen zu Dr. Natterer's "Chemisch-Geologischen Tiefseeforschungen," von Prof. T. Fuchs, 589 †
Küstenwasser, Das kalte, von E. White, 130 †
Marine Research, International Conference for, 257 †
Muséum océanographique de Monaco, par Jules Richard, 131 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b9

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [423v] (199/232)

Oceanography—*continued.*
Några iakttagelser öfver hafsvattnets salthalt i Finska Skärgårdshafvet, af P. H. Olsson, 258 †
Norwegian Marine Investigations, Report on, by Dr. J. Hjort, O. Nordgaard, and H. H. Gran, 131 †
Norwegian North Atlantic Expedition, by O. Nordgaard, 258 †
Océan Arctique, Matériaux océanographiques rassemblés pendant les années 1899–93, par M. N. Andréef, 704 †
Oceanographic Problems, On Some, by Vice-Admiral S. Makaroff, 589 †
Planktonmètre pour pêches pélagiques à grande vitesse, par G. Buchet, 374 †
Plankton-organisms, On the Seasonable Distribution of some, by P. T. Cleve, 130 †
Presidential Address to Section E, Brit. Assoc., by Sir John Murray, 374 †
Siboga Expedition, On the Work of the, 130 †, 549 *
Surface Waters of the Sea round the British Coasts, Mean Temperature of the, by H. N. Dickson, 130 †
Tidal Currents of the North Sea, by A. Buchan, 704 †
Valdivia Expedition, Oceanographical . . . Work of the, by Dr. G. Schott, 258 †
Valdivia, Deutsche Tiefsee-Expedition auf dem, von Dr. G. Schott, 589 †
Wasserzirkulation im Nordatlantischen Ozean, von Dr. O. Pettersson, 257 †
Ochrid, Lake, Macedonia, 217, 218
Odessa and District, Agriculture and Trade of (Foreign Office Rep.), 245 †
Oestreich, Dr. K., on the Geography of the Kosovo Vilayet, 222
Offord, J., Note on the Geography of Phœnician Inscriptions, 376 †
Ohio–
Rock Waters of, by E. Orton, 371 †
Oikapu, New Guinea, 271
Okavango—
Bericht über eine reise nach dem Okavangogebiet, von Lieut. Eggers, 580 †; note on, 561
Okhotsk and Kamchatka, M. Bogdanovich's Expedition to, 222
Oldham, R. D., Report on the Great Earthquake of June, 1897..696 †; on the coast-line of Thirlmere, 446
Olsson, P. H., En Trapa-förande torfmosse på Åland, 245 †; Några iakttagelser öfver hafsvattnets salthalt i Finska Skärgårdshafvet, 258 †
Olssufjev, E., The Territory of Anadyr, 578 †
Olufsen, Lieut. O., Danish Expedition to the Pamirs under, 99; Den anden danske Pamir-Expedition, 366 †; Die zweite Dänische Pamir-Expedition, 123†
Omin, East Central Africa, 620
Omond, R. T., Temperature Observations in Somaliland and Abyssinia, 581 †
Ookhtomsky, Prince E., Travels in the East of Nicholas II., 575 †
Oppenheim, Dr. Max von, Vom Mittelmeer zum Persischen Golf, 367 †
Orange Free State—
Maps: War Map of the, by W. and A. K. Johnston, 136 †
Ordnance Survey Maps of England and Wales, 134 †, 261 †, 377 †, 496 †, 592 †, 708 †
Oregon—
Coos Bay Coal Field, by J. S. Diller, 371 †
Orkneys—
Old Red Sandstone of the, by J. S. Flett, 695 †
Orleans, Prince Henri d', Le Transvaal et l'Abyssinie, 582 †
Orton, E., The Rock Waters of Ohio, 371 †
Osborn, Prof. H. F., The Geological and Faunal Relations of Europe and America during the Tertiary Period, etc., 130 †
Osorno volcano, Patagonia, 33
Ostiak tribe of Siberia, 347
Ostrovo, Lake, Macedonia, 218
Oswald, Dr. A., Eine Besteigung des Ararat, 698 †
Oswell, William Cotton, Hunter and Explorer, by W. E. Oswell, 705 †
Oxford—
Diploma in Geography at, 112
School of Geography, 3, 357; Scholarship of, 567

P.

Pacaya volcano, Central America, 478
Pacific—
Albatross, Explorations of the, by A. Agassiz, 128 †, 255 †
Pacific Islands, French—
Cable across the, Further Correspondence relating to the Proposed construction of a, 255 †
Notice sur les Etablissements Français de l'Océanie, 703 †
Padrões or pillars of stone used by the Portuguese discoverers, 627, 642
Page, J., Ice and Ice Movements in Bering Sea, 373 †; note on, 110
Pakhoi, Trade of (Foreign Office Rep.), 486 †
Palena river, Patagonia, 26, 195
Palestine—
Days in Galilee and Scenes in Judæa, by Rev. A. A. Boddy, 698 †
Maps: Murray's Handy Classical Maps, edited by G. B. Grundy, 498 †
Matthew Paris' map of, 325
Trade of (Foreign Office Rep.), 248 †
Pamabo range, Borneo, 39
Pamirs—
Dänische Pamir-Expedition, Die zweite, von O. Olufsen, 123 †; note on, 99
Den anden danske Pamir-expedition, O. Olufsen, 366 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006c

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [424r] (200/232)

Pampaloni, L., I terrini carboniferi di Seui ed oolitici della Perdaliana in Sardegna, 362 †
Pantellaria, von Dr. A. Mayr, 244 †
Papal Demarcation—
Lines of Demarcation of Pope Alexander VI., by S. E. Dawson, 494 †
Papuans of New Guinea, 270
Para, Trade of (Foreign Office Rep.), 254 †
Paraguay—
Etymologie des Wortes "Paraguay," von Dr. R. Endlich, 254 †
Trade of (Foreign Office Rep.), 372 †
Paris—
Paris and Environs with Routes from London to Paris, Handbook for Travellers by K. Baedeker, 361 †
Plans of, and the Exhibition, by W. and A. K. Johnston, 135 †
Plan de l'Exposition Universelle de 1900, par E. Fasquelle, 262 †
Sol et la croissance de Paris, par M. Paul Dupuy, 484 †
Paris, Matthew, ancient maps of, 319–326
Parker, E. H., Inscriptions de l'Orkhon, 247 †; Russia's Sphere of Influence; or, a Thousand Years of Manchuria, 122 †
Parliamentary Reports, etc., Catalogue of, 706 †
Pasanisi, F. M., La popolazione dell' Europa, 242 †
Passarge, Dr. S., Durch die Karroo nach Kimberley, 251 †
Patagonia—
Cordillera of, and its Main Rivers, by Dr. Hans Steffen, 14 *, 185 *
Reisen in den Patagonischen Anden, by Dr. Hans Steffen, 372 †
Southern: Some Geographic Features of, by J. B. Hatcher, 254 †; Sedimentary Rocks of, by J. B. Hatcher, 254 †
Voyage en Patagonie, par le Comte Henri de La Vaulx, 372 †
Paulitschke, Dr. P., Zur Erinnerung an, von Dr. W. Hein, 590 †; (Biography of), 259 †
Pavie Mission in Indo-China, Results of the, 248 †, 473
Payer, Lieut., Map of Franz Josef Land, Admiral von Brosch on, 109
Payeur-Didelot, M., Trente Mois au Continent Mystérieux, 488 †
Peake, R. E., On the Survey of the . . . Cable Route between Bermuda and Jamaica, 704 †
Pearce, Captain F. B., Notes on the Country between Lake Chiuta and the River Luli, 367 †; Rambles in Lion Land, 370 †
Peary, Mr., Work of, Mr. H. L. Bridgman on, 492 †
Peary Expedition of 1900 in the Arctic Regions, 109
Pe-chi-li—
Golf von Petschili, 576 †
Pe-chi-li—*continued*.
Report on the Province of Chi-li, Quarter-Master-General's Department, Simla, 486 †
Peel, C. V. A., On a Collection of Insects . . . made in Somaliland, 370 †
Peh-shui-chiang, 532
Pelet, Paul, Atlas des Colonies Françaises, 137 †, 379 †, 709; Un nouvel "Atlas des colonies françaises," 376
Penas, Gulf of, Patagonia, 204
Penck, Dr. A., Bemerkungen über alte und neue Lothungen im Hallstätter See, 483; Die Begründung der Lehrkanzel für Geographie und des geographischen Institutes an der Universität Wien, 706 †; Der Vernagtferner, 694 †; Die vierte Eiszeit im Bereiche der Alpen, 694 †; Eduard Brückner, Die feste Erdrinde und ihre Formen, 704 †
Peragallo, P., Ancora sulla distinta personalità di Verrazzano e Florin, 259 †
Pereira, J. M. E., Elementos do logographia industrial, 573 †
Perrine, C. D., Earthquakes in California, 490 †
Perron, C., Les Reliefs en général et du Relief au 1: 100,000 de la Suisse en particular, 703 †
Perrot, Herr B., explorations of Ancient Ruins in German East Africa, 561
Persia—
Cities of Irân as described in the old Pahalavi treatise of Shatrôiha-i-Irân, by J. J. Modi, 578 †
Marco Polo's Itinerary through, Captain Sykes on, 472
Persia, by Sir Lepel Griffin, 248 †
Persia and Afghanistan—
Problem of the Middle East, by General Sir Thomas Gordon, 123 †
Persian Gulf—
Ancient Trading Centres of the, by Captain A. W. Stiffe, 211 *
Trade of the (Foreign Office Rep.), 578†; note on, 682
Peru—
El Peru en Europa, by C. B. Cisneros and R. E. Garcia, 491 †
Mapa del Peru, by A. Raimondi, 263 †
Sinopsis geográfica y estadistica del Peru, 491 †
Petermann, R. E., Gletscher und Firnmeere, 257 †
Peters, Dr. Carl, Macombe's Country, 369 †
Petersen, Dr. J., Bewegungsrichtungen des diluvialen Inlandeises, 493 †
Petitot, E., Du Territoire d'Alberta à l'État d'Iowa par le Far-West, 371 †
Petrohue river, Patagonia, 32
Pettersson, O., Die Wasserzirkulation im Nordatlantischen Ozean, 257 †; Die hydrographischen Untersuchungen des Nordatlantischen Ozeans, 258 †; Ueber die Einfluss der Eisschmelzung auf die Oceanische Cirkulation, 130 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [424v] (201/232)

Pettersson - Nansen Insulating Water-Bottle, by H. R. Mill, 469
Pettipice, T. W., The Intermediate School Geography, 706 †; The Irish School Geography, 706 †
Phænology—
Phänologische Mitteilungen, von E. Ihne, 704 †
Philadelphia, Trade of (Foreign Office Rep.), 371 †
Philip, G., London School Board Atlas, 710 †
Philippines—
Diseases of the Islands, Report of a Special Commission on the, by Prof. Flexner and Prof. Barker, 698 †
Igorroten von Pangasinan, von F. Blumentritt, 578 †
Philippine Islands and their People, by J. G. Schurman, 248 †
Tifones del Archipiélago Filipino y mares circumvecinos, por P. J. Doyle, 248 †
Trade of (Foreign Office Rep.), 578 †
Phillips, P. L., List of Maps and Views of Washington and District of Columbia, 253 †
Phœnicia—
Phénicie et les Phéniciens, par E. Reclus, 259 †
Phœnician Inscriptions, Note on the Geography of, by J. Offord, 376 †
Photographic Surveying—
Paper on, by J. Bridges Lee, 256 †
Photogrammetrische Terrainaufnahme, von A. von Hübl, 587 †
Photographs—
Africa, East, by E. J. Mardon, 140 †
British New Guinea, Scenery in vicinity of Kemp Welsh river in, by R. E. Guise, 596 †
Canada, North-West Territories of, by D. T. Hanbury, 139 †
Mongolia and Russian Central Asia, by I. Morse, 380 †
Quetta to Europe, taken by Captain Benn during journey from, 596 †
Sierra Leone, by C. L. Weller, 712 †
Transcaucasia, The Aras and Kur rivers in, by C. S. Gulbentian, 380 †
Vesuvius, Eruption of, by Prof. R. V. Matteucci, 264 †
Yangtse Valley and Sechuen, by R. L. Jack, 500 †
Phyto-Geography—
Géographie botanique et son évolution au XIXe siècle, par A. Masclef, 704 †
Pikes Peak Quadrangle, Granitic Rocks of the, by E. B. Matthews, 583 †
Pilkington, W., On Methods adopted in carrying out Dock and Harbour Works at Quebec, 125 †
Pinon, R., La Chine qui s'ouvre, 486 †
Pio di Savoja, G., Gli Italiani nel sud dello Stato di Sta. Caterina, 372 †
Piræus, Trade and Agriculture of the (Foreign Office Rep.), 244 †
Pirie, Mount, Central Africa, 475
Pittard, Dr. E., Anthropologie de la Suisse, 121 †; Note préliminaire sur l'ethnologie de la Savoie et de Haute-Savoie, 484 †, 570 †
Pjetursson, H., The Glacial Palagonite-Formation of Iceland, 244 †
Place Names—
Etymologies Lyonnaises, par M. A. Steyert, 706 †
Etymology of Africa and Ophir, by Sir George Birdwood, 134 †
Metodo e misura nelle ricerche di topo-nomastica, Del Prof. G. Grasso, 592 †
Names of Places, by Sir H. Maxwell, 261 †
River Terminology, by R. Richardson, 376 †
Trascrizione dei Nomi di Luogo, by Dr. S. Crotta, 592 †
Plague—
Bubonic Plague, History and Geographic Distribution of, by G. N. Sternberg, 134 †
Climatic conditions necessary for the propagation and spread of plague, by B. Latham, 591 †
Plant-Geography—
Fortschritte der Pflanzen-geographie in 1896 bis 1898, von A. F. W. Schimper, 374 †
Geographische Verbreitung der Rostpilze, von Dr. P. Dietel, 374 †
Latitude, Influence of, on Plant-life in Germany, Prof. Ihne's observations, 680
Plehn, R., Beiträge zur Völkerkunde des Togo-Gebietes, 582 †
Pleyte, C. M., Herinneringen uit Oost-Indie, Soematra's Westkust, 123 †, 366 †
Plumstead, E., Mr. Moxley's Appeal to the Gentiles, 374 †; Dr. Nansen and his Scientific Results, 256 †; Moxley's Theory of the Tides, 705 †
Poesche, Dr. Theodor (Biography), 259 †
Poincaré, A., Combinaison des effets des révolutions synodique et tropique de la Lune, 493 †; Rapport sur le projet de revision de l'arc méridien de Quito, 491 †; Mouvements barométriques provoqués . . . par la marche du Soleil et de la Lune, 257 †
Pokao people, New Guinea, 276
Poland and Lithuania, Trade of (Foreign Office Rep.), 363 †
Polar regions—
Conquête des Poles, La, par Lieut.-Gen. Wauwermans, 128 †
Walfang, Die gegenwärtige Eismeer-fischerei und der, von Hegemann, 128 †
Pomerania, Trade of (Foreign Office Rep.), 243 †
Pondicherry, Trade of (Foreign Office Rep.), 487 †
Poole, R. L., Historical Atlas of Modern Europe, 377 †, 708 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000002

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [425r] (202/232)

BRITISH LIBRARY

Poole, W., Rapid Preliminary Surveys on the Darling River, N.S.W., 255 †
Porena, Prof. F., Della Morfologia della superficie terrestre nella Geografia, 493 †; Le scoperte geografiche del secolo XIX., 375 †, 579 †
Port au Prince, Haiti, 308
Porto Alegre, Trade of (Foreign Office Rep.), 490 †
Porto Rico, its Topography and Aspects, by H. M. Wilson, 491 †; Trade of (Foreign Office Rep.), 702 †
Port Said and Suez, Trade of (Foreign Office Rep.), 699 †
Portugal—
Arms of, in use up to 1485 .. 628
Elementos de logographia industrial, por J. M. E. Pereira, 573 †
Map: Carta Geologica de, por Delgado e Choffat, 136 †
Trade of (Foreign Office Rep.), 245 †
Position observations—
Auflösung des Zweihöhen-Problems nach einer Näherungsmethode von Raper, von Dr. C. Börgen, 256 †
Zur Höhenberechnung, von Dr. O. Fulst, 587 †
Poskin, Dr. A., Bilans Congolais, 249 †; Note sur l'étiologie, le diagnostic . . . de la Malaria, 591 †
Possession Island, Antarctic, 396 †
Potanin, G. N., Letzte Reise in West-China, von Dr. E. Bretschneider, 122 †
Pottinger, Captain E. C., A Recent Survey in Western China, 575 †; Surveys for the Burma-Sechuan Railway, 680, 681
Prespa, Lake, Macedonia, 217, 218
Preston, E. D., Geodatische Arbeiten in den Vereinigten Staaten, 125 †; The United States Coast and Geodetic Survey, 126 †
Prichard, H., Through Haiti, 306 *
Prins, P., Explorations in the Shari Basin, 228; Vers le Tchad, 250 †; Voyage au Dar Rounga, 250 †
Proskowetz, Max von, mit einem Epilog (Biography), 133 †
Prussia—
Pässe der Sudeten unter besonderer Berücksichtigung der Zentralsudeten, von Dr. R. Fox, 243 †
Polaben im hannöverschen Wendland, von Dr. F. Tetzner, 243 †
Provinz Westpreussen und ihre Naturdenkmäler, von Dr. C. Brick, 485 †
Regenkarte der Provinz Ostpreussen, von Prof. Dr. G. Hellmann, 120 †
Römercastell bei Haltern an der Lippe, von Dr. C. Schuchhardt, 243 †
Puelo river and Cordillera, 36, 185
Pugh's Almanac and Queensland Directory, 255 †
Pullar, F. P., and Sir J. Murray, A Bathymetrical Survey of the Fresh-water Lochs of Scotland, 121 †, 246 †
Pungwe River, E. Africa, 165
Punjab—
Gazetteers of the Peshawur, Kangra, and Montgomery Districts, 577 †
Railway Flood-Works in the, by R. C. Farrell, 577 †
Report on the Administration of the, 123 †
Purey-Cust, Commander H. E., Report on the Undercurrents in the River Congo, 258 †; note on, 349
Purtscheller, Ludwig (Biography), 590 †
Purvis, J. B., Handbook to British East Africa and Uganda, 487 †
Putzger, F. W., Historischer Schul-Atlas, 263 †
Pyrenees—
High Pyrenees, The, by H. Spender, 362 †
Inondations de 1897 et les effets du déboisement des Pyrénées, par M. S. Guénot, 362 †

Q.

Quebec—
Dock and Harbour Works at, by W. Pilkington, 125 †
Queensland—
Did De Quiros land in Queensland? by T. F. Bevan, 479, 494 †
Geological Features of the Country between Warren and Mount Lion, Report on, by B. Dunstan, 586 †
Pugh's Almanac and Directory, 255 †
Reply to "Some Critical Notes on the Queensland Volume of the International Catalogue of Scientific Literature," by J. Shirley, 375 †
Royal Geographical Society of Australasia, Queensland Branch of the, Medal of the, 568
Quevedo, S. A. Lafone, El "Sebastian Gaboto" de Henry Harrisse, 131 †; Los Ojos de Imaymana y el Señor de la Ventana, 127 †; Progresos de la Etnologia en el Rio de la Plata, 126 †; El Barco y Santiago del Estero, 126 †
Quiros and the Discovery of Australia, Cardinal Moran and W. T. Bevan on, 479, 494 †
Quito—
Mesure de l'arc du méridien de, 585 †
Rapport sur le projet de revision de l'arc méridien de Quito, par M. Poincaré, 491 †; note on, 356
Reconnaissance de l'arc du méridien de Quito, par E. Maurain, 491 †; note on, 356

R.

Racovitza, E. G., La vie des animaux et des plantes dans l'Antarctique, 492 †
Radde, Dr. Gustav, Grundzüge der Pflanzenverbreitung in den Kaukasusländern, 123 †; Die Sammlungen des Kaukasischen Museums, 366 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000070

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [425v] (203/232)

Raffles, Sir Stamford, by H. E. Egerton, 590 †
Railway Surveying with the Tacheometer, by H. G. Dempster, 256 †
Raimondi, A., Mapa del Peru, 263 †
Rainfall—
Diurnal Range of Rain at Observatories in connection with the Meteorological Office, by R. H. Scott, 121 †
Drought-Intensity, Observations on the Determinations of, by G. H. Knibbs, 588 †
Recherches sur les centres d'action de l'atmosphere, II. La Pluie, par H. H. Hildebrandsson, 257 †; note on, 234
Suggestions for depicting the Character of Seasons as regards Rainfall, by H. Deane, 588 †
Rajna, Dr. M., Appendice a una discussione su l'unificazione del calendario, 257 †
Rakas-Tal und Manasarowar, von H. Singer, 576 †
Ranke, J., Erinnerung an die vorgeschichtlichen Bewohner der Ostalpen, 242 †
Raveneau, L., Neuvième Bibliographie Géographique Annuelle, 591 †
Ravenstein, E. G., researches on the distribution of relative humidity, 446; Martin de Bohemia (Martin Behaim), 590 †; The Voyages of Diogo Cão and Bartholomeu Dias, 1482–88 .. 625 *
Ray, Mr., remarks on "Studies in the Anthropogeography of British New Guinea," 440
Reclus, E., La Phénicie et les Phéniciens, 124 †, 259 †
Red Sea—
Origine et la formation de la mer Rouge, par A. Issel, 589 †
Reed, J. Howard, The Transvaal from without, 252 †
Rein, Prof. J., Erläuterungen zur Geschichte der Eroberung und Besiedelung der La Plata-Länder, 253 †
Reina, Prof. V., Determinazione astronomica di latitudine, 256 †
Reinecke, Dr., Die wirtschaftliche Bedeutung Samoas und die deutschen Pflanzungen, 255 †
Reliefs—
Reliefs Perron, Les, par A. de Claparéde, 703 †
Reñihue-Expedition, Die chilenische, von Dr. P. Krüger, 372 †, 585 †
Reñihué, Rio, Patagonia, 192
Réunion—
Notice sur la, par A. G. Garsault, 700 †
Reusch, Dr. Hans, Et stykke af det Timanske bjerk-jaedesystem i Norge, 572 †; Braesjøer i fordums, 572 †; Geografi for Middelskolen, 133 †; A Note on the last stage of the Ice Age in Central Scandinavia, 694 †
Rhamm, Karl, Zur Entwickelung des slavischen Speichers, 119 †, 573 †
Rhine from Rotterdam to Constance, Handbook for Travellers by K. Baedeker, 365 †
Rhodesia—
British South Africa Company, Information as to mining in Rhodesia, 700 †
Reports on the Admistration of, 487 †
Richard, Dr. J., Les Campagnes Scientifiques du Prince de Monaco, 589 †; Le Muséum océanographique de Monaco, 131 †
Richards, H., Account of the Bay of Balik Papan, 474
Richardson. R., River Terminology, 376 †
Richter, Hauptmann, Einige weitere ethnographische Notizen über den Bezirk Bukoba, 250 †; Notizen über Lebensweise . . . des Bezirks Bukoba, 368 †
Richter, Dr. E., Die Gletscherkonferenz im 1899 .. 257 †; note on, 233; Gebirgshebung und Thalbildung, 373 †
Richthofen, Baron F. v., Karte des nordöstlichen China, 708 †
Rickmers, W. R., Bokhara, 366 †
Rickmers, Mrs., A Journey through the Khanate of Bokhara, 248 †
Rigo District, New Guinea, 284
Rijnhart, Mr., murder of, in Tibet, 556
Rio de Janeiro, Trade of (Foreign Office Rep.), 584 †
Rio Grande do Sul, Vegetationen i, af C. A. M. Lindman, 127 †
River-basins of North Germany, Geography of, 552
River-erosion—
Rate of Erosion of some River Valleys, by C. C. Brittlebank, 589 †
River-regulation—
Wildbäche und ihre Verbauung, von G. Strele, 374 †
River System of North Wales, Mr. Philip Lake on the, 679
River Terminology, by R. Richardson, 376 †
Rivers—
Gewässerkunde im letzten Jahrzehnt, von Willi Ule, 131 †
Roads—
Voies de communication, De l'emploi de la main-d'œuvre militaire à la construction des, par Colonel Lyautey, 591 †
Robertson, Sir George, Political Geography and the Empire, 447 *
Rockhill, W. W., The Journey of William of Rubruck to the Eastern Parts of the World, translated, etc., by, 485 †
Rocky Mountain Region, The Freshwater Tertiary Formations of the, by W. M. Davis, 371 †
Roe, Sir Ch., The Constitutional Relations of England and her Dependencies, 375 †
Rollet de l'Isle, M., Note au sujet de la détermination de la hauteur du niveau de la mer, 589 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000059

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [426r] (204/232)

BRITISH LIBRARY

Rooper, T. G., on Progress of Geographical Instruction in Elementary Schools, 442
Roro people, New Guinea, 274, 275
Rosario, Trade of (Foreign Office Rep.), 126 †
Rosberg, J. E., Sääksmäki Socken, 120 †
Rosh-kala, fortress, Shugnan, 678
Rosier, W., Le milieu géographique suisse considéré comme facteur du développement historique, 573 †, 695 †
Rossi, E., L'emigrazione Italiana agli Stati Uniti, 252 †
Roth, Dr. E., Die deutschen Dünen und ihr Bau, 484 †
Roussel, E., Une ancienne Capitale-Orange, 570 †
Rouville, P. G. de, Une station géologique, etc., Les Fumades (près Alais), 120 †
Roux, M. J. C., Le canal de jonction du Rhone à Marseille, 360 †
Roxburgh, T. L., and J. C. Ford, The Handbook of Jamaica, 127 †
Royal Atlas of Modern Geography, by W. and A. K. Johnston, 498 †
Royal Geographical Society—
Address to the, by Sir C. R. Markham, 1 *
Address on opening Session 1900–1901, by Sir C. R. Markham, 597
Anniversary Meeting, 115; Dinner, 117
Library of, Subjects Catalogue, 3
Meetings of the, Session 1899–1900.. 115, 241, 693
Ruanda, Dr. Kandt's Explorations in, 559
Ruchuru river, Central Africa, 174
Rudolf or Gallop, Lake, East Africa, 298; Count Leontieff's expedition to, 103, 558
Rudolf, Lake, and the Nile, An Expedition between, by Dr. Donaldson Smith, 600 *
Rue, M., Explorations within the Bend of the Congo, 562
Ruge, W., Ueber Identifizierung antiker Oertlichkeiten, 131 †
Rukwa depression, Nyasaland, 106
Rukwa, Lake, Dr. Fülleborn's investigations in, 561
Rumania—
Documente geografice, de D. N. Jorga, 362 †
Jiu, Sur l'histoire de la vallée du, par M. E. de Martonne, 362 †
Karpates méridionales, Sur la période glaciaire dans les, par M. E. de Martonne, 120 †, 362 †
Population de la Roumanie en 1894, Mouvement de la, 245 †
Societetea Geografică Romînă, Buletin, 706 †
Sondage et analyse des boues du lac Galcescu, par MM. de Martonne et Murgoci, 120 †
Trade of (Foreign Office Rep.), 694 †
Runeberg, R., Steamers for Winter Navigation and Ice-breaking, 591 †
Rusizi river, Tanganyika, 168
Russell, H. C., Current Papers, No. 4.. 374 †; note on, 689; Results of Rain . . . Observations made in New South Wales, 586 †
Russell and Macdonald, Messrs., journey in British New Guinea, 107
Russia—
Chemin de fer en Asie Centrale: Jonction du Transcaspien avec le Transsibérien, par P. Gourdet, 366 †
Coal Crisis in (Foreign Office Rep.), 245 †
Degree-measurement Expedition to Spitsbergen, 111, 567, 688
Description sismique de l'Empire Russe, par F. de Montessus de Ballore, 694 †
En nouvelle Russie, par le Baron de Baye, 363 †
Geologie und Bodenverhältnisse im Kreise Borowitschi, von Prof. P. Zemjatschensky, 573 †
Growth of, by E. A. Grosvenor, 363 †
Militär-Kartographie, Entwicklung der russischen, von S. Truck, 573 †
Population de l'Empire de Russie, Premier Recensement Général de la, 245 †
Russian Railways (Foreign Office Rep.), 120 †
Ruvuvu river, Central Africa, 559, 560
Ruwenzori, Mount, letter from Mr. Grogan on his Picture of, 693

S.

Sabine Island, East Greenland, 664
Sachau, E., Am Euphrat und Tigris, 578 †
Sacred Books of the East, edited by F. Max Müller, 591 †
Sahara—
Am Nordrande der Sahara, von Dr. W. Behrens, 251 †
Mission Foureau-Lamy, par G. Vasco, 700 †
St. Antonio, or Ilha do Principe, 625, 626
St. Elias—
Ascent of Mount St. Elias by the Duke of the Abruzzi, by F. de Filippi, 252 †
St. Lawrence, Gulf of, Currents in the, 685
Sainte-Marie, L. de, La colonization en Nouvelle-Calédonie, 373 †
St. Mary, Cape, Padrõe at, 628
Saint-Pierre et Miquelon, par M. Caperon, 701 †
Saint-Yves, G., Dans le Tian Chan Russe, 123 †; Notes sur la distribution des plantes en Sibérie et dans l'Asie centrale, 698 †
Sakwala hill, Abyssinia, 295
Salonica and District, Trade of (Foreign Office Rep.), 695 †
Salvetat et ses environs, par M. G. Gros, 119 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00002c

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [426v] (205/232)

Salwey, Charlotte M., Korea, the Pearl of the Orient, 366 †
Samoa—
Die Wirtschaftliche Bedeutung Samoas und deutschen Pflanzungen, von Dr. Reinecke, 255 †
Hebungen und Senkungen in, von Dr. A. Krämer, 255 †
Namen der Samoa-Inseln, von W. von Bülow, 491 †
Samoaner in der heidnischen Zeit, von Dr. G. Kurze, 255 †
Trade of (Foreign Office Rep.), 255 †; note on, 231
Samshui, Trade of (Foreign Office Rep.), 576 †
Sandal Dawan, Central Asia, 519
Sand-dunes—
Entstehung der Dünen, von O. Baschin, 704 †
Formation des Dunes de Sable, par Vaughan Cornish, 258 †
Sanders, C., Determination of the latitude of Ambriz and San Salvador, 699 †
San Francisco, California, The Climate of, by A. G. McAdie and G. H. Willson, 126 †
San Miguel volcano, Central America, 478
Sapper, Dr. Carl, Bemerkungen über einige Vulkane von Guatemala und Salvador, 585 †; Vulkan-Skizzen aus Guatemala und Salvador, 498 †; note on, 478
Sarawak, trade of, 54
Sardinia—
I terreni carboniferi di Seui ed oolitici della Perdaliana in Sardegna, di L. Pampaloni, 362 †
Trade of (Foreign Office Rep.), 572 †
Sargon pass, Central Asia, 511
Sarikol range, 529
Sartorius, A., Die Germanisierung der Rätoromanen in der Schweiz, 246 †
Sassoon, Sir E. A., Imperial Telegraphic Communication, 258 †
Satow, Sir E., The Cultivation of Bamboos in Japan, 578 †
Savinien, R. P., Voyages et aventures d'un Missionaire dans le Far-West, 253 †
Savoy—
Ethnologie de la Savoie et de Haute-Savoie, par Dr. E. Pittard, 570 †
Saxe-Coburg and Gotha, H.R.H. the Duke of, obituary of, 358
Saxony—
Kalender und Statistisches Jahrbuch für das Königreich Sachsen, 571 †
Scandinavia—
Einfluss der Eiszeit auf das Natur- und Kulturbild der skandinavischen Länder, von H. Kerp, 120 †
Er der foregået nye invandringer i Norden? af C. O. E. Arbo, 120 †
Ice Age in Central Scandinavia, A note on the last stage of the, by H. Reusch, 694 †
Scandinavia—*continued.*
Till kännedomen om Skandinaviens geografi och Kartografi, af K. Ahlenius, 694 †
Scenery, The Study of, by John E. Marr, review, 112
Schaffer, Dr., Expedition to Asia Minor, 556
Scheibler, F., Sette Anni di Caccia Grossa e Note di Viaggio in America, Asia, etc., 133 †
Schenk, Dr. A., Ethnogénie des populations helvétiques, 121 †
Schimper, A. F. W., Bericht über die Fortschritte der Pflanzen-geographie, 374 †
Schleswig-Holstein—
Geographischen Verteilung der Personennamen Schleswig-Holsteins um 1500, von R. Hansen, 485 †
Schlüter, Dr. O., Ueber den Grundriss der Städte, 132 †; note on, 235; Die Formen der ländlichen Siedelungen, 259 †
Schmidt, Emil, Die Verteilung der Kopfformen in Europa, 119 †
Schmitt, R. H., Geographische Ortsbestimmungen in Ostafrika, 368 †
Schnee, Dr., über eine Fahrt nach der Südküste Neu-Pommerns, 127 †; voyage along the South Coast of New Britain, 107
Schoch, G., Una crociera nel Mar Polare Artico, 128 †
Schokalsky, J. de: *see* Shokal'sky
Schott, Dr. G., Die deutsche Tiefsee-Expedition auf dem Dampfer *Valdivia*, 491 †, 589 †; Die Strömungen zwischen Singapore und Taku, 576 †; The Oceanographical . . . Work of the *Valdivia* Expedition, 258 †; Sprungwelle und Fluthgrösse im oberen Theil der Fundy-Bai, 125 †
Schuchhardt, Dr. C., Das Römercastell bei Haltern an der Lippe, 243 †
Schumann, O., Islands Siedelungsgebiete während der landnámatið, 361 †
Schurman, J. G., The Philippine Islands and their People, 248 †
Schurtz, H., Kairuan, 252 †
Schwaighofer, Dr. W., on Austria-Hungary and the Eastern Trade, 553
Schweinfurth, Dr. E. Manfredo Camperio (Biography), 590 †
Schweinfurth, G., Aufnahmen in der Östlichen Wüste von Ägypten, 708 †
Schwerin, H. H. von, Om Kustfolks olika sjöduglighet, 375 †
Scidmore, Eliza R., China, the Long Lived Empire, 486 †
Scotland—
Bathymetrical Survey of the Fresh-water Lochs of, by Sir J. Murray and F. P. Pullar, 121 †, 246 †
Botanical Survey of, by Robert Smith, 574 †
Rainfall, Annual, from 1800 to 1898, by Dr. A. Buchan, 364 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000043

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [427r] (206/232)

Scotland—*continued.*
Thorough Guide Series, by M. J. B. Baddeley, Scotland, Part i., 364 †; ditto, Orkney and Shetlands, 364 †
Scott, R. H., The Diurnal Range of Rain at Observatories in connection with the Meteorological Office, 121 †
Seals of the antarctic, 382
Sea-water—
Physical and chemical constants of, Dr. Knudsen on, 445
Sechuan, Railway to, Captain E. C. Pottinger's surveys for the, 681
Sechuen, South-West, A Journey through, by E. Amundsen, 531 *
Seismology—
Propagation of Earthquake Vibrations through the Earth, by Prof. C. G. Knott, 704 †
Seismological Investigation, Fourth Report of the Committee, 374 †
Sismoscopio elettrico a doppio effetto per le scosse sussultorie, di G. Agamennone, 258 †
Selangor Government Railway, by G. H. Fox, 578 †
Seler, C., Auf alten Wegen in Mexiko und Guatemala, 701 †
Seligmann, Mr., remarks on "Studies in the Anthropogeography of British New Guinea," 440
Sella mountain, Eastern transverse arch of, 463
Selous, F. C., Sport and Travel East and West, 707 †
Sendip, Shugnan, 677
Serebrennikov, Lieut.-Colonel, On the Afghan Frontier: A Reconnaissance in Shugnan, 666 *
Serrano, Captain, expedition to the Palena, 26
Servia—
Rumänen in Serbien, von Prof. G. Weigand, 245 †
Siedelungskunde Südserbiens, von Dr. M. V. Smiljanić, 573 †
Trade of (Foreign Office Rep.), 245 †
Settlements—
Formen der ländlichen Siedelungen, von Dr. O. Schlüter, 259 †
Sewell, Robert, A Forgotten Empire (Vijayanagar), 696 †
Seychelles—
Découverte des îles Seychelles d'après des Documents inédits, par M. A. A. Fauvel, 247 †
Shaid, Wadi, 539
Shakh-Dara, territory and people of, 669; river of, 672, 678
Shaler, N. S., J. B. Woodworth, and A. F. Foerste, Geology of the Narragansett Basin, 583 †
Shan States—
Northern: Preliminary Report on the Geology of the, by T. D. La Touche, 577 †
Shan States—*continued.*
Southern: Geological Reconnaissance in Parts of the, by C. S. Middlemiss, 577 †
Shari river—
M. P. Prins' Explorations on the, 228
Sources du Chari, 251 †
Sharman, G., and E. T. Newton, Notes on Fossils collected at Seymour island, by Dr. Donald and Captain Larsen, 586 †
Sharpe, A., Report on the British Central Africa Protectorate, 475
Sharpe, Dr. Bowdler, remarks on "In the Heart of Borneo," 61; remarks on "An Expedition between Lake Rudolf and the Nile," 624
Sherriff, William, Railway Communication with China, 696 †
Shipping and Ship-building on the American Lakes, Mr. T. Erskine's report on, 353, 489 †
Shirley, John, A Reply to "Some Critical Notes on the Queensland Volume of the International Catalogue of Scientific Literature," 375 †
Shokalsky, Colonel J. de, Limnological Investigations on Lake Ladoga, 471; Le général de Tillo, 590 †; Le lac Ladoga au point de vue thermique, 694 †; note on, 471
Shugnan, A Reconnaissance in, from journal of Lieut.-Colonel Serebrennikov, 666 *
Siam—
Surveying and Exploring in Siam, by James McCarthy, 578 †
Siberia—
Bogdanowitsch' Ochotskisch - Kamtschatkasche Bergexpedition, von General Krahmer, 366 †; note on, 222
Ethnographic Researches in, by Dr. J. Jankó, 347
Geologischen Ergebnisse der Reisen von Baron E. Toll, von Dr. C. Diener, 698 †
Geschichtliche Entwicklung Sibiriens, 578 †
High plains of, 95
Maps: Geologische Skizze der Neusibirischen Inseln, etc., von Baron E. Toll, 498 †
Natur des Gebietes Jakutsk, von P. v. Stenin, 248 †
Transbaikalian branch of the Siberian railway, 223
Siberia and Central Asia—
Plantes en Sibérie et dans l'Asie centrale, Notes sur la distribution des, par G. Saint-Yves, 698 †
Sǐboga Expedition to the Malay Archipelago, 549; On the Work of the, 130 †; The Cruise and Deep-sea Exploration of the, in the Indian Archipelago, 697 †
Sicily—
Conche lacustri dovute a suberosioni nei gessi in Sicilia, di O. Marinelli, 362 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000009

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [427v] (207/232)

Sicily—*continued.*
Etna, Mont, Sur l'observatoire du, par J. Janssen, 572 †
Sullo stato presente dei vulcani eolici, del M. Baratta, 572 †
Siedel, H., Photographieen aus Deutsch-Ostafrika, 250 †
Siegmeth, K., Wanderungen im Siebenburgischen Erzgebirge und im Bihar-Kodru-Gebirge, 571 †
Sierra Leone—
Photographs of, by C. L. Weller, 712 †
Sievers, Prof. W., Hermann Wagner (Biography of), 259 †; Die geographische Erforschung Südamerikas im 19 Jahrhundert, 372 †; note on, 478
Sikait, Wadi, and Jebel, 541, 548
Sikhim Himalayas, Lepcha Land, or Six Weeks in the, by Florence Donaldson, 697 †
Silk—
Production de la soie dans le monde, par M. V. Groffier, 131 †; note on, 357
Silat river, Borneo, 42
Silver Map of Drake's Voyage, Mr. Miller Christy on, 113
Simpson, Major W. A., Influence of Geographical Conditions on Military Operations in South Africa, 370 †
Sinai—
Voyage au mont Sinaï, par A. Keller, 578 †
Singapore und Taku, Die Strömungen zwischen, von Dr. G. Schott, 576 †
Singer, H., Rakas-Tal und Manasarowar, 576 †
"Situs Hierusalem," mediæval map, 326
Skeat, W. W., Expedition in the Malay Peninsula, 345
Slavery, Sixty Years against, 261 †
Slavs—
Entwicklung des slavischen Speichers, von Karl Rhamm, 573 †
Slichter, C. S., Theoretical Investigation of the Motion of Ground Water, 374 †
Smiljanić, Dr. M. V., Beiträge zur Siedelungskunde Südserbiens, 573 †
Smith, C. M., Results of Observations of the Fixed Stars made with the Madras Meridian Circle, 365 †
Smith, Dr. Donaldson, Expedition in Somaliland, 102; An Expedition between Lake Rudolf and the Nile, 600 *
Smith, Major-General Sir R. Murdoch, obituary of, 237
Smith, Robert, Botanical Survey of Scotland, 574 †; (Biography), 705 †
Smith, V. A., The Buddhist Monastery at Sohnag, 487 †
Smyrna and District, Trade of (Foreign Office Rep.), 698 †
Smyth, H. Warington, remarks on receiving Medal on behalf of Mr. J. McCarthy, 116
Sobat basin, French Explorations in the, 476; Sobat river, 302
Sobral, J. G., Estudios sobre las Regiones árticas, 128 †
Society Islands, Trade of the (Foreign Office Rep.), 586 †
Sokotra, Exploration of, Report of the Committee, 370 †
Solomon Islands, Austrian Explorations in the, 230
Somali Coast—
Trade of (Foreign Office Rep.), 249 †
Italian, Condition and Prospects of, 104
Somaliland—
Expedition, Dr. Donaldson Smith's, 102
French: Djibouti et Obock, par M. P. Barré, 367 †
Journey through, by Dr. R. Koettlitz, 700 †
Rambles in Lion Land, by Captain F. B. Pearce, 370 †
Roches volcaniques du Protectorat des Somalis, par MM. A. de Gennes et A. Bonard, 488 †
Seventeen Trips through, by Major H. G. C. Swayne, 700 †
Somaliland and Abyssinia—
Journey through, by R. Koettlitz, 581 †
Temperature Observations in, by R. T. Omond, 581 †
Sondo river, British East Africa, 85, 88
Sonora, State of, Trade and Agriculture of the (Foreign Office Rep.), 582 †
Sotik country and people, Central Africa, 79, 84
Southampton, Notes on the Walls of, by W. H. St. John Hope, 121 †
Southern Cross Expedition to the Antarctic, by C. E. Borchgrevink, 381 *
Spain—
Cession of Islands to the United States, 683
Espagne, politique, litterature, etc., 363 †
Maps: Mapa Militar de la Capitania General del Norte (Deposito de la Guerra, Madrid), 708 †
Voyage en Espagne, par L. F. Viala, 121 †
Spanish explorations in Chile, 15
Speleology—
Spéléologie ou Science des Cavernes, par E.-A. Martel, 374 †
Spender, H., The High Pyrenees, 362 †
Spiro, J., Les Yezidi ou les adorateurs du Diable, 124 †
Spitsbergen—
Degree-measurement operations in, 111, 567, 688
Expédition suédoise au Spitzbergen, Travaux de, par V. Carlheim-Gyllenskköld, 256 †
Hudson's Voyage to Spitsbergen in 1607, by Sir Martin Conway, 256 †
Some unpublished Spitsbergen MSS., by Sir Martin Conway, 373 †
Spitsbergen, 1898 and 1899, Voyages with H.S.H. the Prince of Monaco, by W. S. Bruce, 587 †
Sprecher, F. W., Grundlawinenstudien, 588 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [428r] (208/232)

BRITISH LIBRARY

Stahl, A. F., Teheran und Umgegend, 248 †
Stanford, E., Map of Marocco, Algeria, etc., 378 †
Stanmore, Lord, remarks on "In the Heart of Borneo," 60
Starr, F., Catalogue of a Collection of Objects illustrating the Folklore of Mexico, 489 †
Statesman's Year Book, by J. Scott Keltie and I. P. Renwick, 134 †
Statistics—
Address to the Economic Science and Statistics Section of the British Association, by Major P. G. Craigie, 705 †
Steam Navigation, Address on, by Sir W. H. White, 259 †
Steeb, C. R. von, Die Ausgleichung mehrfach gemessener Höhen bei der Militär-Mappierung, 588 †
Stefan, A., Fünfzehn Monate im südlichen Eismeer, 586 †
Stefánescu, Dr. J., Paludismul diu punct de vedere geografic, 375 †
Stefani, Prof. C. de, La produzione dell' acido borico . . . in Italia, 571 †
Stefanie, Lake, 606
Steffen, Dr. Hans, The Patagonian Cordillera and its Main Rivers, 14 *, 185 *; Reisen in den Patagonischen Anden, 372 †
Stein, Mr., expedition to Ellesmere Land, 689
Stein, M. A., Memoir on Maps illustrating the Ancient Geography of Kásmīr, 487
Stein, Oberleutnant v., Erläuterungen zu meinen Reisen in Süd-Kamerun, 368 †, 562
Stenin, P. v., Die Natur des Gebietes Jakutsk, 248 †
Stenroos, K. E., Thierphänologische Beobachtungen in Finland, 363 †
Sternberg, G. N., The History and Geographic Distribution of Bubonic Plague, 134 †
Stevens, —, Trade of Batoum and District, 366 †
Steyert, M. A., Étymologies Lyonnaises, 706 †
Stierling, J., Die Konigsgräber der Wahehe, 488 †
Stiffe, Captain A. W., Ancient Trading Centres of the Persian Gulf, VI. Bandar Abbas, 211 *
Stirling, E. C., and A. H. C. Zietz, Fossil Remains of Lake Callabonna, 128 †
Stock, Franz, Zum neunhundertjährigen Jubiläum der ersten Entdeckung Amerikas, 131 †
Stockholm, Trade of (Foreign Office Rep.), 246 †
Stone, G. H., The Glacial Gravels of Maine, 583 †
Storm, Dr. Gustav, Et brev til pave Nicolaus den 5te om Norges, 572 †
Strachey, Sir R., on the conformation of the Himalayas, 527; Narrative of a Journey to the Lakes Rakas-tal and Manasarowar, 247 †
Strandes, Justus, Die Portugiesenzeit von Deutsch- und Englisch-Ostafrika, note on, 353
Strele, G., Die Wildbäche und ihre Verbauung, 374 †
Struck, Ad., Durch Pontus nach Amassia, 248 †
Subis, Mount, Borneo, 40
Subjects Catalogue of the Library of the R.G.S., 3
Suchitan volcano, Central America, 478
Sudan—
Arabischen Beduinendialekte Innerafrikas, Material zum Studium der, von G. Kampffmeyer, 581 †
Bonchamps, Résultats géographiques de la mission de, par C. Michel, 580 †; note on, 476
Egyptian, Report on the, 103
French: Une ville du Niger, Dienné, par M. G. Bastard, 250 †; Le Soudan français, par M. H. Lorin, 250 †; M. Baillaud's Expedition in, 227; Territoires français du Niger, leur valeur économique, par E. Baillaud, 580 †; note on, 477; Vers le Tchad, par P. Prins, 250 †; Voyage au Dar Rounga, par P. Pruins, 250 †
Geographical Progress in the, 599
Suess, Ed., La Face de la Terre, 130 †
Suez Canal —
Engineering Works of the, A Short History of the, by Sir C. Hartley, 580 †
Sufra, Jebel, 539
Sumatra—
De inlijving der V. Kota-Kampar, door A. L. van Hasselt, 123 †
Herinneringen uit Oost-Indië, Soematra's Westkust, door C. M. Pleyte, 123 †, 366 †
Poeloe Weh, door E. Heldring, 697 †
Tabakkultur in Sumatra, 248 †
Supan, Dr., Die Hohengrenze des Baumwuchses in den Vereinigten Staaten, 252 †
Superior, Lake—
Geological History of, by Dr. R. Bell, 582 †
Surveying—
Ausgleichung mehrfach gemessener Höhen bei der Militär-Mappierung, von C. R. von Steeb, 588 †
Methods of Survey employed by the Chilean Boundary Commissions, by Prof. A. Bertrand, 704 †
Railway Surveying with the Tacheometer, by H. G. Dempster, 256
Topographic Surveying, etc., by G. Heimbrod, 587 †
Sutherland, W., A Possible Cause of the Earth's Magnetism, 589 †
Sutton, J. R., The Winds of Kimberley, 367 †; Do the mining operations affect the climate of Kimberley ? 367 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007a

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [428v] (209/232)

Swahili—
Sitten und Gebräuche der Suaheli, von C. Velten, 488 †
Swatow, Trade of (Foreign Office Rep.), 486 †
Swayne, Major H. G. C., Seventeen Trips through Somaliland, 700 †
Swaziland, by A. M. Miller, 251 †
Sweden—
Climat de la Suède, par M. Egnel, 695 †
Degree-measurement Expedition to Spitsbergen, 111, 567, 688
Nya bidrag till Vermlands och Dals bryogeografi, af N. C. Kindberg, 246 †
Physische Geographie von Schweden, von G. Andersson, 121 †
Studier öfver vattenförhållandena i svenska sjöar, af G. Nerman, 246 †
Svenska Turistföreningens Årsskrift för År 1900..121 †
Trade of Stockholm and Eastern coast of (Foreign Office Rep.), 246 †
Ume river-valley, On the Glacial Lakes in the upper part of the, by Axel Gavelin, 695 †
Switzerland—
Annuaire Statistique de la Suisse, 573 †
Anthropologie de la Suisse, par E. Pittard, 121 †
Ethnogénie des populations helvétiques, par Dr. A. Schenk, 121 †
Geographisches Lexikon der Schweiz, von C. Knapp und M. Borel, 573 †
Germanisierung der Rätoromanen in der Schweiz, von A. Sartorius, 246 †
Glacial Erosion in the Valley of the Ticino, by Prof. W. M. Davis, 121 †
Milieu géographique suisse considéré comme facteur du développement historique, par W. Rosier, 573 †, 695 †
Schweizerische Landschaft einst und jetzt, von Dr. E. Brückner, 573 †
Tourtemagne, La valée de, par H. Correvon, 695 †
Zermatt, Valley of, and the Matterhorn, by Ed. Whymper, 121 †
Sykes, Captain P. M., on Marco Polo's Itinerary through Persia, 472
Symons, George James, by H. Sowerby Wallis, 133 †

T.

Taganrog, Trade of (Foreign Office Rep.), 573 †
Tajiks-Shugnans, 671; Tajik dwellings, 676
Takla Makan desert, 502
Talko-Hryncewicz, J. de, Notes sur l'Anthropologie des Chinois du Nord, 122 †
Tanganyika, Lake, Mr. Moore's expedition to, 227
Tasiagaluk, or Eskimo Seal Lake, Labrador, 686
Tebang, Mount, Borneo, 51
Teheran und Umgegend, von A. F. Stahl, 248 †
Telegraphic Communication, Imperial, by Sir E. A. Sassoon, 258 †
Temperature—
Actions planétaires et la température terrestre, par A. Duponchel, 588 †
Einfluss des Waldes auf die Lufttemperatur, etc., von Prof. Dr. Müttrich, 588 †
Terrestrial Magnetism—
Deutschen Seewarte über die Ergbnisse der magnetischen Beobachtungen in dem deutschen Küstengebiete, 705 †
Earth-currents and the electrical currents in the atmosphere, etc., by S. Lemström, 375 †
Earth's Magnetism, A Possible Cause of the, by W. Sutherland, 589 †
Messung der Horizontal-intensität des Erdmagnetismus Mittels des Magnetischen Theodoliten, von J. Liznar, 589 †
Terror, Mount, Antarctic, 399
Tetzner, Dr. F., Die Polaben im hannöverschen Wendland, 243 †
Texas—
Map of, by R. T. Hill, 263 †
Reaction Breakwater at Aransas Pass, Efforts made to demonstrate the Practicability of the, by L. M. Haupt, 253 †
Trade of (Foreign Office Rep.), 253 †
Thessaly, Trade and Agriculture of (Foreign Office Rep.), 244 †
Thomasset, Captain, La Côte d'Ivoire, 124 †; note on, 104
Thompson, Prof. D'Arcy, On a supposed resemblance between the Marine Faunas of the Arctic and Antarctic Regions, 587 †
Thoroddsen, T., Jordskjaelv i Islands sydlige Lavland, 362 †
Thoulet, M. J., Analyse de fonds marins recueillis dans l'Iroise, 258 †; Analyse mécanique des sols sous-marins, 589 †; Les études nouvelles de Chimie Océanique, 589 †; Les phénoménes volcaniques dans leurs rapports avec l'océanographie, 705 †
Threlfall, T. R., Senussi and his threatened Holy War, 124 †
Thung or Thungal pass, Central Asia, 508
Thuringia—
Litteraturbericht zur Landes- und Volkskunde Thüringens, von A. Berg, 243 †
Sormitzgebiet, physisch-geographische Skizze, von C. Wiefel, 243 †
Thursday Island and Torres Straits, Past and Present of, by Hon. John Douglas, 128 †
Tian Shan—
Dans le Tian Chan Russe, par G. Saint-Yves, 123 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007a

مكتبة قطر الوطنية
Qatar National Library

Tibet—
Captain Deasy's journeys in, 141
Murder of Mr. Rijnhart in, 556
Northern: Dr. Sven Hedin's journeys in, 472
Rakas-tal and Manasarowar, Lakes, Narrative of a Journey to the, by Sir R. Strachey, 247 †
Rakas-Tal und Manasarowar, von H. Singer, 576 †
Ticino, Valley of the, Glacial Erosion in the, by Prof. W. M. Davis, 121 †
Tides—
Détermination de la hauteur du niveau de la mer à un instant quelconque du marée, par M. Rollet de l'Isle, 589 †
Moxly's Appeal to the Gentiles, by E. Plumstead, 374 †
Moxly's Theory of the Tides, by E. Plumstead, 705 †
New Theory of, by Rev. J. H. S. Moxly, 705 †
Ocean Tides, A partial explanation of some of the principal, 589 †
Tidikelt—
Mission au Tidikelt, archipel Touatien, par G. B. M. Flamand, 224, 369 †
Mission d'exploration scientifique au Tidikelt, par G. B. M. Flamand, 369 †
Tientsin, Trade of (Foreign Office Rep.), 576 †
Tillo, Lieut.-General Alexis de (Biography), 133 †; ditto, von Prof. Dr. A. Woeikow, 133 †; par J. de Schokalsky, 590 †
Time—
Time and its Curious Contradictions, by W. Allingham, 256 †
Unificazione del calendario, Appendice a una discussione su l', del Dr. M. Rajna, 257 †
Times Atlas, 264 †
Tirol—
Einfluss der Erosion auf die Structur der Südosttirolischen Dolomitstöcke, von Prof. Dr. C. Diener, 119 †
Steinach am Brenner, von J. Jäger, 483 †
Toaripi people, New Guinea, 273
Tobago—
Planting in, Hints and Suggestions on, 702 †
Todd, J. E., The Moraines of South-Eastern Dakota, 384 †
Todd, Mabel L., Corona and Coronet, 592 †
Todd, Prof. H. D., and Prof. S. J. Brown, Total Eclipse of the Sun, May, 1900.. 260 †
Todos los Santos, Lake, Patagonia, 33
Togo—
Erschliessung des Kaburelandes in Nordtogo, von F. Hupfeld, 251 †
Geographische Ortsbestimmungen von Dr. Kersting im Hinterland von Togo, von Dr. F. Cohn, 368 †
Togo—*continued.*
Togo unter Deutsche Flagge, von Heinrich Klose, review, 106
Völkerkunde des Togo-Gebietes, von R. Plehn, 582 †
Tolan Khoja valley, 503
Toll, Baron, Auxiliary Arctic Expedition of, 567; Geologische Skizze der Neusibirischen Inseln, etc., 498 †; on New Siberia and the Circumpolar Tertiary Flora, by P. Kropotkin, 95
Tonga, British Agreement with, 108
Tope-Tope marsh, Congo, 562
Torres Straits—
Anthropology and Natural History of, Report of the Committee, 373 †
Inhabitants of islands of, 414
Tower, G. W., and G. O. Smith, Geology . . . of the Tintic District, Utah, 372 †
Town Plans—
Grundriss der Städte, Ueber den, von Dr. O. Schlüter, 132 †; note on, 235
Townley, —, German Colonial Estimates for 1900..260 †
Towns—
Town Sites, from a geographical point of view, by H. R. Mill, 590 †
Transcaucasia—
Photographs taken in neighbourhood of the Aras and Kur rivers, by C. S. Gulbentian, 380 †
Transvaal—
Maps: Northern Portion of the, by Wood and Ortlepp, 378 †; Vereeniging-Pretoria portion of the, by E. H. V. Melvill, 378 †
Transvaal from without, by J. Howard Reed, 252 †
Transvaal and Abyssinia—
Transvaal et l'Abyssinie, conférence de Prince Henri d'Orleans, 582 †
Transvaal and South Africa, Collection of References, etc., by Cotgreave, 125 †
Transvaal and Swazieland—
Mining and Minerals in the, by E. St. John Lyburn, 700 †
Travelling, The Art of, An interview with Mrs. J. F. Bishop, 592 †
Travels—
Explorations et travaux géographiques des Missionnaires Catholiques en 1899, par V. Groffier, 707 †
Ferienreisen und Studien, von Bertha von der Lage, 592 †
Sport and Travel East and West, by F. C. Selous, 707 †
With Note-book and Camera, by Edith Baring-Gould, 707 †
Trebizond and Sivas, Trade of the Vilayets of (Foreign Office Rep.), 248 †
Tregear, E., Mangareva Dictionary, Gambier Islands, 255 †
Tricoche, Général, par L. Drapeyron, 590 †
Trinidad—
Trinidad Reviewer, compiled by F. Eversley, 702 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000013

مكتبة قطر الوطنية
Qatar National Library

Trombetas, Voyage au, par O. Coudreau, 490 †
Tronador, Mount, Patagonia, 34
Tropical Agriculture—
Garton Lectures on Colonial and Indian Agriculture, by R. Wallace, 707 †
Tropics, Ants as Geologic Agents in the, by J. C. Branner, 126 †
Truck, S., Die Entwicklung der russischen Militär-Kartographie, 573 †
Tuat—
Marche vers le Touât, par R. de Caix, 251 †
Oases, M. Flamand's Scientific Mission to the, 224, 369 †
Tucker, Bishop, A Missionary Journey through Nkole, 249 †
Tugwell, Bishop, and Rev. A. E. Richardson, The Expedition to Hausaland, 581 †
Tunis—
Grundlagen des französischen Protectorates in Tunesien, von V. Levy, 700 †
Lac de Bou-Grara et la pénétration, par M. E. Vassel, 370 †
Situation économique de la Tunisie, par M. E. Fallot, 370 †
Tunnicliffe, Dr. F. W., Dr. William Marcet, 132 †
Turkana tribe, Central Africa, 300
Turkestan—
Russian: De l'état actuel du Turkestan Russe, par M. Vénukoff, 248 †
Turkey—
Die Karte der europäischen Türkei herausgegeben vom kaiserl. Ottomanischen Generalstabe, 573 †
Handbook for travellers in Constantinople and the Troad, by Sir C. W. Wilson, 574 †
Maps: European Turkey (Turkish General Staff), 136 †; note on, 221
Pontus nach Amassia, Durch, von A. Struck, 248 †
Trebizond and Sivas, Trade of the Vilayets of (Foreign Office Rep.), 248 †
Turquie d'Asie, Géographie administrative, etc., par Vital Cuinet, 248 †
Turner, E. T., Physical Geography of New York State, 253 †
Twombly, A. S., Hawaii and its People, 372 †
Tyrrell, J. B., The Basin of the Yukon River in Canada, 370 †

U.

Uberi people, New Guinea, 281
Uchi valley, Central Asia, 507
Uganda Railway, Memoranda relating to, 370 †
Ule, Willi, Die Gewässerkunde im letzten Jahrzehnt, 131 †
Um Selim, Northern Etbai, 537
United Kingdom—
Barometric and Thermometric Gradients between London and Edinburgh, by R. C. Mossman, 364 †
British Rainfall, 1899, compiled by H. S. Wallis, 695 †
Earthquakes, On some Minor, by C. Davison, 121 †
Food Supply of the, by R. F. Crawford, 121 †; note on, 220
Imports and Exports of 40 Years, by M. G. Mulhall, 364 †
Literature and History of the British Islands, Catalogue of, 574 †
Meteorological Observations at Stations of the Second Order, 246 †
Mines and Quarries: General Report and Statistics, 246 †
Ordnance Survey, Twelve Years' Work of the, by Colonel Sir J. Farquharson, 364 †
Photographs of Geological Interest in the, Tenth Report of the Committee, 364 †
Rain, Diurnal Range of, at Observatories in connection with the Meteorological Office, by R. H. Scott, 121 †
Southport, The Fernley Observatory, Report, etc., by J. Baxendell, 246 †
Statistical Tables relating to the Colonial and other Possessions of the, 133 †
Tide Tables for the British and Irish Ports, by Captain Harris and Commander Havergal, 695 †
United States—
Agriculture, Commerce, and Navigation, Work of the Meteorologist for the Benefit of, by F. H. Bigelow, 584 †
Altitudes in the, Dictionary of, by H. Gannett, 490 †
Baumwuchses in den Vereinigten Staaten, Hohengrenze des, von Prof. Dr. Supan, 252 †
Coast and Geodetic Survey, its origin, etc., by E. D. Preston, 126 †
Coastal Topography of the, by Prof. O. C. S. Carter, 126 †
Emigrazione Italiana agli Stati Uniti, del E. Rossi, 252 †
Geodätische Arbeiten in den Vereinigten Staaten, von E. D. Preston, 125 †
Hydrographic Charts, 139 †, 264 †, 500 †, 595 †, 712 †
Irrigation, Rise and Future of, by E. Mead, 490 †
Maps: Geologic Atlas of the (U.S. Geo. Survey), 595 †
Missions Catholiques aux États-Unis, 125 †
Naval Observatory, Report of the Superintendent of the, 253 †
Nordamerikanische Union als Weltmacht, von Dr. E. Deckert, 701 †
North American Indians of To-day, by G. B. Grinnell, 701 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000a

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [430r] (212/232)

BRITISH LIBRARY

United States—*continued.*
Pueblofolkens Konstlif, Skildringar ur, af Y. Hirn, 253 †
Rock Specimens, Educational Series of, etc., by J. S. Diller, 490 †
Spanish Islands, cession of, to the, 683
Sternenbanner-Republik, In der, von Dr. C. Gardini, 701 †
Stream measurements for 1897, Report of, by F. H. Newell and Others, 372 †
Temperature, Humidity, and Wind Direction, Vertical Gradients of, by H. C. Frankenfield, 583 †
Voyages . . . d'un Missionnaire dans le Far-West, par R. P. Savinien, 253 †
Weather Bureau, Monthly Weather Review, Annual Summary, 253 †
Urmi, Salt Lake of, On the Waters of the, by R. T. Günther and J. J. Manley, 123 †
Urundi district, Central Africa, 559
Utah—
Geology . . . of the Tintic District, by G. W. Tower and G. O. Smith, 372 †

V.

Valdivia, Die deutsche Tiefsee-Expedition auf dem, von Dr. G. Schott, 589 †; Oceanographical . . . Work of the, by Dr. G. Schott, 258 †
Vallejo, F. R., Departamento Chamical, 702 †
Vallentin, Dr. Wilhelm (Biography), 590 †
Vallot, J. et H., Un projet de chemin de fer du pied au sommet du Mont-Blanc, 360 †
Valparaiso, von J. Hermann, 490 †
Van der Stok, Dr. J. P., Een nieuwe regenkaart van Java, 697 †
Vannutelli, L., Un' escursione nel Cekiang settentrionale, 486 †
Vasco, G., L'Arbitrage Anglo-Vénézuelien, 254 †; Sahara: Le mission Fourcau-Lamy, 700 †
Vassel, E., Le lac de Bou-Grara et la pénétration, 370 †
Vaudoux ceremonies at Haiti, 315
Vaulserre, Vicomte de, Le Fleuve Bleu de Sui-fou à la hauteur de Tali-fou, 247 †
Vaux, G. and W., Additional Observations on Glaciers in British Columbia, 252 †; note on, 687; The Great Glacier of the Illicilliwaet, 125 †
Vea, Antonio de, voyage of, 19
Vedova, Prof. G. D., (Biography of) Giovanni Marinelli, 495 †
Veeren, F. E. L., De beteekenis van de wateren der aarde als drinkwater, 376 †
Velten, C., Erklärung einiger ostafrikanischer Ortsnamen, 488 †; Sitten und Gebräuche der Suaheli, 488 †
Venetia—
Della linea e dei fiumi di resorgiva in relazione al territorio veneto, del Prof. G. L. Bertolini, 572 †
Venezuela—
Anglo-Venezuelan Boundary Dispute, by Marcus Baker, 254 †
Venice, Trade of (Foreign Office Rep.), 244 †
Vénukoff, M., De l'état actuel du Turkestan Russe, 248 †
Verbeek, Dr. P., William Dampiers Leben und Werke, 494 †
Verkhoyansk ridge, geology of, 95
Verney, N., et G. Dambmann, Les puissances étrangères dans le Levant, 579 †
Verrazzano e Florin, Ancora sulla distinta personalità di, del P. Peragallo, 259 †
Verrill, A. E., Notes on the Geology of the Bermudas, 125 †
Vespucci, Amerigo, Una lettera di Henry Harrisse, 133 †
Vesuvius, Photographs showing eruption of, by Prof. R. V. Matteucci, 264 †
Viala, L. F., Un Voyage en Espagne, 121 †
Victoria Land, Antarctic, 383, 400
Victoria Nyanza, A Journey to the, by Captain G. H. Gorges, 78 *
Viedma, Antonio, journey in Patagonia, 21
Vienne, E., Notice sur Mayotte et les Comores, 699 †
Vignon, L., L'exploitation de notre Empire colonial, 495 †
Vincent, Dr. J., Réforme de l'Enseignement de la Géographie, 375 †
Vinson, M., Le port et le quartier maritime d'Antibes, 570 †
Vivien de Saint Martin, M., et F. Schrader, Atlas Universel de Géographie, 711 †
Volcanic Phenomena—
Phénomènes volcaniques dans leurs rapports avec l'océanographie, par J. Thoulet, 705 †
Volossovitch, K. A., Expedition to New Siberia, 232, 567
Von der Lage, Bertha, Ferienreisen und Studien, 592 †
Vries, J. H. de, Reis door eenige eilandengroepen der Residentie Amboina, 697 †

W.

Waddell, Major L. A., The Physical Types . . . of the Wild Tribes of the Brahmaputra Valley, 247 †
Wagner, Dr. Hermann (Biography), von W. Sievers, 259 †; Geographisches Jahrbuch, 376 †
Wakhan range, Shugnan, 670
Walamo district, Abyssinia, 297
Walder, Prof. Dr. E., Heinrich Zeller-Horner (Biography), 133 †
Wales—
Bala Lake and the river system of North Wales, by P. Lake, 364 †
North, River System, Mr. Philip Lake on the, 679
Thorough Guide Series: South Wales, etc., by C. S. Ward and M. J. B. Baddeley, 574 †
Walker, B. E., Canadian Surveys and Museums, 489 †
Walker, J. B., The Cartography of the Terra Australis and New Holland, 590 †
Walker, T. L., A Geological Sketch of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001f

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [430v] (213/232)

the Central Portion of Jeypore Zemindari, 487 †
Wallace, R., The Garton Lectures on Colonial and Indian Agriculture, 707 †
Wallis, H. S., George James Symons (Biography), 133 †; British Rainfall, 1899..695 †
Walsh, Canon P., on the Future of the New Zealand Bush, 108
Walters, Captain H. F., The Operations of the Malakand Field Force, 697 †
Walton, Joseph, China and the Present Crisis, 696 †
Wandorobo tribe, 78
War maps, by Colonel Sir T. H. Holdich, 492 †
Ward, C. S., and M. J. B. Baddeley, Thorough Guide Series, South Wales, etc., 574 †; North Devon and North Cornwall, 574 †
Warner, G. F., The Voyage of Robert Dudley . . . to the West Indies, 491 †
Warundi tribe, Central Africa, 559
Washington and District of Columbia, List of Maps and Views of, by P. L. Phillips, 253 †
Washington, Cape, Antarctic, 397
Water-bottle, The Pettersson-Nansen Insulating, by H. R. Mill, 469
Watermeyer, J. C., Notes on a Journey in German South-West Africa, 368 †
Water-supplies—
De beteekenis van de wateren der aarde als drinkwater, door F. E. L. Veeren, 376 †
Waterway from the Baltic to the Black Sea, 554
Watson, Colonel, remarks on "King Menelek's Dominions," etc., 305
Watson, T. L., Some Notes on the Lakes and Valleys of the Upper Nugsuak Peninsula, 256 †
Watusi tribe, Central Africa, 169
Wauters, A. J., La région des concessions dans le bassin de la Sanga, 250 †; La Sanga, 250 †; Le problème du Wam, 250 †; Les sources du Congo, 580 †
Wauwermans, Lieut.-General, La conquête des Poles, 128 †
Weatherley, P., observations on Lake Mweru, 475
Weber, S., (Biography of) G. F. von Berzeviczy, 590 †
Weber, Prof., *Siboga* Deep-sea Expedition under, 111, 549
Webster, Commander H., China and her People, 575 †; Korea — the Hermit Nation, 248 †
Weeks, F. B., Bibliography and Index of North American Geology, Paleontology, etc., 489 †
Weigand, Prof. G., Die Rumänen in Serbien, 245 †
Weill, R., L'art de la fortification dans la haute antiquité égyptienne, 367 †
Weisgerber, Dr., Études géographiques sur le Maroc, 369 †
Weiss, Dr. E., und Dr. R. Schram, Astronomische Arbeiten des k. k. Gradmessungs-Bureau, 483 †
Wellby, Captain M. S., King Menelek's Dominions and the Country between Lake Gallop (Rudolf) and the Nile Valley, 292 *, 698 †; Obituary of, 358
Weller, C. L., Photographs of Sierra Leone, 712 †
Wells, A. F., Map showing the Route and Discoveries of the Calvert Exploring Expedition in Western Australia, 379 †
Wenzel Lake, crater lake, Central Africa, 561
Westerlund, F. W., Självformorden i Finland 1861–1895..363 †
West Indies—
Colonies Néerlandaises dans les Indes Occidentales, par C. M. Kan, 372 †
Dänemarks westindische Besitzungen, 491 †
Plantæ Utowanæ. Plants collected in the, by C. F. Millspaugh, 702 †
Voyage of Robert Dudley, etc., edited by G. F. Warner, 491 †
Westphal, Dr. A., Das Mittelwasser der Ostsee bei Travemünde, etc., 484 †
Whaling—
Gegenwärtige Eismeerfischerei und der Walfang, von Hegemann, 128 †
White, D., Fossil Flora of the Lower Coal Measures of Missouri, 583 †
White, J. D., The Log-book of Hanno, 590†
White, Sir W. H., Presidential Address on Steam Navigation, 259 †
White Volta river, Gold Coast, 683
Whymper, Ed., A Letter addressed to the Members of the Alpine Club, 376 †; Chamonix and the Range of Mont Blanc, 119 †; Scrambles amongst the Alps in the years 1860–69..569 †; The Valley of Zermatt and the Matterhorn, 121 †
Wichmann, Prof. Dr. A., Die Mapia- oder Bunai-Inseln, 127 †; De Doif-eilanden, 366 †
Widenmann, A., Eine Kilimandscharo-Besteigung bis zu 5500 m. Höhe, 488 †
Wiedemann, Prof. Dr. A., A Mythological-Geographical Text, 494 †
Wiefel, C., Das Sormitzgebiet, physisch-geographische Skizze, 243 †
Wiik, F. J., Om de primitiva formationernas geologi . . . till Finlands, 363 †
Wild, H., Ergänzungen zu meinem magnetischen Reise-Theodolith, etc., 256 †
Wilkin, A., Among the Berbers of Algeria, 699 †
Willson, G. H., and A. G. McAdie, The Climate of San Francisco, California, 126 †
Wilson, H. M., Porto Rico: its Topography and Aspects, 491 †
Wilson, Sir C. W., Handbook for travellers in Constantinople, etc., 574 †; The Dead Sea, 698 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000063

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [431r] (214/232)

BRITISH LIBRARY

Winds—
Influence of, on the Level of Lake Erie, Prof. A. J. Henry on, 685
Variations in the Velocity of Winds, by S. Lemström and J. Dannholm, 588 †
Windward, Voyage of the, 357, 566
Wingate, Captain A. W. S., "Things Chinese," 122 †
Wissmann, Major, remarks on "Through Africa from the Cape to Cairo," 184
Wit, Augusta de, Facts and Fancies about Java, 123 †
Witte, E., Das kalte Küstenwasser, 130 †
Wittenoom, Hon. E. H., Western Australia in 1899..128 †
Woeikof, Prof. A., Alexis v. Tillo (Biography), 133 †; Climat des Hauteurs de l'Europe occidentale, 257 †; Klima von Luktschun, Centralasien, 365 †; Luftdruck und die Atmosphärische Cirkulation in Asien, 247 †; Wo ist der hochste Luftdruck der Erde, mit und ohne Reduktion auf das Meeresniveau? 374 †
Wolkenhauer, Prof. Dr. W., Geographische Nekrologie für die Jahre 1898 und 1899..132 †; Die Entwicklung der Geographie im xix Jahrhundert in einigen Merkzahlen, 260 †
Wood and Ortlepp, Messrs., Map of the Northern Portion of the Transvaal, 378 †
Woodhouse, Mr., on the Waterway from the Baltic to the Black Sea, 555
Workman, F. B., and W. H., In the Ice-World of Himálaya, 577 †; note on, 681
World—
Journey with the Sun around the, by W. McMahon, 592 †
Maps: Erdumrisskarte in flächentreuer Planisphäre, von A. Bludau, 137 †
Production de la soie dans le monde, par M. V. Groffier, 131 †; note on, 357
Silver Map of the, by Miller Christy, Note on, 113
Worsfold, W. Basil, The Redemption of Egypt, 367 †
Wragge's Australasian Almanac and Weather Guide for Land and Sea, 585 †
Wrong, Prof. G. M., and H. H. Langton, Review of Historical Publications relating to Canada, 252 †
Wuchow, Trade of (Foreign Office Rep.), 247 †
Wuhu, Trade of (Foreign Office Rep.), 576 †
Wüllerstorf und Urbair, Bernhard Freiherr v. (Biography), 590 †
Württemberg—
Wirtembergisches Urkundenbuch, 244 †

Y.

Yang-tse—
Ausflug nach den Yangtze-Grotten, von Dr. H. Betz, 486 †
Mündung des Yangtse-Kiang, 576 †
Yangtze Valley and the British Sphere, by A. J. Little, 247 †
Yate, Major A. C., Sixty Years of Frontier Warfare, 247 †
Year-book—
Statesman's Year Book, by J. Scott Keltie and I. P. Renwick, 134 †
Yelcho, Rio, Patagonia, 191, 194
Yeld, G., Scrambles in the Eastern Graians, 483 †
Yellowstone National Park, Geology of the, by A. Hague and Others, 584 †
Yermak, Ice-breaker, by Vice-Admiral Makaroff, 260 †
Yeshil Kul, Pamirs, 99, 143
Yezidi ou les adorateurs du Diable, par J. Spiro, 124 †
Yokohama, Trade of (Foreign Office Rep.), 578 †
Yoruba—
In Yorubaland, Journal of the Rev. T. Harding, 251 †
Young, C. H., Peloponnesian Journeys, 244†
Yucatan—
Biologia Centrali-American, Archæology, by A. P. Maudslay, 372 †
Yukon—
Basin of the Yukon River, by J. B. Tyrrell, 370 †
Ice-Cliffs on White River, by Martin W. Gorman, 125 †
Ice-Cliffs on White River, Yukon Territory, by C. W. Hayes and A. H. Brooks, 371 †
Yung-peh, Sechuen, 534

Z.

Zachariæ, Gen.-Major G., Præcisionsnivellementet over Øresund, 129 †
Zambezi—
Source of the, Major Colin Harding's Expedition to the, 349
Zambèse et le Shire, par M. Levêque, 369 †
Zanzibar, Der Obstreichthum der insel, von G. Neuhaus, 487 †; Zanzibar, Trade of (Foreign Office Rep.), 699 †
Zarafshan river, 519
Zeller, Dr. R., Aus dem algerischen Atlasgebirge, 579 †
Zeller-Horner, Heinrich, von Prof. Dr. E. Walder (Biography), 133 †
Zemjatschensky, Prof. P., Untersuchungen über Geologie und Bodenverhältnisse im Kreise Borowitschi, 573 †
Zemmrich, Dr. J., on the Germans and Czechs in North-West Bohemia, 553
Zermatt, Valley of, and the Matterhorn, by Ed. Whymper, 121 †
Zimmermann, Prof M., Lyon et la Colonisation française, 484 †
Zimmermann, M., Le sort de l'Expédition Andrée, 586 †
Zuai, Lake, Abyssinia, 296
Zuccato, —, Trade of Venice, 244 †
Zukwala: *see* Sakwala
Zwemer, Rev. S. M., Arabia: The Cradle of Islam, 574 †

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000032

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

INDEX TO MAPS.

EUROPE.

England, Matthew Paris' Map of, final form, 321
Macedonia and Southern Alba nia—Prespa, Lake, 216; Ochrid, 217

ASIA.

Afghanistan and Baluchistan, Orographical Map of, 596, 682
Borneo, North, Baram District, 140
Calcutta and Lower Ganges Region, Sketch-map, 239
China, South-Western, illustrating journey of E. Amundsen, 596
Malay Archipelago, Bathymetric Chart of the, 550
Siberia—
Ob and the Irtish, Dr. Jankó's routes between the, 347
Tibet and Sin-Chiang (Chinese Turkestan), showing Captain Deasy's surveys, 596

AFRICA.

Addis Abeba to the Sobat river, Sketch-map of Captain Wellby's journey from, 380
Assyut, Oases of, Sketch-map, 656
Central: Sketch-map of Region between Tanganyika and Albert Edward Nyanza, 264
Dinka Country, Swamps of the, Sketch-map, 181
Naivasha, Lake, to Victoria Nyanza, Sketch-map illustrating a journey from, 140
North-East, Map to illustrate Explorations in, 712
Sikait District, Sketch-map showing position of Emerald Mines, 538; Plan of Jebel Sikait, 540; Cross-section of Sikait, 596; Survey of route from Um Selim to Sikait, 596
West: Franco-Spanish Boundaries, Sketch-maps of, 226

AMERICA.

Chesterfield Inlet to Great Slave Lake, Sketch-map, 140
Patagonian Cordillera, Sketch-map of the 140

ANTARCTIC.

South Victoria Land, Part of the coast-line of, 500

ARCTIC

Greenland, Sketch of the course of the *Antarctic*, 662

AUSTRALASIA.

New Guinea, British—
Distribution Sketch-maps; Cephalic index of over 78..289; Initiation ceremonies, etc., 418; Houses, 423; Canoes, 426; Bow and arrow, etc., 428; Decorative art, 430
New Guinea, British—*continued.*
Linguistic map of Central district, 438
Mekeo district, Geological Sketch-map of the, 268; Sketch-map of the, 272
Rigo district, Sketch-map, 285
Sketch-map of, 267

GENERAL.

Diogo Cão and Bartholomeu Dias, Maps illustrating the Voyages of, 712
Mediæval maps:—Matthew Paris' map of England: final form, 321

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000099

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [432r] (216/232)

BRITISH LIBRARY

ILLUSTRATIONS AND DIAGRAMS.

ASIA.

Borneo—
Dayak Gutta hunters, 57
Kayan district, Jungle in the, 43
Limestone cave, haunt of the swifts, 41
Madangs on a jungle path, 45
Madangs shooting with the Keleput (blowpipe), 49
Madang tomb, 47
Punans at home, 53
Warriors prepared for the *Jawa*, 50
Calcutta—
Geological section from supposed ancient crater to Calcutta and on to Kerpoy, 240
Central Asia—
Asgan Sal Valley, Peculiar formation in, 161
Central Asia—*continued.*
Glacier near Nabo La pass, 151
Glaciers near sources of Kiria river, 509
Hunza, Difficult part of route through, 155
Khotan river, General view of sources of, 513
Kwen Lun range, View of, 505
Raskam, Scene in, 159
Snow bridge on Dras river, 143
Tibet, Camp scene in, 147
Yarkand river, The most westerly bend of, 517
Persian gulf—
Mausolea near Bandar 'Abbas, 212

AFRICA.

Africa, from Tanganyika to Albert Edward Nyanza—
Geysers, Albert Edward Nyanza, 175
Ruwenzori, from the west, 179
Volcanoes from Lake Kivu, 167
Volcanoes, Mount Götzen and Mount Sharp, 171
Assyut, Oases of—
Er Ramlah el Kabir, on the Assyut road to Kharjah, 657
Kasr Dakhil, General view of, 660
Kharjah, Oasis of, 658
Mut, Town of, Oasis of Dakhilah, 659
Smint el Kharab, ruined temple, 661
Etbai, Northern—
Abbadi native, 545, 546
In the Desert: Halfway to the mines, 539
Roman hill, Jebel Sikait, plan and cross-section, 542
Shrine in the hills between Wadi Nugrus and Wadi Sikait, 544
Etbai, Northern—*continued.*
Sikait, Jebel, from the west, 541
Sikait, Jebel, View of wadi from, 543
Naivasha Lake to Victoria Nyanza—
Kach village, 86
Native bridge, 88
Sotik head-dresses and girl's apron, 82
Sotik hut, 84
Sotik spears and knives, 81
Rudolf, Lake, and the Nile—
Bad Lands, near Laki, east of Lake Stefanie, 605
Cedar valley, 612
Gazella Grantii Brightii, 607
Magois youth, 613; Near Magois, 615
Mursu on the river Omo, 610
Nile at Fort Berkeley, 623
Omo at Mursu, On the, 603
Raffia palms, country of the Akara, 617
Tragelaphus Bor (Heuglin), 619

AMERICA.

Haiti—
Turglan, Road to, 311
Patagonian Cordillera—
Aisen river near its mouth, 187
Alanso river, Narrows of, 25
Alanso river, Valley of, near its junction with Puelo valley, 21
Baker channel from a harbour in its central part, 195
Baker river in its lower course, 199
Patagonian Cordillera—*continued.*
Chubut river in Alaiten valley and the water-parting Cordilleran ranges, 29
Cisnes river, 10 miles from mouth, 33
Cisnes valley, Central, Primæval forest in the, 37
Mañiuales river near its origin, 191
Osorno volcano, from a lava-field near Lake Todos Los Santos, 17
Pascua river and lagoon, 203

ANTARCTIC.

Antarctic—
Adare, Cape, in winter time, 384
Dugdale glacier, 389
Geikie Land, Part of the medial moraine in, 394
Iceberg, A typical antarctic, 399
Reindeer moss (lichen), 395
Antarctic—*continued.*
Ridley camp after the first snow-drift, 387
Starfish found in 20 fathoms at Cape Adare, 392
Thermometer screen, 385

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005d

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [432v] (217/232)

ARCTIC.

Greenland—
Christiansen, Cape, 664
Garde, Cape, on Blossonville coast, 663
Greenland—*continued.*
Kaugerdlugsuak, View from the north side of, 665; Small glacier east of, 666

AUSTRALASIA AND PACIFIC ISLANDS.

New Guinea, British—
Bull-roarer and ceremonial masks from Karama, Papuan gulf, 420
Canoe carved with heads of the frigate bird, Massim region, 433
Carved wooden belt, Papuan gulf, 431, 434
Club, and dancing shield, carved designs, 435
Drum from the Fly river, foliar decoration of a, 432
Drums from Daudai, with animal and plant designs, 432
"Fulaari," or masked executive of the Taboo, Waima, Mekeo district, 419
Gaile natives, Motu stock, 279
New Guinea, British—*continued.*
"Geometric" patterns on a wooden comb from Mer, Torres Strait, 431
Houses in coconut grove, Nada, 424
Kalo village, 287
Koiari men of the village of Makabiri, 291
Mer (Murray islands), The last round house in, 422
Pottery-making at Hanuabada, Port Moresby, 429
Shield and ceremonial or magical tablets from the Papuan gulf, 434
Tree house, Gasiri, Central district, 283
Wavy-haired boy, Sinaugolo, 270

GENERAL.

Auroral curves in the Antarctic and in Canada, 692
Cão's and Dias' Voyages—
Arms of Portugal up to 1485..628
Coat-of-arms of D. Cão, 632
Padrão of São Jorge, 630; Padrão of Cape Cross, 634; Padrão of B. Dias, 642
Royal coat-of-arms, 1485..634
Land-forms—
Bending and warping of a lath loaded at the centre with a weight, 457
Bending and warping of a lath subjected to end compressions, 458
Land-forms—*continued.*
Resultant wave-form, 468
Sella mountain in the Dolomites, Portion of the eastern transverse arch of, 464; Portion of the western transverse arch of, 465
Slabs in Schlern dolomite rock, produced by cross-pressures, 463
Wedges of Lower and Middle Trias above the plane of overthrust in Buchenstein valley, 462
Pettersson-Nansen insulating water-bottle, 470

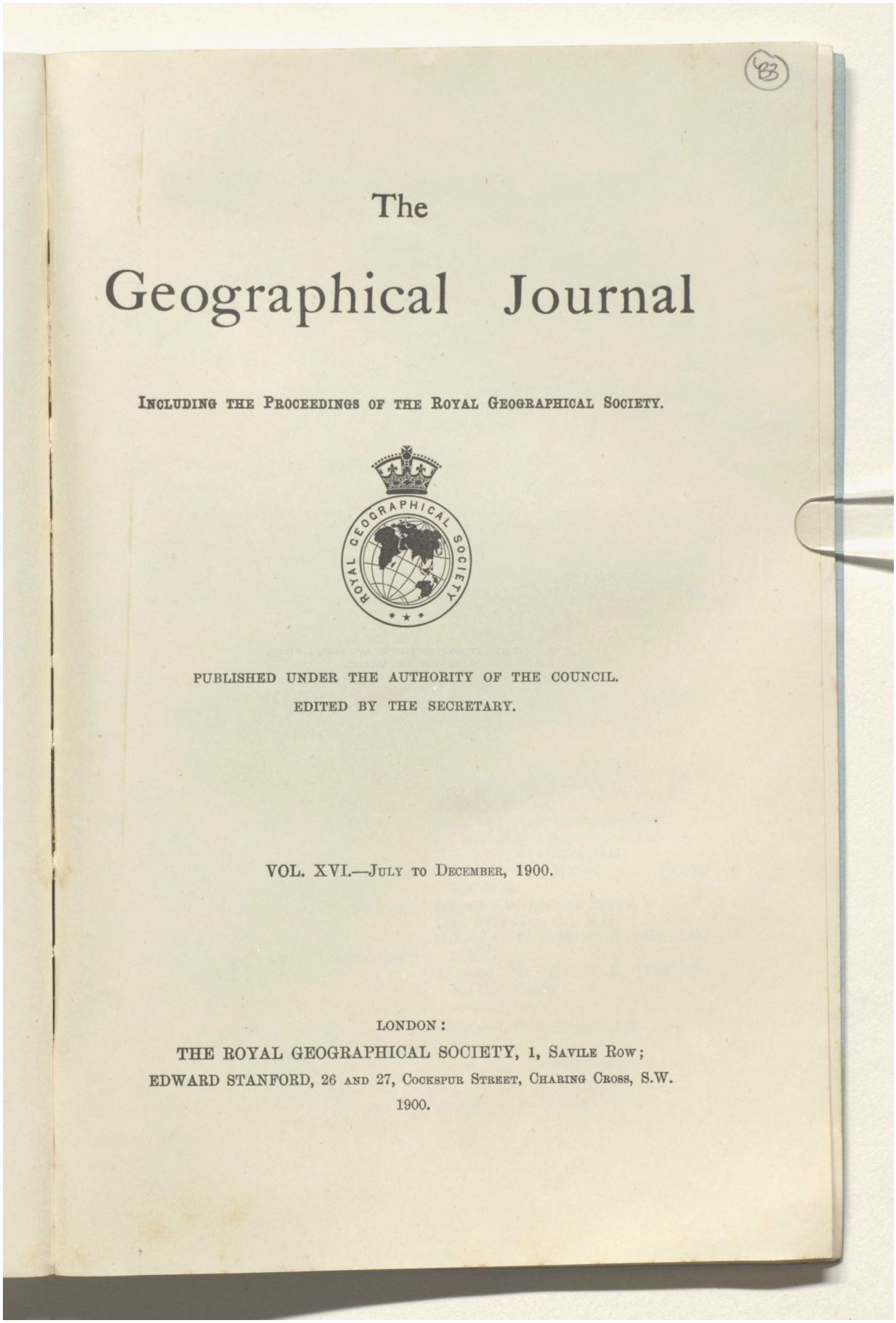
END OF VOL. XVI.

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



The Geographical Journal

INCLUDING THE PROCEEDINGS OF THE ROYAL GEOGRAPHICAL SOCIETY.

PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.
EDITED BY THE SECRETARY.

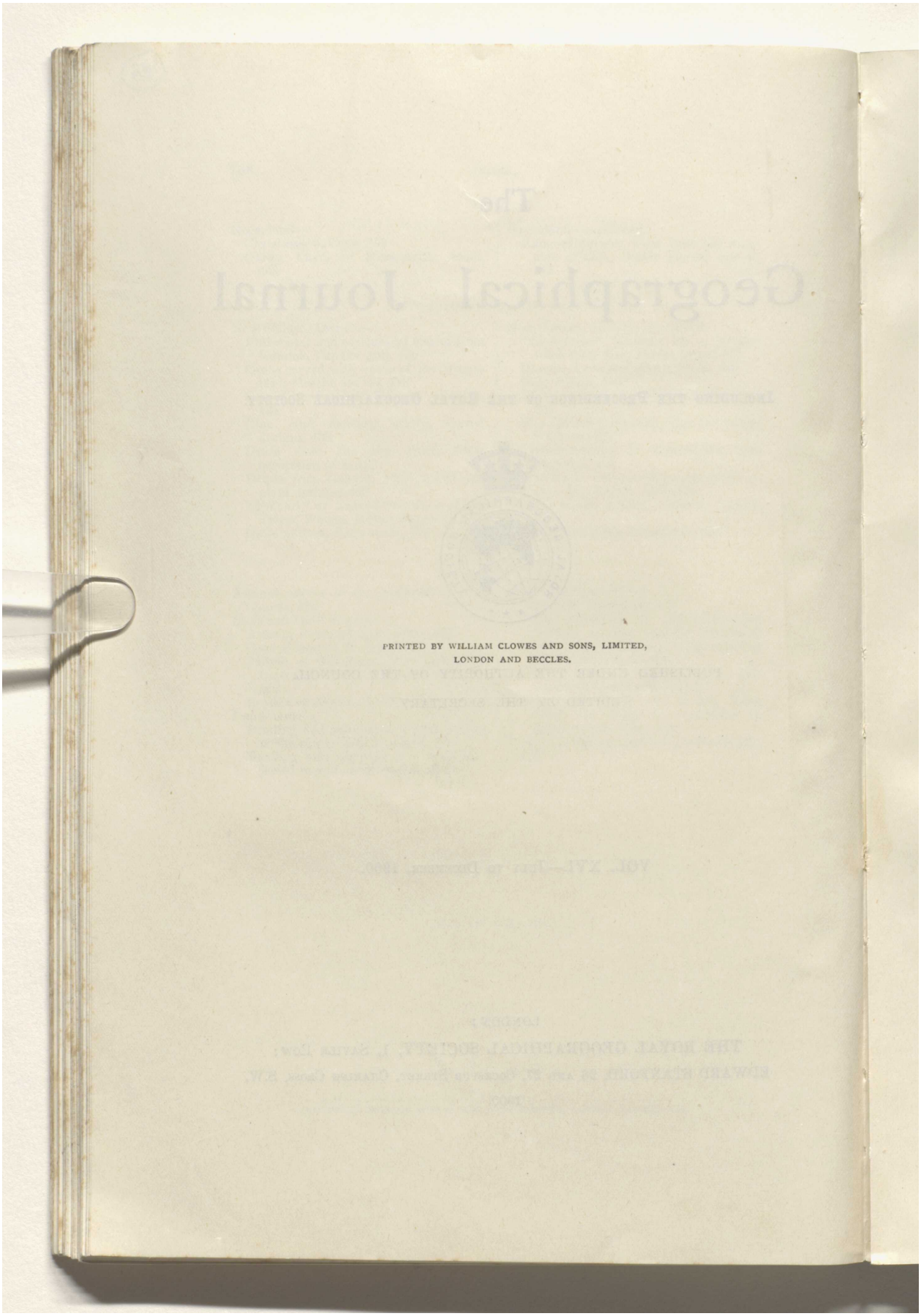
VOL. XVI.—JULY TO DECEMBER, 1900.

LONDON:
THE ROYAL GEOGRAPHICAL SOCIETY, 1, SAVILE ROW;
EDWARD STANFORD, 26 AND 27, COCKSPUR STREET, CHARING CROSS, S.W.
1900.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,
LONDON AND BECCLES.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

439

ROYAL GEOGRAPHICAL SOCIETY.

PATRON.

HER MAJESTY THE QUEEN.

VICE-PATRON.

HIS ROYAL HIGHNESS THE PRINCE OF WALES, K.G., K.T., K.P., G.C.B., &c., &c.

Honorary President.

HIS ROYAL HIGHNESS THE DUKE OF YORK, K.G.

COUNCIL

(ELECTED MAY 21, 1900).

President—Sir Clements R. Markham, K.C.B., F.R.S., F.S.A.

Vice-Presidents.

Hon. George C. Brodrick.
Right Hon. Sir George D. Taubman Goldie, K.C.M.G.
Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B.
Admiral Sir Anthony H. Hoskins, G.C.B.
Admiral Sir F. Leopold McClintock, K.C.B., D.C.L., F.R.S.
Gen. Sir Chas. W. Wilson, R.E., K.C.B., K.C.M.G.

Treasurer—Edward L. Somers Cocks.

Trustees—Right Hon. Lord Avebury, F.R.S.; Sir Cuthbert E. Peek, Bart., F.R.A.S., F.S.A.

Honorary Secretaries—Major Leonard Darwin, R.E.; James F. Hughes.

Foreign Secretary—Sir John Kirk, K.C.B., G.C.M.G., F.R.S.

Members of Council.

Major-General Sir John C. Ardagh, K.C.I.E., C.B.
Sir H. E. G. Bulwer, G.C.M.G.
W. T. Blanford, LL.D., F.R.S.
Colonel George Earl Church.
Clinton T. Dent.
Major-General Sir Francis W. De Winton, R.A., G.C.M.G., C.B.
Admiral Sir R. Vesey Hamilton, G.C.B.
Colonel D. A. Johnston, R.E.
Colonel Augustus Le Messurier, R.E., C.I.E.
L. W. Longstaff.
George S. Mackenzie, C.B.
Admiral A. H. Markham.
A. P. Maudslay.
Duke of Northumberland, K.G.
Sir George S. Robertson, K.C.S.I.
Howard Saunders, F.L.S.
General Sir Henry A. Smyth, K.C.M.G.
Herbert Warington Smyth.
Lord Stanmore, G.C.M.G.
Colonel Charles Moore Watson, R.E., C.M.G.
Admiral Sir W. J. L. Wharton, K.C.B., F.R.S.

Secretary and Editor of Publications—J. Scott Keltie, LL.D.

Librarian—H. R. Mill, D.Sc.

Map Curator.
E. A. Reeves, F.R.A.S.

Chief Clerk.
S. J. Evis.

Bankers—Messrs. Cocks, Biddulph, and Co., 43, Charing Cross.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CONDITIONS OF FELLOWSHIP, &c.

Candidates for admission into the Society must be proposed and seconded by Fellows, and it is necessary that the description and residence of such Candidates should be clearly stated on their Certificates.

It is provided by Chapter IV., § 1, of the Regulations, that—

"Every Ordinary Fellow shall, on his election, be required to pay £5 as his "admission fee, and £2 as his first annual subscription, or he may compound, "either at his entrance by one payment of £35, or at any subsequent period on the "following basis:—

Fellows of 20 years' standing and over						...	£12 10s.
,,	15	,,	,,	and under	20	...	£16
,,	10	,,	,,	,,	15	...	£20

"And no Fellow shall be entitled to vote or to enjoy any other privilege of the "Society so long as he shall continue in arrear."

All Subscriptions are payable in advance, on the 1st of January in each year.

The privileges of a Fellow include admission (with one Friend) to all ordinary Meetings of the Society, and the use of the Library and Map-room. Each Fellow is also entitled to receive a copy of all the Society's periodical publications. The *Geographical Journal* is forwarded, free of expense, to all Fellows whose addresses are known.

Copies of the Year Book, Regulations, and Candidates' Certificates may be had on application at the Society's House, 1, Savile Row, London, W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00004f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CONTENTS.

Authors are alone responsible for their respective statements.

No. 1. *July.*

PAGE

Address to the Royal Geographical Society. By Sir Clements R. Markham, K.C.B., F.R.S., President 1
The Patagonian Cordillera and its Main Rivers, between 41° and 48° South Latitude. By Dr. Hans Steffen 14
In the Heart of Borneo. By Charles Hose, Resident of the Baram District .. 39
A Journey from Chesterfield Inlet to Great Slave Lake, 1898–9. By David T. Hanbury 63
A Journey from Lake Naivasha to the Victoria Nyanza. By Captain G. H. Gorges, of the Uganda Rifles 78
Admiralty Surveys during the Year 1899 90
Observations on the Aurora Australis. By Henryk Arctowski 92
Baron Toll on New Siberia and the Circumpolar Tertiary Flora. By P. Kropotkin 95
The Monthly Record 98
Obituary 114
Meetings of the Royal Geographical Society 115
Geographical Literature of the Month 118
New Maps 134

Maps and Illustrations.

Osorno Volcano, from a Lava-field near the Western Extremity of Lake Todos los Santos 17
Valley of River Alanso near its Junction with Puelo Valley (looking South) 21
Narrows of River Alanso (looking North) 25
River Chubut in Alaiten Valley and the Water-parting Cordilleran Ranges (looking West) 29
River Cisnes, 10 miles from its Mouth 33
Primæval Forest in the Central Cisnes Valley 37
Limestone Cave — Haunt of the Swifts 41
Jungle in the Kayan District 43
Madangs on a Jungle Path 45
A Madang Tomb 47
Madangs shooting with the Keleput (Blowpipe) 49
Warriors prepared for the *Jawa* .. 50
Punans at Home 53
Dayak Gutta Hunters 57
Sotik Spears 81
Sotik Knives 81
Sotik Head-dresses 82
Sotik Girl's Apron 82
Sotik Hut 84
A Kach Village 86
Native Bridge 88
Sketch-map of the Patagonian Cordillera 140
Map of the Baram District, Sarawak, Northern Borneo 140
Sketch-map — Chesterfield Inlet to Great Slave Lake 140
Sketch-map illustrating a Journey from Lake Naivasha to Victoria Nyanza 140

No. 2. *August.*

Journeys in Central Asia. By Captain H. H. P. Deasy 141
Through Africa from the Cape to Cairo. By Ewart S. Grogan 164
The Patagonian Cordillera and its Main Rivers, between 41° and 48° South Latitude. By Dr. Hans Steffen 185

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007f

مكتبة قطر الوطنية
Qatar National Library

PAGE

Ancient Trading Centres of the Persian Gulf. By Captain Arthur W. Stiffe, R.I.M. 211
Dr. Jovan Cvijić's Researches in Macedonia and Southern Albania 215
The Monthly Record 220
Obituary 236
Correspondence 238
Meetings of the Royal Geographical Society 241
Geographical Literature of the Month 242
New Maps 261

MAPS AND ILLUSTRATIONS.

Snow Bridge on Dras River 143
Camp Scene in Tibet 147
Glacier near Nabo La Pass 151
Difficult Part of Route through Hunza 155
Scene in Raskam 159
Peculiar Formation in Asgan Sal Valley 161
The Volcanoes from Lake Kivu; View from South-east 167
The Volcanoes Mount Götzen and Mount Sharp, from the North-east 171
The Geysers, Albert Edward Nyanza 175
Ruwenzori, from the West 179
The Swamps of the Dinka Country 181
River Aisen near its Mouth (looking West) 187
River Mañiuales near its Origin (looking North) 191
Baker Channel, from a Harbour in its Central Part (looking South-west) 195
River Baker in its Lower Course (looking South-west) 199
River Pascua and Lagoon (looking North) 203
Mausolia near Bandar 'Abbas—the highest about 30 feet high .. 212
Lake Prespa, 1 : 250,000 216
Lake Ochrid, 1 : 250,000 217
Cape Blanco and Adrar Region .. 226
Muni River Region 226
Lower Ganges Region 239
Geological Section from Supposed Ancient Crater to Calcutta and on to Kerpoy 240
Sketch-map of Central Africa between the Region of Lake Tanganyika and Albert Edward Nyanza 264

No. 3. *September.*

Studies in the Anthropogeography of British New Guinea. By Prof. Alfred C. Haddon, SC.D., F.R.S. 265
King Menelek's Dominions and the Country between Lake Gallop (Rudolf) and the Nile Valley. By the late Captain M. S. Wellby, 18th Hussars 292
Through Haiti. By Hesketh Prichard 306
New Light on some Mediæval Maps. By C. Raymond Beazley, M.A. 319
Methods of Survey employed by the Chilean Boundary Commissions in the Cordillera of the Andes. By Prof. A. Bertrand (University of Santiago, Chile) 329
The Monthly Record 345
Obituary 358
Geographical Literature of the Month 359
New Maps 377

MAPS AND ILLUSTRATIONS.

Sketch-map of British New Guinea 267
Geological Sketch-map of the Mekeo District 268
Wavy-haired Boy, Sinaugolo, Rigo District 270
Sketch-map of the Mekeo District .. 272
Three Gaile Natives: Motu Stock .. 279
Tree House, Gasiri, Central District 283
Sketch-map of the Rigo District .. 285
Village of Kalo 287
Distribution of Cephalic Index of over 78 289
Koiari Men of the Village of Makabiri 291
Road to Turglan, Haiti 311
Matthew Paris' Map of England: Final Form 321
Dr. Janko's routes between the Ob and the Irtish 347
Sketch-map of a Journey from Addis Abeba to the Sobat River .. 380

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

No. 4. *October.*

PAGE

The *Southern Cross* Expedition to the Antarctic, 1899–1900. By C. E. Borchgrevink 381
The Anthropogeography of British New Guinea. By Prof. Alfred C. Haddon, SC.D., F.R.S. 414
Geography at the British Association, Bradford, 1900 441
Political Geography and the Empire. By Sir George S. Robertson, K.C.S.I. .. 447
The Origin of Land-forms through Crust-torsion. By M. M. Ogilvie Gordon, D.SC., PH.D., LL.D. 457
The Pettersson-Nansen Insulating Water-bottle. By Hugh Robert Mill, D.SC., LL.D. 469
The Monthly Record 471
Obituary 481
Geographical Literature of the Month 482
New Maps 496

Maps and Illustrations.

Cape Adare in winter-time 384
Thermometer Screen 385
Camp Ridley after the first snowdrift 387
Dugdale Glacier (Mouth of) 389
Starfish found in 20 fathoms at Cape Adare 392
Part of the medial moraine at Geikie Land 394
Reindeer Moss (lichen) 395
A typical Antarctic Iceberg 399
Distribution of Initiation Ceremonies, etc. 418
"Fulaari," or Masked Executive of the Taboo, Waima, Mekeo District 419
Bull-roarer and Ceremonial Masks from Karama 420
The last round house in Mer (Murray Islands) 422
Distribution of Houses 423
Houses in coconut grove, Nada .. 424
Distribution of Canoes 426
Distribution of Bow and Arrow, Spear, etc. 428
Pottery-making at Hanuabada, Port Moresby 429
Distribution of Decorative Art .. 430
Carved wooden belt, Papuan Gulf; "Geometric" patterns on wooden comb from Mer, Torres Strait .. 431
Rubbing of part of the foliar decoration of a drum from the Fly River; Drums from Daudai .. 432
1. "Geometric" patterns burnt on a bamboo tobacco-pipe; 2. Prow of a canoe carved with heads of the frigate bird, Massim Region 433
Shield and ceremonial or magical tablets 434
Carved wooden belt from the Papuan Gulf 434
1. Frigate-bird scrolls carved on a club; 2. Dancing shield with frigate-bird designs; 3. Lime gourd with burnt design 435
Linguistic Map of the Central District 438
Fig. 1.—Bending and warping of a lath loaded at the centre with a weight 457
Fig. 2.—Bending and warping of a lath subjected to end compressions 458
Fig. 3.—Wedges of Lower and Middle Trias above the plane of overthrust in Buchenstein Valley 462
Fig. 4.—Slabs in Schlern dolomite rock, produced by cross-pressures: Spitzkofl group from Gröden Pass 463
Fig. 5.—Portion of the eastern transverse arch of Sella Mountain in the Dolomites 464
Fig. 6.—Portion of the western transverse arch of Sella Mountain, in the Dolomites 465
Fig. 7.—Differential strains 466
Fig. 8.—Resultant wave-form .. 468
Fig. 1.—Pettersson-Nansen water-bottle descending, set and ready for use; Fig. 2.—Ditto ascending, closed and locked 470
Map of a Part of the Coast-line of South Victoria Land 500

No. 5. *November.*

Journeys in Central Asia. By Captain H. H. P. Deasy 501
An Orographic Map of Afghanistan and Baluchistan. By Colonel Sir T. H. Holdich, K.C.I.E., C.B. 527
A Journey through South-West Sechuen. By Edward Amundsen 531
The Emerald Mines of Northern Etbai. By Donald A. Mac Alister 537
The Dutch *Siboga* Expedition to the Malay Archipelago 549

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000015

مكتبة قطر الوطنية
Qatar National Library

The Geographical Journal(Journal of the Royal Geographical Society): Volume XVI, No. 6 [436v] (225/232)

PAGE
The Monthly Record 552
Correspondence 569
Geographical Literature of the Month 569
New Maps 592

MAPS AND ILLUSTRATIONS.

View of Kwen Lun Range, from Shor Kul 505
Glaciers near Sources of Kiria River 509
General View of Sources of Khotan River 513
The most Westerly Bend of Yarkand River, taken from the Mouth of the Mariong Valley 517
Map of the Sikait District 538
In the Desert: halfway to the Mines 539
Plan of Mined Area between Wadi Nugrus and Wadi Sikait 540
Plan of Jebel Sikait, showing position of mines 540
Jebel Sikait from the west 541
Roman Hill, Jebel Sikait 542
View of Wadi from Jebel Sikait .. 543
Small Shrine in the hills between Wadi Nugrus and Wadi Sikait, cut in the soft rock 544
Abbadi Natives 545, 546
Bathymetric Chart of the Malay Archipelago 550
Map of part of Tibet and Sin-Chiang (Chinese Turkestan) 596
Orographical Map of Afghanistan and Baluchistan 596
Sketch-map of part of South-Western China 596
Survey of a Route from Um Selim to Sikait 596

No. 6. *December.*

The President's Opening Address, Session 1900–1901 597
An Expedition between Lake Rudolf and the Nile. By Dr. A. Donaldson Smith 600
The Voyages of Diogo Cão and Bartholomeu Dias, 1482–88. By E. G. Ravenstein 625
The Oases of the Mudirieh of Assyut. By A. R. Guest 655
The Danish East Greenland Expedition in 1900. By Lieut. G. C. Amdrup, R.D,N. 662
On the Afghan Frontier: A Reconnaissance in Shugnan 666
The Monthly Record 679
Correspondence 691
Meetings of the Royal Geographical Society 693
Geographical Literature of the Month 694
New Maps 707

MAPS AND ILLUSTRATIONS.

On the Omo at Mursu 603
Bad Sands, near Saki, east of Lake Stefanie 605
Gazella Grantii Brightii 607
Mursu on the River Omo 610
Cedar Valley 612
A Magois Youth 613
Near Magois 615
Raffia Palms, Country of the Akara 617
Tragelaphus Bor (Heuglin) 619
The Nile at Fort Berkeley 623
The Arms of Portugal up to 1485 .. 628
The Padrão of São Jorge 630
The Coat-of-arms of D. Cão, 1484 .. 632
The Padrão of Cape Cross 634
The Royal Coat-of-arms, 1485 634
Fragments of a Padrão of B. Dias, 1487 642
Sketch-map of the Oases of Assyut 656
Er Ramlah el Kabir, on the Assyut Road to Kharjah 657
Oasis of Kharjah 658
Town of Mut, Oasis of Dakhilah .. 659
General View of Kasr Dakhil, Oasis of Dakhilah 660
Ruined Temple, Smint el Kharab .. 661
Sketch of the Course of the *Antarctic* and of the Coast-Expedition in 1900 662
Cape Garde, on Blossonville Coast 663
Cape Christiansen, 67° 13′ N. lat. .. 664
View from the North Side of Kaugerdlugsuak 665
A Small Glacier East of Kaugerdlugsuak 666
Auroral Curves in the Antarctic and in Canada 692
Map to illustrate Explorations in North-East Africa 712
Maps illustrating the Voyages of Diogo Cão and Bartholomeu Dias 712

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000009

مكتبة قطر الوطنية
Qatar National Library

437



SECTION ARRANGED FOR TRANSPORT.

THE

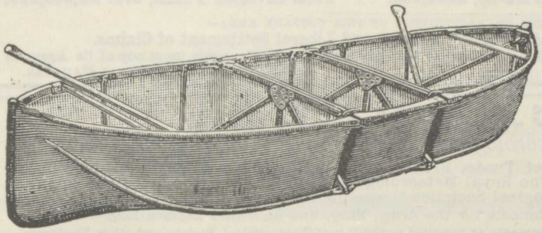
JAMES FOLDING BOATS.

OFFICES:
20, BUCKLERSBURY, E.C.

EMERGENCY.
PONTOONS.
FISHING.
EXPLORING.

Supplied to Her Majesty's Government; also to the German, Russian, Japanese, and Argentine Governments.

WORKS:
QUEEN'S ROAD, BATTERSEA.



These boats have been supplied to Prince Abruzzi for his Polar Expedition, and to Sir George Newnes for the British Antarctic Expedition.

PLATINOTYPE GIVEN AWAY!

Sufficient Paper and Developing Salts for a trial sent post free for 1/-, with illustrated book of instruction.

THE SIMPLEST PHOTOGRAPHIC PROCESS.
ONCE USED, ALWAYS USED.

THE PLATINOTYPE COMPANY,
22, BLOOMSBURY STREET, LONDON, W.C.

THE NEW HYGIENIC MATERIAL,

30 MEDALS. **"PETANELLE"** 30 MEDALS.

NATURAL ANTISEPTIC AND DEODORANT CLOTHING,

Absorbs, Deodorizes, and Evaporates Perspiration, remaining always dry and warm. Maintains even temperature. The best preventive of Chill, Rheumatism, etc.

Underwear, Socks for perspiring feet, Athletic and Tropical Outfits, Cholera Belts, Rugs, Waterproof Felt Ground Sheets, Bedding, Blankets, Hats, Caps, &c.

Of all Outfitters, or write for particulars and Price List to—

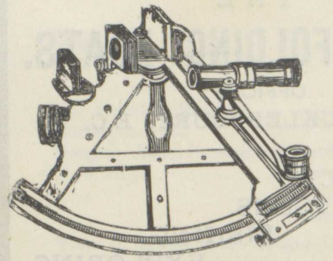
PATÉ, BURKE & CO., 6, Wool Exchange, London, E.C.

b

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000021

مكتبة قطر الوطنية
Qatar National Library

Cary's Celebrated Edge-Bar Sextant.



ONLY MAKER of Capt. George's Patent Barometers, Artificial Horizons, & Double Sextants.

CARY'S
Travelling Sets of Surveying Instruments,

Consisting of Barometers, Compasses, Sextants, Artificial Horizons, Binocular Glasses, &c., &c., specially made for the Royal Geographical Society, by

H. PORTER,
APPRENTICE AND SUCCESSOR TO THE LATE
W. CARY,
Optician by Special Appointment to the Admiralty, War Office, India Office, Trinity House, Swedish, Norwegian, and other Foreign Governments.
7, PALL MALL, LONDON, S.W.
ESTABLISHED OVER 100 YEARS.
GOLD MEDALS AND HIGHEST AWARDS.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.
THE IMPERIAL INSURANCE COMPANY, LIMITED, FIRE.
1, OLD BROAD STREET, 22, PALL MALL, and 47, CHANCERY LANE, LONDON.
ESTABLISHED 1803.
Subscribed Capital, £1,200,000. Paid-up, £300,000. Total Invested Funds, over £1,500,000.
THE DISTINGUISHING CHARACTERISTICS OF THIS COMPANY ARE:—
Moderate Rates; Undoubted Security; Prompt and Liberal Settlement of Claims.
Every Information and Forms of Proposal can be obtained from the Offices of the Company, or at any of its Agencies at home or abroad.
E. COZENS-SMITH, GENERAL MANAGER.

L. CASELLA,
Surveying, Mining, Meteorological, and Electrical Instrument Maker
To the Admiralty, Ordnance, Board of Trade, British and Foreign Governments; various Observatories; The Royal Geographical, The Royal Meteorological Societies, and the principal Scientific and Meteorological Societies throughout the World.
Every Improvement in Instruments for the Army, Navy, and Scientific Explorations.
And special sets of portable and other Instruments as supplied to the Royal Geographical Society and other Explorers.
147, HOLBORN BARS, LONDON, E.C.
Telegraphic Address: "ESCUTCHEON, LONDON." Telephone No. 1054, HOLBORN.

TOO STOUT.
A POSITIVE CURE Guaranteed or Cash returned.
If after Four Weeks' Treatment no appreciable relief has resulted, every halfpenny expended on this remedy WILL BE RETURNED.
OBESITY
is simply a disease, and we profess to have an absolutely Safe and Permanent Cure.
The value of the following certificates cannot be over-estimated, proving as it does the absolute efficacy and non-injurious character of this preparation.
"This is to certify that I have tested this Medicament, as recommended by the Irristum Company, and my opinion is that it is an absolute Cure for Corpulency, that it is non-injurious, and may be taken by all those who are afflicted with Obesity, without fear of injury to the constitution.
"ARTHUR FARR, L.R.C.P. (London), L.H.P.S.G.,
"Diploma Public Health, and late Medical Officer of Health for Lambeth."
"THE LABORATORY, 32, Duncan Terrace, N.,
"*April* 23, 1900.
"I have examined the Preparation handed to me by you, and described by you as a Remedy for Corpulency; upon analysis and careful consideration of the component parts, I am of opinion that the ingredients are perfectly harmless, and would be greatly beneficial for the purposes stated.
"STUART HALLOWS, M.B., D.H.P."
Write to-day for our 64-page pamphlet, entitled "Corpulence and its Cure." Illustrations by George Cruickshank, instructive and interesting, sent in plain envelope gratis and post free.
THE IRRISTUM ANTI-FAT CO. (Dept. D),
145, Stockwell Road, LONDON.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

INDIA, CEYLON, JAVA, QUEENSLAND, BURMAH, PERSIA, EAST AFRICA, &c.

BRITISH INDIA STEAM NAVIGATION COMPANY, LIMITED,
BRITISH INDIA ASSOCIATION.

MAIL STEAMERS FROM LONDON TO

CALCUTTA.	BOMBAY.	BRISBANE.
MADRAS.	KURRACHEE.	BATAVIA.
COLOMBO.	BAGHDAD.	ROCKHAMPTON.
RANGOON.	ZANZIBAR.	TOWNSVILLE.
MAURITIUS.	MOMBASSA.	MARYBOROUGH.

For Dates see Daily Advertisements.

Delivering Mails, Passengers, Specie, and Cargo to all the principal Ports of INDIA, BURMAH, EAST AFRICA, QUEENSLAND, and JAVA.

Every comfort for a tropical voyage.

Apply to GRAY, DAWES, & CO., 23, Great Winchester Street, E.C., and Craven House, Northumberland Avenue, W.C.; or to GELLATLY, HANKEY, & CO., Albert Square, Manchester; 51, Pall Mall, and Dock House, Billiter Street, London.

HAMBURG-AMERICAN LINE.

The Hamburg-American Line's TWIN-SCREW EXPRESS STEAMERS leave SOUTHAMPTON for NEW YORK viâ CHERBOURG. Special train from Waterloo Station on day of sailing.
TWIN-SCREW MAIL STEAMERS leave PLYMOUTH on Tuesdays for NEW YORK direct.

For all further particulars, apply to—

HAMBURG-AMERICAN LINE,

THOMAS CLIFFORD, Agent,
22, COCKSPUR STREET, CHARING CROSS, S.W.

WHY BE SEA-SICK if you can prevent it?

Why hesitate to procure the preventive when its price is so small?

Send us 1/6

And you will receive post free a tin of 10

VALIDOL PRALINES

with instructions. We return money if you tell us that Validol (absolutely harmless) proved unsuccessful in either altogether preventing or greatly reducing your usual suffering. The makers are the well-known manufacturers of Quinine and Euquinine (tasteless quinine for neuralgia, fevers, &c.), MESSRS. ZIMMER AND CO., LTD. Apply to their

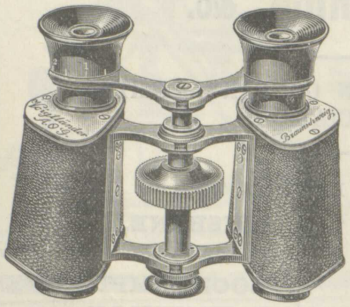
London Agency, 33, Lime Street, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008b

مكتبة قطر الوطنية
Qatar National Library

SPECIAL HIGHEST POWER PRISM BINOCULAR

MAGNIFYING 12 DIAMETERS.



HIGHEST-POWER PRISM BINOCULAR

This Binocular Glass has been specially prepared to meet the demand for a short, handy, light glass of great power.

Power 12 Diameters. Price £9 9s. nett.

Extract from Daily Paper.—An officer in Natal says of a pair of Zeiss field glasses (8 diameters): "They are splendid for examining Boer positions, far better than anything else I've seen, except the swell naval gun telescope, about 4 feet long when shut up."

NOTE.—*These Highest-power Glasses magnify* 12 *Diameters, and are therefore* 33 *per cent. more powerful than those mentioned above.*

SOLD ONLY BY—

HEATH & CO., LTD.,

SCIENTIFIC INSTRUMENT MAKERS,

BY APPOINTMENT TO

THE LORDS COMMISSIONERS OF THE ADMIRALTY, THE HONOURABLE CORPORATION OF THE TRINITY HOUSE, THE BOARD OF TRADE, &c., &c.,

2, TOWER ROYAL, CANNON ST., LONDON.

WORKS: CRAYFORD, KENT.

Managing Director—G. W. HEATH, F.R.G.S., M.I.Mec.E.

Samples can be seen at 2, Tower Royal, London, E.C. Orders executed from the Works.

SOMATOSE (MADE FROM BEEF)

The most Powerful Food known to Science. A True Meat Nutrient, and is especially valuable in all cases of

FEVER, DYSENTERY AND INFLUENZA.

Vide "LANCET" of Sept. 30th, 1899.

Is acknowledged by Eminent Medical Authorities at Home and Abroad to be

THE IDEAL FOOD FOR INVALIDS AND CONVALESCENTS.

It is an almost TASTELESS and ODOURLESS POWDER.
It contains nearly 80 per cent. of MEAT ALBUMEN.
It acts directly as a TONIC and creates an APPETITE.
It is NOT a DRUG, but a THERAPEUTIC FOOD.
It is easily SOLUBLE in Water, Milk, Soup, Coffee, Cocoa, etc.

SOMATOSE IS ALSO SOLD AS A LIQUID

Being a more convenient form of administration.

IRON-SOMATOSE

Contains the tonic qualities of IRON combined with the albuminous substance of MEAT.
Causes NO GASTRIC DISTURBANCE or CONSTIPATION.
Does NOT AFFECT THE TEETH.
Is a FREELY SOLUBLE preparation of IRON.

MILK-SOMATOSE

Contains the ALBUMINOUS MATTER of MILK, combined with 5 per cent. of TANNIC ACID.
Is SLIGHTLY ASTRINGENT and NON-IRRITANT.
Is most suitable for STRENGTHENING WEAK DIGESTIVE ORGANS.
Is ESPECIALLY VALUABLE for INFANTS and CHILDREN.

NOW USED IN ALL THE PRINCIPAL CIVIL & MILITARY HOSPITALS.

SOLD BY ALL CHEMISTS.

Full particulars from—

THE BRITISH SOMATOSE Co., Ltd., *165, Queen Victoria St., London, E.C.*

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000039

مكتبة قطر الوطنية
Qatar National Library

439

HÔTEL MÉTROPOLE, LONDON

NORTHUMBERLAND AVENUE, TRAFALGAR SQUARE.

Offers unequalled accommodation for real comfort and luxury in every detail. Numerous single and double Bedrooms, with or without private Bathroom, etc., attached, all most comfortably furnished; also Suites of Private Apartments, varying in accommodation from Bedroom and Sitting-room to princely suites comprising Drawing, Dining, and Reception Rooms, with Bedrooms, Dressing-rooms, Bathrooms, etc. The Restaurant is available for guests not staying at the Hotel. Table de Hôte Breakfast, Luncheon, and Dinner; also Service *à la carte*—perfect cuisine and wines, moderate charges.

NEW ILLUSTRATED TARIFF SENT ON APPLICATION.

THE GORDON HOTELS ARE—

GRAND HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND WHITEHALL ROOMS, } LONDON.
HÔTEL VICTORIA, LONDON.
FIRST AVENUE HOTEL, LONDON.
HÔTEL MÉTROPOLE, AND CLARENCE ROOMS, } BRIGHTON.
BURLINGTON HOTEL, EASTBOURNE.
ROYAL PIER HOTEL, RYDE, I. OF W.
CLIFTONVILLE HOTEL, MARGATE.
LORD WARDEN HOTEL, DOVER.
HÔTEL MÉTROPOLE, FOLKESTONE.
GRAND HOTEL, BROADSTAIRS.
HÔTEL MÉTROPOLE, MONTE CARLO.
HÔTEL MÉTROPOLE, CANNES.

PROPRIETORS—

GORDON HOTELS, LTD.

Awarded Gold Medal Liverpool International Exhibition, 1886. Also Grand Prix (Highest Award) Antwerp, 1894.

ALL DESCRIPTIONS OF ENGLISH MANUFACTURED

SWEETENED TOBACCOS AND CIGARETTES.

RICHMOND CAVENDISH Co., Ltd., LIVERPOOL.

Exploration parties can (under special conditions) be supplied with duty free Tobacco, Cigars, and Cigarettes. Particulars on application.

SPECIAL BRANDS:—

"PIONEER" Golden Flake Cut. TWIN CLOUDS. "RICHMOND SMOKING MIXTURE." RICHMOND NAVY CUT. Bright and Black Plug Cavendish in all usual sizes.

PRICE LISTS ON APPLICATION. ESTABLISHED 1863.

JOHN WOOD & SON,

CIGAR, CIGARETTE AND TOBACCO MANUFACTURERS,

23 & 25, QUEEN VICTORIA STREET, E.C.;

AND FACTORY, 87, SOUTHWARK STREET,

LONDON.

ESTABLISHED 1836.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000078

مكتبة قطر الوطنية
Qatar National Library

OPPOSITE THE BRITISH MUSEUM.

THACKERAY HOTEL

(TEMPERANCE),

GREAT RUSSELL STREET, LONDON.

This newly-erected and commodious Hotel will, it is believed, meet the requirements of those who desire all the conveniences and advantages of the larger modern licensed hotels at moderate charges.

Passenger Lift. Electric Light in all Rooms. Bath-rooms on every Floor.

Spacious Dining, Drawing, Writing, and Smoking Rooms.

All Floors Fireproof. Perfect Sanitation. Night Porter. Telephone.

BEDROOMS FROM 2s. 6d. TO 4s. 6d. PER NIGHT.

Full Tariff and Testimonials on Application.

Telegraphic Address: "THACKERAY, LONDON." Proprietor—J. TRUSLOVE.

Septimus Chambers'

SPECIALITY

EJECTOR GUN.



Price, 15 GUINEAS.

My "National" Cartridge (colour, red, white, and blue) is the best on the market; once used, always used.

Telephone No. 405.

Telegrams: "Septimus, Bristol."

SEPTIMUS CHAMBERS,

Practical Gunmaker and Cartridge Manufacturer,

Branches: Cardiff and Shepton Mallet. BROAD ST., BRISTOL.

Fishing Tackle and Athletic Goods of every Description.

HAVE YOU TRIED KEATING'S LOZENGES FOR YOUR COUGH?

ANY DOCTOR WILL TELL YOU "there is no better Cough Medicine."—One gives relief: if you suffer from cough try them but once: they *will* cure, and they *will not* injure your health; an increasing sale of over 80 years is a certain test of their value. Sold in 1½d. tins.

BROWN & ROWLEY,

WATLING STREET, CITY,

Printers,

Account Book

Manufacturers,

AND

General Stationers.

Contractors to the Royal Geographical Society.

Telephone No. 181, Holborn.

EDWARD WELLER & GRAHAMS, LTD.

GEOGRAPHICAL AND GENERAL DRAUGHTSMEN,

ENGRAVERS, LITHOGRAPHERS, & COPPER PLATE PRINTERS.

Chromo and Color Printing of every description.

DENMARK WORKS, 42, DENMARK HILL, LONDON, S.E.;

6, FURNIVAL STREET, HOLBORN, E.C.

MAP ENGRAVERS TO THE ROYAL GEOGRAPHICAL SOCIETY, ADMIRALTY, ETC.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Non-Commercial Licence

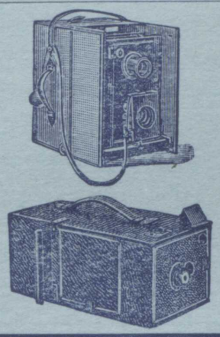
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

(446)

DRY MONOPOLE
CHAMPAGNE.
One Quality only Shipped.
HEIDSIECK & Co., Reims.
ESTABLISHED 1785.
Walbaum, Luling, Goulden & Co. Successors.
WHOLESALE AGENTS:
HALLOWES & TOSETTI, 147, Fenchurch Street, E.C.



ROSS' Hand Cameras
Are Unrivalled for THE FINEST WORK.
TWIN-LENS CAMERAS.
TWO MODELS WITH ROSS, ROSS-ZEISS, or ROSS-GOERZ' LENSES.
These Cameras have been much imitated, but are still unequalled.
THE WIER-ROSS HAND CAMERA
FOR CYCLISTS, TOURISTS, LADIES, etc.
PORTABLE BELLOWS CAMERAS AND APPARATUS OF EVERY KIND.
ROSS, Limited, 111, New Bond Street, LONDON, W.
ESTAB. 1830.

SPRATT'S PATENT LTD.
PURVEYORS OF
SHIP BISCUITS,
Flour, and Hunter's Scotch Oat Meal
FOR MEMBERS OF
JACKSON-HARMSWORTH
POLAR EXPEDITION.
ALSO
DOG CAKES
FOR
SLEDGE DOGS.
SPRATT'S PATENT LTD.,
24 and 25, Fenchurch Street, LONDON, E.C.

All Applications for Advertisements to be made to—
WALTER JUDD, LTD., 5, QUEEN VICTORIA STREET, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Asiatic Quarterly Review(Full Title: The Imperial and Asiatic Quarterly Review, and Oriental and Colonial Record): Volume XIII, No. 26 [front-f] (1/238)

441

THE IMPERIAL
AND
ASIATIC QUARTERLY REVIEW
AND
ORIENTAL AND COLONIAL RECORD.

(FOUNDED JANUARY, 1886.)

THIRD SERIES. APRIL, 1902. VOL. XIII. No. 26.

Contents.

ASIA.

H. F. B. LYNCH: "THE PERSIAN GULF."
SIR ROLAND K. WILSON, BART.: "IS ANY SYSTEM OF STATE-AIDED EDUCATION SUITABLE TO THE PRESENT CIRCUMSTANCES OF INDIA?"
SIR JOHN JARDINE, K.C.I.E.: "LORD CANNING AND LORD MILNER."
A. ROGERS: "THE PROGRESS OF THE MUNICIPAL IDEA IN INDIA."
J. B. PENNINGTON: "THE INDIAN CIVIL SERVICE AND THE FURTHER ADMISSION OF NATIVES OF INDIA."
"RUSTICUS": "THE POVERTY OF THE RAYAT."

AFRICA.

ION PERDICARIS: "MOROCCO: THE SULTAN AND THE BASHADOURS."
PROFESSOR H. E. S. FREMANTLE, M.A.: "THE PRINCE OF WALES PROFESSORSHIP OF HISTORY AT THE SOUTH AFRICAN COLLEGE."

ORIENTALIA.

PROFESSOR DR. E. MONTET: "QUARTERLY REPORT ON SEMITIC STUDIES AND ORIENTALISM."
L. C. INNES: "THE AGE OF MÁNIKA VÁÇAGAR."

GENERAL.

CHARLOTTE M. SALWEY, M.J.S.: "JAPANESE MONOGRAPHS. IX.—CONCERNING MARRIAGE CUSTOMS."
E. H. PARKER: "CHINA, THE AVARS, AND THE FRANKS."
MAJOR G. E. GERINI: "SIAM'S INTERCOURSE WITH CHINA."

PROCEEDINGS OF THE EAST INDIA ASSOCIATION.

CORRESPONDENCE, NOTES, AND NEWS:

FAMINE IN INDIA: ITS CAUSES AND EFFECTS.—AN IMPENDING FAMINE IN INDIA—A FORECAST.—AGREEMENT BETWEEN GREAT BRITAIN AND JAPAN: THE EXACT TEXT OF THE AGREEMENT.—THE NATIONAL DEBT OF JAPAN.—THE AMERICAN SCHOOL FOR ORIENTAL STUDY AND RESEARCH IN PALESTINE.—A NEW WORK ON INDIAN FOLKLORE.

REVIEWS AND NOTICES.

Memoirs of Maharaja Nub Kissen Bahadur.—Sepoy Generals.—Volkstum und Weltmacht in der Geschichte.—The Oriental Club and Hanover Square.—The Brahmo Samaj and Arya Samaj in their Bearing upon Christianity; a Study in Indian Theism.—Kim.—The Tale of the Great Mutiny.—Prosperous British India.—The Lore of Cathay; or, the Intellect of China, etc.

SUMMARY OF EVENTS IN ASIA, AFRICA AND THE COLONIES.

PUBLISHERS: ORIENTAL INSTITUTE, WOKING.

5*s. net.* (*Number of pages*, 224.) [*All Rights reserved.*

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

393

THE ASIATIC QUARTERLY REVIEW contains Articles by distinguished Statesmen, Officials, Politicians and Scholars of various nationalities, not only on current Oriental and Imperial politics, but also on Oriental Geography, History and Philology, besides Sketches of folk-lore, manners and customs, as interesting to specialists as to the General Reader.

The Imperial and Asiatic Quarterly Review.

(A PUBLICATION OF ABOUT 224 ROYAL OCTAVO PAGES.)

Subscriptions and Advertisements are to be sent to THE MANAGER OF "THE ASIATIC QUARTERLY REVIEW," ORIENTAL INSTITUTE, WOKING, *to whom also arrears due for either subscriptions or advertisements are to be paid, and with whom contracts for advertisements are to be made.**

Books for Review and Literary Contributions generally are to be forwarded to THE EDITOR OF "THE ASIATIC QUARTERLY REVIEW," ORIENTAL INSTITUTE, WOKING.

The January number of 1891 *has inaugurated an Enlarged Series of* "THE ASIATIC QUARTERLY REVIEW," *the scope of which has been extended to Africa and to the Colonies generally, and which has since that date appeared as—*

"THE IMPERIAL AND ASIATIC QUARTERLY REVIEW,
AND ORIENTAL AND COLONIAL RECORD."

The last number of "The Asiatic Quarterly Review," January, 1902, Third Series, Vol. XIII., No. 25. (Price 5s.) 224 pages, royal 8vo.

CONTENTS.

By the Hon. Mr. C. L. TUPPER: "Bonds of Empire."

ASIA.
D. DUNCAN, LL.D.: "Is the Education System of India a Failure as regards Moral Training?"
W. EGERTON, I.C.S.: "The Indian Civil Service as a Career."
A. ROGERS: "Agricola Redivivus."
ALEC MCMILLAN, I.C.S. (Retired): "Unity of Coinage for the Empire."

AFRICA.
PROFESSOR DR. E. MONTET: "The Religious Orders of Morocco."
HAROLD BINDLOSS: "British Dominion in Eastern Africa."

ORIENTALIA:
PROFESSOR DR. E. MONTET: "Quarterly Report on Semitic Studies and Orientalism."
H. BEVERIDGE: "Two Bodleian MSS."

GENERAL.
"PINYA": "A History of the French Missions to Siam."
A. FRANCIS STEUART: "Anglo-Indian Miniaturists."
L. C. INNES: "The Pelasgians: A New Theory."
MAJOR G. E. GERINI: "Siam's Intercourse with China."
PROFESSOR L. MILLS, D.D.: "Tansar's Alleged Letter."

PROCEEDINGS OF THE EAST INDIA ASSOCIATION.

Correspondence, Notes, and News: Storage of Water and Irrigation in India—"Poverty and Un-British Rule in India"—Oriental Studies—Archæological Exploration of India.

Reviews and Notices: Life of Sir William Wilson Hunter, K.C.S.I.—Life of Major-General Sir R. Murdoch Smith, K.C.M.G.—From Cyprus to Zanzibar by the Egyptian Delta—The Thirteen Colonies—Grammar of the Classical Arabic Language—Vedanta Philosophy—China under the Searchlight, etc.

Summary of Events in Asia, Africa, and the Colonies.

Appendix—Containing the Titles of the Articles which have appeared in this Review from the beginning (1886) to 1901 inclusive.

THE ASIATIC QUARTERLY REVIEW publishes Articles by Orientals of standing on Oriental subjects, thus adding the information derived from native authorities to that of European and other specialists.

PUBLISHED BY
THE ORIENTAL INSTITUTE, WOKING, ENGLAND.

* The following are the rates for Subscriptions: per annum, £1; per quarterly number, 5s., inclusive of postage.
The following is the ordinary rate for Literary Advertisements: per page, 5 guineas; half-page, £2 15s.; per line, 2s. For other Advertisements at the rate of 6 guineas per page. Special terms are made for continued Advertisements.

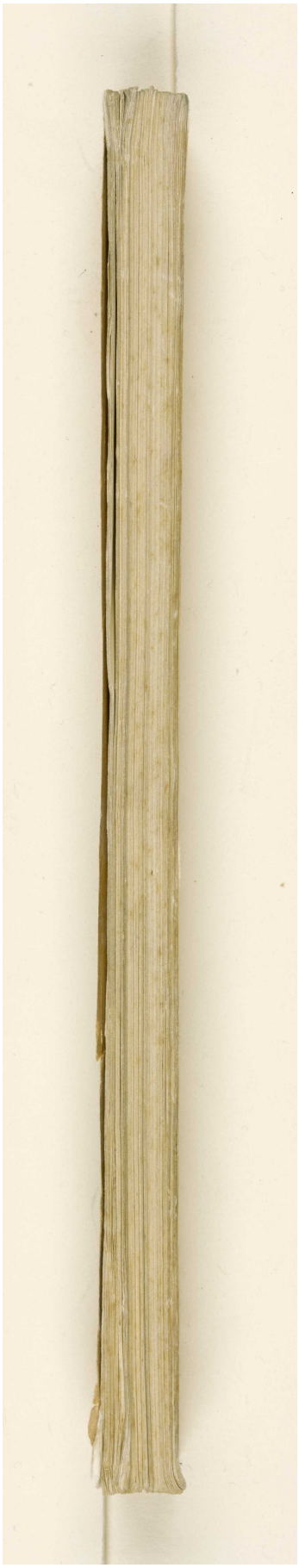
Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002d

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000074

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000d

مكتبة قطر الوطنية
Qatar National Library



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a1



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000042

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Accumulator Industries, Ltd.

MANUFACTURERS OF **"LEITNER"**

STATIONARY & TRACTION ACCUMULATORS.

STATIONARY ACCUMULATORS:

For POWER AND LIGHTING STATIONS, HOUSE LIGHTING, Etc.

TRACTION ACCUMULATORS:

"Heavy Traction" & "Light Traction" Types. For LIGHT RAILWAYS, TRAMWAYS, LURRIES, DELIVERY VANS, ELECTRICAL CARRIAGES OF EVERY DESCRIPTION, LAUNCHES, Etc.

PORTABLE ACCUMULATORS:

Special Type for LIGHTING of RAILWAY CARRIAGES; Sets of Accumulators for LIGHTING BROUGHAMS, Etc., also for GENERAL LABORATORY USE, ELECTRO-CAUTERY, Etc.

ACCUMULATOR INDUSTRIES, LIMITED,

Works and Laboratories,

WOKING, SURREY, ENGLAND.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Important to Schools, Colleges, Laboratories, Etc.

The "Cupron" Element.

A CONSTANT CURRENT PRIMARY BATTERY.

Positive plate regenerated in the air.
No depolarizer required.
No costly maintenance.
No attention required.
No fumes.
Will charge Accumulators.
Heavy discharge rates.
Always ready for use.
Inexpensive.
Four types: 50 to 400 ampère hours.

Dry Accumulators.

GELATINOUS ELECTROLYTE.

Portable ACCUMULATORS for all purposes.
Carriage Lighting.
Ignition Cells.
Hand Lamps.
Miners' Lamps.
Cycle Lamps.
Pocket Accumulators.

Accumulator Components & Accessories.

ACCUMULATOR INDUSTRIES, LIMITED,

WOKING, SURREY, ENGLAND.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE BRITISH ELECTROMOBILE COMPANY, LTD.,

4, BLOOMSBURY PLACE, LONDON, W.C.



MAKERS OF ALL KINDS OF ELECTROMOBILES.
Prices from £275.
TOWN AND COUNTRY CARRIAGES. "LEITNER" ACCUMULATORS USED ON ALL CARS.

THAMES VALLEY LAUNCH COMPANY, LTD.,

Chief Works and Offices: *WEYBRIDGE, ENGLAND.*



DESIGNERS AND CONSTRUCTORS OF ELECTRIC, STEAM, OIL, AND ANY KIND OF

LAUNCHES.

GOOD WORKMANSHIP AND MODERATE PRICES.

ESTIMATES FREE.

SPECIALITY for ABROAD:
Complete sets of gear packed and marked so as to be easily fitted into the launch by an ordinary mechanic.

PATENT ELECTRIC LAUNCHES. One handle controls and steers. Cannot get out of order

"LEITNER" ACCUMULATORS USED IN THESE LAUNCHES.

Catalogues on Application.

Managing Director: W. ROWLAND EDWARDS, A.M.I.E.E.

Telegrams: "Launch, Weybridge." Telephone: No. 7, Weybridge.

ASIATIC QUARTERLY REVIEW, *April*, 1902.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

EAST INDIA ASSOCIATION.

Instituted for the independent and disinterested advocacy and promotion, by all legitimate means, of the public interests and welfare of the Inhabitants of India generally.

WESTMINSTER CHAMBERS, 3, VICTORIA STREET, LONDON, S.W.

President.

THE RIGHT HON. LORD REAY, G.C.S.I., G.C.I.E.

Vice-Presidents.

His Grace the Duke of DEVONSHIRE, K.G.
The Most Hon. the Marquis of RIPON, K.G., G.C.S.I.
The Most Hon. the Marquis of DUFFERIN AND AVA, G.C.B., K.P., G.C.S.I., G.C.M.G., G.C.I.E.
The Right Hon. the Earl of ELGIN, K.G., G.C.I.E., G.C.S.I.
His Highness the Guikwar of BARODA, G.C.S.I.
His Highness the Maharaja Madharao SCINDIA OF GWALIOR, G.C.S.I.
His Highness the Maharaja Shivajee Ráo HOLKAR OF INDORE, G.C.S.I.
His Highness the Ráo of KUTCH, G.C.I.E.
His Highness the Nawáb of JUNAJARH.
His Highness the Thákur Sáhib of GONDAL, K.C.I.E., D.C.L.
His Highness the Maharaja of DARBHANGA, G.C.S.I.
The Most Hon. the Marquis of TWEEDDALE.
The Right Hon. Viscount COBHAM.
The Right Hon. Lord HARRIS, G.C.I.E.
The Right Hon. Lord STANLEY OF ALDERLEY.
Field-Marshal Earl ROBERTS OF KANDAHAR, G.C.B., G.C.S.I., G.C.I.E., K.G., V.C.
The Right Hon. Sir JAMES FERGUSSON, Bart., G.C.S.I., K.C.M.G., C.I.E., M.P.
The Thákur Sáhib of WADWAN.
The Thákur Sáhib of PALITÁNA, K.C.S.I.
ROBERT H. ELLIOT, Esq.
Diwán Ragunáth Ráo BAHADAR.
The Venerable Archdeacon BALY.

COUNCIL, 1899-1900.

Chairman.—Sir LEPEL GRIFFIN, K.C.S.I.

C. W. ARATHOON, Esq.
Sir MANCHERJEE M. BHOWNAGGREE, K.C.I.E., M.P.
A. K. CONNELL, Esq., M.A.
Sir H. S. CUNNINGHAM, K.C.I.E.
Sir CHARLES A. ELLIOTT, K.C.S.I.
Sir GERALD SEYMOUR VESEY FITZGERALD, K.C.I.E., C.S.I.
Sir HENRY SEYMOUR KING, K.C.I.E., M.P.
Sir ROPER LETHBRIDGE, K.C.I.E.
J. B. PENNINGTON, Esq., B.L. (Retired M.C.S.).
F. LORAINE PETRE, Esq., B.C.S.
LESLEY CHARLES PROBYN, Esq.
Sir WILLIAM RATTIGAN, K.C., M.P.
Sir CHARLES ROE.
ROBERT SEWELL, Esq., M.R.A.S., F.R.G.S.
S. S. THORBURN, Esq., I.C.S.
THOMAS H. THORNTON, Esq., D.C.L., C.S.I.

Honorary Secretary.—C. W. ARATHOON, Esq.

Honorary Solicitor.

ALEXANDER HAYMAN WILSON, Esq. (of the firm of Messrs. T. L. Wilson & Co.).

NOTE.—The Annual Subscription, including Journals, is £1 5s., payable in advance.
The Life Subscription, ,, ,, £14.

The use of the Reading-room and Library is free to Members, who can also have their letters addressed there.

Members residing in the United Kingdom receive a copy of the Asiatic Quarterly Review, which embodies the Journal of the Association, without further subscription.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000016

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

JUST PUBLISHED.

A MANUAL OF PUSHTU

By Captain G. ROOS-KEPPEL,
President of Central Committee of Examination in Pushtu,
AND
Qazi ABDUL GHANI KHAN,
Munshi of Peshawur.

8vo., cloth, 12s. 6d. net.

LONDON : SAMPSON LOW, MARSTON & CO., LTD., ST. DUNSTAN'S HOUSE, FETTER LANE, E.C.

IMPORTANT TO ORIENTALISTS, BIBLIOPHILES, AND MUHAMMADAN STATES.

A PHOTO-ZINCOGRAPHED KORAN.

THE ORIENTAL INSTITUTE publishes a Photo-Zincographed reproduction — so as to avoid the objections to printing or lithographing the sacred text—of the Manuscript of the Korán of Hafiz Osman, written in 1094 A.H., and famous for its correctness. The frontispiece is splendidly illuminated; the volume, beautifully cloth-bound in green, red, or blue, gilt cover with flap, is in a gilt cloth slip-case with elevating band. A testimonial as to the accuracy of the reproduction, signed by leading Muhammadan Divines, is photographed at the end of the work.

PRICE 10s. ONLY TWENTY COPIES. Or, without case, 7/6.

The same, illuminated, stitched in page form, ready to be bound and without case.
Price 5s.

PROPOSED CHEAP EDITION (IF THERE BE SUFFICIENT DEMAND).

The same, not illuminated, in folio sheets, not folded, per 500 copies, for the use of Muhammadan Schools or States only, at **2s.** per copy—per thousand copies at **1s. 6d.** a copy—per ten thousand copies at **1s.** per copy.

SIENA:

Its History and Art (in German).

By LOUISE M. RICHTER.

With 140 Illustrations. Price 5s.

E. A. SEEMANN, LEIPZIG.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000026

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE IMPERIAL
AND
Asiatic Quarterly Review,
AND ORIENTAL AND COLONIAL RECORD.
APRIL, 1902.

THE PERSIAN GULF.

By H. F. B. Lynch,
Author of "Armenia."*

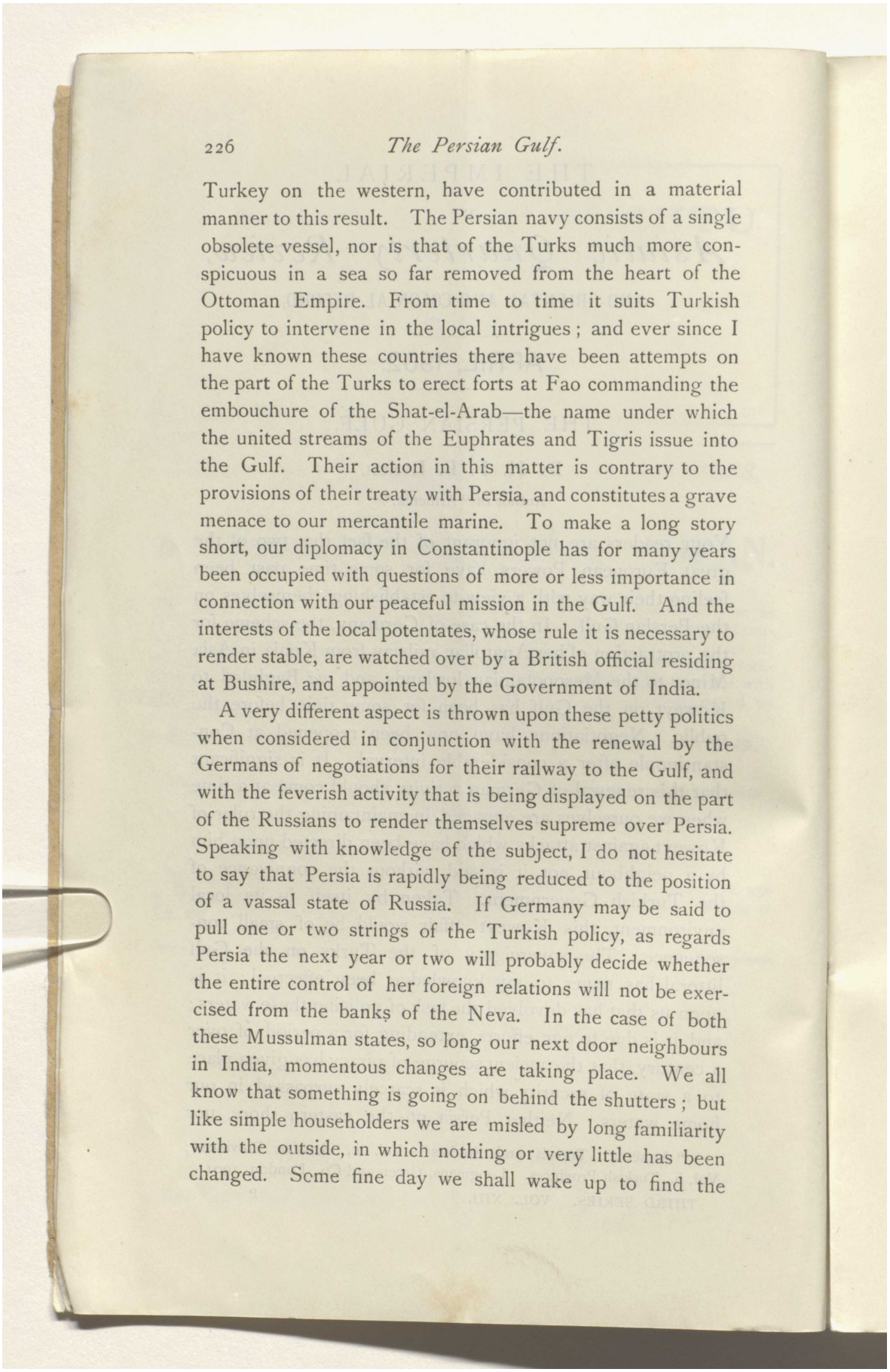
Your readers are not ignorant of the fact that two of the great European Powers have for some time past been feeling their way with a view to establishing themselves on the Persian Gulf. In the case of Germany, the scheme for the protraction of her Anatolian railway from Konia in Asia Minor to the Mesopotamian lowlands and *viâ* Baghdad to Koweyt on the Gulf has been for some time before the public. Negotiations have now been reopened at Constantinople after a considerable interval. It is significant that this renewal of German activity should come at a time when we ourselves are engaged in maintaining the ruler of Koweyt against attacks which have been directed upon him by a neighbour, not, it is said, without the connivance of the Turkish Government. Taken by itself in its local environment, this Koweyt affair would be of small consequence. The sovereignty of the Turks on the Gulf littoral has never to my knowledge been effectual; it is upon us that has devolved the task of policing these waters; and it is due to our efforts, extending for a period of over a century, that the ancient scourge of piracy has given place to a state of security which is scarcely surpassed in our home waters. Neither Persia on the eastern shore, nor

* "Armenia: Travels and Studies"—Vol. i., Russian Provinces; Vol. ii., Turkish Provinces. Longmans, Green and Co., London, 1901.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Turkey on the western, have contributed in a material manner to this result. The Persian navy consists of a single obsolete vessel, nor is that of the Turks much more conspicuous in a sea so far removed from the heart of the Ottoman Empire. From time to time it suits Turkish policy to intervene in the local intrigues; and ever since I have known these countries there have been attempts on the part of the Turks to erect forts at Fao commanding the embouchure of the Shat-el-Arab—the name under which the united streams of the Euphrates and Tigris issue into the Gulf. Their action in this matter is contrary to the provisions of their treaty with Persia, and constitutes a grave menace to our mercantile marine. To make a long story short, our diplomacy in Constantinople has for many years been occupied with questions of more or less importance in connection with our peaceful mission in the Gulf. And the interests of the local potentates, whose rule it is necessary to render stable, are watched over by a British official residing at Bushire, and appointed by the Government of India.

A very different aspect is thrown upon these petty politics when considered in conjunction with the renewal by the Germans of negotiations for their railway to the Gulf, and with the feverish activity that is being displayed on the part of the Russians to render themselves supreme over Persia. Speaking with knowledge of the subject, I do not hesitate to say that Persia is rapidly being reduced to the position of a vassal state of Russia. If Germany may be said to pull one or two strings of the Turkish policy, as regards Persia the next year or two will probably decide whether the entire control of her foreign relations will not be exercised from the banks of the Neva. In the case of both these Mussulman states, so long our next door neighbours in India, momentous changes are taking place. We all know that something is going on behind the shutters; but like simple householders we are misled by long familiarity with the outside, in which nothing or very little has been changed. Some fine day we shall wake up to find the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ancient Oriental lattices vanished from the window frames, and in their place smug plate-glass and polished knockers. We shall then discover that two of the biggest and most clamorous of our neighbours in Europe have come down upon our seclusion in India by different routes for change of air.

Yes, but like most similes, this one is only partial. We of the Central Asian Society have not confined ourselves, whether as travellers or as thinkers, to the purely scientific and academic side of our subjects. Our labours have lain in the countries surrounding or adjacent to India; and none of us have been able, even had we been willing, to divert and divorce our attention from the momentous political problems which are forced upon us in those lands. The truth is that all these countries have constituted up to the present time a kind of No-man's-land. And in the case of the vast territories bordering upon the Persian Gulf, it is alone due to the long and persistent efforts of our countrymen that they enjoy the blessings of uninterrupted communication with the great markets of Europe, of which the wares have reached them under the protection of the British flag, to be spread into their inmost recesses by land avenues that have been opened up by the pioneer enterprise of British merchants. We have therefore acquired vested interests in the property of our neighbours, as well as the right to demand, and, if necessary, to require that they shall not alienate their estates, in however veiled and tentative a manner, without obtaining our consent. Our case is strengthened by the fact that already on two occasions our arms have been employed in defending these rights.

I have spoken of our trade-routes from the Gulf to the interior; let me now endeavour to group them under convenient categories. The first includes the various avenues ramifying from ports on the Persian littoral, of which the objective are the cities of Southern Persia—Kerman, Yezd, Shiraz, Isfahan. A separate place may be assigned to the newly-developed Seistan route, which,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

starting from Quetta, within British territory, makes its way through Beluchistan to Eastern Persia. A third artery follows the course of the Karun River as far as the towns of Ahwaz and Shushter, the latter situated at the foot of the mountains in which it has its source. A caravan road with steel bridges has been constructed across those mountains by the British company navigating the Karun. Starting from Ahwaz on the Karun, it ends at the city of Isfahan—a distance of 250 miles. The fourth category will comprise the valley of the Tigris, which has been navigated by British steamers as far as Baghdad for a period of nearly half a century. The goods which they convey supply the Mesopotamian markets and find their way into Central Persia. I have said nothing of that great trade route between the Black Sea and Northern Persia which owes its existence to British initiative and persistent energy. It lies somewhat outside the scope of this paper, but it enables the products of Manchester still to compete with Russian merchandise in some of the markets of Northern Persia. The extent of our commercial interests in the Persian Gulf itself may be gauged by the shipping statistics. The last year for which they are published is 1900. Out of a total tonnage, entering and clearing at the principal ports, of 963,000 tons, no less than 766,000 tons, or more than three-quarters of the whole, was British. Neither the Russians nor the Germans are represented at all.

There have appeared quite lately in certain organs of the press in England a number of articles and letters designed to familiarize us with the idea of an occupation by Russia of a port on the Persian Gulf. From familiarity to acceptance the road is not long, if once you can be induced to enter the path. At the same time a Russian vessel of war has put in an appearance, following with her searchlights the movements of our small police-fleet in these waters. We are naïvely told that if we could see our way to make Russia this concession—"this supremely valuable concession" are, I believe, the words—there would no longer

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000029

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

exist a cause of disagreement between us, the Russians having no thoughts of invading India. Would there remain, then, no issues with her in Central Asia, to say nothing of Asiatic Turkey and the Far East? Would the pressure become less felt because more near?

For my own part I refuse to believe in the efficacy of any such concession, whether it be made to Russia or to Germany. I have no doubt both Powers would like to repeat on the Persian Gulf their procedure within quite recent times in the Gulf of Pechili. Kiaou-Chaou and Port Arthur are very useful precedents for the seizures of Koweyt and Bunder Abbas or Chahbar. The main argument of the advocates of this "concession" to Russia is that with her assistance we would succeed in keeping Germany out of the field. Did ever notion more fatuous enter the brain of the political schemer? On what grounds could we refuse a German demand for equal measure? No! We must either resist any infringement of the *status quo* as contrary to our vital interests, or we must be prepared sooner or later to see both Powers established on the confines of our Indian Empire.

I say "established," for is there anyone sufficiently ingenuous to credit the hypothesis that the lease or acquisition by either Power of a port on the Gulf would bring us to the end of the matter? To be of any use in these little governed countries, the possession of a port would entail the control of the territories behind; and the political importance and potential resources of these countries combine with their vast extent and scanty population to render them a prize well worthy of a Great Power, and one which is free from the difficulties besetting similar enterprises in China. Germany in Mesopotamia, and Russia in Southern Persia, would be much more likely to come together and squeeze the Englishman out of Asia than we to secure, at all events for any length of time, the assistance of the one against the other. I am now brought to the very kernel of my subject. The interests of the British Empire are so

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000086

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

world-wide and complex that a British statesman has the right to ask whether he is justified by the stake at issue to commit his country to a policy which, if challenged, will have to be vindicated by force, and from which, once adopted, there must be no going back.

I put aside the magnitude of our commercial interests in these countries, which would be sacrificed were they occupied or controlled by a Protectionist Power. My desire is to consider the eventuality of such an occupation as it would be likely to affect our hold upon India and the security of our communications with the Far East. Am I, are we English, too near our subject to see it clearly, in just perspective, so to speak? I turn to the pages of an American writer, whose surveys of world-movements have been studied in this country, and whose name is known to all with respect. In a book not long ago published, and called "The Problem of Asia," Captain Mahan, of the American Navy, has devoted much of his attention to this question of the Persian Gulf and adjacent countries. He bids us suppose for the sake of discussion that the various territories known as Turkey in Asia, instead of composing, as at present, a flabby body, enfeebled by centuries of misrule, were to be braced together into a highly organized modern state. Stretching from the Black Sea and the Mediterranean to the Persian Gulf and the Red Sea, this hypothetical state would control the communications between Europe and Asia, and play in the Eastern Mediterranean the part played by France in the Western. Egypt would be at her mercy just as, during the prevalence of analogous conditions, the valley of the Nile became incorporated into the vigorous Ottoman Empire. He proceeds to draw a most instructive comparison between the relative importance in modern world-movements between China on the one hand, and, on the other, Persia and the territories component of Asiatic Turkey. In the case of China it is her wealth, both actual and potential, that attracts the nations to her gates. One is anxious to come down into these favoured regions; while

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000055

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

others, more remote, have established, or are engaged in establishing, a lucrative commerce and profitable enterprises. A much more important rôle is rightly assigned by Captain Mahan to the countries between the Mediterranean and the Persian Gulf. If their resources, as yet so very little developed, be indeed less than those of China, they are nevertheless sufficiently vast to satisfy the loftiest ambitions. Unlike China, their populations are susceptible of Western culture, and are among the most easily governed in the world. And, while China may be compared to a land upon which the roads converge, forming the goal towards which they tend, these countries—Persia, Mesopotamia, and Asia Minor—lie on the principal highway to that goal. The American naval writer discusses at some length the alternative of the long circumnavigation by the Cape of Good Hope. He rejects it in a weighty argument with which he mingles a little scorn. He regards the canal of Suez, and the proposed canal across the isthmus of Central America, as the main pivots round which the politics of the Old and the New Worlds are destined to revolve. Directing his vision to the struggle between Great Britain and Russia in Asia, he warns us against the dangers of a Russian advance to the Persian Gulf. On the Gulf, Russia outflanks the Afghanistan position and places herself upon our main line of communications with India and the Far East. Such an advance would, in his opinion, materially improve her prospects both of initiating and of sustaining operations in India. We should have her on the flank of our great dependency, controlling the issue of any railway from the Mediterranean through Mesopotamia, and barring the way to its prolongation towards India. It is a consummation which would carry with it—I quote his actual words—"a perpetual menace in war." It would entail on our part the maintenance in Indian waters of a large and costly fleet. To lock her up in the Gulf would involve an exhausting effort to Great Britain and her natural allies. I would add myself that the presence of Russia on the Persian Gulf would go

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

far towards counterbalancing our occupation of Egypt. "There is no motive," he goes on to say, "in the good of Russia for the other states to consent to an arrangement which carries with it hazard to them." To this statement it may be useful to append the vigorous sentence in which Lord Curzon has summed up the conclusions he arrived at after study on the spot: "I should regard the concession of a port upon the Persian Gulf to Russia by any power as a deliberate insult to Great Britain, as a wanton rupture of the *status quo*, and as an intentional provocation to war; and I should impeach the British Minister who was guilty of acquiescing in such a surrender as a traitor to his country."*

This is all very forcible and clear; but your readers may ask me for a constructive policy. What are my conclusions, as a traveller in most of these countries west of India, as to the part which we should play? Not, certainly, the part of the dog in the manger. We do not desire, we have shrunk from acquiring, even during our war with Persia, when we were in possession, territory on the Persian Gulf. Moreover our commercial policy, for which our persistent practice in all parts of the world is a sufficient guarantee, is a policy of the door open to all comers. What we should endeavour to prevent with all the means at our disposal is the establishment on the Gulf of any European Power. And, as regards the vast land areas which give access to these waters, our policy should be frankly one of spheres of influence†—the only policy which is any longer possible in Persia, and which seems to be dictated by the counsels of ordinary prudence in the case of Asiatic Turkey.

It is fortunate for us—though it is a fact which would appear to be all but unknown to our statesmen—that Nature has herself determined these spheres. In relation to Russia, the natural division between her sphere and ours is formed in Persia by that broad zone of saline and scarcely passable

* "Persia and the Persian Question." London, 1892. Vol. ii., p. 465.

† These words have been misunderstood in one or two quarters. They are not intended to convey the meaning that we should abandon our traditional policy of maintaining the integrity and independence of Persia.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000024

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

desert which extends on the tableland from the confines of Afghanistan all the way to the neighbourhood of the capital of Persia, Tehran. North of this zone lie the mountains and fertile Persian province of Khorasan with the great Persian cities, Meshed, Nishapur. The trade of Russia is already supreme in this region, to which she has secured ready access by means of her Transcaspian Railway. South of the desert is situated a companion fertile country, comprising the mountains which buttress up the tableland on the side of the Persian Gulf and the Mesopotamian lowlands. This country must continue to be threaded by our commercial arteries, of which the objective are the Persian cities of Kerman and Yezd, of Shiraz, Isfahan and Kum. Our old-established hold upon all these markets must be quickly tightened by improved communications. All attempts on the part of Russia to wrest our predominance in these regions by means of political pressure at the capital must be strenuously resisted. And any "understanding" with her in relation to Persia should be based on a frank recognition of these spheres.

The case of Central Persia and of Asiatic Turkey may be dealt with on similar natural principles. The belt of mountains buttressing the tableland of Persia bends round at the head of the alluvial plains of Mesopotamia, performing the same function for the highlands of Armenia, and, further west, for those of Asia Minor. The ridges sink into the waters of the Mediterranean at the head of Syria, adjoining Cyprus. The lowlands which they confine at their southern extremities should be preserved at all hazards from a foreign occupation, intimately connected as they are with the Persian Gulf. They are threaded from end to end by two magnificent navigable rivers, Euphrates and Tigris. They already form a lucrative field for our trade, which is practically supreme. We must be on our guard against assisting the Germans in constructing a railway across this, our sphere, by consenting to any increase of the tax upon our imports, in order to find the funds for a kilometric guarantee. As

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

it is our trade that in the main will pay the bill, we should first secure that the projected railway shall be of real use to our communications. This would not necessarily conflict with Turkish requirements. We ought also to obtain a predominant voice in the management of the Mesopotamian section.

Whether the ends which we should have in view can best be obtained by the declaration of a Protectorate over certain portions of the littoral of the Persian Gulf, is a question which must be left for decision on its merits according to circumstances. But I am certain that the general lines of the policy I have ventured to commend to your readers' attention do not involve any obstruction to the legitimate aspirations of either of the new-comers, Germany and Russia. Germany in Asia Minor—by which I mean, of course, the highlands—and Russia in Northern Persia and Armenia have enough to accomplish to provide them with useful occupation for at least a century. No German colonist could bring up his family in Mesopotamia or Southern Persia, and the case is the same for the Russians. This clamour on the part of Russia for outlets for her population in Western Asia is nothing but a herring drawn across the scent. On the other hand, I am equally confident that this policy is vital for England, and that it must be taken in hand before it be too late. If we pursue it, we not only safeguard our communications with India and the Far East, but we maintain and increase our intercourse with markets which will grow in importance as those of China commence to feel the pressure of American competition, assisted, as it will be, by the completion of the canal across the Central American isthmus. But if in fancied security and with lordly generosity we lend our ear to insidious phrases about "understandings" and "concessions"; if we surrender, one by one, our dearly acquired markets and the outposts of our Indian Empire—sooner or later the majestic fabric which we have raised in Asia will fall in pieces to the ground.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

IS STATE-AIDED EDUCATION IN ANY SHAPE SUITABLE TO THE PRESENT CIRCUMSTANCES OF INDIA?*

By Sir Roland K. Wilson, Bart.

I have been for some twenty years a member of the East India Association, have attended a fair proportion of its meetings, and have read reports, or noted the subjects, of a great many more; but I have no recollection of any single paper advocating retrenchment in any shape or form. I really think it is about time that a precedent should be created. For surely the fact that ought now to dominate all our thinking, whatever may be the subject immediately under discussion, is

The Poverty of India.

In order that time may not be wasted in controversy as to the precise extent of that poverty, I shall adopt provisionally the most optimistic estimate. For the purpose of the present discussion, and for this purpose only, I shall assume that Lord Curzon is right and Mr. Digby wrong, and shall take £2 rather than 22s. 4d. as the average annual income per head of the entire population of British India. £2 per annum is 1½d. a day, and is hardly more than the weekly wage of a skilled London mechanic. This figure, officially conceded, is quite sufficient to silence for the present all boasting about the blessings of British rule. It is not in human nature to keep on blessing an earthly Providence which cannot save its votaries from going through life half-fed and less than half-clothed. The only question that it leaves open is, whether the Government has been, in regard to this matter, simply powerless for good, or an active instrument of mischief. And this brings me to the next topic bearing upon my argument, namely,

The Amount and Incidence of Taxation.

I will assume for the purpose of the present argument, and for this purpose only, that the chief cause of the general

* See the "Proceedings of the East India Association," elsewhere in this *Review*, for the discussion on this paper.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

poverty is the character of the people, their ignorance and superstition, their deep divisions of caste and creed, their apathy and lack of enterprise. I not only concede, but would strongly insist, with Pope, on the relative smallness, among all the ills that men endure, of the part that Governments can—cure. "Cause or cure" are the poet's words; but it is hard to fix any limit to the evil that may be caused, not only by a malignant, but by a benevolently fussy and meddlesome Government. However that may be, no such general considerations will avail to exempt a Government from its own specific share of responsibility for acts of its own tending to aggravate the suffering of its subjects; and under this head must surely be reckoned the impoverishment of the largest, poorest, and most laborious class of taxpayers by means of the land assessment and the salt duty. Whatever else tends to produce poverty, most certainly the direct abstraction of wealth must do so, and more particularly when the money abstracted represents hard manual labour, and is a portion of what is needed for bare subsistence.

I was amazed to read lately in a special article of the *Times*, that undue leniency of assessment discourages industry. I should have thought it hardly disputable that the strength of the inducement to exertion must be diminished by every prospective defalcation from the fruits of labour. It may be otherwise where a little labour will suffice to satisfy all the felt wants of a savage; but I never yet heard of the Indian raiyat to whom that description would apply.

The assurance of the Famine Commissioners that the assessments are low or moderate everywhere except in Bombay, would be more convincing if it were not confessedly based on the selling value of the gross produce, without any reference to the cost of production. For all that appears to the contrary, this might be so great as to leave no room for any Government demand, however moderate. For the same reason one of the chief points in Lord Curzon's reply to Mr. Dutt seems irrelevant to the real issue. My argument, however, does not require me to go beyond his lordship's

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00000a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

own concluding pronouncement, impressing upon the revenue authorities that they must be more careful to avoid over-assessment in future. The land assessment is, of course, not the only shape in which the pressure of taxation makes itself felt. In one way or another, "the cheapest civilized Government in the world" takes from its subjects according to the lowest estimate—*i.e.*, not according to Mr. Digby, but according to the Viceroy—a slightly larger proportion of income than is taken from the far wealthier population of the United Kingdom.* The poorer the community, the more painfully will the subtraction of a tenth of its income be felt. Yet it may well be that the security which only a regular Government can afford must in the nature of things cost more proportionately to a poor country than to a rich one, just as a working man has to pay away a larger proportion of his income in house-rent than a millionaire. If so, there is all the more reason why such a Government should confine itself to its absolutely necessary functions, and should eschew all fancy expenditure.

But this is not all. A heavy burden evenly distributed can be borne more easily than a lighter one ill-adjusted. In India, as is not only admitted, but strongly insisted by so thorough-going an official apologist as Sir John Strachey, the richer classes pay much less, from which it follows that the poorer pay much more, than their proper share. The only province, for instance, which enjoys the privilege of a permanent settlement is one of those in which the settlement was made with the landlords, and not with the cultivators. Here again it may be that as an alien Government we simply cannot afford to quarrel with the well-to-do classes who now get off too easily, for the sake of the overtaxed masses who are too ignorant and apathetic to give us effective support. Or it may be, on the other hand, that we are unconsciously biassed by the fact that the financial system

* Approximately ten as against 9½ per cent., taking £2 and £35 respectively as the average incomes per head, and comparing the combined receipts from taxes and local rates for 1899, 1900.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000084

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

which favours the well-to-do native favours *a fortiori* the still richer and more influential Anglo-Indian. On either view we have to take account of the fact that the pressure of taxation is more severely felt, owing to its inequitable adjustment, than would appear from the bare statement of its ratio to average income; consequently the need for retrenchment is so much the more urgent.

My next point is that the

NEED FOR INCREASED EXPENDITURE

in certain directions is also urgent, thus further strengthening the case for abolition of superfluous departments. The "cheapest of civilized Governments" is not only not cheap, if by "cheap" is meant "unburdensome to the subject," but is also very imperfectly civilized, if by that adjective is implied that civil rights are efficiently protected and justice accessible to all who need it. We have learnt lately, on the high authority of Mr. Thorburn, that in the Punjab "the Sarkar has failed in the first duties of a Government;" that more agrarian outrages are committed in one year in certain districts of that province than in Ireland during the worst period of Land League domination; and that the civil judges are so overburdened with work that they can think of nothing but clearing their files without attempting to get at the real merits of disputes between raiyat and money-lender. Not in the Punjab only, but all over India, we should have heard less about the necessity for reactionary legislation against freedom of contract, had the simple remedy been first tried of providing a sufficiency of gratuitous, accessible, and trustworthy Small Cause Courts, so as to enable the poor and ignorant to litigate on equal terms with the rich and astute. But if this is a counsel of perfection, incompatible with the present financial straits, at least the urgency of police reform, which cannot be accomplished without money, is notorious and officially admitted.*

Then there is the work of codification at a standstill, a

* The official statistics show an increase of crime during the past decade, concurrently with increased expenditure on education.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

matter to which I myself once invited the attention of the public. I showed, or tried to show, how a vast amount of domestic quarrelling and ruinous litigation might be prevented if the Legislature would only do its duty by overhauling the native family laws, and also the general family law of India, instituting systematic inquiries as to the wishes of the classes interested, and legislating accordingly.* Meanwhile, instead of money being found to strengthen the Legislative Department, the valuable time of the Legal Member of Council is being taken up with a roving Education Commission.

All these matters lie well within the first, most indisputable, and most indispensable province of Government. In the second rank of urgency, according to my estimate, in the first perhaps according to some, comes military expenditure. I place it second, because a country is not worth defending externally unless the internal conditions are tolerable; while, conversely, if the internal conditions were perfect, a prosperous and united community of 300 millions would have no need to give a thought to external defence. First or second, I submit (for reasons to be stated presently) that both must be adequately provided for before the claims of State education can be considered. When, however, we come to the question, How much ought India to pay for frontier defence? we find a divergence of views, ranging from a large increase to a very substantial decrease of the present expenditure. I am not now asking you to take sides either with Lord Curzon or with the Indian National Congress in this matter. If Lord Curzon is right, the case is so much the stronger for retrenchment in other directions; and whether right or not, his word is law for the present, and he has told us that we must look for no reduction under this head during his Viceroyalty. On the other hand the persistent demand of the Congress party for reduction of the British garrison to the very lowest point consistent with safety would be more impressive if made

* See the *Imperial and Asiatic Quarterly Review* for October, 1898.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003b

مكتبة قطر الوطنية
Qatar National Library

simply in the interest of the taxpayer than if coupled (as it too often is) with suggestions that the money saved should go to swell the education budget. This brings me at last to the main question,

OUGHT INDIA TO HAVE AN EDUCATION BUDGET AT ALL?

Does she require it? Can she afford it?

Of course, if she requires it in the same sense in which she requires courts of justice and laws, and a police force and an army, she must afford it, and on such a scale as to be effective, though millions should have to starve in consequence. But does she require it in any such sense? Please remember that "*it*" is not education *per se*, but State aid to education. The question is not whether education is a good thing in itself, nor whether voluntary efforts for its diffusion are meritorious, but whether it is absolutely necessary to take from individuals without their consent, for the support of the particular kind of education favoured by Government, the money which they might prefer to keep and spend in some other way. The distinction is fundamental, though constantly overlooked.

The protective function of the State must in the nature of things be a monopoly. That is to say, unless there is, throughout any given area, one association, *and only one*, prepared to apply physical force to all disputants who will not listen to reason, there can be no security for honest folk. We all know what would happen if the police, judges, and soldiers throughout India were suddenly to strike work. In the words of Manu, the stronger would roast the weaker, like fish on a spit. We know what actually did happen wherever the British power was temporarily in abeyance during the great Mutiny, and what was always happening somewhere during the century of partial anarchy between the collapse of the Mogul Empire and the consolidation of the British Râj. We know that detached efforts of knights-errant, vehm-gerichts, lynching societies, etc., to supply the place of the vanished Govern-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000af

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

ment, must from the nature of the case fail to afford security until some one of them succeeds in swallowing up the others, and so re-establishing the one indivisible State. And note that the same result would follow as certainly, though less immediately, from a stoppage in any one of the three departments mentioned. If the police were to strike work, the decrees of the courts would be waste paper. If the courts ceased to sit, the police would not know whom to protect and whom to arrest. If the army were to disband itself, it would not be very long before both police and judges found their commissions superseded by those of some foreign conqueror or native usurper. I need not waste time by showing how the same chain of necessary interdependence embraces also the legislative, diplomatic and financial departments of Government. And I should hardly have thought it worth while to demonstrate that it cannot be made to embrace the Education Department, were it not that the Education Commissioners of 1883 notice, without either endorsing or repudiating, the contention that the claims of this department stand exactly on the same level as those of the others.

Suppose, then, a sudden suspension of all provincial and municipal disbursements for education, the other administrative departments continuing to draw their usual remittances. Would the whole machine be paralyzed? Surely not. Everything would go on as before, except that school-managers would be compelled either to reduce their establishments, or to raise their fees, or to increase their subscription lists; and would on the other hand be free to modify their arrangements to suit the wishes of subscribers and customers without waiting for the approval of the Government Inspector. Whether this would be a change for better or for worse I will consider presently; for the moment I am only concerned to insist that, at all events, the consequences would not be so appalling as to silence all pleadings for economy.

Look at the same matter from the taxpayer's point of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000007

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

view. In so far as he knows that the money is required for the protective work of Government, the usual compulsory processes, though doubtless convenient, are not really necessary; a threat to exclude him from the corresponding benefit—in other words, to outlaw him—would be quite as effective, at all events in the case of anyone who had more to gain by justice than by injustice. The commodity for which he is asked to pay is one which he can by no possibility obtain by his own exertions or from any other shop. But if an education rate were demanded separately (I do not know whether this ever actually happens in India), he would not be in the least frightened by the threat to exclude his children from the Board school in case of refusal, even if he happened to have any of school-going age. He would coolly compare the bargain offered by the State with the terms obtainable elsewhere, or with the advantage of keeping the children at home, and decide accordingly.

In short, the State has a natural monopoly of protection and justice. It has no such natural monopoly of education. Its right to create an artificial monopoly would be extremely hard to prove, and is, happily, not yet asserted in India. Its comparatively modest claim at present is not to supplant, but to supplement private enterprise. To this claim, standing as it does on a wholly different level from that of the departments to which private enterprise is inapplicable, the objection is, I submit, a legitimate one that the present financial situation does not justify expenditure on superfluities.

It may be argued that the present State expenditure on education is too small to be felt as an extra burden, or to be worth contending about. A million and a quarter sterling may be regarded as a mere flea-bite; but it is in reality more like the first bite of a leech, which, if left to itself, will go on sucking till it is gorged to repletion, or till the life-blood of the victim is exhausted. Widely as educational experts differ as to the way in which the money

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

should be spent, there is absolute agreement as to the necessity for spending much more than at present if any real good is to be done, and nowhere have I seen suggested any figure, however large, on attaining which they will cease to ask for more. There was, indeed, some appearance of finality in the original aim of the founders of State education in India. It was to impart to the limited class of natives who would have been employed in administrative work under a native Government so much of Western learning as they could be induced to receive, in order to fit them for co-operating with Europeans in the same kind of work. It might reasonably be expected that when once the money value of the new knowledge came to be understood, it would be spontaneously sought and paid for, so that the institutions for higher education would in time become self-supporting; and it was hoped that then the wisdom of the few would in some natural way filter down among the masses. But the case was entirely altered when the Despatch of 1854 proclaimed "the importance of placing the means of acquiring useful and practical knowledge within the reach of the great mass of the people."

As a matter of fact, no public money has been saved even on higher education since that date, in spite of a largely increased income from fees and voluntary contributions, and in spite of a gradual change from the method of direct management to that of "grants-in-aid." But if there had been any saving under this head, it would have been sunk, with all other surplus revenue, in the bottomless morass of what we are pleased to call education of the masses. The Commissioners of 1883 actually speak of "protecting the *right* of the masses to receive primary education, not only against the encroachments of expenditure upon public works and other demands which local boards have to meet, but also against those demands which fall upon provincial revenues." If it is the "right" of every child of school-going age to receive a benefit, which only one in twelve is at present actually receiving, the prospect

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000051

مكتبة قطر الوطنية
Qatar National Library

is remote indeed of relief to the taxpayer from any conceivable curtailments of home charges, however pacific may be our foreign policy, however restricted our employment of Europeans. Every pice that can be saved in other departments must go for many a long year to come in discharge of this alleged outstanding debt to eleven out of every twelve children—say fifty-four or fifty-five millions. Does the debt also include the feeding and clothing of those who would otherwise not be in a fit state to receive instruction? As these will presumably be found among the eleven-twelfths who have not yet been reached, the question is not so immediately pressing as that of the

QUALITY OF THE INSTRUCTION

imparted to the favoured one-twelfth.

For it is unfortunately not a simple case of the proverbial half-loaf, it being well known that bad teaching is worse for a child than none at all. It gives him a lot to unlearn, and intensifies his natural aversion to study of any kind. But in the administration of public funds there is the further danger of arousing discontent by unfair distribution of a benefit, even if the benefit is real to the actual recipients. Thus a poor Government, setting itself to diffuse education among a vast and poor population, is between Scylla and Charybdis. If it spends its small income in maintaining a few good schools at important centres, those who live near those centres must be unduly favoured at the expense of other taxpayers. If, on the other hand, it aims at planting a school of some sort within reach of every child, it is certain that, long before that result is achieved, the quality of the instruction will have fallen (so to speak) below zero. The course actually pursued, of departmental grants-in-aid, combined with a system of partly permissive local rating, presents on paper the appearance of judicious compromise, but in practice steers dangerously near the Charybdis of general inefficiency. The tests by which the grants are apportioned are different in different

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

provinces, but all confessedly unsatisfactory, while their application involves the diversion of a large amount of energy from education to inspection and the compiling of statistics. Whether I go for information to the great Report of 1883, or to the Quinquennial Review of 1898, or to the *Times* special article of the last day of last year, I am reminded of the remark made by a Bengal civilian ten years ago, concerning Indian administration generally, but with special reference to its educational side: "The Government of India, being both poor and ambitious, is bent on making a show at as little cost as possible."*

This is how Mr. Carstairs, from whom I am quoting, speaks of the system of school inspection—that is, of inspectors who receive reports from deputy-inspectors, who in turn supervise a still lower grade of men by whom alone the schools are actually visited:

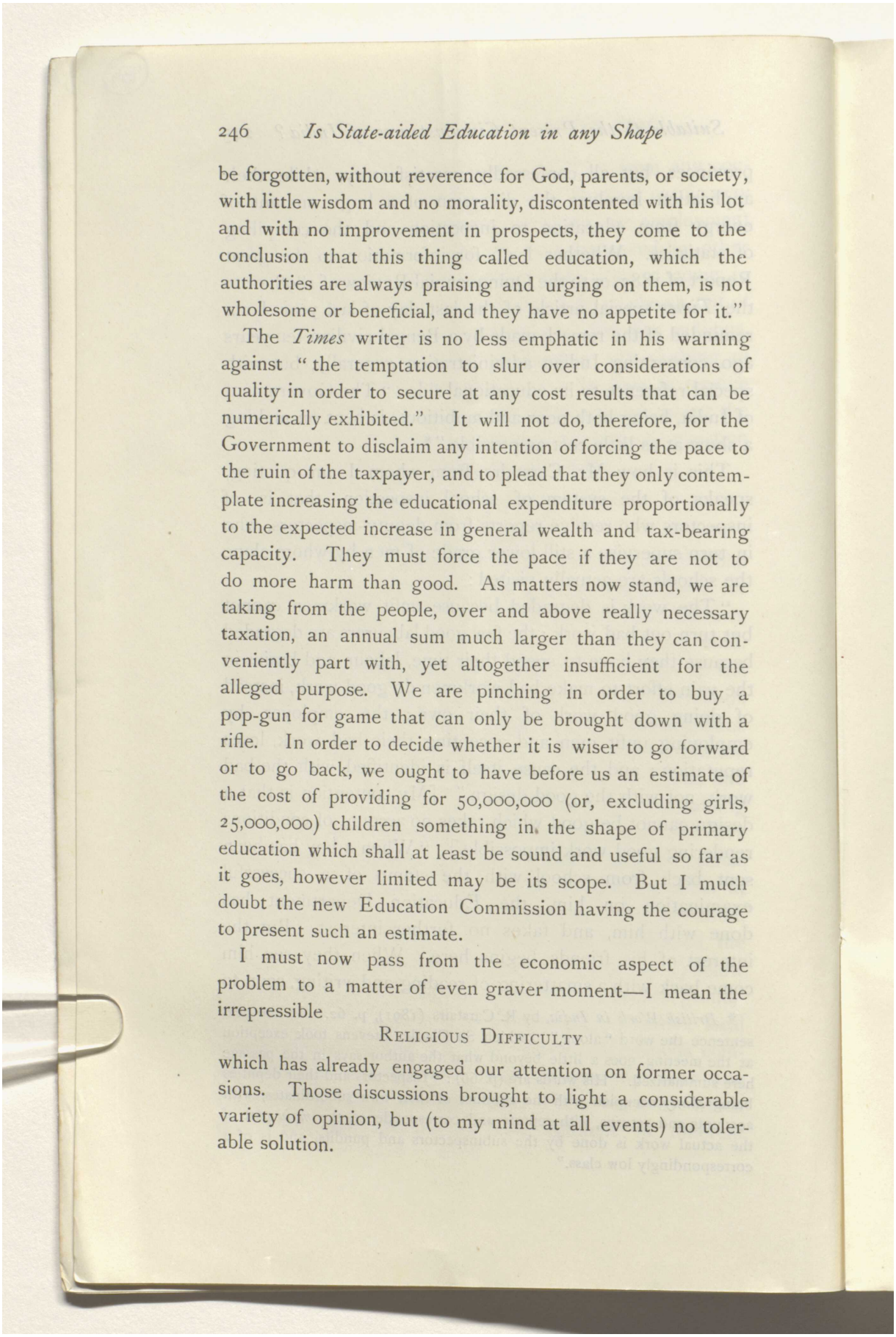
"The work is degraded because unfit workmen cannot but turn out bad work; the few good labourers are degraded because they have to spend their time, labour and brains in the vain effort to make bad workmen do good work, instead of doing good work of their own; the employer, by employing unfit men and accepting their bad work, loses reputation; and the cause itself is identified with the bad work, not with the good design." [My contention is that a design cannot be good which takes no account of conditions rendering good work impossible.] "When a boy has been sent back from school with the stamp of a successful examination on him, the Education Department has done with him, and takes no further interest. But the interest of his friends begins here. When they see him come back with a smattering of reading and writing, soon to

* *British Work in India*, by R. Carstairs (1891), p. 62. In the next sentence the word "alone," to which Sir Charles Stevens took exception at the meeting, goes a little beyond what the author says in the passage here summarized. His words are (p. 66): "Inspectors and their deputies being *chiefly* occupied with the conduct of their own subordinates, with accounts and returns, with reports and correspondence, the *main* part of the actual work is done by the subinspectors and pundits, and is of a correspondingly low class."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



be forgotten, without reverence for God, parents, or society, with little wisdom and no morality, discontented with his lot and with no improvement in prospects, they come to the conclusion that this thing called education, which the authorities are always praising and urging on them, is not wholesome or beneficial, and they have no appetite for it."

The *Times* writer is no less emphatic in his warning against "the temptation to slur over considerations of quality in order to secure at any cost results that can be numerically exhibited." It will not do, therefore, for the Government to disclaim any intention of forcing the pace to the ruin of the taxpayer, and to plead that they only contemplate increasing the educational expenditure proportionally to the expected increase in general wealth and tax-bearing capacity. They must force the pace if they are not to do more harm than good. As matters now stand, we are taking from the people, over and above really necessary taxation, an annual sum much larger than they can conveniently part with, yet altogether insufficient for the alleged purpose. We are pinching in order to buy a pop-gun for game that can only be brought down with a rifle. In order to decide whether it is wiser to go forward or to go back, we ought to have before us an estimate of the cost of providing for 50,000,000 (or, excluding girls, 25,000,000) children something in the shape of primary education which shall at least be sound and useful so far as it goes, however limited may be its scope. But I much doubt the new Education Commission having the courage to present such an estimate.

I must now pass from the economic aspect of the problem to a matter of even graver moment—I mean the irrepressible

Religious Difficulty

which has already engaged our attention on former occasions. Those discussions brought to light a considerable variety of opinion, but (to my mind at all events) no tolerable solution.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000030

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Dr. Duncan was completely successful as against both Mr. Maconachie and the bishops, in showing that the reasons for strict neutrality on the part of the Government are as strong now as they ever were.* I fail to see that he (or anyone else) has succeeded in rebutting the presumption that a body which is debarred from meddling with religion must be unfit to control education. The distinction thus forced into prominence between secular and religious subjects is very modern, highly artificial, and probably ephemeral even in the West; it is still more difficult to imagine its taking root in the East. An uneasy consciousness of this incongruity has been undoubtedly one of the motives for the gradual extension of the grant-in-aid system in substitution for institutions directly managed by Government. Dr. Duncan laid stress on the point, as proving that the alleged moral failure of the system as a whole cannot be due to exclusion of religious teaching, that in 85 per cent. of the schools, comprising more than two-thirds of the pupils, the religious teacher has a free hand. *But has he?* Let Dr. Duncan himself answer the question. He says:

"Of the extent to which teachers in non-Government schools take advantage of their freedom it is impossible to speak otherwise than in general terms. On all except private schools the pressure of the secular subjects is felt to be heavy."

He goes on to remark that in missionary and non-mission schools alike all earnest-minded teachers "feel the difficulty, but at the same time the necessity, of striving against the engrossing pursuit of those immediate and tangible results that aid directly in the struggle for existence." My complaint is that this natural and universal difficulty is aggravated, instead of being relieved, by the conditions of State aid. To the same effect is the testimony of an earnest-minded Hindu in the Calcutta weekly called *New India*:

"It is the cultivation of memory alone that is the aim of

* See this *Review* for January last, pp. 1-20.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000059

مكتبة قطر الوطنية
Qatar National Library

the Indian educational system. . . . And the result has been that our teaching manufactories have been turning out graduates who are generally more or less ignorant of all true culture."

The grant-in-aid system is no more a solution of the difficulty in India than it is in England. The money grant is more eloquent than the finest Viceregal oration, and it declares unmistakably to all concerned that the studies inspected and paid for are, in the opinion of the State, the essentials of good education, and that the studies ignored are unimportant extras. For this reason I maintain that if there is any Government in the world fit to control so sacred and personal a business as education, it is certainly not one pledged to religious neutrality. Still more unfit, of course, would be a Government identified with the religion of an insignificant minority of its subjects; which, however, I do not understand to be the present position of the Government of India, notwithstanding a sentence in the Queen's Proclamation of 1858 which might be so interpreted.

Moral and Political Difficulties.

Until recently the Government concerned itself almost as little about moral as about religious training, and it is quite an open question whether it has strengthened or still further weakened its position by abandoning that attitude, and (among other things) bestowing its *imprimatur* on untheological moral text-books, compiled expressly for school use. I do not gather that these text-books have been received with much enthusiasm, but cannot speak of them from personal knowledge. There is, however, one officially recognised text-book, dealing with that special branch or offshoot of ethics commonly known as politics, which I have read, and about which I have something to say. I refer to Sir William Lee-Warner's "Citizen of India."

I observe that it has been recommended for school use in all parts of British India, and is even supplemented by an "Authorized Guide" for examination purposes.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000003

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

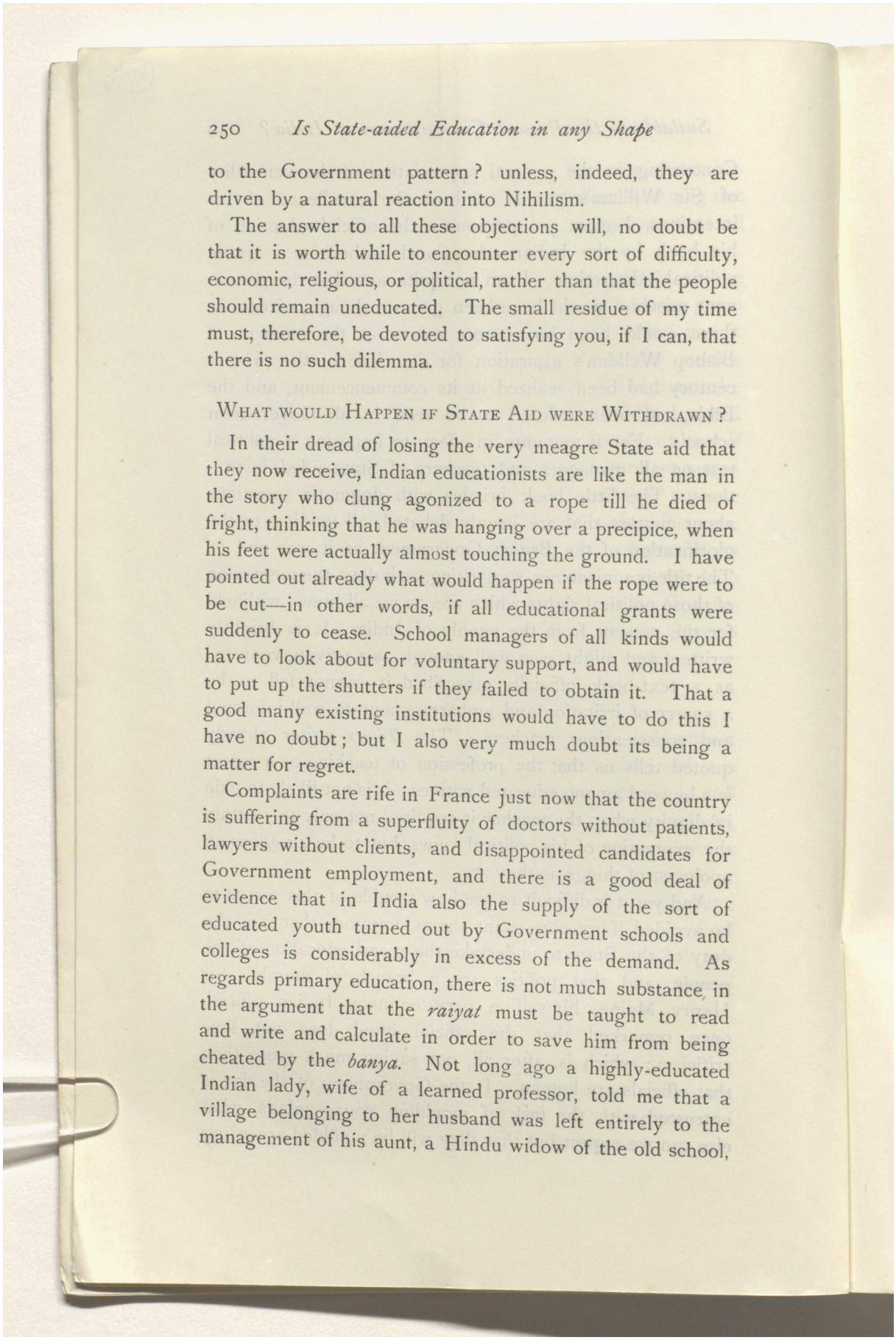
Concurring in the general appreciation of the versatility of Sir William's genius, and of the excellence of his intentions, I must yet pronounce the official adoption of his book by the Indian educational authorities a grave political indiscretion. I am not quite sure that the permanent mischief would have been greater, though, of course, there would have been more outcry at the moment, if Bishop Welldon's aspiration for the close of the present century had been realized at its commencement, and the Bible had been ordered to be read in all Government schools. For it amounts, in effect, to imposing a political test on all managers and teachers of State-aided institutions. The little book bristles with dogmatic assertions about matters that are keenly debated, all tending to the glorification of the British Government as it was and is. The title is a misnomer, suggesting, as it does, the possession of those political rights which are, as we all know, withheld for the present from the people of India. It is brightly written, and might pass well enough as a private venture; as a text-book officially prescribed it cannot fail to be a source of irritation and embarrassment to well-informed and conscientious teachers. The *Times* writer already quoted tells us that the profession of teaching as a career is a byword among educated natives; it is not likely to gain in dignity when the teacher is required not only to restrain the expression of his political views, but to be *ex officio* an apologist of things as they are.

And yet it is difficult to see how trouble of this sort is to be avoided if we once grant the assumptions that it is the duty of the State to undertake the moral education of the people, and that politics are a branch of morals. Sir Henry Maine, himself a very eminent Indian official, once remarked that the official mind does not love criticism; which is, after all, not saying much more than that officials are human. If the Government of the day is entrusted with the task of moulding young minds, what else can we expect but that they will be moulded according

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000062

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



to the Government pattern? unless, indeed, they are driven by a natural reaction into Nihilism.

The answer to all these objections will, no doubt be that it is worth while to encounter every sort of difficulty, economic, religious, or political, rather than that the people should remain uneducated. The small residue of my time must, therefore, be devoted to satisfying you, if I can, that there is no such dilemma.

What would Happen if State Aid were Withdrawn?

In their dread of losing the very meagre State aid that they now receive, Indian educationists are like the man in the story who clung agonized to a rope till he died of fright, thinking that he was hanging over a precipice, when his feet were actually almost touching the ground. I have pointed out already what would happen if the rope were to be cut—in other words, if all educational grants were suddenly to cease. School managers of all kinds would have to look about for voluntary support, and would have to put up the shutters if they failed to obtain it. That a good many existing institutions would have to do this I have no doubt; but I also very much doubt its being a matter for regret.

Complaints are rife in France just now that the country is suffering from a superfluity of doctors without patients, lawyers without clients, and disappointed candidates for Government employment, and there is a good deal of evidence that in India also the supply of the sort of educated youth turned out by Government schools and colleges is considerably in excess of the demand. As regards primary education, there is not much substance in the argument that the *raiyat* must be taught to read and write and calculate in order to save him from being cheated by the *banya*. Not long ago a highly-educated Indian lady, wife of a learned professor, told me that a village belonging to her husband was left entirely to the management of his aunt, a Hindu widow of the old school,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000019

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

who could neither read nor write, but who managed it perfectly, and that when this lady came to visit her she found herself quite taken out of her depth among the technicalities of revenue law with which her illiterate relative seemed perfectly familiar. Moreover, English experience goes to show that the "three R.'s" cannot be effectively taught except as a part of a good all-round training, which the present schools are quite unable to supply. On the whole, considering the many other urgent demands on the average income of 1½d. a day, I can well believe that general social progress might benefit in the long-run by some temporary contraction of scholastic expenditure. But, considering how deeply respect for learning is rooted in the traditions of both Hindus and Muhammadans, I see no reason to apprehend that the voluntary support of education would fall below a standard fairly corresponding to the actual resources of the population; and I see a good deal of reason for supposing that the kinds of education supported would be more closely adapted than at present to actual needs.

Of the institutions that survived the loss of State aid, some would do so by working on strictly commercial lines, supplying only those kinds of instruction in which teaching could be had cheap, or for which parents would be able and willing to pay high fees. And in this connection I may observe that a powerful stimulus would be applied to private educational enterprise were the Government at last to consent to the holding of examinations in India for the higher Civil Service. Other schools and colleges would appeal for public support on non-commercial lines.

The great missionary societies, for instance, no longer lured aside from their professed aim by the bait of Government grants, would cease to fill their schools with non-Christian children under non-Christian teachers in the strange fashion described to us the other day by Dr. Duncan and the speakers who followed him; would concentrate their attention on the conversion of parents, and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000064

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

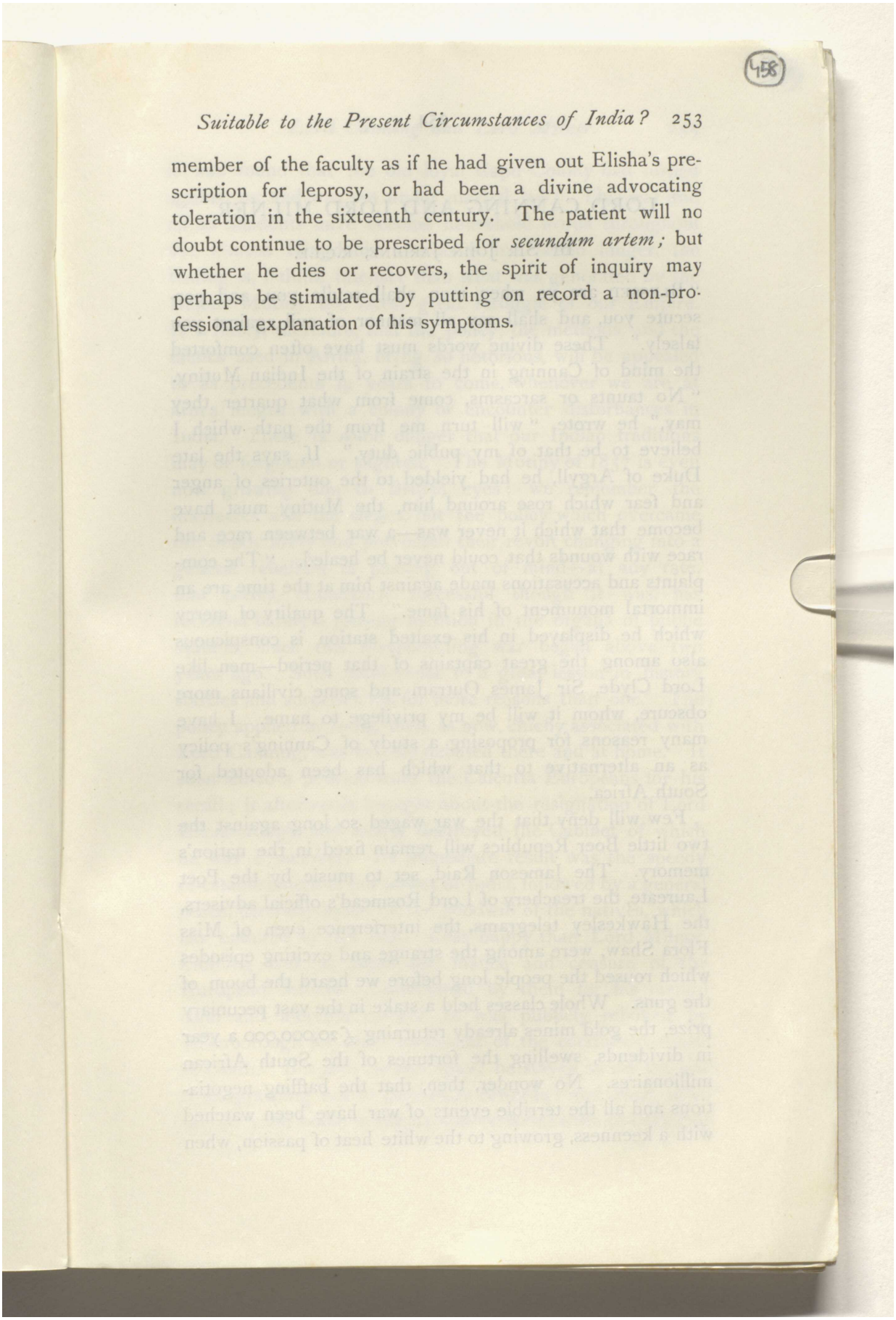
on making model Christians of the children entrusted to their care as Christians, and would be able to ground their appeals to their wealthy co-religionists at home on a more intelligible basis. If, on the other hand, the plan of purely secular education, now pursued of necessity in Government schools, should happen to commend itself in principle to any considerable number of persons, they would combine to take over from the State the financial responsibility for these institutions. Similarly, those who desire with Mr. Maconachie to connect all teaching with a profession of theistic belief would be free to enlist what support they could in favour of institutions on that basis. Personally, I should expect and welcome a great increase of activity on the part of the Brahmo Somaj and kindred bodies, which aim at disengaging the purer from the baser elements of Hinduism; and if the orthodox Hindus and Muhammadans were to be goaded thereby into educational rivalry, so much the better. The Dayanand Anglo-Vedic College, under the management of the Arya Somaj, shows what may be done in this way. All that is really alive in native society would show quite another sort of energy when relieved from the enervating influence of official patronage and control, and at the same time from the fiscal oppression which is the obverse of the same phenomenon; while the Government, no longer hampered by inconsistent pledges, and discredited by poor performance after large promises, would be vastly stronger for its proper work. It might then educate by example more effectively than now by precept.

All this, however, is purely hypothetical; what might have been, what possibly might be even now, if home public opinion were other than it is. Though I spoke at the commencement of "advocating" retrenchment, my task has really been one of diagnosis rather than of prescription. I do not need to be told that the physician who in these days should prescribe a plain diet of voluntaryism for India or any other over-governed community would have as little chance of being met in consultation by any self-respecting

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000011

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



member of the faculty as if he had given out Elisha's prescription for leprosy, or had been a divine advocating toleration in the sixteenth century. The patient will no doubt continue to be prescribed for *secundum artem;* but whether he dies or recovers, the spirit of inquiry may perhaps be stimulated by putting on record a non-professional explanation of his symptoms.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000074

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

LORD CANNING AND LORD MILNER.

By Sir John Jardine, K.C.I.E.

"Blessed are ye when men shall revile you, and persecute you, and shall say all manner of evil against you falsely." These divine words must have often comforted the mind of Canning in the strain of the Indian Mutiny. "No taunts or sarcasms, come from what quarter they may," he wrote, "will turn me from the path which I believe to be that of my public duty." If, says the late Duke of Argyll, he had yielded to the outcries of anger and fear which rose around him, the Mutiny must have become that which it never was—a war between race and race with wounds that could never be healed. "The complaints and accusations made against him at the time are an immortal monument of his fame." The quality of mercy which he displayed in his exalted station is conspicuous also among the great captains of that period—men like Lord Clyde, Sir James Outram and some civilians more obscure, whom it will be my privilege to name. I have many reasons for proposing a study of Canning's policy as an alternative to that which has been adopted for South Africa.

Few will deny that the war waged so long against the two little Boer Republics will remain fixed in the nation's memory. The Jameson Raid, set to music by the Poet Laureate, the treachery of Lord Rosmead's official advisers, the Hawkesley telegrams, the interference even of Miss Flora Shaw, were among the strange and exciting episodes which roused the people long before we heard the boom of the guns. Whole classes held a stake in the vast pecuniary prize, the gold mines already returning £20,000,000 a year in dividends, swelling the fortunes of the South African millionaires. No wonder, then, that the baffling negotiations and all the terrible events of war have been watched with a keenness, growing to the white heat of passion, when

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00004a

مكتبة قطر الوطنية
Qatar National Library

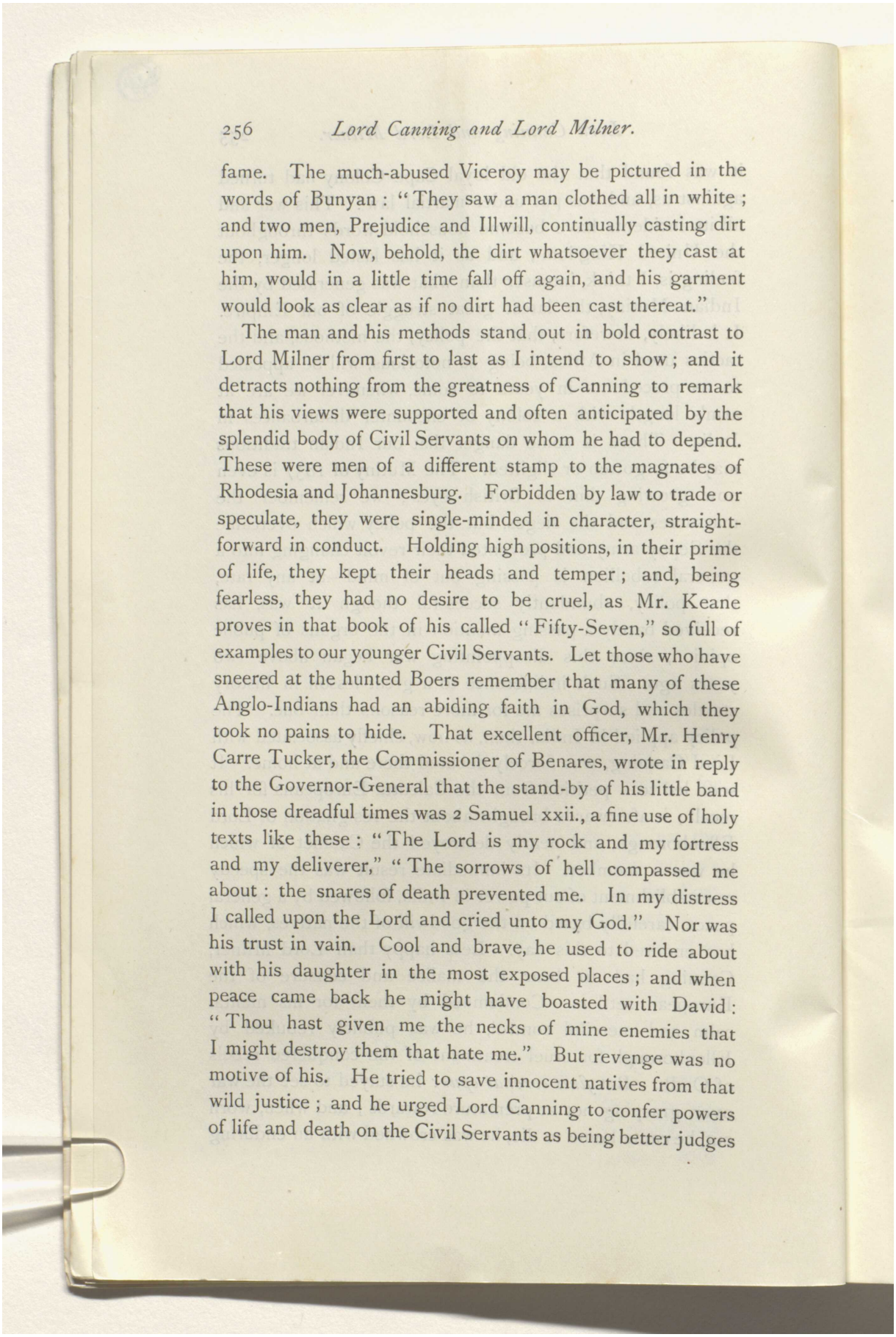
BRITISH LIBRARY

it was found that the old loyal Cape Colony had turned against us, and was put under martial law! This war and all its incidents have become household words throughout the United Kingdom; and as it has lasted longer, the feeling is, I think, intenser than what was generated by the Indian Mutiny, the latest great struggle of our Empire. It is likely, therefore, that the policy, the methods, and the tactics used in Africa, being so notorious, will be appealed to as precedents in years to come, whenever we are at arm's length with a colony or encounter disturbances in India. There is some danger that our Indian traditions may be forgotten or slighted. The Mutiny of 1857 is even now growing dim to British eyes; we remember the massacres and the sieges, but the policy which overcame the Sepoy army and prevented their revolt changing into a general rebellion is passing out of mind—at any rate, that policy, abundantly successful though it was, has received barely a passing mention in the organs of public opinion, since this disappointing war began above two years ago. Such indifference to a great lesson in history startles and surprises me for more reasons than one. The policy applied in India, then, as now, chiefly associated with Lord Canning, was fiercely debated there and at home. It soon led to a petition from the Calcutta Europeans for his recall; it afterwards brought about the resignation of Lord Ellenborough, and nearly destroyed the Cabinet of which he was a member. Its immediate result was the speedy re-establishment of our power in India, followed by a general peace, carefully based on the goodwill of the natives, which has endured to this day. Less happy than Lord Milner, Canning had to bear the malice and censure of the European settlers. Condemned by them for his mental calm and merciful control, he was publicly rebuked by Ellenborough for cruel treatment of the conquered rebels of Oudh. But *finis coronat opus:* he stayed to see the war over, grasping not at premature rewards; and when, worn out, he came home to die, he was crowned with an enduring

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



fame. The much-abused Viceroy may be pictured in the words of Bunyan: "They saw a man clothed all in white; and two men, Prejudice and Illwill, continually casting dirt upon him. Now, behold, the dirt whatsoever they cast at him, would in a little time fall off again, and his garment would look as clear as if no dirt had been cast thereat."

The man and his methods stand out in bold contrast to Lord Milner from first to last as I intend to show; and it detracts nothing from the greatness of Canning to remark that his views were supported and often anticipated by the splendid body of Civil Servants on whom he had to depend. These were men of a different stamp to the magnates of Rhodesia and Johannesburg. Forbidden by law to trade or speculate, they were single-minded in character, straightforward in conduct. Holding high positions, in their prime of life, they kept their heads and temper; and, being fearless, they had no desire to be cruel, as Mr. Keane proves in that book of his called "Fifty-Seven," so full of examples to our younger Civil Servants. Let those who have sneered at the hunted Boers remember that many of these Anglo-Indians had an abiding faith in God, which they took no pains to hide. That excellent officer, Mr. Henry Carre Tucker, the Commissioner of Benares, wrote in reply to the Governor-General that the stand-by of his little band in those dreadful times was 2 Samuel xxii., a fine use of holy texts like these: "The Lord is my rock and my fortress and my deliverer," "The sorrows of hell compassed me about: the snares of death prevented me. In my distress I called upon the Lord and cried unto my God." Nor was his trust in vain. Cool and brave, he used to ride about with his daughter in the most exposed places; and when peace came back he might have boasted with David: "Thou hast given me the necks of mine enemies that I might destroy them that hate me." But revenge was no motive of his. He tried to save innocent natives from that wild justice; and he urged Lord Canning to confer powers of life and death on the Civil Servants as being better judges

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of evidence than regimental officers. His brother, the judge of Futtehpore, who was killed bravely fighting on the top of his Court-house, lived under the same religious influences. He it was who set up at the entrance of that station the four pillars of stone, engraved in Persian and Hindee, with our Ten Commandments. I have only instanced two of the many religious men of that time, whose wisdom and bravery in the awful months of trial were only equalled by the generous and merciful spirit they displayed to the beaten enemy. Seldom in history do we find such simple following of the Christian doctrine about forgiveness. Others there were, like Colonel Neill, who justified out of the Old Testament what Sir J. Kaye calls "the indiscriminate ferocity of military men." Many of these soldiers, however, were just and gentle; unselfish, conscientious leaders like Sir James Outram, who silenced a fire-eater with the remark that officers who boast most loudly of bloodshed are often the least courageous in the battle. The moral courage, born of religious conviction, appears as constantly in the civil and military services of that time as does their calm valour; the intense belief in the moral law, in the profound gulf between right and wrong, pervades the memoirs and private letters as well as the official despatches sent to Lord Canning by his district officers. Their high sense of duty enabled them to brave unpopularity in withstanding the outcries raised by fear and revengeful passions.

Lord Canning's enemies forgot the dangers he had to meet when he assumed office at Calcutta in March, 1857—I mean the want of discipline in the Bengal army and the unrest in Oudh. To abate the first, he promptly asked for more officers for each British and native regiment, but was overruled. Lord Dalhousie had protested strongly, but vainly, when two European regiments were, in 1854, taken away to the Crimean War, urging that such withdrawals loosened our hold on India; and certainly the repetition of this policy, which has greatly weakened the British garrison

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000e

مكتبة قطر الوطنية
Qatar National Library

of India to supply troops for South Africa, is as serious a matter now as it was then. In 1856 more British regiments were sent away to Persia, so that when the Mutiny began there was only one European battalion left in the 750 miles which lie between Barrackpur and Agra, and only one within 100 miles radius of the fortress of Allahabad. With the kingdom of Oudh, which we had annexed and occupied about fourteen months before, 25,000 square miles and 5,000,000 of inhabitants had passed from their native prince to the Queen. Here was a new and heavy responsibility to be faced with a reduced British force. The Directors of the East India Company exulted that this conquest had been made "without the expense of a drop of blood, and almost without a murmur." They treated the acquiescence of the natives as evidence that no attachment existed to the old Government. It was known, however, that Oudh contained 60,000 men of the native king's disbanded army, while its warlike people supplied most of our own rank and file, every peasant household sending one member at least to enlist under the Company's flag. Canning, as we have seen, did what he could to make the annexation effective; but with vast increases of territory he was forced, as Lord Curzon is now, to hold India with a smaller European force, a state of things which is soon known and noted in all the bazaars.

In times of danger and excitement there are always some who wish to dictate to the responsible authorities. Such were the Europeans in Calcutta. Soon after the outbreak at Meerut, on May 10, 1857, Lord Canning called his Parliament together and passed a series of Acts for the prompt punishment of mutiny, rebellion, and lawless crimes, and these new laws were put in force in the Mofussil of Bengal. The Calcutta people demanded that martial law should be applied to that capital and port. Lord Canning refused so to do on the ground that there was not the smallest inclination to disaffection on the part of the inhabitants. He recognised the distinction which our ancient

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

common law has always made between places in the hands of the rebels or enemies and those where the ordinary courts continue to perform their functions in peace. Under Lord Canning the appalling constitutional result of the Marais case in Cape Colony could never have occurred. He replied to C. Williams and other petitioners as follows: "As respects Calcutta, where English law prevails, the direct effect of proclaiming martial law would be to suspend the functions of the ordinary Courts of Judicature. This is a proposal which the Governor-General in Council cannot entertain. To substitute the jurisdiction of courts martial for that of the Supreme Court would infallibly be accompanied by much private inconvenience, uncertainty, and hardship in a community such as that of Calcutta; and his Lordship is not aware of any commensurate public gain which, in the present state of affairs, would be derived from the change. The military authorities are already empowered to try by court-martial, and by a process more summary than that ordinarily recognised, all military offenders and all persons exciting soldiers to mutiny." This cool answer is compared by the late Duke of Argyll to a single voice of command and self-control, in the midst of a raging crowd, swayed by anger and fear. It did something to allay the panic, which, however, extended to England, where Canning became the subject of much abuse in the newspapers and censures in Parliament.

As disloyalty has spread over Cape Colony *pari passu* with the infliction of martial law over peaceable districts, it is very interesting to compare the vigorous measures of repression employed by Canning and his lieutenants in countries in open rebellion and the prompt but judicious and humane procedure they enforced in districts where the ordinary law prevailed, or had been re-established. This latter procedure contrasts at all points with the despotism at the Cape, where the Parliament is abolished; and the courts, although sitting, are practically subservient to the orders of the general and his colonels and captains.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Now, Lord Canning challenged his detractors by the success of his methods, a success quickly attained and lasting till this day. It is pleasing to find his principles followed long after when the Kuka insurrection disturbed the Punjab; Lord Mayo then proclaimed anew the doctrine of our law that rebels in arms must be vigorously attacked by force, but added that on the return of quiet, no illegal, unnecessary or barbarous retaliation would be allowed—for example, no cold-blooded slaughter of prisoners awaiting trial in the gaols at the next assizes—by due course of civil law. It is noteworthy that in Lower Bengal, where we had only 2,400 British troops among 29,000 Sepoys, the Mutiny never assumed dangerous proportions. The prompt but measured justice applied by Canning to the Barrackpur regiment is strongly contrasted by Sir Henry Cunningham with the severe and degrading punishment of the troopers at Meerut, followed at once by the massacre and the march to Delhi. The late Duke of Argyll's verdict is that if the military tribunals at Meerut had shown the same gentleness and firmness as Canning used in Bengal, as Sir Henry Lawrence, depending on his one European regiment, used at Lucknow, the danger of general mutiny over the matter of greased cartridges might have passed away.

To enable the Ministry at home to support him against his accusers, the Governor-General, after some months had passed, wrote to explain his policy, its motives, and results. In one despatch of December 11, 1857, I find something like a history of his methods, which is full of interest, especially in the light of the literature and correspondence of those eventful years. The Indian Government deals far more fully with the question of martial law than has ever been vouchsafed as regards Cape Colony. The moment the local ruler received news of the outbreaks at Meerut and Delhi, he proclaimed martial law in all the revolted districts. The same thing was done in the countries lower down the Ganges as the rebellion extended. No time was lost in the Punjab and Oudh. But because of a peculiarity

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003e

مكتبة قطر الوطنية
Qatar National Library

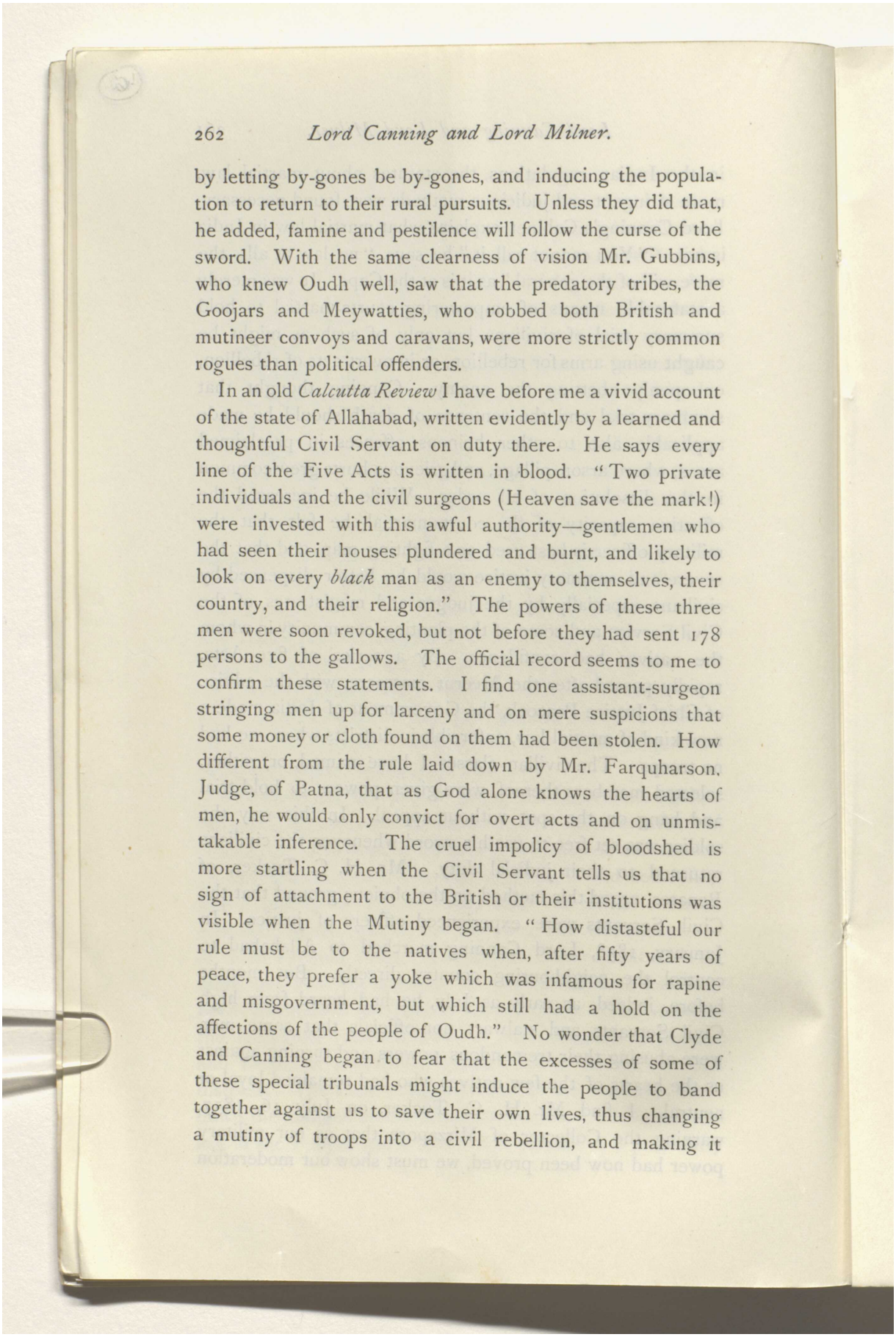
BRITISH LIBRARY

in the Indian regulations, the statutes about martial law, more stringent and judicious methods were found necessary. Lord Canning's Cabinet explains what martial law in India is not. "You cannot call it," he says, "no law at all—the mere will of the general," as it is at the Cape. It was merely a statutable means of empowering courts-martial to hold summary trial of civilians, but only of such as might be caught using arms for rebellion, or in overt acts of rebellion, or openly abetting the enemy. Canning thought that summary trial and the sentence of death should be made applicable also to other heinous offences in proclaimed areas, where arson, pillage, and grievous hurts grew common in the dissolution of all order. While he increased the effective capacity of the courts-martial, he felt that the military officer is best used as a fighting man, and that the severe and summary justice would be better dispensed by civilians, especially by the judges and magistrates of the Civil Service and some of the planting community in whom the natives had confidence. By a series of five Acts, rapidly passed after the Meerut massacre, with the advice of Chief Justice Peacock, the Government of India made a new kind of martial law, enforcible in districts where we had no troops. The civilian classes I have named, or, rather, selected members thereof, were given powers to hold trial and hang on the spot without appeal. In this way the soldier was set free to use his sword whenever the civilians returned to their judicial duty. Mr. H. C. Tucker, of Benares, urged this method on the obvious ground that the Civil Servants were experienced officers of justice. In January, 1858, Lord Canning marched to Allahabad to control the neighbouring country directly. But months before, indeed, as early as July, he had heard from high Civil Servants and stalwart non-officials that some men were abusing their tremendous powers and turning against us the hearts of the few natives who had remained loyal or neutral. I find Mr. H. C. Tucker, on July 16, 1857, warning the Collector of Mirzapore that as our military power had now been proved, we must show our moderation

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000094

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



by letting by-gones be by-gones, and inducing the population to return to their rural pursuits. Unless they did that, he added, famine and pestilence will follow the curse of the sword. With the same clearness of vision Mr. Gubbins, who knew Oudh well, saw that the predatory tribes, the Goojars and Meywatties, who robbed both British and mutineer convoys and caravans, were more strictly common rogues than political offenders.

In an old *Calcutta Review* I have before me a vivid account of the state of Allahabad, written evidently by a learned and thoughtful Civil Servant on duty there. He says every line of the Five Acts is written in blood. "Two private individuals and the civil surgeons (Heaven save the mark!) were invested with this awful authority—gentlemen who had seen their houses plundered and burnt, and likely to look on every *black* man as an enemy to themselves, their country, and their religion." The powers of these three men were soon revoked, but not before they had sent 178 persons to the gallows. The official record seems to me to confirm these statements. I find one assistant-surgeon stringing men up for larceny and on mere suspicions that some money or cloth found on them had been stolen. How different from the rule laid down by Mr. Farquharson, Judge, of Patna, that as God alone knows the hearts of men, he would only convict for overt acts and on unmistakable inference. The cruel impolicy of bloodshed is more startling when the Civil Servant tells us that no sign of attachment to the British or their institutions was visible when the Mutiny began. "How distasteful our rule must be to the natives when, after fifty years of peace, they prefer a yoke which was infamous for rapine and misgovernment, but which still had a hold on the affections of the people of Oudh." No wonder that Clyde and Canning began to fear that the excesses of some of these special tribunals might induce the people to band together against us to save their own lives, thus changing a mutiny of troops into a civil rebellion, and making it

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

impossible for the British and the natives to settle down together at the end of the war! One evil result was a growing belief that our Government intended a general and bloody prosecution of both Hindus and Mussalmans. While they feared that innocent people had been killed by the revengeful European and rapacious loyal Sepoy soldiery, the Indian Government promptly, by order of July 31, 1857, checked the abuse of power by the civilians. The despatch speaks of the spirit of bitterness and hatred rapidly seizing every class and race. "With time and returning calm the acts of Government are reviewed, and the Government which has punished blindly and revengefully will have lost its chief title to the respect of its subjects." "The settlement will be spoilt by the remembrance of needless bloodshed." It appeared that Sepoys who had risked all to save their officers' lives were in danger of their necks from some of the unjust tribunals. The Lieutenant-Governor of Bengal urged Canning to publish the records of those shameful trials by way of defence of his action. "No," he said, "I will not so terribly disgrace my countrymen." A quick stop was put to the wanton burning of farms and villages. Where all the villagers had joined in some grave outrage an example might be necessary, but no such devastation was to take place as would confound the innocent with the guilty. As the Allahabad civilian writes, when a village was surrounded at night to secure the males and fired, the women and children were burnt in the confusion. The result of Lord Canning's action was that the peasantry soon returned and resumed tillage quietly, as if no war was going on.

Constantly advised by the best officers and the most trusted planters, Canning's influence extended to many details. With generous scorn, he refused to keep the wives of rebels as hostages. He forbade offers of rewards for mutineers and rebels, "dead or alive." In all this he was rowing against the stream. "Not one man in ten," he wrote to the Queen, "seems to think that the hanging and shooting of 40,000 or 50,000 men can be otherwise than practicable

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000037

مكتبة قطر الوطنية
Qatar National Library

and right." The thoughtful official from Allahabad said despondingly: "No longer are we to dwell among the people like parents among their children. They have all —we have all—tasted blood. We hate them, and they hate us to the death." We see now that it was Lord Canning's calmness and justice which has falsified this augury.

Lest I should seem too partial to the civilians, I gladly turn to the generous prompting which Canning received from the Commander-in-Chief, that great soldier, Lord Clyde, then Sir Colin Campbell. His views were as prudent as they were merciful; and as our policy in South Africa has been so different, I will give Clyde's counsels in his own words. In a letter of December 22, 1857, to Canning, he told him that our British regiments, engaged in fighting ever since the hot months of May and June, were "reduced to skeletons, and the men are in much need of rest." Again on March 17, 1858, the day after he had recaptured Lucknow, with the loss of 1,100 men, he urged the Viceroy to save his forces from the effects of the burning winds, pressing him "that some notice should issue to the Sepoys, which may have the effect of dissolving the confederacy between the mutinous regiments," in order to prevent "a serious business all through the hot weather, which would break down our troops and be never-ending." He saw clearly that, if we went on executing every rebel Sepoy we caught, the area of the war would increase; the mutineers had no choice but to cling together, because if they went home to their villages they would be caught and hanged. In a letter of July 24, 1858, to the Duke of Cambridge, Clyde wrote as follows: "It appears to me that if these wretched criminals be not reassured, guilty though they be, it will be impossible to predict any term to the general struggle, which has already assumed formidable proportions in a very wide area, and may be extended indefinitely, viz., wherever the mutineers may be driven to carry fire and sword with them. It therefore seems to me

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000090

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

to be not merely a question of clemency and mercy, but of policy as regards the cessation of this war. Now, if it were desirable, we cannot look for extermination of the entire remnant of the Sepoy army. According to the terms on which we are now with that remnant, they look for nothing else than extermination, and we propose nothing else. What then can be the sequel but a most protracted contest, in which vast sections of the population will take part against us under the disbanded Sepoys?" No despatches of this sort have yet come from South Africa. It required high courage on Clyde's part to unite in policy with Canning, whose general amnesty, proclaimed on November 1, 1858, roused the European community to denounce him as ignorant, stupid, cowardly and treacherous, until the general peace which ensued over all India about six months later proved the wisdom of Canning and Clyde.

In the autumn of 1859 Canning went in great state to the scenes of the massacres, meeting the native princes and nobility at Durbars in Cawnpur, Agra, and Lucknow, the capital of Oudh. To me it seems wonderful that so new and warlike a province, the birth-place of a revolted army, which had 12,000 native artillery in its ranks, should have been pacified so soon. The contrast with Cape Colony under Lord Milner is obvious but painful. I have already described the orders which drew down on the Governor-General the taunting name of "Clemency Canning." I must now deal with his famous Oudh proclamation of March 3, 1858, sent to General Sir James Outram to issue to the civil population as soon as we had recaptured Lucknow, which was effected between the 2nd and 22nd March, by defeating the army of 100,000 which Outram had been watching, with 4,000, for six months. Canning's action was immediately branded as both cruel and impolitic. Every leading soldier in our camp objected to our confiscating the lands of a whole nation, still armed, still in the field. The *Times* correspondent, Dr. Russell, says he heard no voice in its defence. Outram protested

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000068

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

strongly in a letter of March 8. The lairds of Oudh, he said, would not be content with the mere offer of life and freedom from prison. He had been Governor before the rebellion: he thought they had great grievances caused by our land laws; only at the last moment did they side against us. "They ought hardly to be considered as rebels, but rather as honourable enemies." If not, they would make a desperate and prolonged resistance, forcing us into "a new guerilla war, for the extirpation, root and branch, of this class of men, which will involve the loss of thousands of Europeans by battle, disease, and exposure." Lord Canning readily agreed in a couple of days to add a saving clause, practically promising immunity to those who would submit and help us. Outram had let him know that there were not a dozen landlords who had not fought against us or helped the rebels. Many later despatches and the judgment of the historians combine to show that there was no real difference of principle between the clement Canning and the generous Outram. The tone of the secret despatch, dated April 18, 1858, written and rather recklessly published by Lord Ellenborough, a former Governor-General, and at that time the member of the Cabinet who controlled India, may therefore be censured for the serious reasons stated by Canning. Impolitic it may have been to question the justice of the annexation of Oudh against the people's wishes and to censure the land settlement which had set the lairds against us. Nevertheless, Ellenborough's stately periods express much the same views as Outram's; and there is nothing like them in the speeches of Lord Milner or the despatches of Mr. Chamberlain. They breathe magnanimity as well as magniloquence. "We must admit that, under the circumstances, the hostilities which have been carried on in Oudh have rather the character of legitimate war than that of rebellion, and that the people of Oudh should rather be regarded with indulgent consideration than made the objects of a penalty, exceeding in extent and in severity almost any which has been recorded in history as inflicted

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000076

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

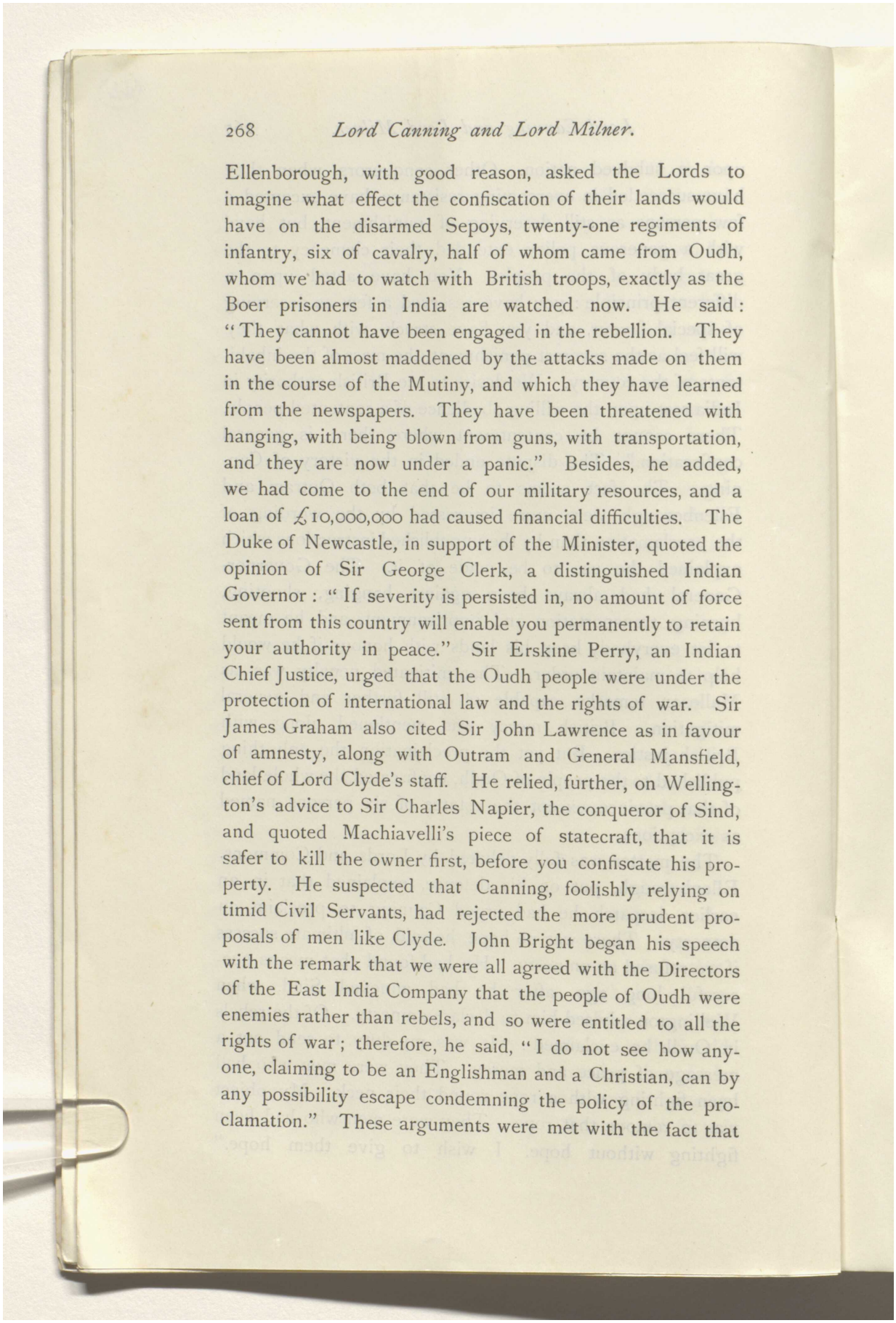
upon a subdued nation. Other conquerors, when they have succeeded in overcoming resistance, have excepted a few persons as still deserving of punishment, but have with a generous policy extended their clemency to the great body of the people. You have acted upon a different principle: you have reserved a few as deserving of special favour, and you have struck, with what they will feel as the severest punishment, the mass of the inhabitants of the country. We desire to see British authority in India rest upon the willing obedience of a contented people. There cannot be contentment where there is general confiscation." The dispute ended in the victory of Canning. The fact seems to be that both Outram and Ellenborough were more impressed by the wording of the proclamation than by the unpublished instructions which explained the use to be made of it. The Governor-General had always been against hanging, shooting, burning, transportation and imprisonment, and he meant to let everybody keep his lands with honour if he would help to maintain order. That mitigated penalty was, as Malleson remarks, capable of still further and general mitigation. British mercy was mentioned along with British justice. But yet the proclamation, the only thing published to the people of Oudh, confiscated the whole land of that province, except the estates of six persons, named as exceptions.

The matter was fully debated by Lords and Commons. Ellenborough, put on his defence, explained that in an earlier despatch he had urged Canning to proclaim an amnesty. There was no hope, he said, of ultimate success if we refused an amnesty. He had found that means successful long ago after he had annexed Sind, when Wellington advised him to declare amnesty. Of the rebels in Oudh he exclaimed: "It was my duty to send out a message of peace and mercy. They were men who had been fighting with a rope round their neck. My object was to remove that rope. They were men who had been fighting without hope. I wish to give them hope."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Ellenborough, with good reason, asked the Lords to imagine what effect the confiscation of their lands would have on the disarmed Sepoys, twenty-one regiments of infantry, six of cavalry, half of whom came from Oudh, whom we had to watch with British troops, exactly as the Boer prisoners in India are watched now. He said: "They cannot have been engaged in the rebellion. They have been almost maddened by the attacks made on them in the course of the Mutiny, and which they have learned from the newspapers. They have been threatened with hanging, with being blown from guns, with transportation, and they are now under a panic." Besides, he added, we had come to the end of our military resources, and a loan of £10,000,000 had caused financial difficulties. The Duke of Newcastle, in support of the Minister, quoted the opinion of Sir George Clerk, a distinguished Indian Governor: "If severity is persisted in, no amount of force sent from this country will enable you permanently to retain your authority in peace." Sir Erskine Perry, an Indian Chief Justice, urged that the Oudh people were under the protection of international law and the rights of war. Sir James Graham also cited Sir John Lawrence as in favour of amnesty, along with Outram and General Mansfield, chief of Lord Clyde's staff. He relied, further, on Wellington's advice to Sir Charles Napier, the conqueror of Sind, and quoted Machiavelli's piece of statecraft, that it is safer to kill the owner first, before you confiscate his property. He suspected that Canning, foolishly relying on timid Civil Servants, had rejected the more prudent proposals of men like Clyde. John Bright began his speech with the remark that we were all agreed with the Directors of the East India Company that the people of Oudh were enemies rather than rebels, and so were entitled to all the rights of war; therefore, he said, "I do not see how anyone, claiming to be an Englishman and a Christian, can by any possibility escape condemning the policy of the proclamation." These arguments were met with the fact that

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Lord Canning was known to be altogether in favour of clemency, however he might have expressed the conditions. The result was a general agreement on policy, and whatever sting there was in it was taken out of the proclamation in its practical working.

About a year afterwards Lord Canning wrote a minute on its wonderful success. It never became an engine of confiscation. Strangely enough, it led to a new agrarian law. It was used as a lever to establish a tenant-right for the peasant farmers exposed to the rack-renting of the war-like lords. The forfeiture was enforced altogether against only fourteen of the latter; partial escheats occurred in the cases of a few less persistent rebels. The result was to restore the old relations between landlord and tenant existing before we dethroned the King of Oudh. The lairds were glad enough to find that we let them keep their estates. The Sepoys, who belonged to the tenant farmer families, found themselves not only safe from the gallows, but endowed also with something like Irish tenant right, at the expense of the rebel landlords. By this time the pacification had gone on apace; 756 out of the 1,100 forts were level with the ground, and Sir Robert Montgomery, the new Civil Governor, expected to collect a weapon from each of the 2,000,000 inhabitants capable of bearing arms. Patient forbearance was extended to the most refractory; the rebels began to believe in our mercy, and Sir Robert reported that in the Province of Oudh, "which little more than four months ago was a surging sea of rebellion and strife, profound peace and perfect safety everywhere prevail." These blessings have remained to this day. Surely this is reason enough for pressing Lord Canning's methods on the attention of the Colonial Office now that the burning of farms, the removal of women, the concentration camps, the deaths therein of 14,000 Boer children, the banishments and the executions, have only inflamed race hatreds and spread this three years' war into a colony that once was loyal.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000026

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE PROGRESS OF THE MUNICIPAL IDEA IN INDIA.*

By A. Rogers.

There has been of late a frequently-repeated cuckoo cry in the mouths of those who would, whether rightly or wrongly, endeavour to pick holes in the system of British administration in India, that it has broken up the village communities or interfered with the village constitution. Such glibly sententious phrases are nice, rounded mouthfuls to produce for the delectation of an ignorant and superficial public which delights in nothing so much as an easily-uttered shibboleth that sounds well, but really conveys no intelligible sense, and it is time that the bubble should be pricked and the gas in it let out. It is time that the question should be examined in detail, and what has been done clearly set forth. For this it is indispensable that the constitution of village communities as they originally existed should be understood, how they came into existence, how they continued, and what functions they exercised. The first idea to grasp is that there was nowhere any central administration worthy of the name. There was no centre like that of the spider's nest connected with the furthest limits of its domain by delicate webs through which sensation could be conveyed outwardly instantaneously by movements of the creature's feet, or *vice versâ* to the centre by the impact of some foreign substance at the most distant point, and communication be thus established between the centre and the extremities. The Peishvá had his head-quarters at Poona, where his Court had to be maintained by the contributions of revenue sent in to it by the *Sir-súbbhás* or other local officers stationed in various provinces, but took no direct part in the local administration by which that revenue was collected, and found it accordingly to be the

* See the Proceedings of the East India Association elsewhere in this *Review* for the discussion on this paper.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002e

مكتبة قطر الوطنية
Qatar National Library

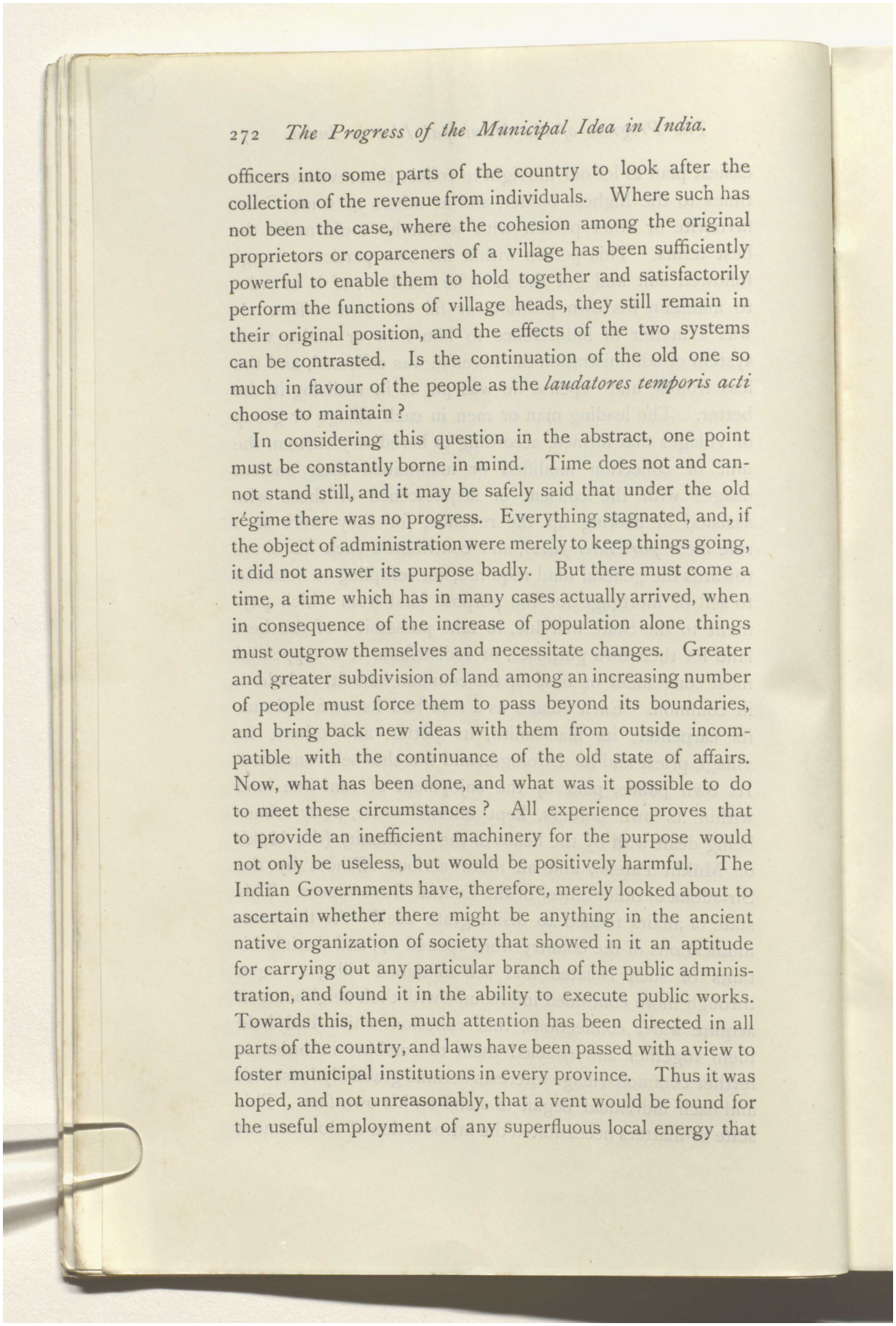
BRITISH LIBRARY

easiest plan to let out the right to collect that revenue sometimes to the highest bidder, and at others to some Court favourite or other person with whom he could make the best terms. This person within his own particular range followed suit and got the most he could out of it in order to maintain his own position or fill his own coffers. It was a matter of indifference to him how or under what system of administration the revenue was collected, and the less trouble and expense he was put to in realizing it, the better. The leading man or men in each village or group of villages that formed, according to hereditary custom, the unit of collection modified or maintained their ancient usages with the consent or acquiescence of those who assisted in making up the revenue, for they were as a rule mere *pari inter pares*, and contributed each his share towards the general fund required, not scrupling on occasion to sell or mortgage for the purpose land from which payment to the State was due, to take possession of the best land for their own purposes, or redistribute it as appeared most convenient or best for the common benefit, or hold it in common. Each village as a rule had its own artisans, its carpenter, its blacksmith, its potter, and others, its village priest and its astrologer, and was thus self-contained. Its own police, paid by the enjoyment of rent-free land within its own borders, kept internal order, petty crimes being dealt with by the heads of the community (the Múkh or Múkhi Patels), and all more serious offences by the Sir-súbhá or other officer of the Central Government. This state of affairs tended to disintegrate itself. As the communications of the country were opened up, and the inhabitants of such isolated and self-contained villages began through more continued intercourse with their neighbours to acquire wider connections, that cohesion which had held them together and enabled them to combine in order to further common village interests became gradually loosened, and each individual began to stand on his own feet. This state of matters necessitated the introduction of Government

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



officers into some parts of the country to look after the collection of the revenue from individuals. Where such has not been the case, where the cohesion among the original proprietors or coparceners of a village has been sufficiently powerful to enable them to hold together and satisfactorily perform the functions of village heads, they still remain in their original position, and the effects of the two systems can be contrasted. Is the continuation of the old one so much in favour of the people as the *laudatores temporis acti* choose to maintain?

In considering this question in the abstract, one point must be constantly borne in mind. Time does not and cannot stand still, and it may be safely said that under the old régime there was no progress. Everything stagnated, and, if the object of administration were merely to keep things going, it did not answer its purpose badly. But there must come a time, a time which has in many cases actually arrived, when in consequence of the increase of population alone things must outgrow themselves and necessitate changes. Greater and greater subdivision of land among an increasing number of people must force them to pass beyond its boundaries, and bring back new ideas with them from outside incompatible with the continuance of the old state of affairs. Now, what has been done, and what was it possible to do to meet these circumstances? All experience proves that to provide an inefficient machinery for the purpose would not only be useless, but would be positively harmful. The Indian Governments have, therefore, merely looked about to ascertain whether there might be anything in the ancient native organization of society that showed in it an aptitude for carrying out any particular branch of the public administration, and found it in the ability to execute public works. Towards this, then, much attention has been directed in all parts of the country, and laws have been passed with a view to foster municipal institutions in every province. Thus it was hoped, and not unreasonably, that a vent would be found for the useful employment of any superfluous local energy that

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000074

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

might be found to exist in a manner beneficial to itself as well as to others. Those who were not immediately required for agricultural operations in the villages, or who through the education provided for them by the State had assimilated the idea that there were other methods for employing their minds, were thus to be afforded their opportunity in the conduct of municipal institutions, which were accordingly organized by various Acts of the Legislature. This it was, of course, impossible to carry out at once in such a vast country as British India, nor was it possible to hit off without experience of their working the subsidiary provisions that were necessary to suit the peculiarities of different localities inhabited by races having various customs; but the system has at all events been established, and is working, however imperfectly. It will now be our task to ascertain to what extent these institutions, to use a common phrase, have caught on and are being utilized by those for whom they are intended, and we are bound to express a considerable feeling of disappointment at the general result of the experiment. It would run an ordinary paper to an inordinate length were we to attempt to do this for the whole of the country, and we therefore propose to confine our attention to the Presidencies of Madras and Bombay, the reports for which for the year 1899-1900, as well as the resolutions of the two Governments on those reports, are now before us. The verdict of the former is that out of sixty municipalities the administration in two was unsatisfactory, in nine it was not efficient, in thirty-three it was fairly satisfactory, and in sixteen good. In Bombay the general conclusion is that there was nothing new in the reports as to the efficiency of the municipalities; there could be no doubt that on the whole they were doing useful work. Two municipalities, viz., those of Bassein and Alibágh, had been superseded for maladministration and incompetency. The number of meetings held was generally satisfactory except in the case of a few Boards in the Central and Southern Divisions, where also the average attendance was smaller than it should

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000036

مكتبة قطر الوطنية
Qatar National Library

have been. The total number of municipalities was 165,* inclusive of the four in the towns of Karáchi, Hyderábád, Shikárpur, and Sukkur in Sind, as in the previous year.

It would be foreign to our purpose to go into the details of the taxation by which the necessary funds for the support of these institutions were raised, or the incidence of that taxation in the several municipalities, our object being to show how far the opportunity for assisting in local self-government in different localities has been made use of by the amount of attention devoted to the subject by individual members of the municipal committees.

We are glad to see that encouragement is given in the Bombay resolution to the Presidents and Vice-Presidents of those municipalities who have distinguished themselves by their exertions during the year by the publication of their names as an example to others: this was in the municipalities of Broach, Poona, Igatpuri, Lonáula, Dhárwar, and Bijápur. It would be as well if the Government of Madras would do the same, and services of this nature would be cheaply rewarded by the bestowal on those worthy of it of the new Order of Merit recently instituted for service in India. To come to particulars: In the twenty-one Madras municipalities there were altogether 1,735 meetings held; of these (or possibly exclusively of these, for the returns are not clear), meetings to the total number of 166 had to be adjourned for want of the attendance of a quorum. Among these, the chief offenders were the municipalities of Mangalore, Vellore, and Cuddapah, which figure respectively for nineteen, fifteen, and fourteen occasions.

In Bombay the returns are given in different forms for the different divisions. In the Northern Division, out of 357 quarterly and special meetings held, thirty-three had to be adjourned for want of a quorum, and 182 out of 536 Commissioners or Councillors did not attend at two-thirds. In the Central Division, out of 556 meetings, 158 had to be adjourned; but whether in the absence of a quorum or for

* Not including the town and island of Bombay.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000020

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

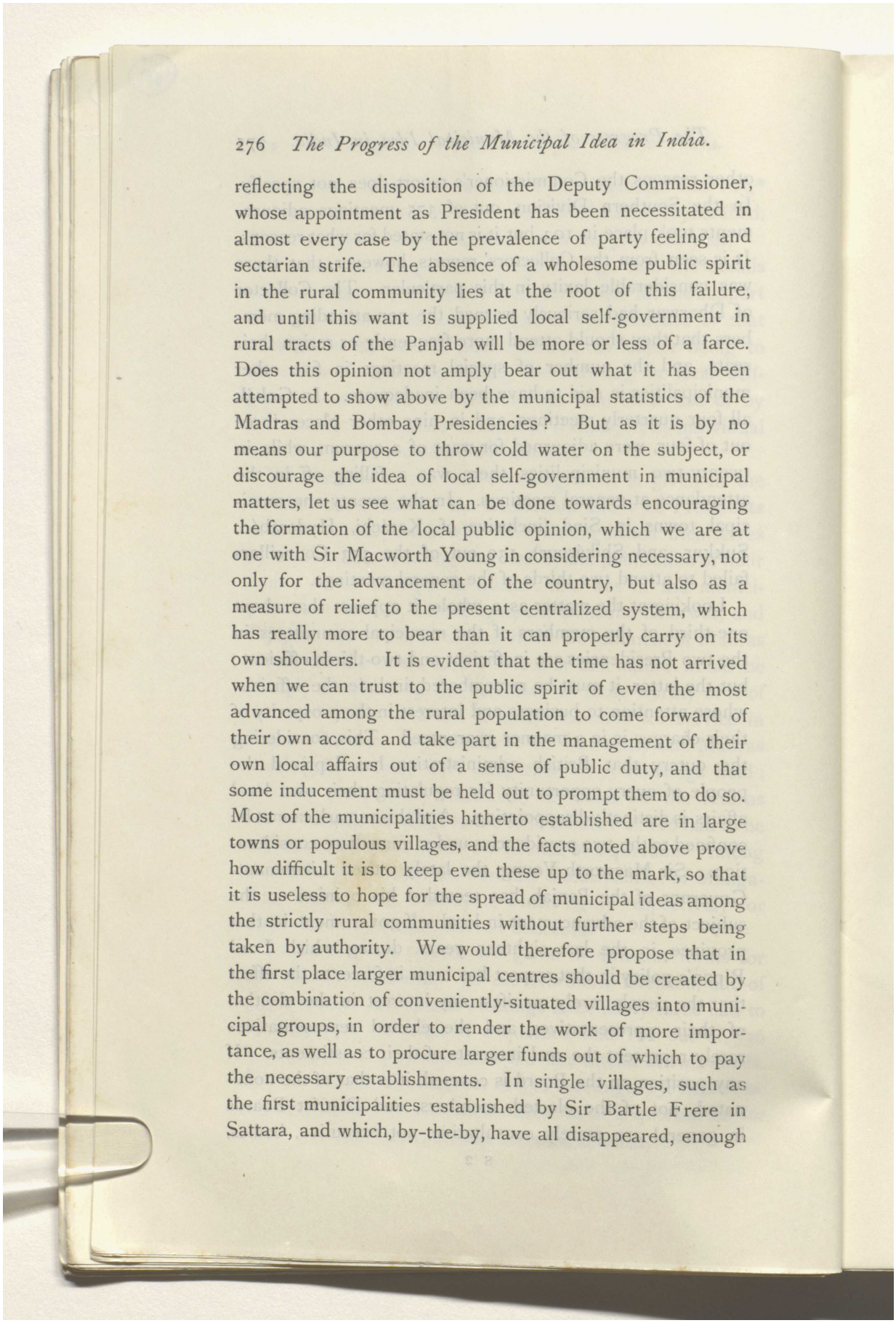
other reasons the Commissioner's report does not specify. In the Southern Division, out of 375 meetings adjournments took place in 103, but it is not stated for what reasons. It is seen from the Collectors' reports, however, that there was considerable laxity in this particular. The Collector of Dharwar had seriously warned the non-attending members that they should attend more frequently or resign their seats, and the number of special meetings in five other municipalities is said to have been inadequate. In Gokák all four quarterly meetings, and in nine other places three out of four, were adjourned for want of a quorum, while in twenty-two municipalities there was a falling off in the attendance at general meetings. In the twenty-one municipal towns in Sind (inclusive of Karáchi, Hyderábád, Sukkur, and Shikárpur), 139 out of the 353 Councillors failed to attend two-thirds of the general meetings.

Looking at the matter as a whole, it appears that about one-third of the members of the municipal committees in the two Presidencies are inefficient and two-thirds efficient; but the latter, it must be remembered, include the officials, whose attention to business and interest in the prosperity of their charges is in a manner guaranteed. This, considering the outcry that British administration has deprived the people of every opportunity for regulating their own local affairs, is distinctly disappointing. And this remark cannot be confined to the two presidencies under immediate consideration. Sir Macworth Young, the lately retired Lieutenant-Governor of the Panjab, has recorded his opinion on the subject of the advancement in local self-government in that province in the last eighteen years, during which Lord Ripon's policy in that respect has been in force, to the effect that the people rarely manifest any interest in the election of their representatives, and the elected representatives rarely represent the real interests of their constituents. If any position on the Board is coveted, it is that of the nominated, not of the elected, members, and District Boards in general are merely consultative, not executive, bodies,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



reflecting the disposition of the Deputy Commissioner, whose appointment as President has been necessitated in almost every case by the prevalence of party feeling and sectarian strife. The absence of a wholesome public spirit in the rural community lies at the root of this failure, and until this want is supplied local self-government in rural tracts of the Panjab will be more or less of a farce. Does this opinion not amply bear out what it has been attempted to show above by the municipal statistics of the Madras and Bombay Presidencies? But as it is by no means our purpose to throw cold water on the subject, or discourage the idea of local self-government in municipal matters, let us see what can be done towards encouraging the formation of the local public opinion, which we are at one with Sir Macworth Young in considering necessary, not only for the advancement of the country, but also as a measure of relief to the present centralized system, which has really more to bear than it can properly carry on its own shoulders. It is evident that the time has not arrived when we can trust to the public spirit of even the most advanced among the rural population to come forward of their own accord and take part in the management of their own local affairs out of a sense of public duty, and that some inducement must be held out to prompt them to do so. Most of the municipalities hitherto established are in large towns or populous villages, and the facts noted above prove how difficult it is to keep even these up to the mark, so that it is useless to hope for the spread of municipal ideas among the strictly rural communities without further steps being taken by authority. We would therefore propose that in the first place larger municipal centres should be created by the combination of conveniently-situated villages into municipal groups, in order to render the work of more importance, as well as to procure larger funds out of which to pay the necessary establishments. In single villages, such as the first municipalities established by Sir Bartle Frere in Sattara, and which, by-the-by, have all disappeared, enough

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000067

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

could rarely be raised to more than support even the most modest scale of clerical assistance. Larger municipal groups are thus an absolute necessity. It would be an inducement for the heads of villages to give their time and labour to such institutions if some distinctive title were given to them to distinguish them from their fellows, and some small fee given them for attendance at meetings. In the present constitution of rural society it is too much to expect that men should give up gratuitously much of the time they require to gain their own living by agriculture to such extraneous duties without any return. In any case, it must be a case of patience and constant attention on the part of the local revenue and magisterial authorities to foster the requisite local public spirit, but there can be little doubt of its creation in course of time. When once created, the powers of such local bodies could cautiously and by degrees be extended, and the superintendence of police, minor criminal, civil, and educational matters, entrusted to them, to the relief of the Collectors and Magistrates, whose time is now too much taken up with looking after such matters. Our maxim in all attempts at progress in this direction should, of course, be the old and true one of *festina lente*, for, as in other undertakings, it is often the pace that kills.

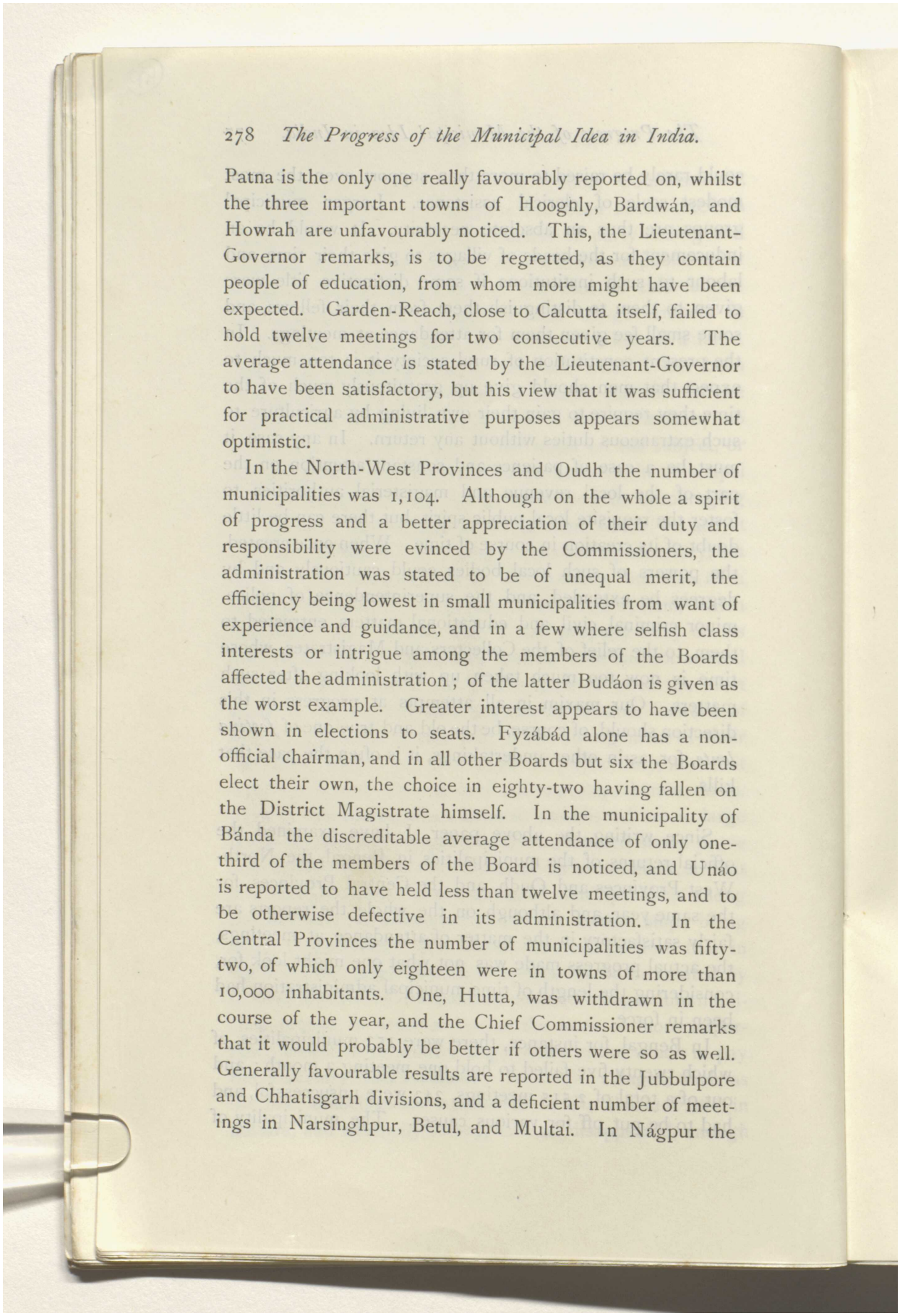
Since writing the above paper, I have examined the official returns of the municipalities in Bengal, the North-West Provinces and Oudh, and the Central Provinces, for the same year, and although on the whole the reports are fairly satisfactory in the matter of attendance at meetings, the actual progress made was not what one might look for, considering the length of time municipal administration had been in force.

In Bengal, for instance, there were 153 municipalities, of which twenty-five failed to hold one meeting a month; and out of a total of 2,515 meetings, 243 were unsuccessful, and had to be put off for various causes. The municipality of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000034

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Patna is the only one really favourably reported on, whilst the three important towns of Hooghly, Bardwán, and Howrah are unfavourably noticed. This, the Lieutenant-Governor remarks, is to be regretted, as they contain people of education, from whom more might have been expected. Garden-Reach, close to Calcutta itself, failed to hold twelve meetings for two consecutive years. The average attendance is stated by the Lieutenant-Governor to have been satisfactory, but his view that it was sufficient for practical administrative purposes appears somewhat optimistic.

In the North-West Provinces and Oudh the number of municipalities was 1,104. Although on the whole a spirit of progress and a better appreciation of their duty and responsibility were evinced by the Commissioners, the administration was stated to be of unequal merit, the efficiency being lowest in small municipalities from want of experience and guidance, and in a few where selfish class interests or intrigue among the members of the Boards affected the administration; of the latter Budáon is given as the worst example. Greater interest appears to have been shown in elections to seats. Fyzábád alone has a non-official chairman, and in all other Boards but six the Boards elect their own, the choice in eighty-two having fallen on the District Magistrate himself. In the municipality of Bánda the discreditable average attendance of only one-third of the members of the Board is noticed, and Unáo is reported to have held less than twelve meetings, and to be otherwise defective in its administration. In the Central Provinces the number of municipalities was fifty-two, of which only eighteen were in towns of more than 10,000 inhabitants. One, Hutta, was withdrawn in the course of the year, and the Chief Commissioner remarks that it would probably be better if others were so as well. Generally favourable results are reported in the Jubbulpore and Chhatisgarh divisions, and a deficient number of meetings in Narsinghpur, Betul, and Multai. In Nágpur the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Commissioners are said to be habitually unpunctual, so that only three meetings were held with a full number. A few members were reported by the Deputy Commissioners for zeal and energy, and administration on the whole is said to have been satisfactory.

The impression conveyed by the working of municipal institutions in these three provinces is pretty much the same as that in those already noticed, and points clearly to the necessity, if they are to be a real success, of the adoption of some such measures as those recommended in this paper to give the requisite stimulus to the idea of local self-government in India.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE INDIAN CIVIL SERVICE AND THE FURTHER ADMISSION OF NATIVES OF INDIA.*

By J. B. Pennington.

Nearly eleven years ago Mr. Connell read a very excellent and exhaustive paper on the above subject, and came to the conclusion that we "could not then foresee the time when it will cease to be necessary in all the higher branches of the administration that a *large proportion* of appointments should be held by members of the covenanted Civil Service, or that this *corps d'élite* should be mainly European."

What I wish this meeting to consider is, whether we have now reached that time; or, at any rate, whether it is possible to materially decrease the proportion of appointments to be held by members of the Civil Service, and to decrease the proportion of Europeans in that service. Before going further, I think it desirable to say that I quite accept the view expressed by Sir Richard Meade, chairman of Mr. Connell's meeting, that "it is the wish at the present time (1891) of all the best officers in India to do everything that is possible to advance the natives, and to give them a fair share in the administration of their country," and I am quite satisfied that it is the *bonâ fide* policy of the English people—so far as they can be said to have any policy on the subject—to so educate and train the natives of India that they may become fit to manage their own affairs if, like the Romans in Britain, we should at any time find it convenient to leave. If we are driven out of the country by superior force, we should naturally have no responsibility for the consequences; but if at any time the English democracy should make up its mind to retire voluntarily, and we had not so prepared the natives that

* See the Proceedings of the East India Association elsewhere in this *Review* for discussion on this paper.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000083

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

they would have a reasonable prospect of carrying on the government, we should, in my opinion, be everlastingly disgraced. I do not profess to know enough of the views of the democracy to say whether such a contingency ought to be provided for; but, if it is at all within the bounds of possibility, it is clear that it ought to be our endeavour to constantly reduce the proportion of Europeans in the service of the Government, and that we ought systematically to keep the number of Europeans down to the very minimum absolutely necessary to carry on the government on the present system.

I should also like to point out that if, as even Mr. Dadabhai seems to admit, a certain number of Europeans in the Civil Service are still indispensable, the present system of entirely open competition is very illogical, and even ludicrous; because it is quite on the cards, however improbable, that a sufficient number of native candidates *might* appear in any year and succeed in securing all the vacancies. We need not go far to find native gentlemen who have come out very high in the list of successful candidates—my friend Mr. Dutt is a most conspicuous example—and it is quite within the bounds of possibility that, if a sufficient number were in a position to undertake such an expensive and abhorrent voyage, they *might* beat all their European competitors. Why not? There are certainly a sufficient number of clever youths in the whole of India; and when we have a Madras Brahmin coming out first in English composition, and with extremely high marks, one does not know what might happen if the conditions of the examination were such as to admit of unlimited competition from India. It is much to be regretted, I think, that those conditions are not at present either fair or reasonable. The native candidate of small means is most unfairly handicapped by having to make a long journey, the expense of which is prohibitory to all but the well-to-do, so that the number of natives competing has always been extremely limited in comparison even with the educated

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

population. I cannot bring myself to believe that it is the deliberate intention of any body of English gentlemen to put such an unfair obstacle in the way of the aspiring native. Not that I object to the competitors having to come to England. I am most strongly opposed to the farce of simultaneous examinations in India and England for many reasons, but especially because the mere journey is a test of enterprise, which is in itself an invaluable proof of fitness, and I believe that a few years' residence in this country is almost indispensable for any candidate, if only to show his superiority to antiquated caste prejudices; but to make the possession of wealth a *sine quâ non* for admission into the Civil Service is utterly destructive of the first principle of open competition. I would therefore do whatever is possible to make the competition really *fair*, subject to the conditions that the examination shall be held only in London, and that some residence at a University in this country, either before or after the examination, shall be insisted on. I do not propose to enter on the question of the fitness of natives for high office in India, because I assume that is already taken for granted under the present system of completely open competition. But before making any suggestion as to possible reform, I ought, perhaps, to refer, however briefly, to other proposals that have been made—notably, by Mr. Dadabhai Naoroji. Even he, as I said before, seems to admit—I am not quite sure whether he does or not—that a certain backing of Europeans is still indispensable, though, as far as I am aware, he has never put forth any estimate of the number he would retain. Clearly, however, he thinks the time has come when the administration should be practically in the hands of natives, and he bases his aspirations on two grounds: first, the repeated pledges of 1833 and 1858, to the effect that, "*so far as may be*, our subjects, of whatever race or creed, shall be freely and impartially appointed to offices in our service," and that "no one shall be excluded *merely* by reason of his religion, place of birth, descent, or any of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

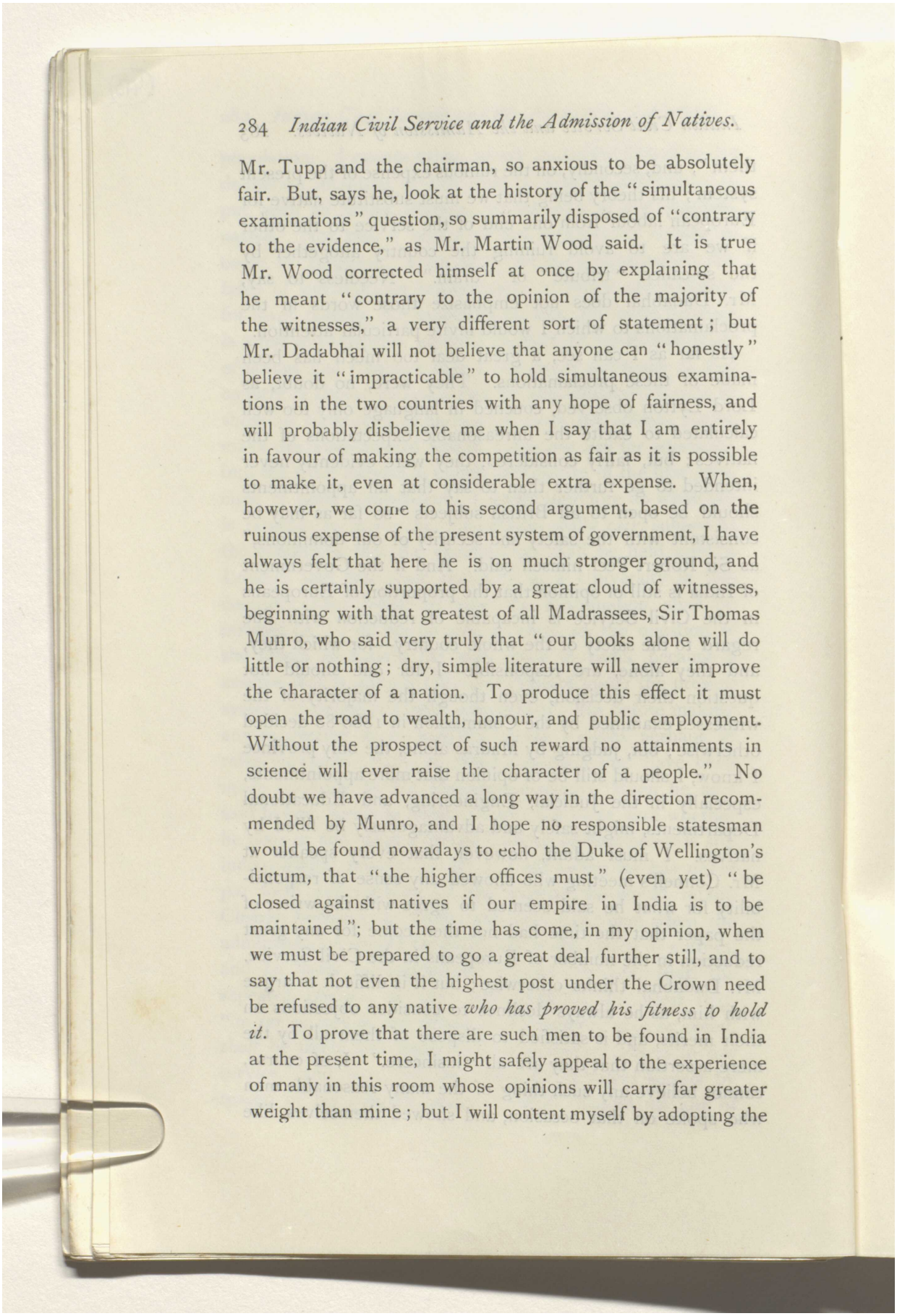
them"; and, secondly, on the ruinous expense of the present system; his theory being that we must substitute native for European labour from one end of the service to the other if we are to avoid ruining the country altogether by the so-called "tribute" or "drain." Needless to say, Mr. Dadabhai does not emphasize those words in the proclamations to which I would invite particular attention.

As far as I can see, a great deal too much has been made of these proclamations. They were, no doubt, as Lord Lytton observed, couched in language only too well calculated to excite the unreasonable expectations of the natives; but, fairly considered, they were evidently never intended to go further than to say that all appointments should be open to all British subjects "so far as may be consistent with the safety and security of our dominions," as Sir Robert Peel himself said. And if the Government of India is still of opinion that the proportion of Europeans in the Civil Service is incapable of reduction with due regard to the safety of the whole country—for which they, and they alone, are responsible—I for one should not question their decision, even though the majority of the witnesses examined by the Commission in 1886-88 decided otherwise; but, judging by Madras alone, the only province I know, I should still be of opinion that more appointments, especially in the Judicial, Engineering, and Educational Departments, might safely and advantageously be filled by natives. I must admit, however, that every speaker at Mr. Connell's meeting who showed any sense of responsibility for what he said seemed to agree with the writer of the paper that the time had not then come for any great reduction in the number of Europeans in the Civil Service. Mr. Dadabhai thinks otherwise; but it is difficult to argue with him, as he always declines to consider objections on their merits, and is satisfied to dispose of them all by the mere assertion that they are all "insincere." I, of course, cannot believe any such thing of the many reasonable men who spoke on that occasion, and showed themselves, like

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Mr. Tupp and the chairman, so anxious to be absolutely fair. But, says he, look at the history of the "simultaneous examinations" question, so summarily disposed of "contrary to the evidence," as Mr. Martin Wood said. It is true Mr. Wood corrected himself at once by explaining that he meant "contrary to the opinion of the majority of the witnesses," a very different sort of statement; but Mr. Dadabhai will not believe that anyone can "honestly" believe it "impracticable" to hold simultaneous examinations in the two countries with any hope of fairness, and will probably disbelieve me when I say that I am entirely in favour of making the competition as fair as it is possible to make it, even at considerable extra expense. When, however, we come to his second argument, based on the ruinous expense of the present system of government, I have always felt that here he is on much stronger ground, and he is certainly supported by a great cloud of witnesses, beginning with that greatest of all Madrassees, Sir Thomas Munro, who said very truly that "our books alone will do little or nothing; dry, simple literature will never improve the character of a nation. To produce this effect it must open the road to wealth, honour, and public employment. Without the prospect of such reward no attainments in science will ever raise the character of a people." No doubt we have advanced a long way in the direction recommended by Munro, and I hope no responsible statesman would be found nowadays to echo the Duke of Wellington's dictum, that "the higher offices must" (even yet) "be closed against natives if our empire in India is to be maintained"; but the time has come, in my opinion, when we must be prepared to go a great deal further still, and to say that not even the highest post under the Crown need be refused to any native *who has proved his fitness to hold it*. To prove that there are such men to be found in India at the present time, I might safely appeal to the experience of many in this room whose opinions will carry far greater weight than mine; but I will content myself by adopting the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000020

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

generous words of the Chairman of this Association on a recent occasion, and say that when *I* "look back on my life in India and the many good friends I had there among all classes of the native community, when I remember those *honourable*, industrious, law-abiding, sober, *manly* men," I doubt if we have a greater choice of excellent officials even in this country. But for the madness of mere racial prejudice in India, I see no reason at all why one of our Chairman's many friends should not conduct the business of one of our provinces quite as successfully as, I suppose, Ranjitsinjhi manages the Sussex Eleven. Let us not be generous in words only, but rest assured that we may safely employ many more of such men as were described so sympathetically by Sir Lepel Griffin.

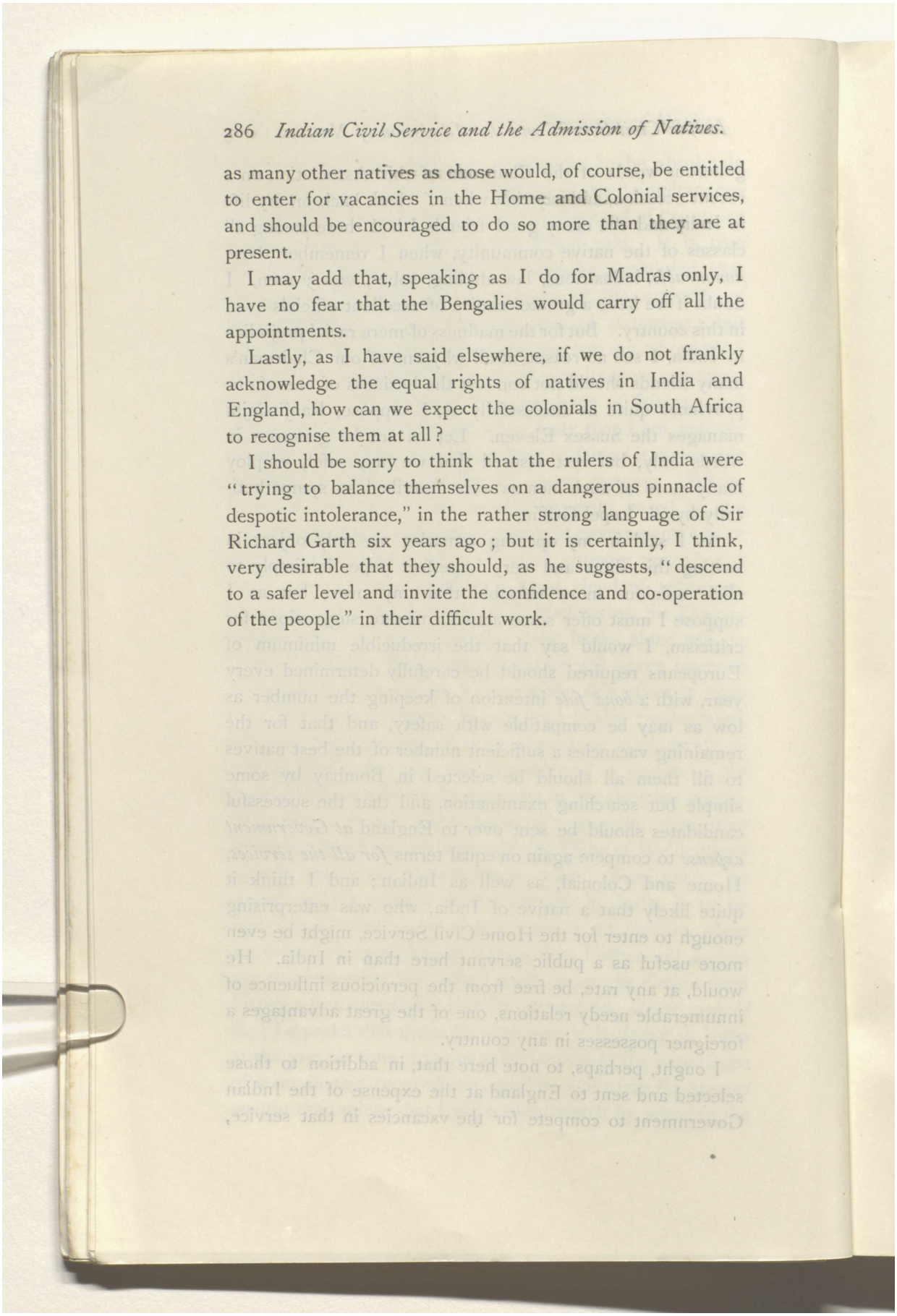
As I said in my opening remarks, my only object in writing this short and very imperfect paper is simply to elicit opinions more valuable than my own; but as I suppose I must offer some actual concrete suggestions for criticism, I would say that the irreducible minimum of Europeans required should be carefully determined every year, with a *bonâ fide* intention of keeping the number as low as may be compatible with safety, and that for the remaining vacancies a sufficient number of the best natives to fill them all should be selected in Bombay by some simple but searching examination, and that the successful candidates should be sent over to England *at Government expense* to compete again on equal terms *for all the services*, Home and Colonial, as well as Indian; and I think it quite likely that a native of India, who was enterprising enough to enter for the Home Civil Service, might be even more useful as a public servant here than in India. He would, at any rate, be free from the pernicious influence of innumerable needy relations, one of the great advantages a foreigner possesses in any country.

I ought, perhaps, to note here that, in addition to those selected and sent to England at the expense of the Indian Government to compete for the vacancies in that service,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



as many other natives as chose would, of course, be entitled to enter for vacancies in the Home and Colonial services, and should be encouraged to do so more than they are at present.

I may add that, speaking as I do for Madras only, I have no fear that the Bengalies would carry off all the appointments.

Lastly, as I have said elsewhere, if we do not frankly acknowledge the equal rights of natives in India and England, how can we expect the colonials in South Africa to recognise them at all?

I should be sorry to think that the rulers of India were "trying to balance themselves on a dangerous pinnacle of despotic intolerance," in the rather strong language of Sir Richard Garth six years ago; but it is certainly, I think, very desirable that they should, as he suggests, "descend to a safer level and invite the confidence and co-operation of the people" in their difficult work.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000003

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE POVERTY OF THE RAYAT.

By Rusticus.

By the time that these pages appear those interested in India will have learned the result of Sir W. Wedderburn's deputation to the Secretary of State on behalf of the "Famine Union." The object was to beg for a full inquiry into the poverty of the Rayat, and one can very well forecast the answer of official optimism. Such an inquiry was held in 1879-80 by the Commission of which the late Sir James Caird was President, and the results are recorded in the very able report drawn up by Mr. (now Sir Charles) Elliott. You may go into test villages, taken at random, and probe the life and condition of every cultivator, investigate the origin of his indebtedness, and trace the nature of his security, the rate of his resource, the amount already paid, and the prospect (if any) of ultimate clearance. But even so the whole truth will not be learnt, or if it could yet you would never know whether the poor man was better off than he was twenty years ago. Even so you could not base any administrative reform on such statistics. So it may be argued.

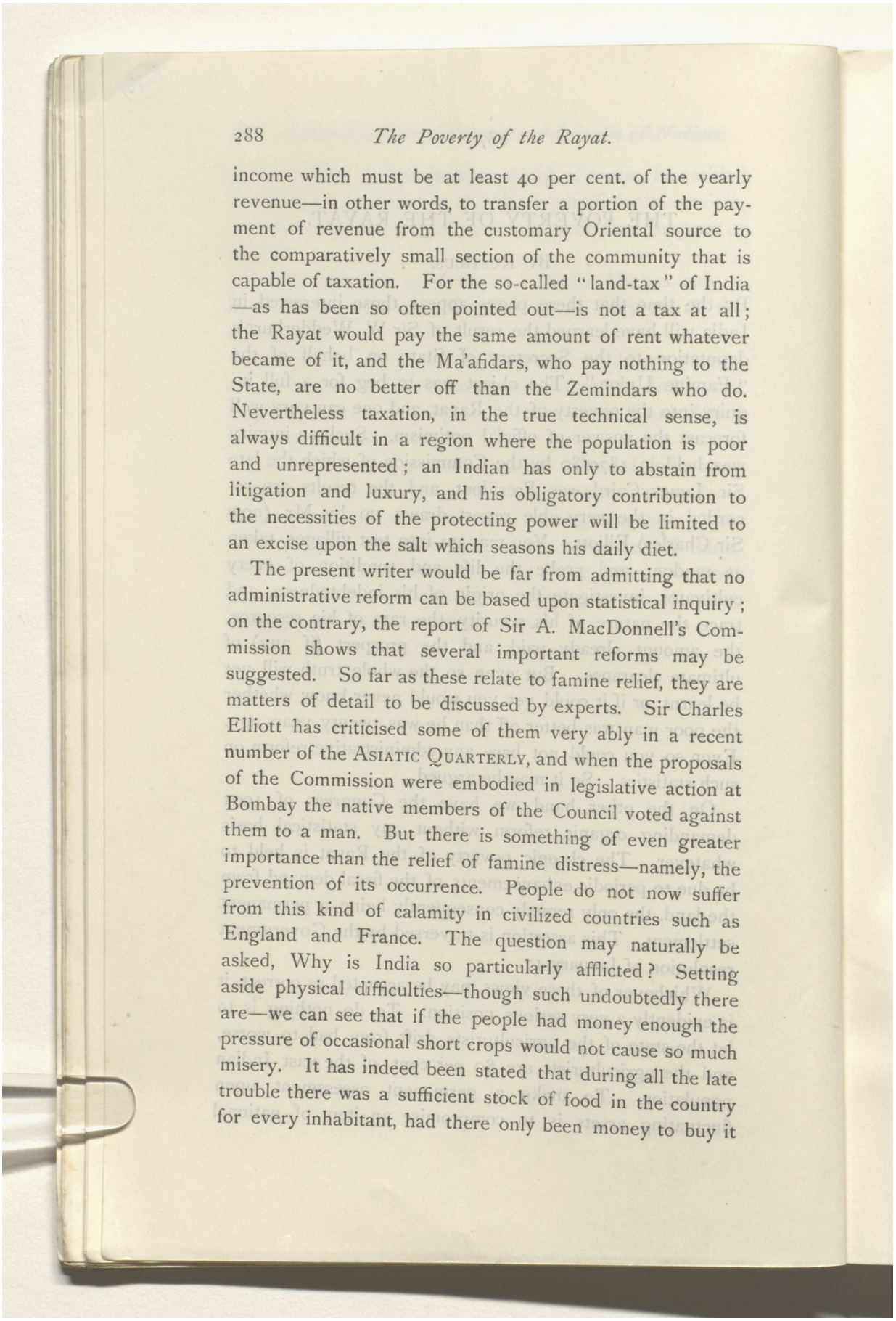
On the other hand, we have the Congress of 1901 demanding organic reform without any statistical basis whatever. The chronic poverty of the Rayat is held to be due to periodic enhancements of the fiscal demand from the land, the only remedy consequently being a permanent settlement. This assertion is traversed by the Government resolution of January 17.

Whichever of these views may be accepted as correct, it is evidently a very serious position. To do nothing is to let the state of the agriculturists drift from bad to worse, and the agriculturists are 80 per cent. of the vast Indian population. To make a permanent assessment upon fluctuating assets is to compromise an item of national

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00006d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



income which must be at least 40 per cent. of the yearly revenue—in other words, to transfer a portion of the payment of revenue from the customary Oriental source to the comparatively small section of the community that is capable of taxation. For the so-called "land-tax" of India —as has been so often pointed out—is not a tax at all; the Rayat would pay the same amount of rent whatever became of it, and the Ma'afidars, who pay nothing to the State, are no better off than the Zemindars who do. Nevertheless taxation, in the true technical sense, is always difficult in a region where the population is poor and unrepresented; an Indian has only to abstain from litigation and luxury, and his obligatory contribution to the necessities of the protecting power will be limited to an excise upon the salt which seasons his daily diet.

The present writer would be far from admitting that no administrative reform can be based upon statistical inquiry; on the contrary, the report of Sir A. MacDonnell's Commission shows that several important reforms may be suggested. So far as these relate to famine relief, they are matters of detail to be discussed by experts. Sir Charles Elliott has criticised some of them very ably in a recent number of the ASIATIC QUARTERLY, and when the proposals of the Commission were embodied in legislative action at Bombay the native members of the Council voted against them to a man. But there is something of even greater importance than the relief of famine distress—namely, the prevention of its occurrence. People do not now suffer from this kind of calamity in civilized countries such as England and France. The question may naturally be asked, Why is India so particularly afflicted? Setting aside physical difficulties—though such undoubtedly there are—we can see that if the people had money enough the pressure of occasional short crops would not cause so much misery. It has indeed been stated that during all the late trouble there was a sufficient stock of food in the country for every inhabitant, had there only been money to buy it

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000063

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

with. Now that is a very serious matter, and one that takes Indian famine out of the category of Divine visitation and brings it into that of evils remediable by man.

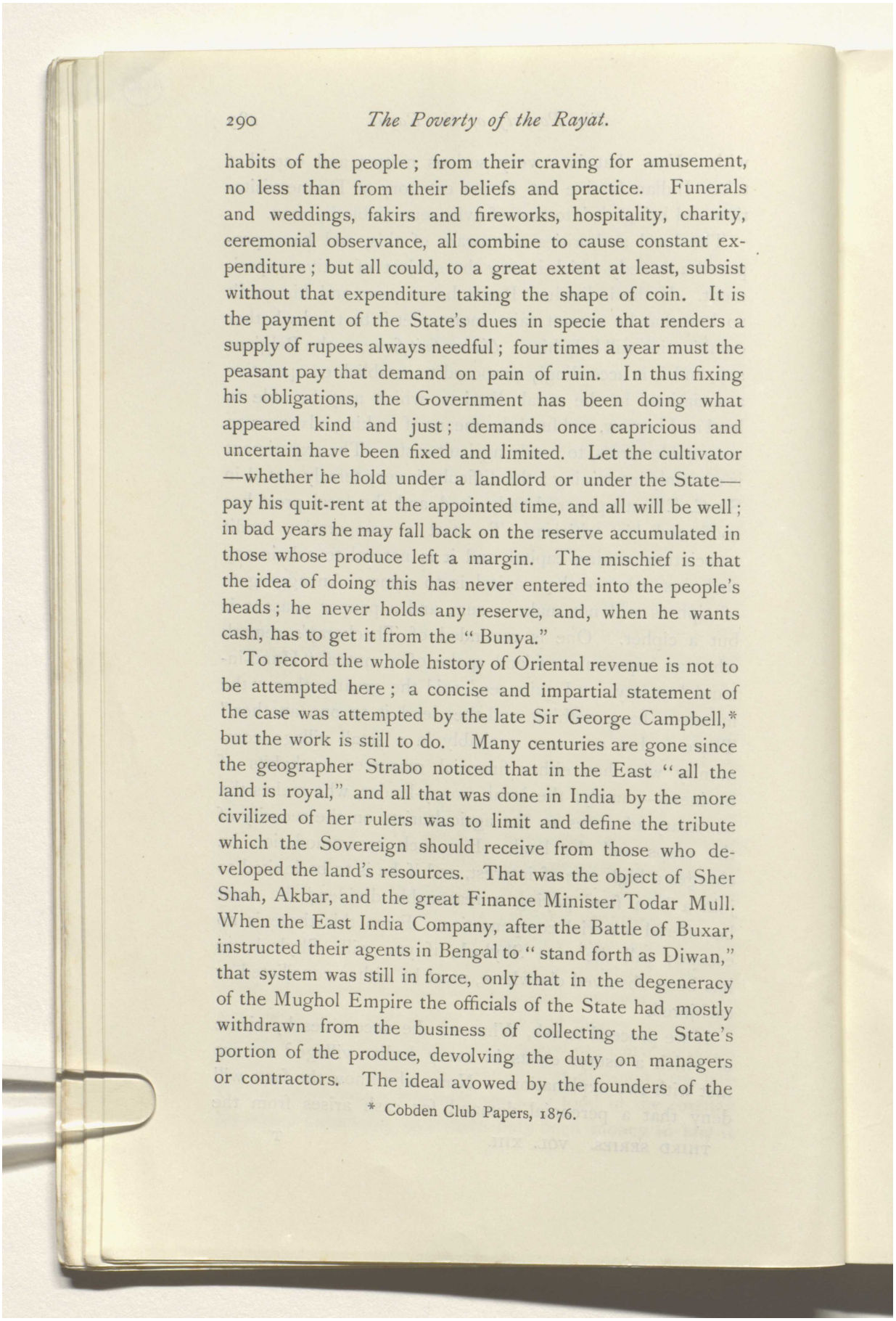
The local authorities are aware of this, and have proposed a remedy which is now the subject of active experiment. If the individual Rayat be so poor and his credit so low that he cannot raise money, let it be tried whether combination will help him. *Union fait force*, as the Belgians say, and it is accordingly proposed to establish co-operative associations in the rural districts, which may be able to lend and borrow, and fund the means of making advances on reasonable terms, to needy agriculturists. The experiment is certainly interesting; the difficulty is very tersely stated in Sir C. Elliott's paper already cited, and the local press has confirmed his criticism. To start a co-operative credit association requires capital, and it is natural to ask in any such case whence that capital is to come. An aggregate of ciphers will not make a sum, and a pauper peasant is but a cipher. One is reminded of Thackeray's remark when an impecunious friend spoke of a mutual "Hand-in-hand" society. "I quite see," said the great author, "the members have nothing, and they lend it to one another." There is but one man probably in a small village community who has either financial resources or habits of business—namely, the local money-lender, who makes the necessary advances to the agriculturists on the security of the crops and the land. For such accommodation he charges a high rate of interest, and if he is to be invited to join a loan fund paying a reasonable dividend, he must be offered material compensation. From this there is no escape; call the man Shylock, if you will—Shylock, as has been observed elsewhere, must be either conciliated or cashiered.

If we proceed to ask, What are the necessities by virtue of which a usurer exists in every Indian village? we are met with two explanations. None who know the facts will deny that a perennial demand for cash arises from the

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



habits of the people; from their craving for amusement, no less than from their beliefs and practice. Funerals and weddings, fakirs and fireworks, hospitality, charity, ceremonial observance, all combine to cause constant expenditure; but all could, to a great extent at least, subsist without that expenditure taking the shape of coin. It is the payment of the State's dues in specie that renders a supply of rupees always needful; four times a year must the peasant pay that demand on pain of ruin. In thus fixing his obligations, the Government has been doing what appeared kind and just; demands once capricious and uncertain have been fixed and limited. Let the cultivator —whether he hold under a landlord or under the State— pay his quit-rent at the appointed time, and all will be well; in bad years he may fall back on the reserve accumulated in those whose produce left a margin. The mischief is that the idea of doing this has never entered into the people's heads; he never holds any reserve, and, when he wants cash, has to get it from the "Bunya."

To record the whole history of Oriental revenue is not to be attempted here; a concise and impartial statement of the case was attempted by the late Sir George Campbell,* but the work is still to do. Many centuries are gone since the geographer Strabo noticed that in the East "all the land is royal," and all that was done in India by the more civilized of her rulers was to limit and define the tribute which the Sovereign should receive from those who developed the land's resources. That was the object of Sher Shah, Akbar, and the great Finance Minister Todar Mull. When the East India Company, after the Battle of Buxar, instructed their agents in Bengal to "stand forth as Diwan," that system was still in force, only that in the degeneracy of the Mughol Empire the officials of the State had mostly withdrawn from the business of collecting the State's portion of the produce, devolving the duty on managers or contractors. The ideal avowed by the founders of the

* Cobden Club Papers, 1876.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

system had been that the State was entitled to one-third of the gross produce, and it was to be collected in kind, excepting that a few specially marketable items—known as "zubti"—were subject to an Excise instead of being divisible. Under the Viceroys of Bengal and Bihar there was no limit in actual practice; the managers and contractors collected as much as they could, and paid to the Viceroy's Treasury as little as the Viceroy could compel. Warren Hastings adopted that method, subject to the condition of punctuality. No questions were asked so long as the revenue was duly paid by the "Zemindars," who were no more owners of the land than a Tahsildar is of his Tahsil, which he manages, but cannot alienate or bequeath.

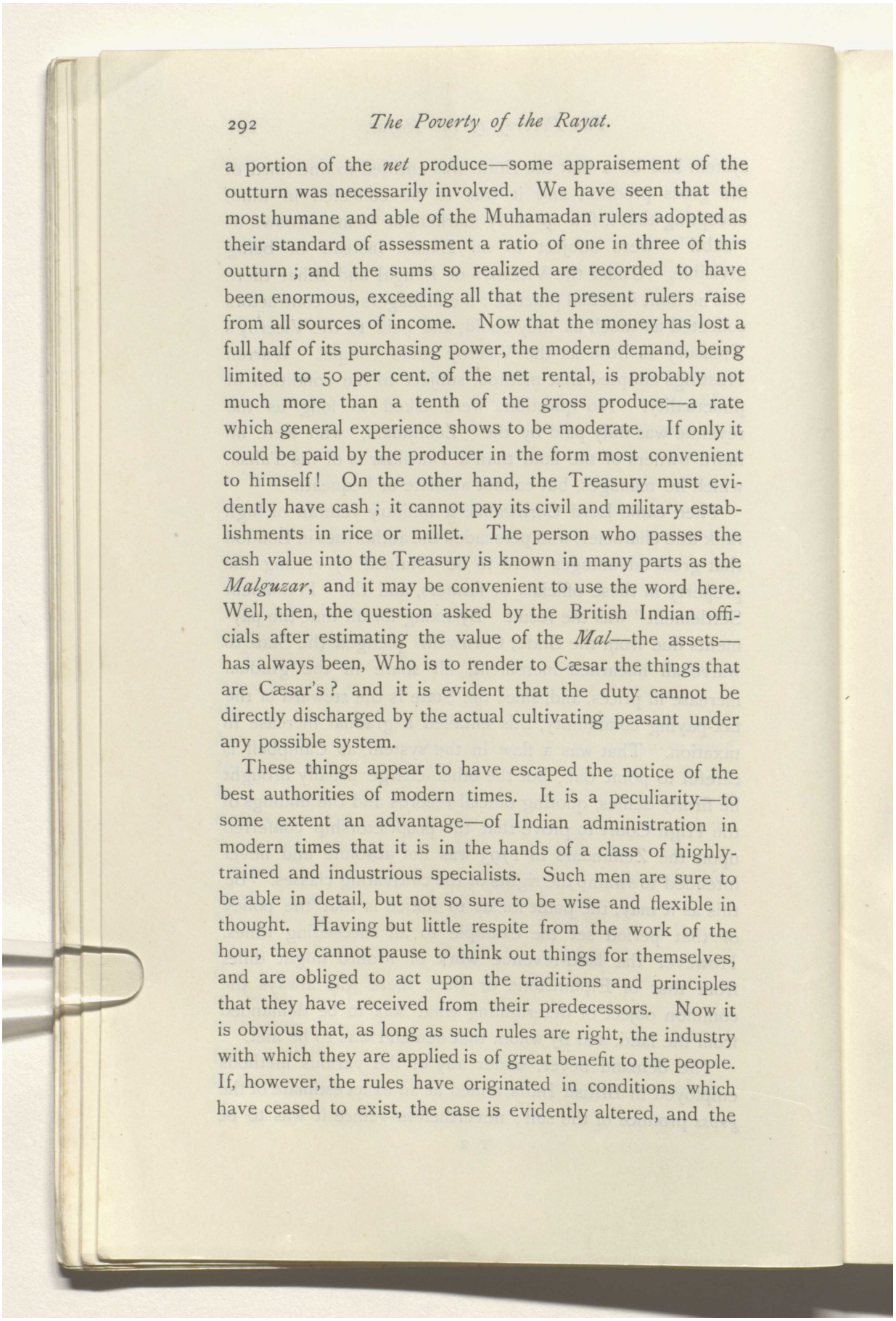
Then came Lord Cornwallis, a military veteran of high rank and character, who persuaded the authorities in London that great advantages were to be obtained by vesting the property in these officials or farmers, and the "Permanent Settlement" was the result. By fixing for all time the payments due from the State, Cornwallis pledged the State to waive all unearned increment, all share in the gradual increase in prices, and, since the State is the steward of the tax-paying community, this entailed a gradual increase in taxation. That was a flaw in the system, as Campbell is careful to point out; but the other charge usually brought he firmly denies, quoting official records and the findings of the High Court to prove that the proprietorship conferred upon the Zemindars in 1793 was not absolute and never intended to swamp the rights of the cultivating classes. Be this as it may, the point for us to notice is that the policy of that period set the example to all succeeding times. However the land-revenue work of Monro might differ from that of Elphinstone or Bird, there was always the common object of determining what was to be demanded from the land, and by whom that demand was to be met.

The demand never, under any of the various methods employed in British India, aimed at an exact estimate of the *gross* produce of the soil; nevertheless—since it was to be

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000049

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



a portion of the *net* produce—some appraisement of the outturn was necessarily involved. We have seen that the most humane and able of the Muhamadan rulers adopted as their standard of assessment a ratio of one in three of this outturn; and the sums so realized are recorded to have been enormous, exceeding all that the present rulers raise from all sources of income. Now that the money has lost a full half of its purchasing power, the modern demand, being limited to 50 per cent. of the net rental, is probably not much more than a tenth of the gross produce—a rate which general experience shows to be moderate. If only it could be paid by the producer in the form most convenient to himself! On the other hand, the Treasury must evidently have cash; it cannot pay its civil and military establishments in rice or millet. The person who passes the cash value into the Treasury is known in many parts as the *Malguzar*, and it may be convenient to use the word here. Well, then, the question asked by the British Indian officials after estimating the value of the *Mal*—the assets—has always been, Who is to render to Cæsar the things that are Cæsar's? and it is evident that the duty cannot be directly discharged by the actual cultivating peasant under any possible system.

These things appear to have escaped the notice of the best authorities of modern times. It is a peculiarity—to some extent an advantage—of Indian administration in modern times that it is in the hands of a class of highly-trained and industrious specialists. Such men are sure to be able in detail, but not so sure to be wise and flexible in thought. Having but little respite from the work of the hour, they cannot pause to think out things for themselves, and are obliged to act upon the traditions and principles that they have received from their predecessors. Now it is obvious that, as long as such rules are right, the industry with which they are applied is of great benefit to the people. If, however, the rules have originated in conditions which have ceased to exist, the case is evidently altered, and the

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000048

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

labour so strenuously bestowed is not merely lost, but often made an instrument of evil.

It is for this reason that the efforts of the "Union" mentioned above are to be regarded as promising of benefit to India. Under the rule of the Old East India Company, now almost passed from recollection, abuses were by no means rare, but a remedy was never far remote. Every twenty years the Company's charter lapsed, and ere it could be renewed a long discussion occurred, alike in Parliament and in the press. Were such consultations held in the present day they would be doubtless founded on a searching inquiry such as is urged by the "Union." It is impossible to predict with any certainty what the result of such an inquiry would be. It might show that all which ought to be known in regard to the condition of the Rayat was already established, and that the Government could effect nothing more for his protection against distress and debt. On the other hand, it might be shown that the Rayat was most prosperous and contented in Bengal; that the element of perpetuity in the demand was indeed the flaw that Campbell called it, and not the panacea contemplated by the Congress;* but that, apart from this, the prosperity of Bengal was attributable to the nature of the land-revenue system. Almost alone in British India, the old provinces in this lieutenancy raise their share of the rent from middlemen, and the actual cultivator is spared the trouble and anxiety involved in the office of Malguzar.

* "A financial mistake," the sometime Governor calls it, and "a sin against posterity."—(*Systems of Land-Tenure*, edited for the Cobden Club by J. W. Probyn, p. 145).

Reference: Mss Eur F111/393. Copyright for this page: Unknown

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

MOROCCO: THE SULTAN AND THE BASHADOURS.

By Ion Perdicaris.

The presence, in January and February, of no less than four of the representatives of the Powers at the coast town of Rabat during the temporary stay there of the young Sultan, Mulai Abd-el-Aziz, and his Court, has afforded the Ministers of England, Austria, Germany, and France the opportunity of treating directly with His Shereefian Majesty, instead of conducting negotiations from Tangier.

The object of Sir Arthur Nicolson's visit was to confirm and ratify the arrangements discussed last summer in London with the Sultan's special envoy, Sid el-Mahdi-el-Menebhi, who, it may be remembered, afterwards visited Berlin, whence he returned, suddenly, and, apparently, in disgrace, attended by Kaid Sir Harry Maclean.

Those who knew what was passing at the Shereefian Court, then at Morocco City, the southern capital of the Moorish Empire, thought, indeed, that it was only the presence of "the Kaid," together with urgent remonstrances from the English Legation at Tangier, which saved Menebhi from arrest on a serious charge of peculation. The inference was that England had suffered an awkward check, since it was evident that the old Moorish faction with Sid Fedoul Gharnit, long Minister for Foreign Affairs under the late Sultan, Mulai el Hassan, and certainly one of the most wily and adroit of Moorish Vizirs, was then in the ascendant. To-day, however, Menebhi is, more than ever, a power at Court—a circumstance which favours a radical change of policy, together with the possible reform of many old customs that "were more honoured in the breach than the observance."

Nothing, indeed, has more surprised those who best know Morocco than this sudden change of attitude on the part of the officials, in whose hands, for the moment at

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

least, is vested the power to dispose of the lives and fortunes of the inhabitants.

After the death, in 1894, of Mulai el Hassan, and whilst the late Grand Vizir, Ba Hamed ben Musa, a fanatical Moslim of the old type, resolute in his fixed opposition to all foreign influence, was in office, the young Sultan himself seemed but a pale effigy of authority, without policy or will of his own, an inert and uninterested spectator of events, scarcely known to his subjects except as a passive feature in state functions. No sooner, however, was the imperious Vizir dead, than Abd-el-Aziz threw off the silence and reserve which had hitherto characterized him, and awoke from his apparent lethargy. Never, perhaps, has a change so sudden or radical been seen. Eager and alert, the once immobile prince now shows the most lively interest in all that concerns his country and his people, and what is the more surprising, considering the circumstances and his education, welcomes with enthusiasm frequent innovations from abroad, and betrays the most lively curiosity concerning foreign customs and modern inventions, even to the sports in which the foreign communities take so keen a delight. Not only has he become an adept on his bicycle and with the camera (with a special predilection for the snapshot), but he has had a cement tennis court laid at Rabat for the purpose of enjoying the game with his diplomatic guests; whilst, on other occasions, discarding all his Oriental magnificence of velvet saddles embroidered in gold, he rides to the hounds on English leather and dressed like an English sportsman.

How striking such a change must seem to many of his subjects can best be realized when the fact is remembered that only fourteen years ago, when Mulai el Hassan, the late father of the present Sultan, visited Tangier, a European photographer, established in front of the legations, was stoned by the mob for venturing to photograph the Sultan as the latter rode through the main street of the town on his way to the principal mosque.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

This sudden departure from the habits and even the modes of thought of former rulers of Morocco is attributed, by most observers, to the personal ascendancy and influence of El Mahdi and to the latter's intimacy with Kaid Sir Harry Maclean, the Scotch Military Instructor of His Shereefian Majesty's forces. Sid el-Mahdi-el-Menebhi has usually filled the post of Minister of War, and, although he does not always enjoy the titular rank of Grand Vizir, is, when in favour, the virtual Prime Minister of his Sovereign. These somewhat pro-English influences have been of late undoubtedly strengthened and enforced by the Sultan's personal regard and esteem for the British Minister, Sir Arthur Nicolson.

There has, however, been another and scarcely less eventful factor in the equation—viz., the fear of France, provoked by the occupation of Tuat on the south-eastern confines of Morocco, and by the advance, last summer, of French troops upon the Moorish town of Figuig.

Between these two contending forces the face of the young Sultan appears, with each succeeding month, to be set more firmly towards the reforms which he is urged to effect. Amongst these figure, in the first instance, the abandonment of the vicious system of the farming out of the collection of "the tenth," or tax upon agriculture, together with the substitution of paid officials, including Kaids and governors, in the place of the insatiable native officials now allowed to levy at pleasure upon the towns or bashalicks confided to their care.

Next in order is the removal of the innumerable barriers to trade and commerce, with a more general permission to export produce, hitherto limited to a few articles, such as beans, maize, aniseed, leather, gum, etc., and, finally, the establishment of means of communication, such as roads, bridges, railways, telegraphs, etc.—not so much in the shape of concessions to foreign companies, but as operations to be carried out directly by the Government itself.

The dangerous point in connection with these plans is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000080

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the necessity for the employment of experts, not merely to carry out administrative experiments of so novel a character, especially for such an "old-bottle" country as Morocco, one where the new wine must be poured into the ancient receptacles with more than usual care, in order to avoid a serious catastrophe to the antique skin with which the would-be reformer is condemned to deal, but experts—and who says "experts," knows that this "subject" must of necessity be qualified by the adjective "foreign," since, among the natives of this degenerate land, no experts, save in the matter of mendacity, are to be found—but experts, as has been said, must be employed when the aforementioned public works are concerned, both engineers and, more especially, financial experts, without whom it would be impossible to obtain the large sums that are required—sums larger than either the Shereefian Treasury or the Customs of the various coast towns can supply, since, unfortunately, both Menebhi, during his recent ambassadorial excursions, and his Imperial master himself, have been spending more freely of late upon toys of various descriptions than has been quite prudent—toys ranging in importance from jewels for the ladies of the harem to motor-cars, and from "bikes" for practice in the Sultan's private grounds to so costly a plaything as a hundred kilometres of rails, with a neat selection of rolling-stock—not for commercial purposes, but, like the bicycles, merely for private amusement—whilst for higher flights a balloon figures in the list of orders.

In this emergency money must be found, and it may therefore be assumed that the modest announcement vouchsafed to the press, "that England and Morocco have agreed upon a *modus vivendi*," means, in reality, that a loan in one shape or another has been, or will shortly be, negotiated; indeed, a rumour is current among the populace that England is about to assume a virtual protectorate over Morocco! In fact, a protectorate appears, not only to the natives, but to many foreign observers as well, the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

only really effective means of realizing the proposed improvements.

The Sultan and his advisers are now already upon the horns of this dilemma, or they will soon be there; for it is almost certain to be a case of *no* protectorate, *no* reforms, *or* a protectorate more or less disguised, *and* trouble with France.

The Parisian press has, indeed, already spoken with no uncertain voice. The first paper to call public attention to the subject was an Opposition organ, *Le Gaulois*, which, under the heading "England at Tangier"—after alluding to the arrival at the latter town of several English *non*-commissioned officers to instruct the Sultan's troops (troops which are clad in uniform and equipment of English make), and to other real or imaginary indications of English preponderance—urges the French authorities to act while it is yet time, and before the Mediterranean has been closed by the British sentinels at Tangier, as well as at Gibraltar. Subsequently *Le Temps* and *La Patrie*, more serious journals and more Governmental in tone, take up the refrain, also advocating a vigorous policy on the part of France: nothing less than the occupation of Tafilelt, as compensation for any advantages England may obtain, either in the shape of railway concessions, or other tangible evidences of preponderating influence.

Mere newspaper bluster, if not backed up by strong national feeling, may be disregarded. Fortunately, moreover, the Waldeck Rousseau Cabinet has hitherto shown so much tact and good sense, that a policy of adventure on such insufficient ground as the confidence of the Sultan of Morocco in his English advisers, seems scarcely to be expected. Still, there are the approaching elections in France, after which Lord Salisbury, or his successor, may have to face a Government less to be depended upon to take a dispassionate view of the situation; for, of course, the mere idea of a war between France and England because Morocco favours one Power more than another is a

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000015

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

monstrous supposition, since all Morocco, or even ten times all Morocco, would not compensate even the victor in such an insane struggle for the tremendous losses entailed by a war between these two great Powers. Yet—and this is the never-to-be-forgotten point—nations are too apt to lose their head and be carried away by purely sentimental grievances; and it must be remembered that the scheme of a French united North African Empire, stretching from the confines of Tripoli to the Atlantic Ocean, and rounded off to the south-west by the French possessions of Senegal, to which France is persistently devoting the most strenuous efforts, is a Gallic ideal which dominates all Frenchmen with an intensity quite equal to the counter-balancing English conception of an uninterrupted right of way for England from Alexandria to Cape Town.

There is no use in shutting one's eyes to our neighbour's point of view. The intelligent statesman will, indeed, be careful to avoid so glaring a fault. It is to be hoped, therefore, that those who direct the policy of England where Morocco is concerned, may remember that the attempt to launch the latter country successfully upon the road to reform without providing against an open or masked attack by France, her nearest and most powerful neighbour, would be to act with little less than criminal cruelty towards Morocco, since the Sultan, left to himself, would be powerless to repel French aggression, in spite of the force of Moorish troops supposed to be so carefully drilled by Kaid Maclean.

This threat of the French occupation of Tafilelt could be but too easily realized, especially when the railway, for which even now material is being hurried forward, shall have been completed to Figuig. Moreover, such an occupation once effected, might of itself and alone prove fatal to the Filali dynasty in Morocco; for it is from Tafilelt that the ancestors of Abd-el-Aziz issued forth to conquer the kingdoms of Fez, of Morocco, of Sus, and of Draa, all of which provinces are now incorporated in the *Aiyala*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000016

مكتبة قطر الوطنية
Qatar National Library

Sherefia, as the Sultanate of Morocco is termed by its inhabitants.

Besides, it must always be borne in mind that pretenders and aspirants for the throne are not to be sought for. Harmless they may be at present, for lack of arms and means, but these are deficiencies which could be easily supplied by France, had she any interest in rallying to the support of some nominee of her own: the mountain-tribes of non-Arab descent, the Riffs, and other branches of the Berber or Sehlha races, tribes only too disposed to revolt against any established authority, as they have been from the time of the Roman, Gothic, or Byzantine occupations down to the present day.

It would be well, therefore, for the friends of the young Sultan to be careful, lest, whilst they are teaching him to play tennis and golf, how to take snapshots and to develop negatives, or how to drive his motor-car or sit his bicycle, that he does not fall from his throne—the throne of his Filali ancestors—which has been from time immemorial the richly-caparisoned, high-peaked Moorish saddle; for from the moral effects of such a fall from the seat of power all the king's men might not be able to set the Sultan up again!

Sir Arthur Nicolson arrived off Rabat, January 21, on board H.B.M. battleship *Illustrious*. The reception of the British Minister on landing—one might almost say his triumphal entry—escorted by his own suite on horseback, and attended by El Menebhi and the other Vizirs and Court officials, was of the most cordial character. The entire force of Moorish regulars now with the Sultan at Rabat—some 6,000 men—all from the country immediately about Morocco city, arrayed in their new uniforms, being under arms to receive the Minister; whilst the Sultan's household cavalry, in their flowing garb of many colours, executed the usual *laab-el-barud*, or powder play, as they preceded the escort.

One memorable departure from established custom

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000072

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

occurred subsequently, when the Sultan received his distinguished guests at the palace, instead of sallying forth on horseback surrounded by his troops, and with the red umbrella held above his head by his attendant slaves, a custom which will probably never again be resuscitated, as it implied the humiliating feature for the foreign envoys of standing bare-headed before the Sultan whilst their interpreter translated their address to the monarch of the faithful.

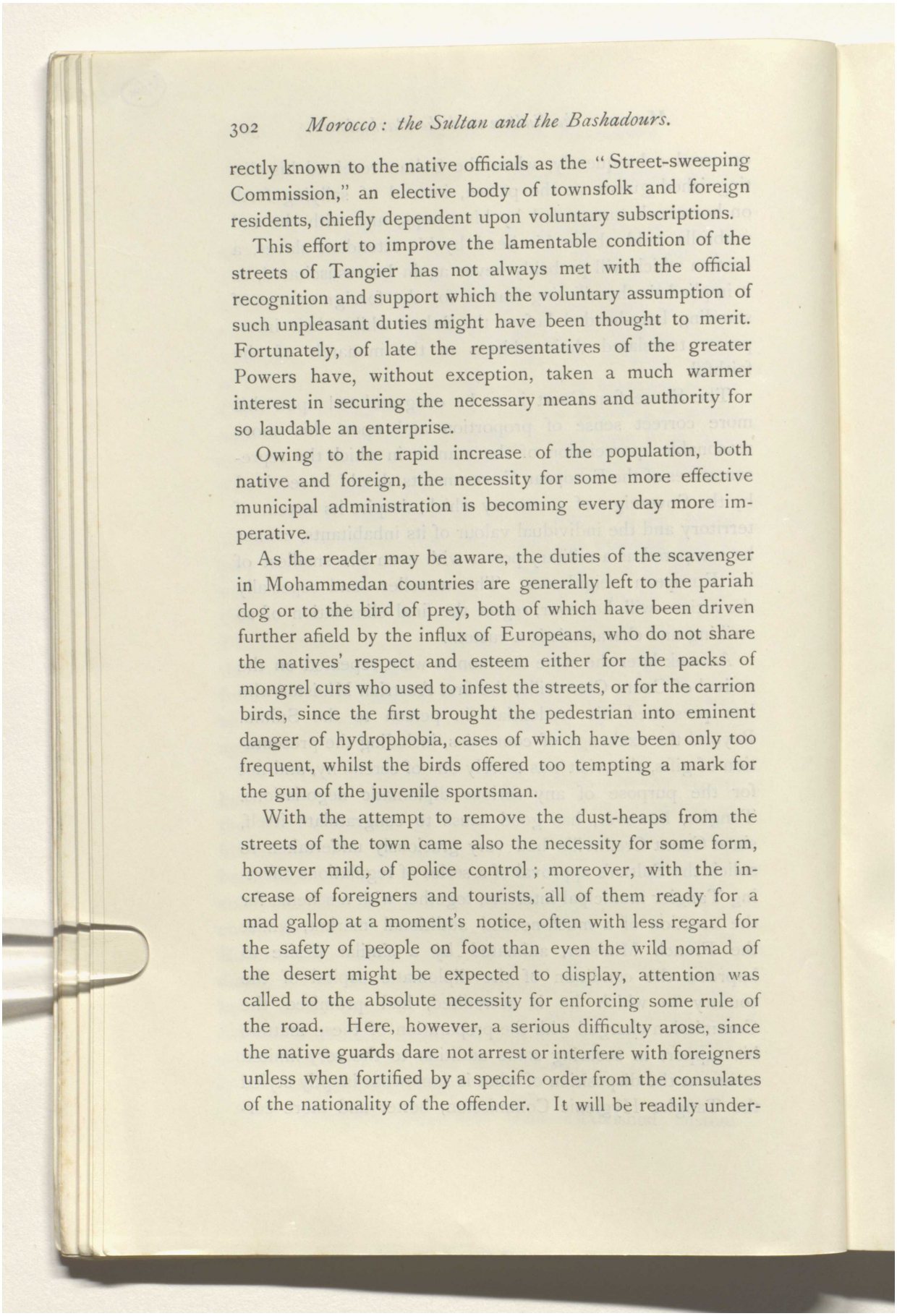
The Shereefian Court is to be congratulated upon this more correct sense of proportion and upon this more reasonable appreciation of the manner in which the representatives of the European Governments should be received by the Sovereign of a country which, despite its extent of territory and the individual valour of its inhabitants, cannot be compared as a military power with even the smallest of its European neighbours. The traveller—and especially the artist—will, however, regret the final elimination of so striking and characteristic a custom.

A week later the same ceremonies were repeated on the arrival of Count Crennville, the first Austrian Minister who has presented his credentials in person to the Sultan. Beyond the exchange of courtesies, including the presentation of gifts, this visit was merely one of ceremony, and not for the purpose of any serious diplomatic negotiations. Tangier, however, has good cause to congratulate itself, since Count Crennville had very graciously undertaken to solicit the Sultan's approval of a series of regulations affecting Tangier municipal interests, together with a scheme for the erection of a much-needed additional market, whilst the French Minister, animated by a similar desire to improve the condition of the diplomatic capital of the country to which he is accredited, had promised the Commission charged with the preparation of these matters his support in securing some addition to the very limited means at the disposition of what is somewhat inaptly styled the Tangier Hygienic Commission, better and more cor-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



rectly known to the native officials as the "Street-sweeping Commission," an elective body of townsfolk and foreign residents, chiefly dependent upon voluntary subscriptions.

This effort to improve the lamentable condition of the streets of Tangier has not always met with the official recognition and support which the voluntary assumption of such unpleasant duties might have been thought to merit. Fortunately, of late the representatives of the greater Powers have, without exception, taken a much warmer interest in securing the necessary means and authority for so laudable an enterprise.

Owing to the rapid increase of the population, both native and foreign, the necessity for some more effective municipal administration is becoming every day more imperative.

As the reader may be aware, the duties of the scavenger in Mohammedan countries are generally left to the pariah dog or to the bird of prey, both of which have been driven further afield by the influx of Europeans, who do not share the natives' respect and esteem either for the packs of mongrel curs who used to infest the streets, or for the carrion birds, since the first brought the pedestrian into eminent danger of hydrophobia, cases of which have been only too frequent, whilst the birds offered too tempting a mark for the gun of the juvenile sportsman.

With the attempt to remove the dust-heaps from the streets of the town came also the necessity for some form, however mild, of police control; moreover, with the increase of foreigners and tourists, all of them ready for a mad gallop at a moment's notice, often with less regard for the safety of people on foot than even the wild nomad of the desert might be expected to display, attention was called to the absolute necessity for enforcing some rule of the road. Here, however, a serious difficulty arose, since the native guards dare not arrest or interfere with foreigners unless when fortified by a specific order from the consulates of the nationality of the offender. It will be readily under-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000099

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

stood how impracticable, not to say impossible, is the application of police regulations by agents subject to such a complex system of checks, and exposed to such dangerous demands, implying the punishment of the native agent or guard in case he arrests even the native servant of a European or other non-native resident, without being previously supplied with the requisite order.

The remedy for this administrative chaos would be simple enough could the representatives of the Powers unanimously agree to allow the native agents of the Hygienic Commission, acting under the direction and control of a properly qualified European police officer, to enforce the regulations which have already been submitted to, and approved, both by the foreign Ministers and by the local or native authority itself.

Unfortunately one or two of the local representatives of the less important Powers, *plus royalist que le roy*, cannot see their way to authorize anyone, not immediately or directly under their own control, even to arrest and bring before their own consular tribunal offenders against these regulations or other disturbers of peace and order. Yet, singularly enough, these very hyper-scrupulous Ministers employ native guards, soldiers of the Basha, men of the same status as the guards of the Hygienic Commission, to arrest numbers of their (the Ministers in question) own nationality.

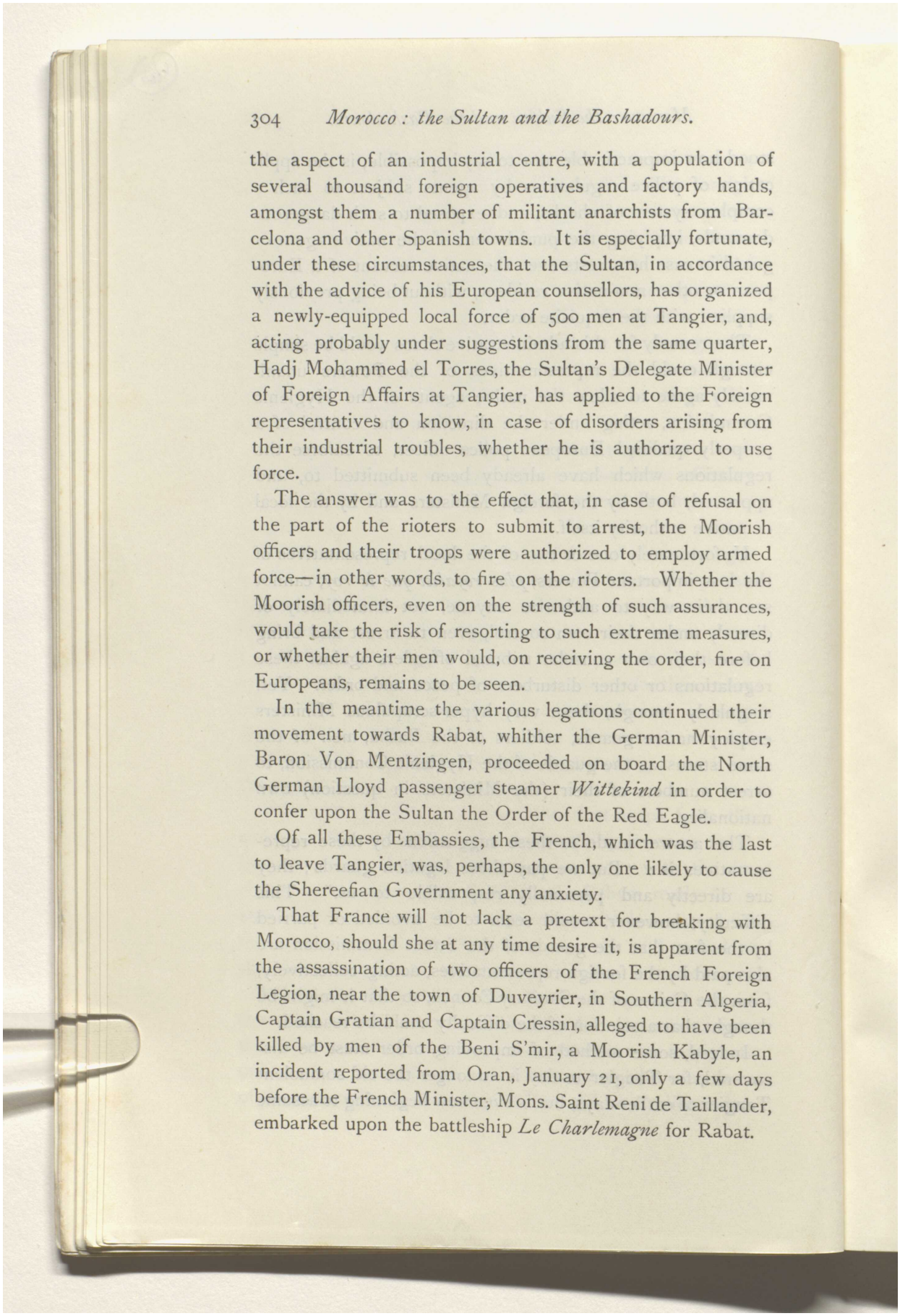
The answer made to these suggestions by these representatives is: "But we pay these legation guards; they are directly and personally responsible to us." This difficulty, however, would seem to be avoided or parried by the fact that the guards of the Street Commission are also paid by the foreign representatives, acting collectively, from the Caisse of the Sanitary Council, so that it might be thought that a solution of the difficulty could be reached.

Indeed, some method of improving order must be discovered, for Tangier to-day is no longer the old somnolent Tangier of earlier days, but is even now beginning to assume

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000013

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the aspect of an industrial centre, with a population of several thousand foreign operatives and factory hands, amongst them a number of militant anarchists from Barcelona and other Spanish towns. It is especially fortunate, under these circumstances, that the Sultan, in accordance with the advice of his European counsellors, has organized a newly-equipped local force of 500 men at Tangier, and, acting probably under suggestions from the same quarter, Hadj Mohammed el Torres, the Sultan's Delegate Minister of Foreign Affairs at Tangier, has applied to the Foreign representatives to know, in case of disorders arising from their industrial troubles, whether he is authorized to use force.

The answer was to the effect that, in case of refusal on the part of the rioters to submit to arrest, the Moorish officers and their troops were authorized to employ armed force—in other words, to fire on the rioters. Whether the Moorish officers, even on the strength of such assurances, would take the risk of resorting to such extreme measures, or whether their men would, on receiving the order, fire on Europeans, remains to be seen.

In the meantime the various legations continued their movement towards Rabat, whither the German Minister, Baron Von Mentzingen, proceeded on board the North German Lloyd passenger steamer *Wittekind* in order to confer upon the Sultan the Order of the Red Eagle.

Of all these Embassies, the French, which was the last to leave Tangier, was, perhaps, the only one likely to cause the Shereefian Government any anxiety.

That France will not lack a pretext for breaking with Morocco, should she at any time desire it, is apparent from the assassination of two officers of the French Foreign Legion, near the town of Duveyrier, in Southern Algeria, Captain Gratian and Captain Cressin, alleged to have been killed by men of the Beni S'mir, a Moorish Kabyle, an incident reported from Oran, January 21, only a few days before the French Minister, Mons. Saint Reni de Taillander, embarked upon the battleship *Le Charlemagne* for Rabat.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The most important issue which the Minister will probably be empowered to discuss with the Sultan will relate to the strategic railway or railways along the Algerian-Moorish frontier, of which the town of Figuig is the immediate objective. It will be remembered that this is a Moorish town, under the Sultan's jurisdiction, and that a line from Oujdah to Figuig, would run almost its entire course on Moorish territory; and Oujdah commands the approach to Fez, whilst Figuig covers Tafilelt. However amicably and gently any approach of the French lines, for which material is being already sent forward, may be suggested, the keenest susceptibility will doubtless be aroused.

It will be some time before the result of this series of missions to the Sultan will become apparent. Undoubtedly the attention of the various chancelleries is awakened, and even incidents far removed from Morocco and its immediate neighbours—such, for instance, as the Anglo-Japanese Treaty—may exercise some counter effect on Moorish affairs, since it will certainly tend towards some more or less successful effort on the part of Russia and France to score, if possible, in Persia and Morocco, as some offset, or compensation, for the advantage achieved by England in the "Far East."

Should Spain not go to pieces altogether economically, owing to industrial and political risings, an attempt will certainly be made to induce that Power to join the Franco-Russo alliance, especially should the Sagasta Cabinet go out. To this end Silvela, who aspires to the succession of the late Conservative chief, Canovas del Castillo, published an unsigned article in one of the leading reviews of Madrid, which attracted much attention at the moment, and which has been followed lately by an article in *La Revista de Aragon* of January, by Julian Ribera, another parliamentary notability, both urgently advocating an alliance with France, eminently suggestive of a joint attack upon Gibraltar, and compensation in Morocco for English successes elsewhere.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000094

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE PRINCE OF WALES PROFESSORSHIP OF HISTORY AT THE SOUTH AFRICAN COLLEGE.

By Professor H. E. S. Fremantle, M.A.

Several causes contribute to render the proposal to establish a Professorship of History at the South African College interesting to thoughtful men beyond the limits of Cape Colony and even of South Africa. In the first place, it is surely a matter of interest to find that South Africa is in a condition to need such a professorship, and that in such a country a young nation is springing up which has already advanced so far in the path of national development as to feel the need of further advance in the way proposed. Nor can it be without interest to those who watch the progress of events in South Africa with an eye to the future to know that it is possible at the present time not only to maintain existing institutions in full working order, but even to make such an effort as the present for this extension. In the second place, men of the greatest prominence at the Cape are supporting the movement, and thereby showing a sense of the importance of education in a practical way, which it would be difficult to induce men in a corresponding position at home to pursue with anything like the same activity or unanimity. In the third place, a proposal which promises to induce the inhabitants of the whole of South Africa to study history deals with men on so great a scale as to appeal to the imagination and expand our conceptions beyond the ordinary range. The special interest of South African history, and the importance of establishing a genuine school for its study must be obvious to all. And, finally, all these reasons have been endorsed and strengthened by the patronage which the Prince of Wales has given to the scheme, adding to it, with that discrimination and tact which is the property of the Royal Family, the dignity which belongs to an Imperial enterprise.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002b

مكتبة قطر الوطنية
Qatar National Library

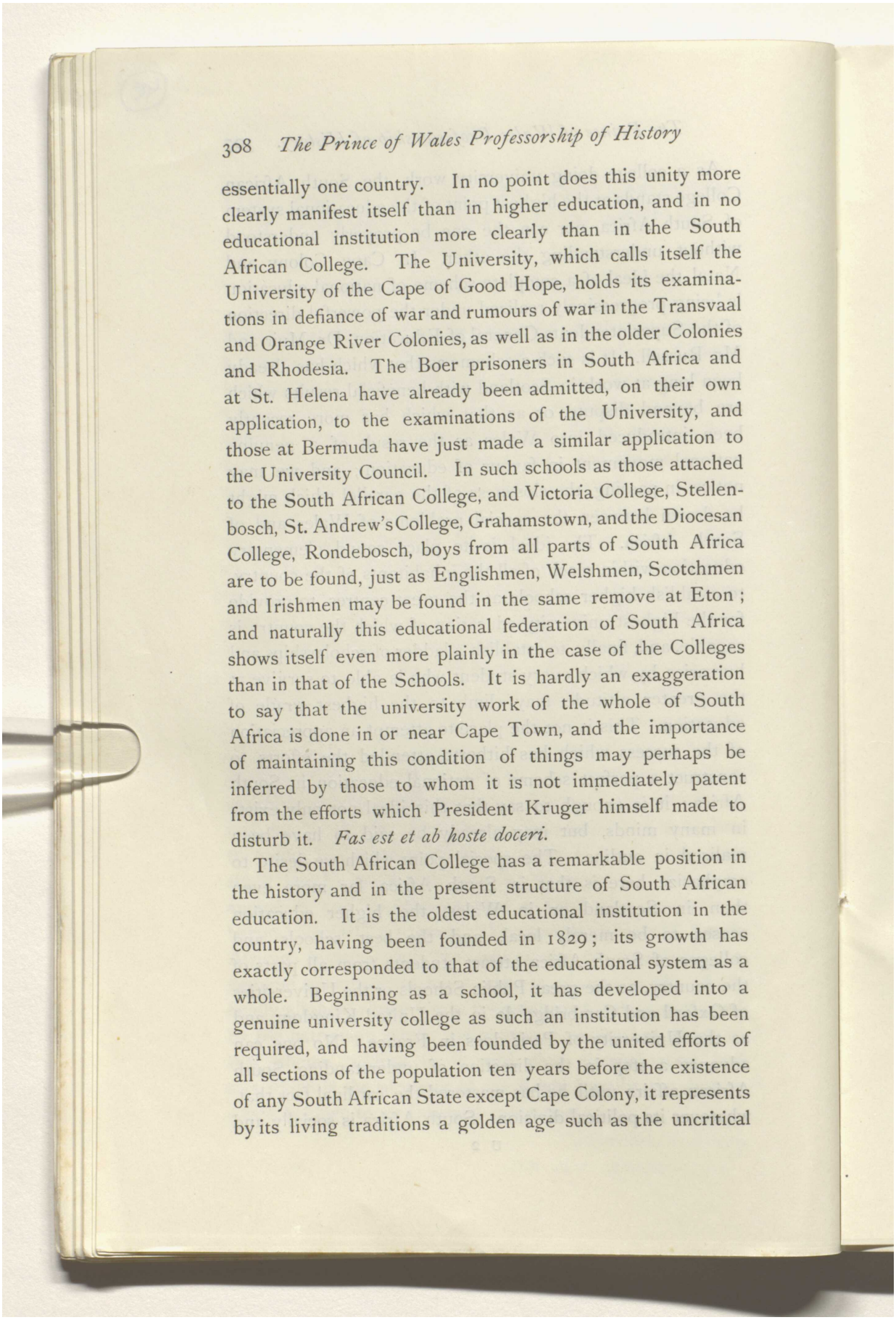
BRITISH LIBRARY

As a college doing university work, the South African College stands at the highest point of the educational system of South Africa, nor can the one be properly understood without understanding the other. In Cape Colony and Natal the ideal of a complete scheme of national education is being progressively realized under the powerful direction of the Superintendents General of Education, Dr. Muir and Mr. Russell. It is such a scheme as that which has already been long at work in Scotland with beneficial results which are beyond dispute, or as that which has more recently been introduced into Wales as the result of a genuine national movement in favour of education; and we may notice, in passing, the closeness of the parallel which might be drawn between the special problems of Wales and of South Africa. The ideal is to place sound elementary education within reach of all the inhabitants of the country, to establish higher schools at the great centres, to provide for the highest university education of which the country is capable, and, finally, to establish a ladder of scholarships and bursaries by which every student who is able to survive at the greater altitude may climb to the highest grade of education. This is not the place to attempt an appreciation of the success which has hitherto attended the efforts to construct a perfect scheme of national education in South Africa; it is enough to say that this ideal not only exists in many minds, but may already be said to have been realized in outline. The special point which we desire to emphasize here is that in South Africa, far more even than in Scotland or in Wales, the higher education ceases to be merely local, and the best schools and colleges of South Africa attract students from all parts of the country, as the great Public Schools or the Universities of Oxford and Cambridge do in the United Kingdom, and as the University of Paris does in France. No one can advance a step in the direction of understanding South African affairs until he has mastered the cardinal fact that, whatever its political divisions, South Africa is socially and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



essentially one country. In no point does this unity more clearly manifest itself than in higher education, and in no educational institution more clearly than in the South African College. The University, which calls itself the University of the Cape of Good Hope, holds its examinations in defiance of war and rumours of war in the Transvaal and Orange River Colonies, as well as in the older Colonies and Rhodesia. The Boer prisoners in South Africa and at St. Helena have already been admitted, on their own application, to the examinations of the University, and those at Bermuda have just made a similar application to the University Council. In such schools as those attached to the South African College, and Victoria College, Stellenbosch, St. Andrew's College, Grahamstown, and the Diocesan College, Rondebosch, boys from all parts of South Africa are to be found, just as Englishmen, Welshmen, Scotchmen and Irishmen may be found in the same remove at Eton; and naturally this educational federation of South Africa shows itself even more plainly in the case of the Colleges than in that of the Schools. It is hardly an exaggeration to say that the university work of the whole of South Africa is done in or near Cape Town, and the importance of maintaining this condition of things may perhaps be inferred by those to whom it is not immediately patent from the efforts which President Kruger himself made to disturb it. *Fas est et ab hoste doceri.*

The South African College has a remarkable position in the history and in the present structure of South African education. It is the oldest educational institution in the country, having been founded in 1829; its growth has exactly corresponded to that of the educational system as a whole. Beginning as a school, it has developed into a genuine university college as such an institution has been required, and having been founded by the united efforts of all sections of the population ten years before the existence of any South African State except Cape Colony, it represents by its living traditions a golden age such as the uncritical

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000031

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

always place in the past and the critical in the future, the age of happy co-operation between English and Dutch, and of the undisputed union of South Africa.

It was not until 1858 that a Board of Public Examiners granting certificates was instituted, and it was not until 1873 that this developed into the University of the Cape of Good Hope, conducting school and university examinations and conferring degrees. The South African College has naturally, therefore, maintained from the first a strong influence over the University. The new offices of the University will almost adjoin the buildings of the College, and apart from the special functions which the College has to perform as a college—that is, as offering the means of the highest education, and so standing in the highest grade of the scheme of national education—it naturally exercises, through the University, an influence over the whole system of which it is itself a part.

The College has greatly developed of late years, and even during the course of the war. In 1900 it finally got rid of the last trace of its origin as a school by handing over the class studying for the matriculation examination at the University to the School which is attached to it. In this it has been followed by the Victoria College, Stellenbosch. The two Colleges have thus definitely taken their places as University Colleges. The position which the two taken together at present occupy may perhaps be gauged by the fact that in the list of honours gained at the last B.A. examination exactly five-sixths of the places—fifteen out of eighteen, leaving out of account the successes gained by the excellent Women's College at Wellington, which of course stands on somewhat different ground—were occupied by students of one or other of the two Colleges; and the position of the South African College by the fact that two-thirds of these (ten out of fifteen, including the first of the year both in literature and in science) were South African College students; and the further fact that in the eighteen years during which the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

University has held honours examinations for the B.A. degree in literature and science, the first place in each department has thirteen times fallen to a student of the College.

We have now attempted to determine the position which the South African College occupies in the system of the national education of South Africa. We shall next endeavour to indicate the extent and nature of the work which, as occupying this position, it is called upon to do for the country. Of the extent of this work we can form some estimate by a merely mechanical reference to the numbers of its students. During the last session there were 236 students at the College. As the white population of South Africa, including Boer and Colonial belligerents and deported prisoners of war, is probably less than 800,000, it follows that about 1 in 3,000 is a student at the College. Reckoning thirty years for a generation—probably forty would be an under-estimate—it follows that about 1 in every 100 of the inhabitants of South Africa is a present or past student at the College. It is difficult to compare this with the position of universities at home. It is important to notice that there are in the United Kingdom two grades of universities; on the one hand, those which, like the Scotch, Welsh, and provincial universities, do the general work of university education for all classes of the community, and are accordingly more or less local in their operation; and on the other hand, the Universities of Oxford and Cambridge, which do the university work for the social and intellectual aristocracy of the whole kingdom. It is important to notice this for two reasons, the first and greater of which is only indirectly connected with the immediate question. It is the need, and the possibility arising from a general sense of the need, of the older universities rising to their position as educators of the real aristocracy of the whole Empire, and acting, if we may use the expression, as universities of appeal not only for the three kingdoms, but also for the great colonies. The other reason is that the South African College cannot

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000ba

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

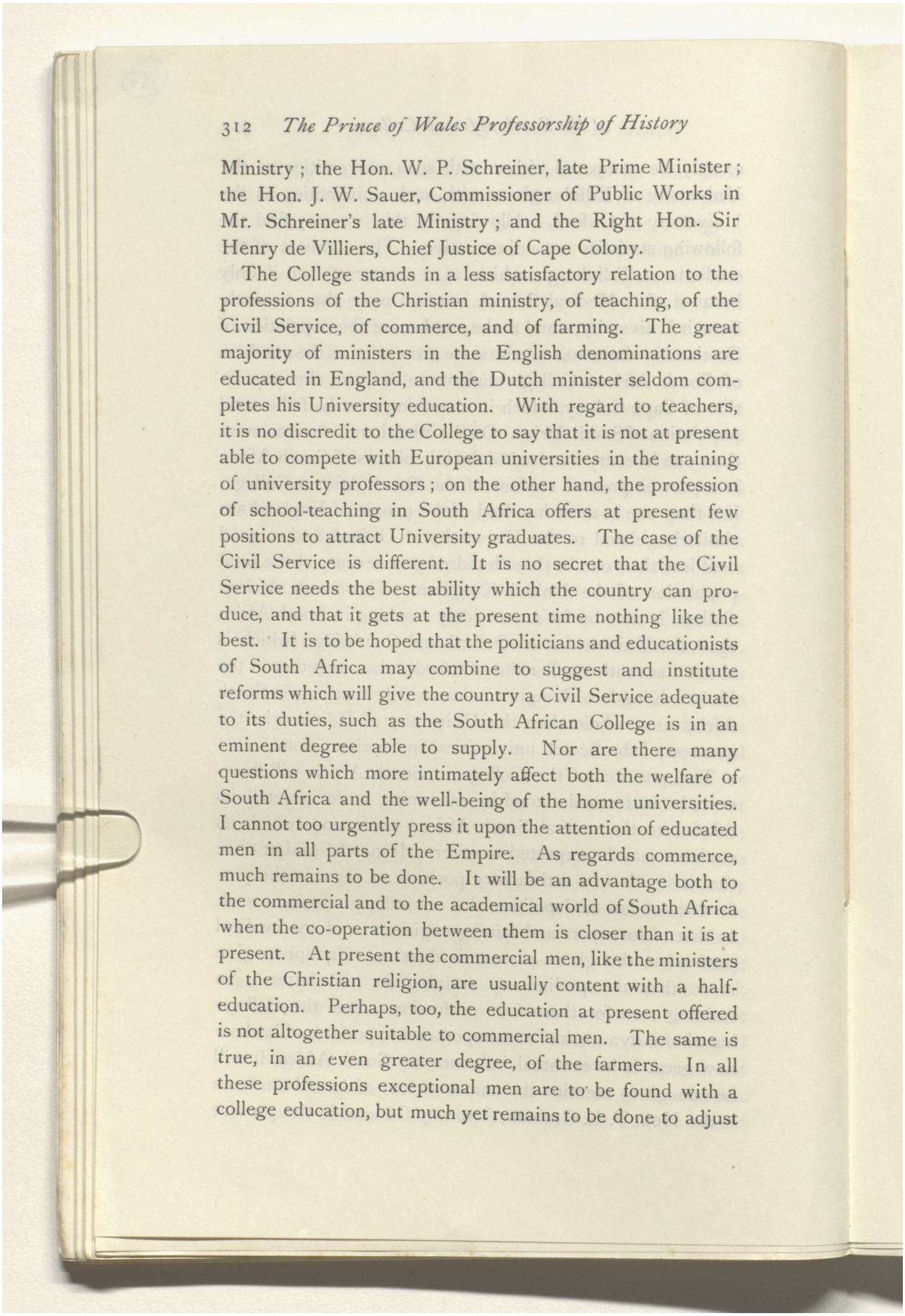
exactly be compared either with such universities as the University of Edinburgh or with such universities as the University of Oxford. Allowing for this, we may find the following statistics not uninstructive. The numbers of the students at Edinburgh, which, as a matter of fact, if only because of its Medical School, is much more than a merely Scotch University, stand to the numbers of the population of Scotland in almostexactly the same proportion as the numbers of South African College students to those of the population of Cape Colony, which is something over half the total population of South Africa. On the other hand, whereas more than one in every hundred of the inhabitants of South Africa is a past or present student of the South African College, less than one in three hundred of the people of England are similarly related to the University of Oxford, and a good deal less than one in three hundred and seventy of the total population of the United Kingdom. The South African College is thus by far more widely reaching in South Africa than the Universities of Oxford and Cambridge (which is about a seventh smaller than Oxford) taken together in the United Kingdom, though it is less widely reaching in South Africa as a whole than the University of Edinburgh (the greatest of the Scotch universities) in Scotland alone.

The position of the College in South Africa will, however, be better understood by examining more in detail its relation to the several South African professions which its students may be expected to enter. It may be said at once that it stands in a satisfactory position as regards the professions of law and politics, the scientific professions, such as that of surveyors and mining engineers, and the medical profession, though at present it does not attempt to give more than the preliminary training for the latter. In training men for these four professions alone the College has obviously a work of vast importance to perform. To show how great is its eventual influence on South Africa, it will be enough to mention the names of four of its old students —the Hon. T. L. Graham, Attorney-General in the present

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000036

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Ministry; the Hon. W. P. Schreiner, late Prime Minister; the Hon. J. W. Sauer, Commissioner of Public Works in Mr. Schreiner's late Ministry; and the Right Hon. Sir Henry de Villiers, Chief Justice of Cape Colony.

The College stands in a less satisfactory relation to the professions of the Christian ministry, of teaching, of the Civil Service, of commerce, and of farming. The great majority of ministers in the English denominations are educated in England, and the Dutch minister seldom completes his University education. With regard to teachers, it is no discredit to the College to say that it is not at present able to compete with European universities in the training of university professors; on the other hand, the profession of school-teaching in South Africa offers at present few positions to attract University graduates. The case of the Civil Service is different. It is no secret that the Civil Service needs the best ability which the country can produce, and that it gets at the present time nothing like the best. It is to be hoped that the politicians and educationists of South Africa may combine to suggest and institute reforms which will give the country a Civil Service adequate to its duties, such as the South African College is in an eminent degree able to supply. Nor are there many questions which more intimately affect both the welfare of South Africa and the well-being of the home universities. I cannot too urgently press it upon the attention of educated men in all parts of the Empire. As regards commerce, much remains to be done. It will be an advantage both to the commercial and to the academical world of South Africa when the co-operation between them is closer than it is at present. At present the commercial men, like the ministers of the Christian religion, are usually content with a half-education. Perhaps, too, the education at present offered is not altogether suitable to commercial men. The same is true, in an even greater degree, of the farmers. In all these professions exceptional men are to be found with a college education, but much yet remains to be done to adjust

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008f

مكتبة قطر الوطنية
Qatar National Library

the relation between these professions and the College, and to put the latter into its proper position as a training school for them.

It remains to be shown how the South African College is being enabled to carry out the duties which we have sketched. It is to be noted that its position in the Gardens at Cape Town is particularly advantageous. It has all the advantages, and as few as possible of the disadvantages, of town life. It has a considerable cricket-field, besides tennis-courts on its own grounds, and at the same time it is close to Government House, the Parliament buildings, the Law Courts, the Public Offices, and also to the Libraries, the Art Gallery, the Museum, and the Botanical Gardens. One advantage of this is that Professors at the College are able to carry on original investigations with the greatest facility possible in South Africa; another, following from the first, is that it is possible to combine some public scientific office with a professorship at the College. This was done some years ago in connection with the establishment of a Professorship of Botany, which has unfortunately been allowed to lapse, and which an effort is now being made to re-establish. A similar arrangement, in 1895, made it possible to successfully establish a Professorship of Geology, the holder of which is head of the Geological Survey. From this double office much has already been gained, and much more is to be expected in the future.

The College has many needs which must be fulfilled before there is any institution in South Africa capable of doing the work of University education satisfactorily. Omitting everything but bare necessities, at least six professorships are still needed. The professorships of English and Philosophy and of Modern Languages should be divided; the existing professorships of Law should be properly endowed and regulated, and professorships of Botany, Zoology and History should be established. The Cape Government already contributes liberally to Professors' salaries; nor is it easy to imagine a more desirable

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000075

مكتبة قطر الوطنية
Qatar National Library

form in which a rich man could secure himself immortality than by offering the £8,000 or £10,000 which would be sufficient, with the co-operation of the Government, to establish any one of these chairs.

None of them is it more important to create than the Professorship of History, nor is it possible to conceive a time when it would be more desirable to create it than the present. A Professor of Philosophy or of Languages may, no doubt, exercise a political influence by his lectures and writings, but a Professor of History alone is definitely called upon to do so, and his influence will be one which it would be most desirable to have exerted as soon as possible, and by all means before the people of South Africa begin to settle down after the close of the present war. This is felt, and has been openly expressed, by all the responsible statesmen, by the chief educationists, and by the general public at the Cape. Their judgment has been approved by the Prince of Wales, looking from the commanding standpoint which he has learnt to adorn, and by such men as Mr. Chamberlain, Mr. Asquith, and Mr. Lecky. It will not, therefore, be necessary to repeat what the present writer has already said elsewhere with regard to the scientific, the educational, and the political advantages to be expected from the institution of the professorship. He may, however, be allowed to call attention to two special points. In the first place, it is already well known that there is much to do with regard to the collection and co-ordination of facts bearing on the various native questions in South Africa. But it is not so well known that there now exists at the Cape an office specially dealing with native affairs, controlled by the Prime Minister of the Colony. Nor is it generally known that the late Sir Bartle Frere sketched out a system for the careful and exact study of native affairs throughout the country, emphasizing the scientific and political importance of the questions involved. In the second place, it can hardly be altogether realized in England how greatly certain ideals, such as that of Republicanism, have

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

influenced the minds of people in South Africa. Whether we are Republicans or not, we can hardly fail to realize that a popular Republicanism founded on ignorance both of South Africa and of general history is likely to be a rickety and ruinous structure which no nation can inhabit with security.

In conclusion, it remains to say something of the prospects of the Endowment Fund, and of the probability of obtaining a suitable occupant of the proposed professorship. It is satisfactory to find that, with few exceptions, the great commercial firms connected with South Africa have realized the importance of the present proposal. At least £7,500 is required to establish the professorship at all. It could be established and the first Professor appointed within a few months of the time when this sum should be obtained. Over £1,800 has already been contributed in London alone, and subscriptions have not yet been invited at all elsewhere. Judging from the temper evinced by the press at the Cape, it may be hoped that the scheme will not be allowed to fail for want of financial support. But it is much to be desired that the success of the project should not be delayed, and as long as the fund is open it will offer an opportunity to all of testifying in a practical way an intelligent interest in the progress and consolidation of the Empire.

As to the prospects of obtaining a suitable man for the post, it is not, of course, as yet possible to speak definitely. We may, however, notice the extremely satisfactory way in which the proposal has been taken up by the academical world, and especially by the historians. Among those who have lent the movement the support of their expressed approval we may notice with special gratification Sir William Anson and Sir Richard Jebb, Members of Parliament for the Universities of Oxford and Cambridge; Dr. Prothero, President of the Royal Historical Society; Professor York Powell, Regius Professor of Modern History at Oxford; and Principal Roberts, Vice-Chancellor

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of the University of Wales. We may fairly argue that the adhesion of such men as these shows that the academical world is fully sensible of the importance of the proposal. If this is so, we may rest assured that the great advantages and commanding and unequalled opportunities offered to a well-trained student endowed with energy and organizing power will not fail to be recognised and will suffice to attract candidates possessed of the highest capabilities. It is not difficult to be impartial in South Africa, nor need politicians who have confidence in the justice of their cause fear that the professorship will be occupied by a partisan of an opposite cause. It is not to be supposed that a man with so little sympathy with imperialism as to be blinded by a prejudice in favour of the Empire's antagonists will wish to expatriate himself from England, nor will any man be willing to devote his life to the study of South African history who has not enough sympathy with the Boers to do them justice. If an able man with neither of the above disqualifications takes up the work of the new professorship Wisdom will be justified of one more of her children; and if rich men assist in creating such opportunities for such a man they will not easily find another investment of which they will have greater reason to be proud.

NOTE.—Subscriptions for the South African College Professorship of History Fund are received and acknowledged by the Standard Bank, 10, Clement's Lane, Lombard Street, London, E.C. Cheques should be made out to "The Standard Bank of South Africa, for the South African College Professorship of History Fund."—ED.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

QUARTERLY REPORT ON SEMITIC STUDIES AND ORIENTALISM.

By Professor Dr. Edward Montet.

GENERAL OBSERVATIONS—ASSYRIOLOGY.

We shall note, at the outset, the "Actes du premier Congrès international d'histoire des religions, Paris, 1900," the first part of which (the report of general meetings) has only appeared.* This very interesting volume contains the *procès-verbaux* of the sittings, discussions, and papers read at the general meetings. The most important of these papers are the following: "Buddhism and Yoga," by Senart; "Biblical Criticism and the History of Religions," by A. Sabatier; "Islamism and Parsiism," by Goldziher; "The Historical Relation between Religion and Morality," by Goblet d'Alviella; "The Present State of Instruction in the History of Religions," by Jean Rèville; "An Historical Sketch of the Congress of Religions at Chicago in 1893," by C. Carroll Bonney.

Since our last Report, there has appeared the continuation of the "History of Religions in Ancient Times,"† by the lamented Tiele, whose recent demise has plunged into grief all who knew the eminent professor. The volume treats of Mazdeism and the Avesta.

Under the title of "Die geistige Kultur der semitischen Völker,"‡ J. Köberle has published an interesting and judicious lecture on the nature of the civilization and spiritual development of Semitic peoples, more particularly the Arabs. The author lays stress, and rightly, on Semitic individualism. In their language, their conception of nature, their style of expressing and solving the problems of a moral and spiritual order, the Semites have the tendency to assign everything to *self*. The Semites have the gift of observing details, bnt they lack that of synthesis and generalization. The author, after sketching a bright picture of the civilization of the Arabs in the Middle Ages, concludes by saying that, notwithstanding this glory of former times, humanity owes more in a spiritual sense to the humble Israelite than to the great Arab race, whose civilization disappeared as rapidly as it appeared with so much ostentation.

On the subject of Assyriology we may first mention the publication of a new fascicule of the Assyrian-English-German Dictionary, by Muss-Arnolt ;§ it is a long time since we had occasion to refer to it.

The "Keilinschriftliche Bibliothek," published by Schrader, has been enriched by two new and important parts, which complete the sixth volume —"Assyrisch-babylonische Mythen und Epen," of Jensen.‖

* Paris, Leroux, 1901.

† "Geschiedenis van den Godsdienst in de Oudheid tot op Alexander den Groot," vol. ii., part ii., Amsterdam, van Kampen, 1901.

‡ Leipzig, Deichert, 1901.

§ 11th Lieferung, Berlin, Reuther und Reichard, 1901.

‖ Berlin, Reuther und Reichard, 1901.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE OLD TESTAMENT—HEBRAIC AND ARAMEAN LANGUAGES—TALMUD.

Under the title of "Hebraisches Vokabular,"* Kraetzschmar has published for the use of students an excellent alphabetical index (Hebrew-German) of the roots and words of the Old Testament. This work, which is very clear and compact, is well executed. Words and roots are arranged in the logical style of grammar: pronouns, nouns with unchangeable vowels, hard triliteral verbs, guttural verbs, נ פ verbs, etc., masculine nouns with changeable vowels on the penultimate, etc., feminine nouns, with changeable vowels on the penultimate, etc., irregular nouns (called primitive), nouns of number, and particles. The work, which is a very practical one, deserves to be recommended.

We note a third edition, revised, of the biblical Aramean grammar, by Strack,† which we noticed when it first appeared.

Bacher has published a curious Hebrew-Persian dictionary of the fourteenth century,‡ the vocabulary of which is taken from the Bible, Targum, Talmud and Midrash. The author who spoke a Jewish-Persian jargon, has made use of Persian and Aramean, and sometimes of Arabic and Turkish for his explanations of Hebrew and Aramean terms.

My trip to Morocco prevented my calling attention to two publications of very great value, both published in England.

The first, edited by Carpenter and Harford-Battersby is entitled: "The Hexateuch according to the Revised Version, arranged in its constituent documents."§ The aim of the work is to introduce to the English public the principal results of modern criticism on the Pentateuch and Joshua. The first volume treats of the construction of the Hexateuch, the second contains the text with notes. It is a very remarkable work.

The second is "An Introduction to the Old Testament in Greek" by H. Barclay Swete.‖ For a long time the publication of a complete and scientific treatise on the Version of the Septuagint has been a desideratum. The work of Swete rewards the patience of scholars. It is divided into three parts: (1) the history of the Greek Old Testament, and of its transmission (the Alexandrian Greek Version, later Greek Versions, the Hexapla, ancient versions based upon the Septuagint, manuscripts and printed texts of the Septuagint); (2) the contents of the Alexandrian Old Testament; (3) literary use, value, and textual condition of the Greek Old Testament (Appendix: the letter of Pseudo Aristeas). The version of the Septuagint is of great utility for the study of the Old Testament, and for the reconstruction of the Hebrew text, so often obscure and mutilated. As Swete so well puts it, "as the oldest version of the Hebrew Bible, the Septuagint claims special attention from Old Testament scholars. It represents a text, and to some extent, an interpretation earlier than any which can be obtained

* Tübingen und Leipzig, Mohr, 1902.
† "Grammatik des Biblisch-Aramäischen, Leipzig, Hinrichs, 1901.
‡ Strassburg, Trübner, 1900.
§ Two vols. gr. in 8vo., London, Longmans, 1900.
‖ Cambridge, University Press, 1900.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

from other sources. It is the business of the textual critic to get behind the official text, and to recover so far as he can the various recensions, which it has displaced. In this work, he is aided by ancient versions, but especially by the Septuagint. Of the versions, the Septuagint alone is actually earlier than the fixing of the Hebrew text. In point of age, indeed, it must yield to the Samaritan Pentateuch, the archetype of which may have been in the hands of the Samaritans in the days of Nehemiah, but the polemical bias of that people, and the relatively late date of the MSS. on which the printed text depends, detract largely from the value of its evidence, which is moreover limited to the Torah."

In the "Zeitschrift für die alttestamentliche Wissenschaft" (Part 2, 1902), Kahle has published an interesting article on the new system of Hebraic punctuation, preserved in fragments of manuscripts brought from Cairo to Cambridge. Consequently there are three different systems known and employed by the Rabbis in writing the "vowel-points."

We have to notice several commentaries on the Old Testament: Exodus-Leviticus by Baentsch* (Hand-Kommentar zum Alten Testament, by Nowack;) Leviticus by Bertholet,† and Chronicles by Bengizer‡ (Kurzer Hand-Commentar zum Alten Testament, by Marti).

Karl Kautzsch, son of the celebrated theologian, has published an interesting study on chapters i., ii., xlii. 7-17 of the book of Job, that is to say on the prologue and epilogue of this most remarkable book of the Old Testament.§ He therein disputes the recent hypothesis of Budde and Duhm, according to which the prologue and epilogue of Job had formed an account of the story of Job previous to the exile. I myself have supported this same hypothesis, in 1886, during my course of lectures at the Geneva University. Kautzsch endeavours to show that the prologue and epilogue are inseparable from the book of Job, and that, like this last, they are subsequent to the exile. The discussion of this opinion would be too long.

To the *Doyen* Bruston of the Faculty of Theology at Montauban is due the publication of a study of critical exegesis of much value on the Songs of Debora.‖ The author, whose works of exegesis, so conscientiously and so accurately made, deserve much appreciation, arrives at the following conclusion: "That the text of this song of victory is less corrupted than one would expect, taking its antiquity into account and the numerous obscurities it presents. Some additions and some errors of transcription are all that can be found. The division and the masoretic vocalization, however, are very defective in several places."

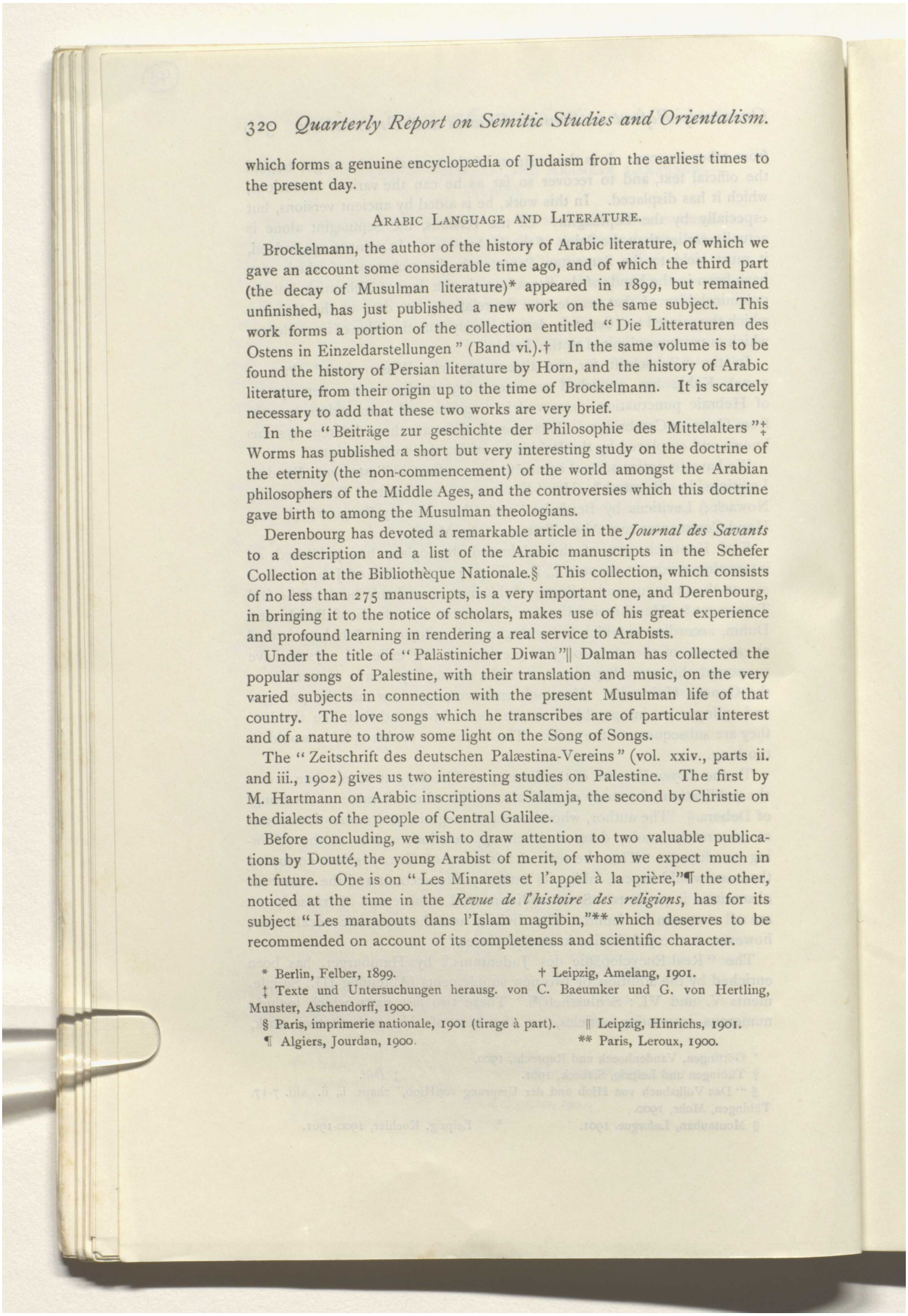
The "Real-Encyclopädie des Judentums," by Hamburger, has been enriched by the addition of two new supplements (Abteilung III., Supplements V. und VI.: Schlussheft)¶. These two last parts, which include numerous interesting articles, are the best of this authoritative work,

* Göttingen, Vandenhoeck und Ruprecht, 1900.
† Tübingen und Leipzig, Siebeck, 1901. ‡ *Ibid.*
§ "Das Volksbuch von Hiob und der Ursprung vonHiob," chaps. i., ii., xlii. 7-17. Tübingen, Mohr, 1900.
‖ Montauban, Laforgue, 1901. ¶ Leipzig, Koehler, 1900-1901.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000054

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



which forms a genuine encyclopædia of Judaism from the earliest times to the present day.

Arabic Language and Literature.

Brockelmann, the author of the history of Arabic literature, of which we gave an account some considerable time ago, and of which the third part (the decay of Musulman literature)* appeared in 1899, but remained unfinished, has just published a new work on the same subject. This work forms a portion of the collection entitled "Die Litteraturen des Ostens in Einzeldarstellungen" (Band vi.).† In the same volume is to be found the history of Persian literature by Horn, and the history of Arabic literature, from their origin up to the time of Brockelmann. It is scarcely necessary to add that these two works are very brief.

In the "Beiträge zur geschichte der Philosophie des Mittelalters"‡ Worms has published a short but very interesting study on the doctrine of the eternity (the non-commencement) of the world amongst the Arabian philosophers of the Middle Ages, and the controversies which this doctrine gave birth to among the Musulman theologians.

Derenbourg has devoted a remarkable article in the *Journal des Savants* to a description and a list of the Arabic manuscripts in the Schefer Collection at the Bibliothèque Nationale.§ This collection, which consists of no less than 275 manuscripts, is a very important one, and Derenbourg, in bringing it to the notice of scholars, makes use of his great experience and profound learning in rendering a real service to Arabists.

Under the title of "Palästinicher Diwan"‖ Dalman has collected the popular songs of Palestine, with their translation and music, on the very varied subjects in connection with the present Musulman life of that country. The love songs which he transcribes are of particular interest and of a nature to throw some light on the Song of Songs.

The "Zeitschrift des deutschen Palæstina-Vereins" (vol. xxiv., parts ii. and iii., 1902) gives us two interesting studies on Palestine. The first by M. Hartmann on Arabic inscriptions at Salamja, the second by Christie on the dialects of the people of Central Galilee.

Before concluding, we wish to draw attention to two valuable publications by Doutté, the young Arabist of merit, of whom we expect much in the future. One is on "Les Minarets et l'appel à la prière,"¶ the other, noticed at the time in the *Revue de l'histoire des religions*, has for its subject "Les marabouts dans l'Islam magribin,"** which deserves to be recommended on account of its completeness and scientific character.

* Berlin, Felber, 1899.
† Leipzig, Amelang, 1901.
‡ Texte und Untersuchungen herausg. von C. Baeumker und G. von Hertling, Munster, Aschendorff, 1900.
§ Paris, imprimerie nationale, 1901 (tirage à part).
‖ Leipzig, Hinrichs, 1901.
¶ Algiers, Jourdan, 1900.
** Paris, Leroux, 1900.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000048

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE AGE OF MÁNIKKA VÁÇAGAR.

By L. C. Innes.

The determination by the late Professor Sundaram Pillai of the age of the great Saiva saint and sage Jnána Sambandhar was a long step towards the elucidation of South Indian history, literary and religious. Very considerable divergence of opinion still exists as to the age of Mánikka Váçagar, another great Saiva saint, some holding that his period was that of the ninth or tenth century of the Christian Era, and others that he flourished in the first or second century. The subject has been very diligently discussed in a little book by Mr. Tirumalai Kolundu Pillai, B.A., entitled "The Age of Mánikka Váçagar." He arrives at the conclusion entertained by those who would throw back the date to the first or second century A.D. I propose to show that this conclusion involves great difficulties, and that this Saiva saint and sage in all probability lived towards the end of the ninth, but not later than the first half of the tenth, century.

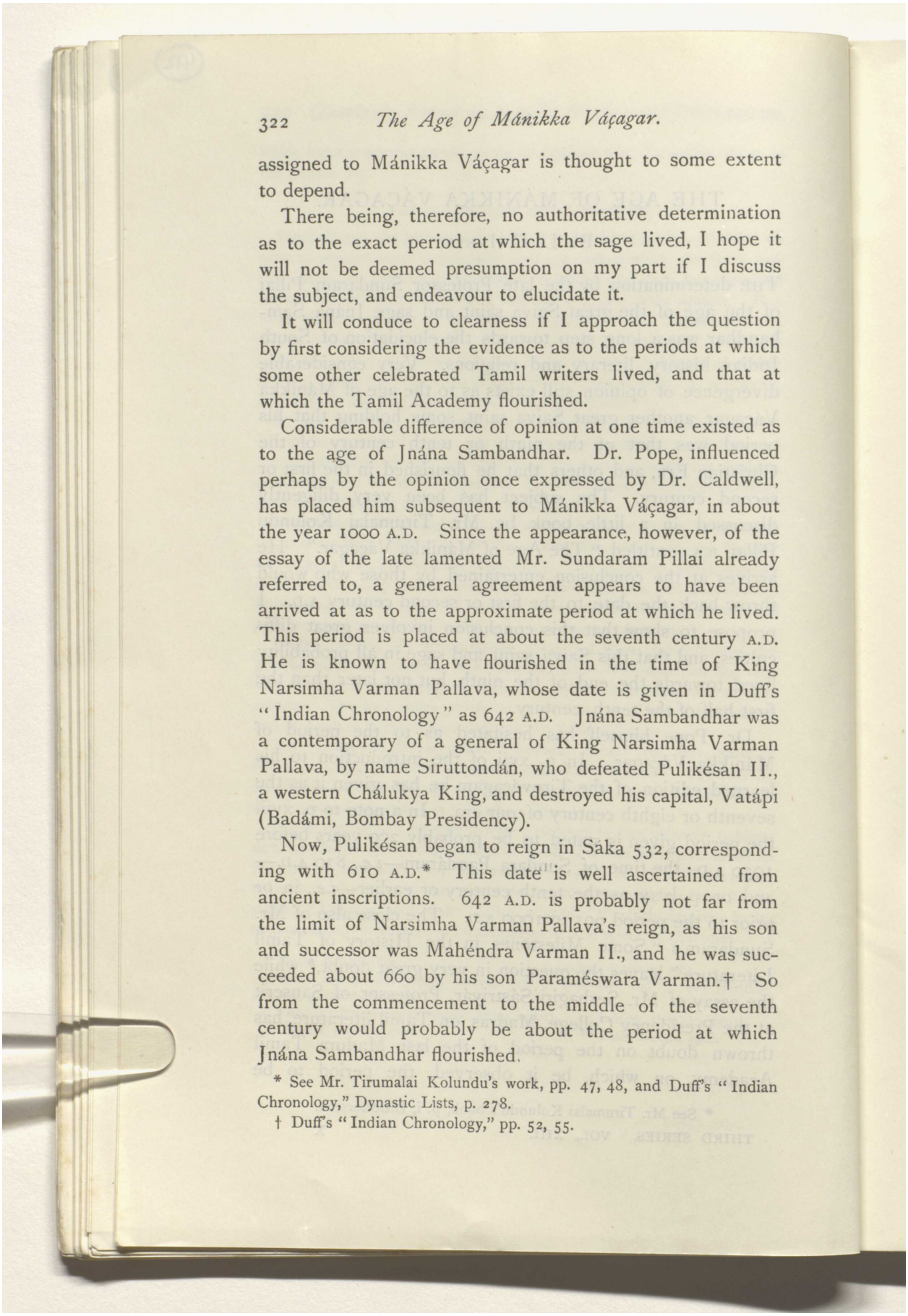
Dr. Pope himself has hesitated as to the period of Mánikka Váçagar. In p. xvii of the introduction to his learned edition of the Tiruváçagam he has given it as the seventh or eighth century of our era. In a note to p. xviii the period given is stated to be probably 200 years before 1030 A.D., the time of Sundara Pandáram—*i.e.*, 830 A.D.—and on p. lxxv as the tenth century or earlier—*i.e.*, in or prior to the period 901 to 1000 A.D. The close also of Mr. Sundaram's "Some Milestones in the History of Tamil Literature" leaves the question in very great doubt,* while the essay of Mr. Seshagiri Sástriyár, Professor of Sanscrit at the Presidency College, Madras, on Tamil literature, has thrown doubt on the period of the last Madura Tamil Academy, on which, be it observed, the period to be

* See Mr. Tirumalai Kolundu's book, p. i, Introduction.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



assigned to Mánikka Váçagar is thought to some extent to depend.

There being, therefore, no authoritative determination as to the exact period at which the sage lived, I hope it will not be deemed presumption on my part if I discuss the subject, and endeavour to elucidate it.

It will conduce to clearness if I approach the question by first considering the evidence as to the periods at which some other celebrated Tamil writers lived, and that at which the Tamil Academy flourished.

Considerable difference of opinion at one time existed as to the age of Jnána Sambandhar. Dr. Pope, influenced perhaps by the opinion once expressed by Dr. Caldwell, has placed him subsequent to Mánikka Váçagar, in about the year 1000 A.D. Since the appearance, however, of the essay of the late lamented Mr. Sundaram Pillai already referred to, a general agreement appears to have been arrived at as to the approximate period at which he lived. This period is placed at about the seventh century A.D. He is known to have flourished in the time of King Narsimha Varman Pallava, whose date is given in Duff's "Indian Chronology" as 642 A.D. Jnána Sambandhar was a contemporary of a general of King Narsimha Varman Pallava, by name Siruttondán, who defeated Pulikésan II., a western Chálukya King, and destroyed his capital, Vatápi (Badámi, Bombay Presidency).

Now, Pulikésan began to reign in Saka 532, corresponding with 610 A.D.* This date is well ascertained from ancient inscriptions. 642 A.D. is probably not far from the limit of Narsimha Varman Pallava's reign, as his son and successor was Mahéndra Varman II., and he was succeeded about 660 by his son Paraméswara Varman.† So from the commencement to the middle of the seventh century would probably be about the period at which Jnána Sambandhar flourished.

* See Mr. Tirumalai Kolundu's work, pp. 47, 48, and Duff's "Indian Chronology," Dynastic Lists, p. 278.

† Duff's "Indian Chronology," pp. 52, 55.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

He and two other well-known and venerated persons, Tirunávukkaraiyar (otherwise called Appár) and Sundara Múrti Náyanár, compiled the Deváram, a collection of Tamil hymns.

An inscription of the time of Rája Rája Déva Chóla, Emperor (984 A.D.), shows that at that time the three compilers of the Deváram had come to be regarded as objects of worship. Dr. Caldwell's view before the discovery of this inscription was that the Deváram, and consequently the age of Jnána Sambandhar, should be brought down to the thirteenth century; but not only is this opinion thus shown to be untenable, but the age of Jnána Sambandhar, as is now generally accepted, may be thrown back with tolerable certainty, on the grounds mentioned, to the seventh century A.D.

The great Vaishnava reformer Rámánuja lived in the end of the eleventh and beginning of the twelfth century. He was persecuted by a Chola Prince named Karikála,* and fled from his persecutions to the court of Biṭṭi Déva, the Bellála King of Dorasamudra (Dwárasamudra), whom he converted from the Jaina to the Vaishnava faith. The King on his conversion took the name of Vishnu Vardhana,† and this event has always been placed in the beginning of the twelfth century. Rice in his "Mysore Inscriptions" places it at 1117 A.D.‡

Now, Kambar, the great Tamil poet, in one of his poems§ refers to Rámánuja by name. It was at one time assumed from the memorial verse prefixed to his Rámáyanam, which gives a date corresponding to 886 A.D., that the period of Kambar was much earlier. But since the period of Rámánuja has been placed beyond a doubt, it has become clear that the date given in the memorial verse

* See as to Karikála Chola Caldwell's "History of Tinnivelly," p. 29. He must have been born before, and reigned in the twelfth century.

† Duff's "Indian Chronology," p. 140.

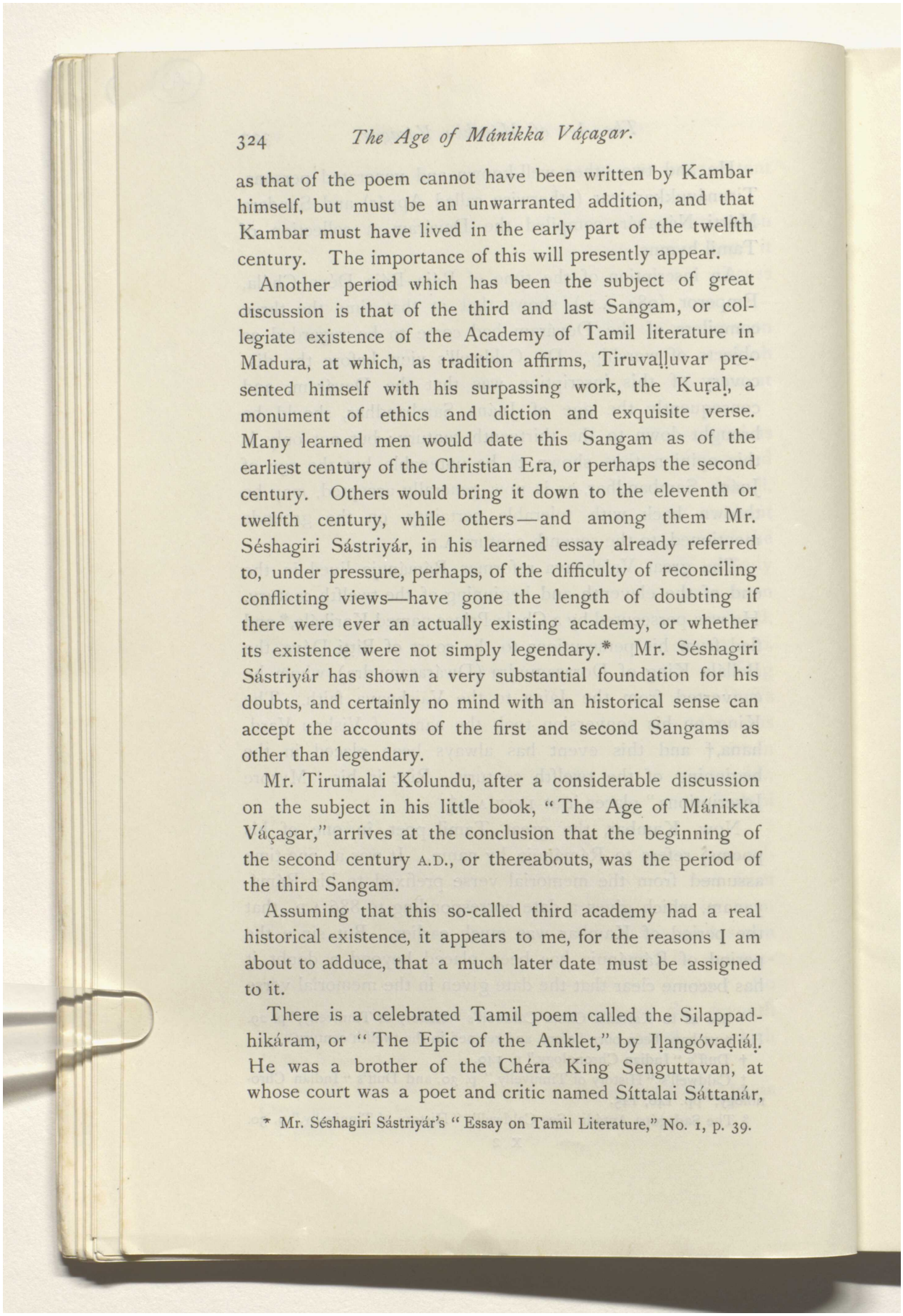
‡ Caldwell's "History of Tinnivelly," p. 30, and Duff's "Indian Chronology," pp. 140, 145.

§ The Sadagópa Antádi. See Caldwell's "History of Tinnivelly," p. 30.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000021

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



as that of the poem cannot have been written by Kambar himself, but must be an unwarranted addition, and that Kambar must have lived in the early part of the twelfth century. The importance of this will presently appear.

Another period which has been the subject of great discussion is that of the third and last Sangam, or collegiate existence of the Academy of Tamil literature in Madura, at which, as tradition affirms, Tiruvaḷḷuvar presented himself with his surpassing work, the Kuṛaḷ, a monument of ethics and diction and exquisite verse. Many learned men would date this Sangam as of the earliest century of the Christian Era, or perhaps the second century. Others would bring it down to the eleventh or twelfth century, while others—and among them Mr. Séshagiri Sástriyár, in his learned essay already referred to, under pressure, perhaps, of the difficulty of reconciling conflicting views—have gone the length of doubting if there were ever an actually existing academy, or whether its existence were not simply legendary.* Mr. Séshagiri Sástriyár has shown a very substantial foundation for his doubts, and certainly no mind with an historical sense can accept the accounts of the first and second Sangams as other than legendary.

Mr. Tirumalai Kolundu, after a considerable discussion on the subject in his little book, "The Age of Mánikka Váçagar," arrives at the conclusion that the beginning of the second century A.D., or thereabouts, was the period of the third Sangam.

Assuming that this so-called third academy had a real historical existence, it appears to me, for the reasons I am about to adduce, that a much later date must be assigned to it.

There is a celebrated Tamil poem called the Silappadhikáram, or "The Epic of the Anklet," by Iḷangóvaḍiáḷ. He was a brother of the Chéra King Senguttavan, at whose court was a poet and critic named Síttalai Sáttanár,

* Mr. Séshagiri Sástriyár's "Essay on Tamil Literature," No. 1, p. 39.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

who was a noted member of the so-called third and last Sangam.

This poem, therefore, was of that period, and in it Tiruvaḷḷuvar is quoted. This affords confirmation of the tradition that Tiruvaḷḷuvar's period was not later than the last Sangam.

Now as to the date of this Sangam. There were, as appears from the Mahawansa, the great chronicle of Ceylon history, two Ceylon Kings of the name of Gajabáhu, one of the date of 113 A.D. and the other of the date of 1142 A.D.* Now it is said in the Mahawansa that Gajabáhu (the King of Ceylon who was a contemporary of Senguttavan Chéra, and was present on one occasion at his court, as is mentioned in the Silappadhikáram)† invaded the Chóla Kingdom in revenge for the Chólas having invaded Ceylon. Mr. Tirumalai Kolundu considers that this event must have occurred in the reign of the earlier Gajabáhu (113 A.D.), as, if we adopt the later date, we should have to place Kambar, the great Tamil epic poet, already referred to, before the period of the last Sangam, whereas he is known to have lived later.‡ He therefore places the Sangam in about the second century.

Mr. Seshagiri Sástriyár had arrived at the same conclusion as Mr. Tirumalai Kolundu Pillai, that the period of the Sangam, if it had an actual existence, coincided with the reign of the earlier Gajabáhu, and for this view the following reasons are assigned: Ilangóvadiál, the author of the Silappadhikáram, and Karikála Chóla, and one of the two Kings of Ceylon, named Gajabáhu, were all contemporaries. Mr. Seshagiri Sástriyár assumes, on the authority of the "Madras Archæological Reports," vol. iv., that the first Karikála Chóla preceded Kulatonga Chóla (1064 to 1113)

* Not 1127 A.D., as stated p. 101 of Tirumalai Kolundu's work. The King of Ceylon in 1127 A.D. was "Jayabáhu." The second Gajabáhu reigned 1142 A.D. See Duff's "Indian Chronology," p. 321.

† See p. 100, Tirumalai Kolundu's work.

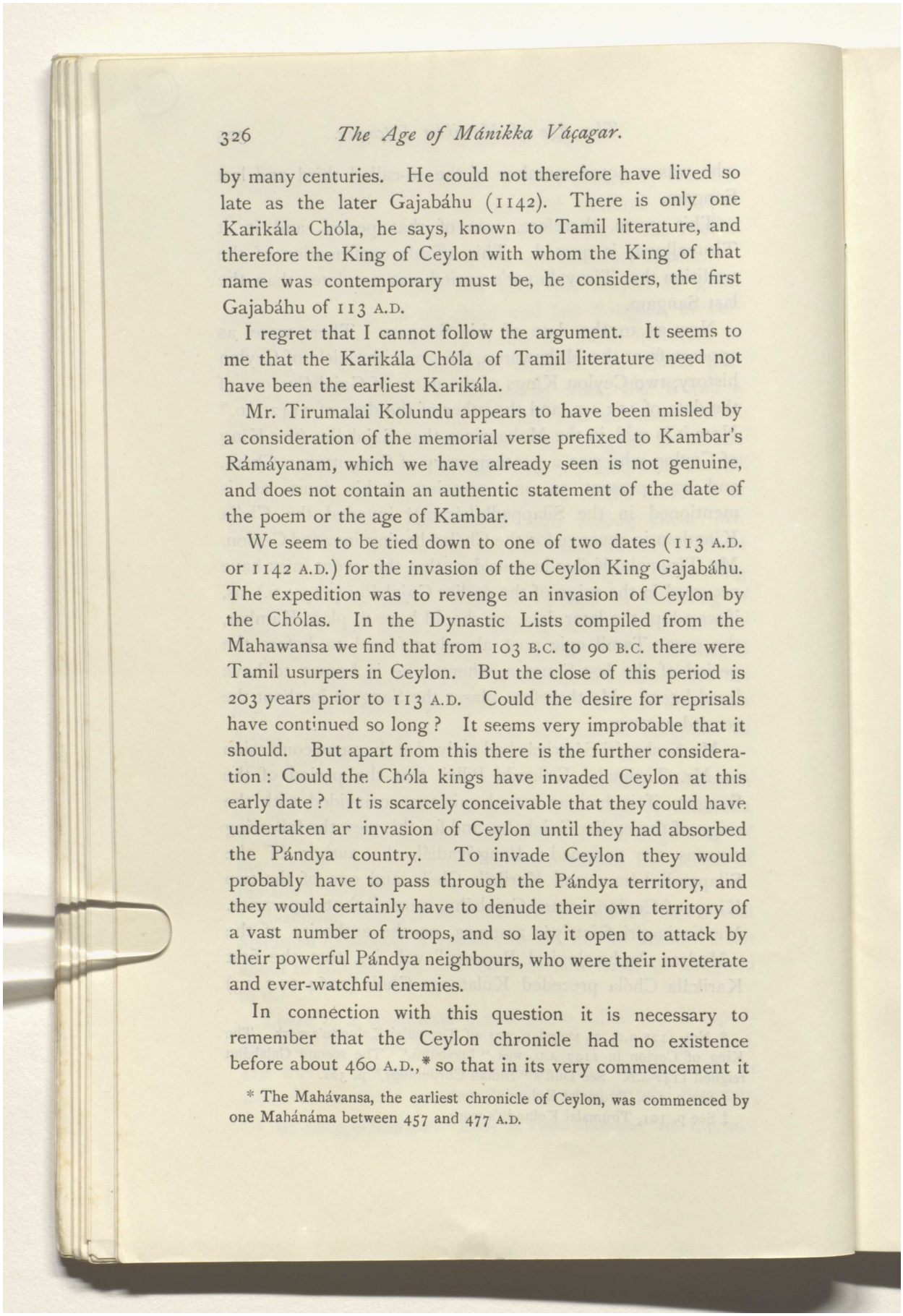
‡ See p. 101, Tirumalai Kolundu's work.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



by many centuries. He could not therefore have lived so late as the later Gajabáhu (1142). There is only one Karikála Chóla, he says, known to Tamil literature, and therefore the King of Ceylon with whom the King of that name was contemporary must be, he considers, the first Gajabáhu of 113 A.D.

I regret that I cannot follow the argument. It seems to me that the Karikála Chóla of Tamil literature need not have been the earliest Karikála.

Mr. Tirumalai Kolundu appears to have been misled by a consideration of the memorial verse prefixed to Kambar's Rámáyanam, which we have already seen is not genuine, and does not contain an authentic statement of the date of the poem or the age of Kambar.

We seem to be tied down to one of two dates (113 A.D. or 1142 A.D.) for the invasion of the Ceylon King Gajabáhu. The expedition was to revenge an invasion of Ceylon by the Chólas. In the Dynastic Lists compiled from the Mahawansa we find that from 103 B.C. to 90 B.C. there were Tamil usurpers in Ceylon. But the close of this period is 203 years prior to 113 A.D. Could the desire for reprisals have continued so long? It seems very improbable that it should. But apart from this there is the further consideration: Could the Chóla kings have invaded Ceylon at this early date? It is scarcely conceivable that they could have undertaken ar invasion of Ceylon until they had absorbed the Pándya country. To invade Ceylon they would probably have to pass through the Pándya territory, and they would certainly have to denude their own territory of a vast number of troops, and so lay it open to attack by their powerful Pándya neighbours, who were their inveterate and ever-watchful enemies.

In connection with this question it is necessary to remember that the Ceylon chronicle had no existence before about 460 A.D.,* so that in its very commencement it

* The Mahávansa, the earliest chronicle of Ceylon, was commenced by one Mahánáma between 457 and 477 A.D.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00005d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

records events that took place more than 350 years previously. This early part of the chronicle, therefore, cannot have the same confidence placed in it as that later portion from the point at which it begins to deal with contemporaneous events.

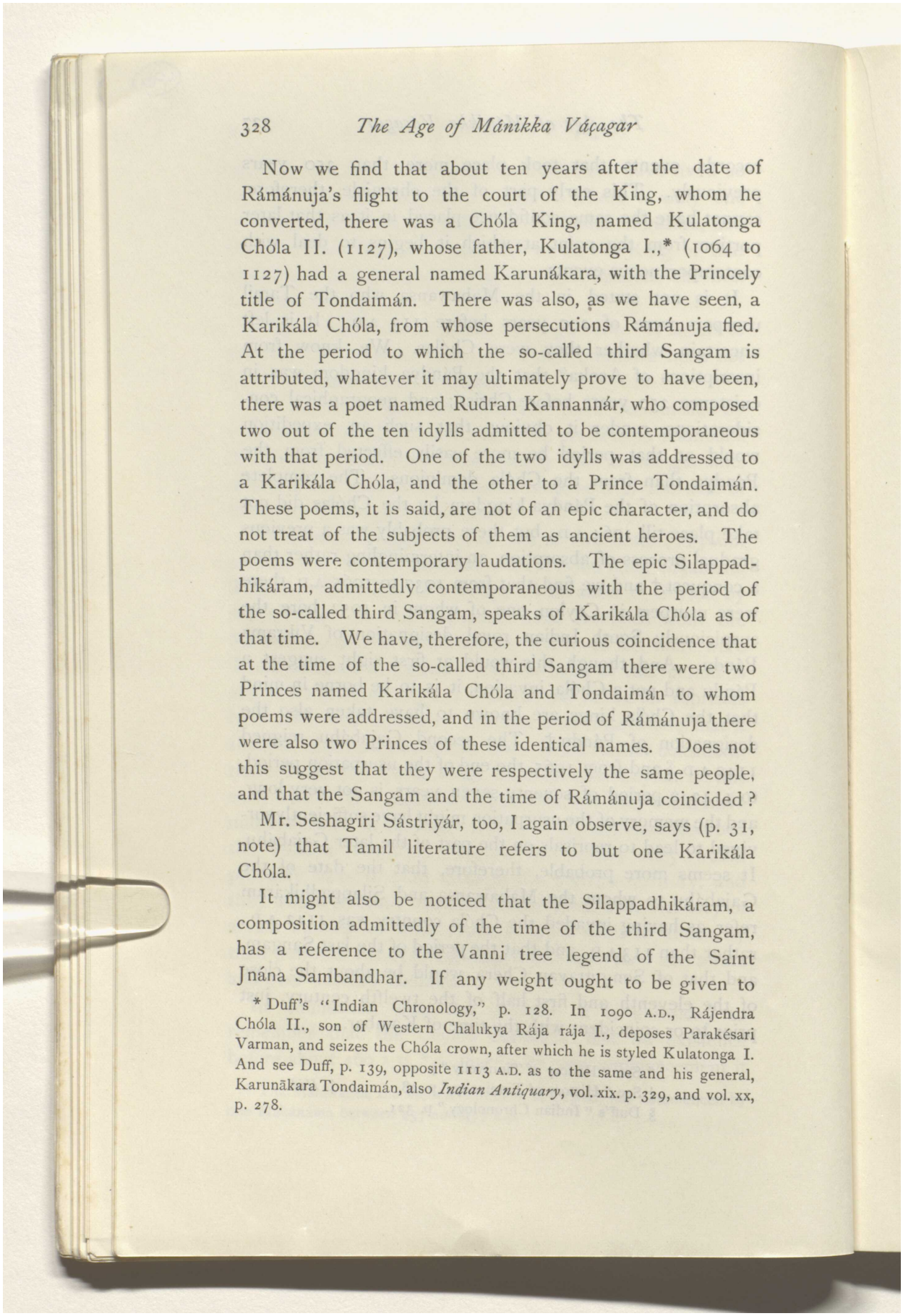
It is not stated in the Mahawansa who the Tamil usurpers were of 200 years before 113 A.D. It is left uncertain whether they were Chólas. We know from inscriptions of Asoka* that the Pándya kingdom was in existence 250 years before Christ; and geographical considerations render it obvious that such an expedition would at that period be more easily effected from the Pándya than from the Chóla dominions. The complete absorption of the Pándya kingdom by the Chólas did not take place till 1064 A.D., but there probably was a previous gradual process of absorption, an intermingling rather than a conquest,† and we find that from 1037 to 1065 A.D. there were usurpers in Ceylon, one of whom in 1052 bore the suspiciously South Indian royal designation of Vikrama Pándu. And though this would at first sight suggest a Pándu and not a Chóla invasion, it is to be borne in mind that the Chóla kings are known to have taken also the designation of Pándu.‡ The second Gajabáhu reigned 1142 A.D.,§ and from 1065, the end of the usurpation period, to 1142, a period of seventy-seven years, is not very long, and the memory of the usurpation might have sufficiently survived to lead to reprisals on the part of the later Gajabáhu. It seems more probable, therefore, that the date of the Gajabáhu to whom the Mahawansa and Silappadhikáram refer as having invaded the Chóla country was 1142 A.D., rather than 113 A.D., and that the period of the last Sangam, and that of Senguttavan Chera, would be about the close of the eleventh and first half of the twelfth century, just prior to or coincident with the time of Kambar.

* See "History of Tinnivelly," p. 12.
† See "History of Tinnivelly," p. 28.
‡ *Ibid.*
§ Duff's "Indian Chronology," p. 321.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Now we find that about ten years after the date of Rámánuja's flight to the court of the King, whom he converted, there was a Chóla King, named Kulatonga Chóla II. (1127), whose father, Kulatonga I.,* (1064 to 1127) had a general named Karunákara, with the Princely title of Tondaimán. There was also, as we have seen, a Karikála Chóla, from whose persecutions Rámánuja fled. At the period to which the so-called third Sangam is attributed, whatever it may ultimately prove to have been, there was a poet named Rudran Kannannár, who composed two out of the ten idylls admitted to be contemporaneous with that period. One of the two idylls was addressed to a Karikála Chóla, and the other to a Prince Tondaimán. These poems, it is said, are not of an epic character, and do not treat of the subjects of them as ancient heroes. The poems were contemporary laudations. The epic Silappadhikáram, admittedly contemporaneous with the period of the so-called third Sangam, speaks of Karikála Chóla as of that time. We have, therefore, the curious coincidence that at the time of the so-called third Sangam there were two Princes named Karikála Chóla and Tondaimán to whom poems were addressed, and in the period of Rámánuja there were also two Princes of these identical names. Does not this suggest that they were respectively the same people, and that the Sangam and the time of Rámánuja coincided?

Mr. Seshagiri Sástriyár, too, I again observe, says (p. 31, note) that Tamil literature refers to but one Karikála Chóla.

It might also be noticed that the Silappadhikáram, a composition admittedly of the time of the third Sangam, has a reference to the Vanni tree legend of the Saint Jnána Sambandhar. If any weight ought to be given to

* Duff's "Indian Chronology," p. 128. In 1090 A.D., Rájendra Chóla II., son of Western Chalukya Rája rája I., deposes Parakésari Varman, and seizes the Chóla crown, after which he is styled Kulatonga I. And see Duff, p. 139, opposite 1113 A.D. as to the same and his general, Karunākara Tondaimán, also *Indian Antiquary*, vol. xix. p. 329, and vol. xx, p. 278.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

this circumstance, it would favour my view in bringing down the period of the Sangam later than the time of Jnána Sambandhar. But I prefer to give no weight to it. There is no distinct connection of Jnána Sambandhar with the narrative, and the legend of the Vanni tree may have existed long before, and quite independently of, the saint, as suggested by Mr. Tirumalai Kolundu Pillai.*

We now come to a consideration of the period of Mánikka Váçagar. One great difficulty in ascertaining the relative age of Tamil literary productions is said to be that from the earliest ages the Tamil language has undergone scarcely any change. The action of the Academy in scrutinizing and regulating grammatical accuracy and attention to fixed rules, while it may have checked the development of the language, preserved it, it is claimed, from alteration, so that there is not much scope for distinguishing the productions of one age from those of another.† But possibly the explanation of this may be that none of the existing literature is as ancient as has been assumed. Another difficulty is the want of history and of historical‡ landmarks which characterizes all the literary works of Southern India. Occasionally the connection of a writer with some conspicuous public character whose period may be ascertained from an inscription gives a clue to the date at which he wrote, but such signposts are rare. In the case of Mánikka Váçagar there is nothing of the kind to guide us. His hymns are generally credited with an age of several centuries, but neither from the language, nor the style, nor from the allusions can we find any certain indications of their position in literary history relatively to other Tamil writings of a respectable antiquity now in existence.

* Tirumalai Kolundu, p. 33.

† Tirumalai Kolundu, pp. 80, 81, and Dr. Caldwell's "Dravidian Grammar," p. 89, edit. i.

‡ It may be said once for all that the Tiruviḷaiyáḍal Puránam, by Paranjoti Munivar, cannot pretend to be historical. Its date is 1051 A.D. See Duff's "Indian Chronology," p. 123, and Mr. Tirumalai Kolundu p. 50, as to this.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000019

مكتبة قطر الوطنية
Qatar National Library

There are, however, inferences to be drawn from the silence of writers as to the hymns of Mánikka Váçagar. He was no obscure person, and, according to general belief, his hymns have enjoyed an extraordinary popularity for centuries, being mingled with the daily worship in every Siva temple throughout the Tamil country. This being so, we might confidently expect to find some mention or allusion to them in literary works of a subsequent date, when occasion arose to refer to such writings.

Now, about 600 to 640 A.D. the collection of hymns that goes by the name of Devâram was compiled by the three saintly persons already referred to, but neither do the hymns nor the other writings of the compilers contain any reference to Mánikka Vácagar.

In the Saiva Bible of the Tamils — a collection of sacred books upon the Saiva religion compiled by Nambi Ándar Nambi in the time of Rája Rája Déva, about 984 A.D.—out of twelve sets of poems included, Jnána Sambandhar's works have the first three places, then Appár has the next three, Sundara Múrti Náyanar the seventh, and Mánikka Váçagar the eighth place. Thus, the three compilers of the Devâram have the prior position. Gandaráditya Chóla, a King who was in being before 940, and succeeded his brother Rájáditya Chóla in 949, is given the ninth place, and Yogi Tirumúlar the tenth. The eleventh place is occupied by miscellaneous compositions, and the twelfth by the Periya Puránam of Sékkilár. Those who contend for the priority of Mánikka Váçagar to Jnána Sambandhar of the seventh century suggest that the Devâram is only an incomplete collection, and account for the omission of all mention of Mánikka on this ground.*

This reason, however, when we consider the eminent position of Mánikka Váçagar's writings in the hymnology of the country, seems hardly satisfactory.

In regard to Mánikka Vaçagar's position of eighth in the Saiva Tamil Bible collection, those who are in favour of his

* Tirumalai Kolundu, p. 24.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000011

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

priority to Jnána Sambandhar suggest that the works are not set out in the order of time, but only in the order of preference, either for the devotees themselves in relation to their superhuman powers, or for the exceptional musical charms of their compositions.* It is to be noticed, however, that Gandaráditya, the ninth and last but three, is of the period 940 to 950 A.D., or not far from the time of the compiler, 984. This circumstance, combined with the fact that those included in the first seven numbers were undoubtedly of the period 610 to 640, is in some degree suggestive of chronological order.

Another reason suggested is that Mánikka is placed later on account of the superior importance of his works.† This reason is inconsistent with the position given him in respect of the ninth, eleventh, and twelfth places, as he will be universally admitted to be superior to the persons to whom those places were assigned.

On the whole, these reasons do not satisfactorily account for Mánikka's works being placed in posterior order to those of the Devaram compilers, if he was prior in time.

There is, further, the Tiruttondaittogai, or Catalogue of Saints, drawn up by Sundara Múrti Náyanar, the third of the Devaram hymners in the seventh century. From this Mánikka Váçagar is entirely omitted. Having regard to the eminence of Mánikka Váçagar as a saint, this would seem conclusive to show that he must have been subsequent to the time of the Devaram hymners, who lived no earlier than the beginning of the seventh century. Those, however, who insist on his priority would regard him as included in the postscript, "Others besides who attained saintship," appended to this document; but this view Mr. Tirumalai Kolundu Pillai seems rightly to hold cannot for a moment be entertained. He observes, also, that the omission cannot be owing to the remote antiquity of Mánikka Váçagar, since five saints who admittedly pre-

* Tirumalai Kolundu, p. 36. † *Ibid.*, p. 31.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000af

مكتبة قطر الوطنية
Qatar National Library

ceded Mánikka, two of whom are referred to in his own works, are included in the Catalogue.

Nor does he accept another reason that is assigned—namely, that Manikka's religious note was pitched too high for the purpose of Sundara and the other hymners, his ideal of God being too impersonal properly to impress the multitude. But he comes to the conclusion (p. 45) that Mánikka may be regarded as included in the clause of the document which runs "and poets of no untrue devotion," in which it was possibly intended to include, he thinks, all the poets of the Sangam Age, the enumeration of whom would have occupied too great a space in Sundara's work.

This, however, appears to me an inadmissible view. Would Sundara or any other writer have the presumption to lump up writers and thinkers and saints of the eminence of Mánikka, Kapilár, Kalládar and others in a mere appendix which relegated them to comparative insignificance?

Mr. Tirumalai Kolundu appears to be greatly influenced by the occurrence in Appár's writings of an allusion to the legend of the transformation of the jackals into horses, a legend specially connected, as is supposed, with the career of Mánikka Váçagar, though the passage does not expressly refer to him. If the passage be genuine, and Appár in his mention of this miracle performed by Siva showed that he intended to connect it with the history of Mánikka Váçagar, it would, of course, be conclusive in favour of the priority of Mánikka Váçagar to Appár. But this is not so, and the passage, even though it be allowed to be genuine, may simply point to the previous existence of a similar legend in some other connection, just as the legend of the Vanni tree may have existed prior to the time of Jnána Sambandhar;* and, looking to what has been said above, this circumstance can scarcely be said to have weight in favour of the priority of Mánikka Váçagar to Appár.

Mr. Tirumalai Kolundu Pillai also refers to the fact that Appár is found to use similar expressions to those employed

* Tirumalai Kolundu, p. 33.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000032

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

by Mánikka Váçagar in some instances. But, apart from the fact that men of devotional minds are apt to hit upon a similar mode of expression, it is quite as probable that Mánikka Váçagar took his expressions from Appár, as that Appár took his from Mánikka Váçagar. The tradition also referred to that Appár was never without a copy of Mánikka Váçagar's hymns in his hands, and was always engaged in the study of them, has no historical basis. I come to the conclusion, therefore, that Mánikka Váçagar must stand at some date between 640 and 984 A.D., this latter date being the period of the compilation of the Saiva Bible, in which his works found a place.

It has never been suggested that he was a contemporary of Kumárila Bhatta (725 A.D.), or of Sankarácháriár, now considered to have been born about 788 A.D.,* or as having lived in the same century with them, nor is he mentioned or referred to by them. Now, Sankarácháriár was a native of Kérala (Malabár), and no doubt familiar with Tamil, of which Malayálam, his own vernacular, is an offshoot. If Mánikka had lived at or before Sankarácháriár's time, would not his doctrines and career have found a notice in the great reformer's works?

If, then, we accept the general opinion that Sankarácháriár's period is of the eighth century and part of the ninth, we may safely conclude that Mánikka Váçagar's period was not earlier than the middle of the ninth century —*i.e.*, 850 A.D. And as for the reasons above given he could not be later than 985, and from the place given him in the Saiva sacred books was prior to Gandaráditya, we may place his lifetime between 850 and 940 A.D.

The Sanscrit name "Arimardhana," that of the Pándyan King to whom he is said to have been Prime Minister, is not found, there being no lists of Pándyan Kings of that time forthcoming. The name, if from Arim and Mardhana, would mean "Pounder of his enemies," or, if from Arim and Ardhana, might mean "Tormentor of his enemies,"

* Some opinions place him as early as 590 A.D.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000009

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and it is very possible the name is, as Mr. Kolundu Pillai suggests, the Sanscrit equivalent of some other Tamil name actually borne by him. Perhaps it may hereafter be ascertained to be so, and it is worth while noticing that the name "Arimjaya," "Conqueror of his enemies," occurs at about this period in a list of Chóla Kings*—*i.e.*, between 900 and 950 A.D., showing that such an exclusively Sanscrit name was current at that period among the Chólas, and thus lending probability to the tradition that the Pándyan King may also have had such a Sanscrit name as *his* royal designation.

A serious objection to the great antiquity claimed for the writings of Mánikka, Tiruvalluvar, and other great Tamil writers is that referred to by M. Vinson in his letter to the editor of the Madras journal, *The Light of Truth*, of May 31, 1901, which appears at p. 30 of the June and July number of the journal for that year—viz., that writing was only introduced into South India towards the middle of the third century, A.D., and that there is no known inscription dating prior to the sixth century.

If we adopt the chronological order given below, which embodies the conclusions I have arrived at as set out in this paper, we shall find that all difficulties as to the silence of other writers in regard to Mánikka Váçagar and Tiruvalluvar disappear, which is a further confirmation of the accuracy of the position given to them. If, on the other hand, we adopt any other chronological order, such as that suggested by those who would antedate the third Sangam to the first or second century A.D., and the period of Mánikka Váçagar to a still earlier date, nothing but confusion arises and endless impossibilities of accounting for the silence of later writers as to persons and institutions supposed to have existed in these earlier times, which in the very nature of things they would have referred to had such persons and institutions actually occupied a place in that earlier period.

* See Duff's "Indian Chronology," p. 323.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

A.D. 600. Jnána Sambandhar, Návukkaraiyar or Appár, Sundara Múrti Náyanár } compilers of the Deváram.

This last was the author of Tiruttoṇḍaittogai, or "Enumeration of Saints."

End of Narasimma Varman's reign, about 642 A.D.

About 725 Kumárila Bhatta.

About 788 Sankarácháryar is supposed to have been born.

850. Máṇikka Váçagar's earliest probable date.

940. Latest date to which Máṇikka Váçagar's life probably extended.

940. Gaṇḍarāḍitya Chóla, poet. He became King in 948.

984. Rája Rája Déva, Emperor.

1000. Nambi Ándár Nambi compiled the Sacred Books in Tamil.

1064. Páṇḍyan kingdom absorbed by the Chólas.

1100. The so-called third Sangam was being held from about this date.

Period of Tiruvaḷḷuvar. Rudran Kannannár wrote a poem in praise of Karikála Chóla, and another in praise of a Prince Tondaimán.

Time of Senguttavan Chéra. Ilangóvaḍiál's poem Silappadhikáram. Síttalai Sáttanár at Senguttavan's court. Ilangóvaḍiáḷ and Síttalai Sáttanár both quote Tiruvaḷḷuvar, and Síttalai Sáttanár commends him. They quote distich 55 of the "Kuṛaḷ."

1117. Rámánuja, the Vaishnavite reformer, flees from the persecution of Karikála Chóla. At this time there was a general of Kulotonga I. named Karunákara, with the title of Tondaimán.

1142. Gajabáhu, a King of Ceylon, at Senguttavan Chéra's court.

The poet Kambar refers to Rámánuja in his poem Saḍagópa Antádí.

1313. Umápati, last Saiva saint.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000049

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

JAPANESE MONOGRAPHS.

By Charlotte M. Salwey, m.j.s.

IX.—CONCERNING MARRIAGE CUSTOMS.

In Japan a priestless ceremony, a ringless marriage, a wedding carried out devoid of almost any religious office, is as binding in its establishment (at least, on the part of the woman) as any marriage conducted under the most rigid rite and in conformity to ancient usage known throughout the civilized world.

Many manners and customs of the Japanese have struck us as being at least peculiar to the nation, full of interest and novelty in contrast with those of other countries. Those ceremonials which dispense entirely with every religious obligation strike us, perhaps, most of all, and excite a feeling of inquiry as to their ultimate successful fulfilment. Like everything else, Japanese customs vary in detail in the different provinces in which they exist. This is inevitable where dependence and custom are based on tradition.

The training of a young girl was severe and exclusive, particularly after the days of happy childhood were over, and the "festival dolls" had descended to a younger sister. There was no season in town, no début into circles where a likely partner might be found, no excitement of a first ball, or a dance with the most honoured guest to the envy of all present. The daughter's future was quietly arranged in the home between parents, guardians, and go-betweens of both families, after every item of suitability had been fully weighed, and found nearly equal. When all items were settled, presents were exchanged, and if the gifts were accepted by the parties and their relatives, there could be no withdrawal. The giving and receiving of presents corresponded to a formal betrothal, and the solemnity of the situation was thereby ratified. On rare occasions the couple were permitted to interview each other, generally in

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000098

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the house of the middleman and his wife, and in their presence; or a young lady would, by means of her mirror, concealed in the folds of her kimino, steal a passing vision of her future lord when he came to pay his visit of introduction to her parents; otherwise they did not meet till the wedding-day.

Many accomplishments came into the requirements of a finished education: embroidery, the arrangement of flowers, rearing and tending household pets, a good knowledge of botany, of fencing, the management of a house and household, dexterity in games of chance and skill, a fair knowledge of the works of celebrated authors, the composition of poetry, and numerous other means of beguiling weary hours for self and others within the home enclosure.

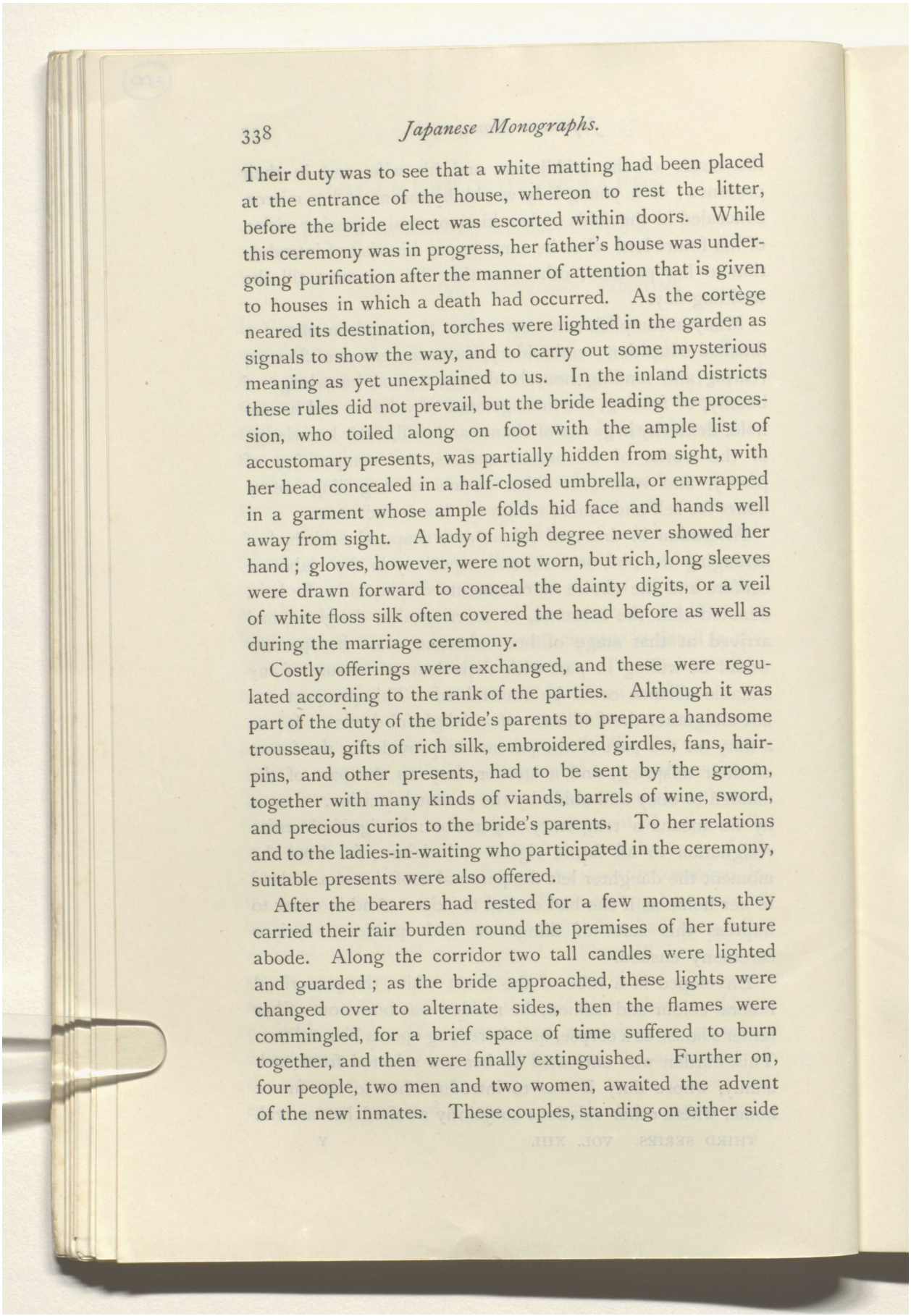
Alteration in dress, of colour and shape, the method of arranging the obé, or sash, and especially in the elaborate coiffure and the choice of ornaments displayed in the hair, denoted that the musumé, or marriageable daughter, had arrived at that stage of her existence when her parents would be willing to part with their dearest treasure, if any suitable alliance could be entertained. This prospect was not altogether the fulfilment of a delightful dream. It was a duty on the part of the parents to provide for the future of their offspring, and a sterner duty on the part of the maiden to obey and abide by the parents' decision. It was by no means a temporary separation: it signified entire resignation to all future rights and claims; for from the moment the daughter left the parental roof she was as dead to her home as if she had ceased to exist. And in order to impress this state of things on both parties a curious ceremony ensued.

Enveloped in a robe of the finest white, the prescribed funeral colour and fashion, the maiden was borne out of her father's house as a corpse, quietly resting upon a bier or litter. This burden was entrusted to bearers selected from each family, whose duty it was to introduce her to her future home, where other relations conjointly awaited her arrival.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000074

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Their duty was to see that a white matting had been placed at the entrance of the house, whereon to rest the litter, before the bride elect was escorted within doors. While this ceremony was in progress, her father's house was undergoing purification after the manner of attention that is given to houses in which a death had occurred. As the cortège neared its destination, torches were lighted in the garden as signals to show the way, and to carry out some mysterious meaning as yet unexplained to us. In the inland districts these rules did not prevail, but the bride leading the procession, who toiled along on foot with the ample list of accustomary presents, was partially hidden from sight, with her head concealed in a half-closed umbrella, or enwrapped in a garment whose ample folds hid face and hands well away from sight. A lady of high degree never showed her hand; gloves, however, were not worn, but rich, long sleeves were drawn forward to conceal the dainty digits, or a veil of white floss silk often covered the head before as well as during the marriage ceremony.

Costly offerings were exchanged, and these were regulated according to the rank of the parties. Although it was part of the duty of the bride's parents to prepare a handsome trousseau, gifts of rich silk, embroidered girdles, fans, hairpins, and other presents, had to be sent by the groom, together with many kinds of viands, barrels of wine, sword, and precious curios to the bride's parents. To her relations and to the ladies-in-waiting who participated in the ceremony, suitable presents were also offered.

After the bearers had rested for a few moments, they carried their fair burden round the premises of her future abode. Along the corridor two tall candles were lighted and guarded; as the bride approached, these lights were changed over to alternate sides, then the flames were commingled, for a brief space of time suffered to burn together, and then were finally extinguished. Further on, four people, two men and two women, awaited the advent of the new inmates. These couples, standing on either side

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000af

مكتبة قطر الوطنية
Qatar National Library

of the passage, were pounding up moche, or rice, in two separate mortars, and as soon as the litter passed, the contents of both mortars changed hands, and were finally incorporated into one inseparable whole mixture of the finest rice flour.*

Ladies-in-waiting repaired to the bridegroom's house the day before the wedding, and spent much time in preparing many comforts. The special robes for the forthcoming ceremony were hung over racks or screens, only used for this purpose; presents were made conspicuous, and the few articles that the bride was permitted to claim as her own from the home she was leaving for ever, were thoughtfully disposed of in a manner to give pleasure to the possessor, who had but little else to call her own.

In this strange marriage ceremony no vows were needed, no prayers or promises. No kiss of love sealed the compact, no gentle pressure of the hand reassured the trembling maiden of future and ever ready protection, no formal words were expected to be witnessed by the company present. It was a silent contract, as silent as the grave. Cups of wine, containing just one sip, were passed between the contracting parties—nine offered by the groom in triplets; nine in like manner returned by the bride, was the preliminary binding action. This wine had previously been mingled by the wine-bearers, from two separate bottles to which were attached models of male and female butterflies made in white paper. These were pressed together, or suffered to remain as emblems of immortal love in all its mystery. While the saké-drinking was proceeded with, delicacies were served—a pair of turtle-doves, fish, rice, cakes, dainty fruits, and other particular condiments.

Then the scene changed, and the second part of the ceremony was marked by the room being rearranged, while the

* It was not until we became acquainted with Japan that the custom of throwing rice over our brides was prevalent. Previously corn was used as a symbolic expression on the part of the wedding guests. The latest modern use of confetti is absurd, and of no symbolic value whatever.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000031

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

company withdrew, and the robes of white were discarded for those of richer make. Costly and beautiful lacquer drinking vessels replaced those of porcelain. Upon these lacquer cups a representation of the double-headed pine-tree of Takasago was always found, and a model of the tree, with all its symbolic and traditional accessories, graced the room.

The marriage feast was considered incomplete without this significant representation; everyone present had learnt the beautiful traditional story of faithful wedded love and filial obedience, embodied in the graceful growth of this particular specimen of coniferæ—

> ". . . the emblem of unchangeableness;
> Exalted is their fame,
> As a symbol to the end of time—
> The fame of the fir-trees that have grown old together."

To the bottles from whence the mixed wine was poured out during the second ceremony, instead of white, gold and silver paper butterflies were attached, and in point of fact all the preparations were on a more luxurious scale. The ladies who presided as wine-servers dressed their hair after the manner adopted at Court—that is to say, the tresses were allowed to fall down the back between the shoulders, showing the entire length of the hair, and the ends were secured by butterfly bows. The wine was served out with spouted ladles having long handles. Saké was generally taken hot, or at least warm.

The tedium of the day did not end here; the bride had to be formally introduced to the mother- and father-in-law and near relations as the bride and newly-adopted daughter, each in turn drinking again tiny cups of wine, as she pledged her obedience to all in authority in her husband's household. Her position was fully realised by the time the ordeal was over. She became conscious she had parted with her last day of liberty, and that henceforth meek submission to her husband and his parents must ever mark her future actions.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

If the bridegroom's parents were not living, the last duty that marked the day's events was a joint visit on the part of both young people to the family altar, in order to do obeisance before the *ihai*, or tablets, that recorded the names of the deceased relatives. For this purpose the *ihai* were placed on the *tokonoma*, with a portion of the wedding feast, as offerings to the ancestral spirit; a miniature feast, in fact, was spread, including even a pair of love-birds, never absent from the marriage menu. For this, the only religious sign of the event, the bride and groom were attired in robes of the richest brocaded silk, the groom with stiff wing-like ornamentation about the shoulders, to emphasize this part of the ceremonial. Then the last act and courtesy had to be carried through by the groom, whose duty it was to send to the bride's household an ample supply of rice, cakes, and other dainty food, carefully packed in rich lacquer boxes of special shape and make—no small item in the expenses of the day, but no doubt gratefully offered as the winding up of a rather lengthy festival.

One startling item in the ancient institution of marriage was personal disfigurement on the part of the bride. Before parents and guardians the honoured lady had to cover up the natural charms of a set of white teeth with a black dye. This custom was carried out by means of a severe prescription consisting of iron filings and gall-nuts stirred up with a red-hot iron bar, allowed to infuse for a certain number of days. But as even this formula did not appear impregnable, the process of blackening had to be constantly resorted to, lest a more unsightly disfigurement resulted, when the dye began to fade away. But the resignation of her personal charms did not end here. After marriage the wife had still to pursue the theory, and before she became a mother custom required her to part with her eyebrows by the process of shaving, to adopt henceforth a sombre shade of colour in her attire, to bind round her her sash in a less ornate fashion, to clip her sleeves of their graceful length, and to arrange her hair in a less attractive style; to enter-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000088

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

tain towards her lord and master, as well as towards his parents, a submissive demeanour ; to suffer herself to take the second place in his household, as long as it pleased the mother-in-law to rule domestic affairs ; to walk behind her husband on occasions of ceremony ; not to speak to him unless first addressed ; and often, after handing round the first course at a feast, to retire and become a "corner lady," to be alone conversed with at the pleasure of those present.

So much for the ancient ceremony of alliance. From the man's point of view, he took the devotion of his wife as a matter of course. It has been stated that for seven slight disqualifications provisions were made for a divorce at the will of the husband. This has naturally called forth much comment. Noble families prided their honour too deeply to avail themselves of such a step, an inharmonious home being considered as much a disgrace as the alternative desire to dissolve it. But there existed customs to carry on the line of noble families. Should no heir be born, those who could afford it, by mutual consent, received a sho, or handmaiden, into their family to raise up an heir ; nevertheless, the first wife always ranked first as wife and even mother, and the child was given over to her care and tender keeping. This state of things was regarded as inevitable, and did not of necessity mar the peace of a faithful wife's devotion, so great was the desire to continue unbroken a long line of ancestry, based on the established belief in the unique and unbroken dynasty of Japan's Imperial rulers.

Marriages were legalised by registration in the office of the konchō, or registrar, at the Town Hall. The name of the bride was entered in the public records of the family into which she had been received. Notification was also sent to her own town or village that she had left her father's roof and had been adopted into her husband's family. This was necessary because a custom prevailed to speak of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the newly-married lady, not as Mrs. So-and-so, but as the wife of Mr. So-and-so.

It will be understood by this monograph that the marriage ceremony of Japan is simply a domestic and family agreement. No outward religious observance was required to complete the union. Priests were not summoned to bless the united pair, or to ask special advantages to crown their future. The ethics of ancestral worship alone influenced in a silent and unobtrusive manner the future lives of the wedded pair. It was the dead who were called to remembrance, whose spirits would watch over the living, who were believed to be ever present in the midst of the circle of the home-life, and on this auspicious occasion in particular. The ceremonial was full of symbolism. Each step in the proceedings, and every dish of food partaken of, set forth the lesson of indissoluble union. Surroundings silently supplied religious teaching: and the bride's white robe in time became her shroud.

But every custom has generally its bright side. There exist in Japan family ties deeper than those which influence as a rule the family affections of the West. This state of things has originated from the morals of Confucius and the ethics of Shintoism. There are many tenets which bind a home together and strengthen the harmony of life within its walls. These are not learnt through the public oratory in temples, but in the constitutional and religious government of the home-life of all classes. This training was undertaken first by the mother, later by the father, and by all in authority successively. Responsibilities weighed heavy on the heads of each household, and all points of importance relating to the career of each junior, received their most just and careful consideration, authority ranking thus: "Ancestors were the first ruling power, relations the second, society the third, and the law the fourth."

Hence, in order to carry out these responsibilities, the elder male member of a family inherited all real property.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000076

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Money was not shared, and fortunes were seldom divided, except in the case of personal belongings. A dowry was not expected for the daughter on her marriage, except as was understood by the richness and amplitude of her trousseau. But the elder brother had to provide the necessary funds to start the younger in life, to pay for his education, and to look well after his mother during her widowhood. A curious custom existed in a home where no heir was born in respect to adoption. If only a daughter constituted the family, a second son from another family could be adopted, who would eventually become the husband of the daughter, but in this case his jurisdiction over his wife was not so great as in the case of ordinary marriage.

The religious system of Japan is sustained not so much by worship or attendance at the temples;* religion flourishes in the hearts and homes of the people. The family shrine is visited daily by all members; the altar receives the greatest care, also the cemeteries where rest the bodies of the departed. None who have lived together are ever forgotten; a *ihai*, or tablet, recording either the family name or the "going away" name, is conspicuous in every household. These are dusted and cared for, prayed before, and looked on tenderly as precious records of lives whose past beauty reflects honour and praise upon the living. Reverence is of more account than love or affection; obedience and submission the highest moral attainments. These characteristics have influenced the past history, and will still strengthen the future enterprises of the people of the Far East.

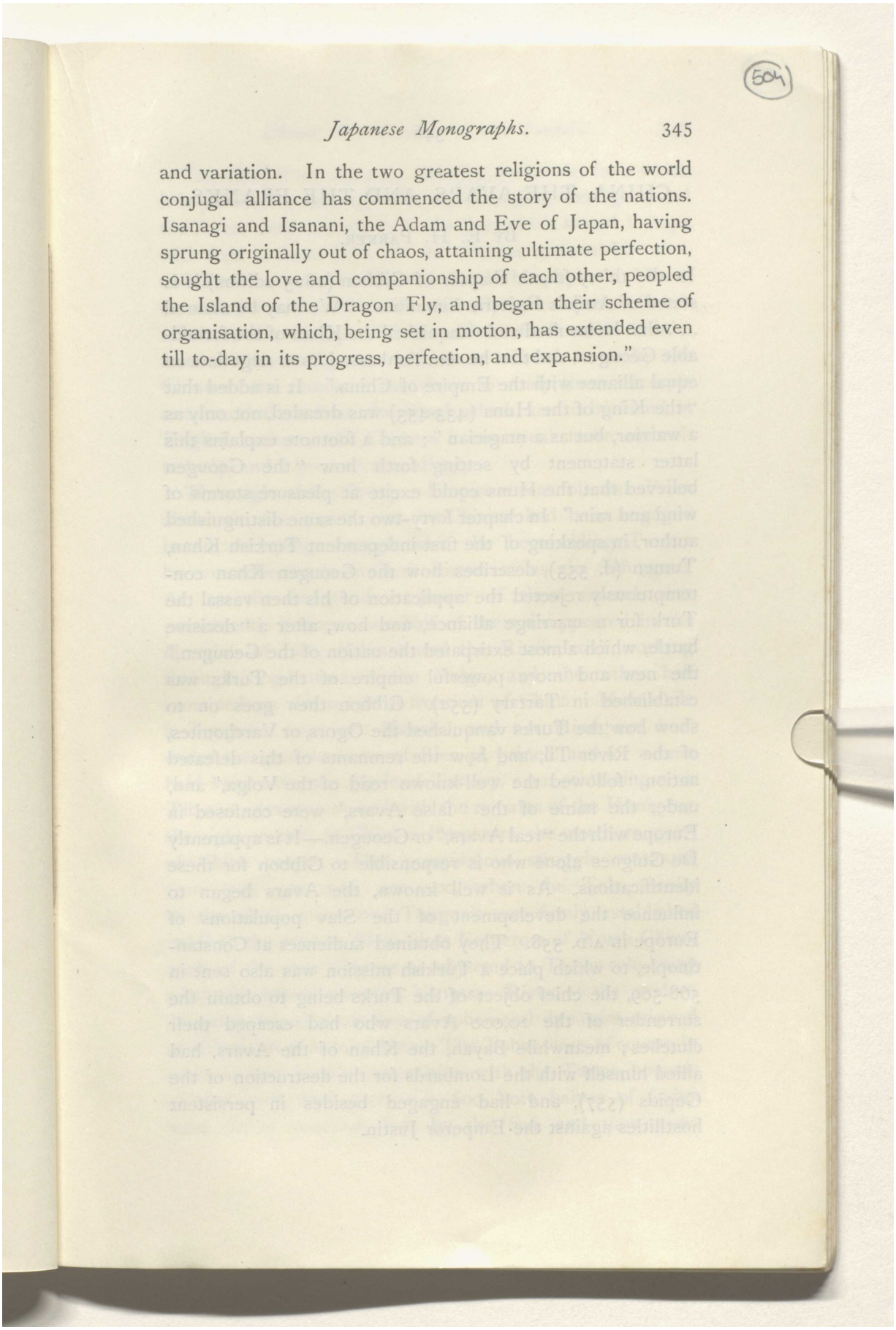
"Marriage," says Mr. Daigoro Goh, "is, in Dai Nippon as elsewhere, the greatest event in human life. It constitutes a life, a home, a family, a community, a nation; it is the continued union of two elements of the universe, without which the world could not continue in all its beauty and perpetual regeneration, its endless chain of youth

* It was not the custom for women to attend the temples much before the age of forty, or, in fact, any crowded place of entertainment.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000068

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



and variation. In the two greatest religions of the world conjugal alliance has commenced the story of the nations. Isanagi and Isanani, the Adam and Eve of Japan, having sprung originally out of chaos, attaining ultimate perfection, sought the love and companionship of each other, peopled the Island of the Dragon Fly, and began their scheme of organisation, which, being set in motion, has extended even till to-day in its progress, perfection, and expansion."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CHINA, THE AVARS, AND THE FRANKS.

By E. H. Parker.

In the thirty-fourth chapter of Gibbon (1825 edition) it is stated of Attila's Eastern dominions: "We may be assured . . . that he insulted and vanquished the Khan of the formidable Geougen, and that he sent Ambassadors to negotiate an equal alliance with the Empire of China." It is added that "the King of the Huns (433-453) was dreaded, not only as a warrior, but as a magician"; and a footnote explains this latter statement by setting forth how "the Geougen believed that the Huns could excite at pleasure storms of wind and rain." In chapter forty-two the same distinguished author, in speaking of the first independent Turkish Khan, Tumen (d. 553), describes how the Geougen Khan contemptuously rejected the application of his then vassal the Turk for a marriage alliance, and how, after a "decisive battle, which almost extirpated the nation of the Geougen," the new and more powerful empire of the Turks was established in Tartary (552). Gibbon then goes on to show how the Turks vanquished the Ogors, or Varchonites, of the River Til, and how the remnants of this defeated nation "followed the well-known road of the Volga," and, under the name of the "false Avars," were confused in Europe with the "real Avars," or Geougen.—It is apparently De Guignes alone who is responsible to Gibbon for these identifications. As is well known, the Avars began to influence the development of the Slav populations of Europe in A.D. 558. They obtained audiences at Constantinople, to which place a Turkish mission was also sent in 568-569, the chief object of the Turks being to obtain the surrender of the 20,000 Avars who had escaped their clutches; meanwhile Bayan, the Khan of the Avars, had allied himself with the Lombards for the destruction of the Gepids (557), and had engaged besides in persistent hostilities against the Emperor Justin.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

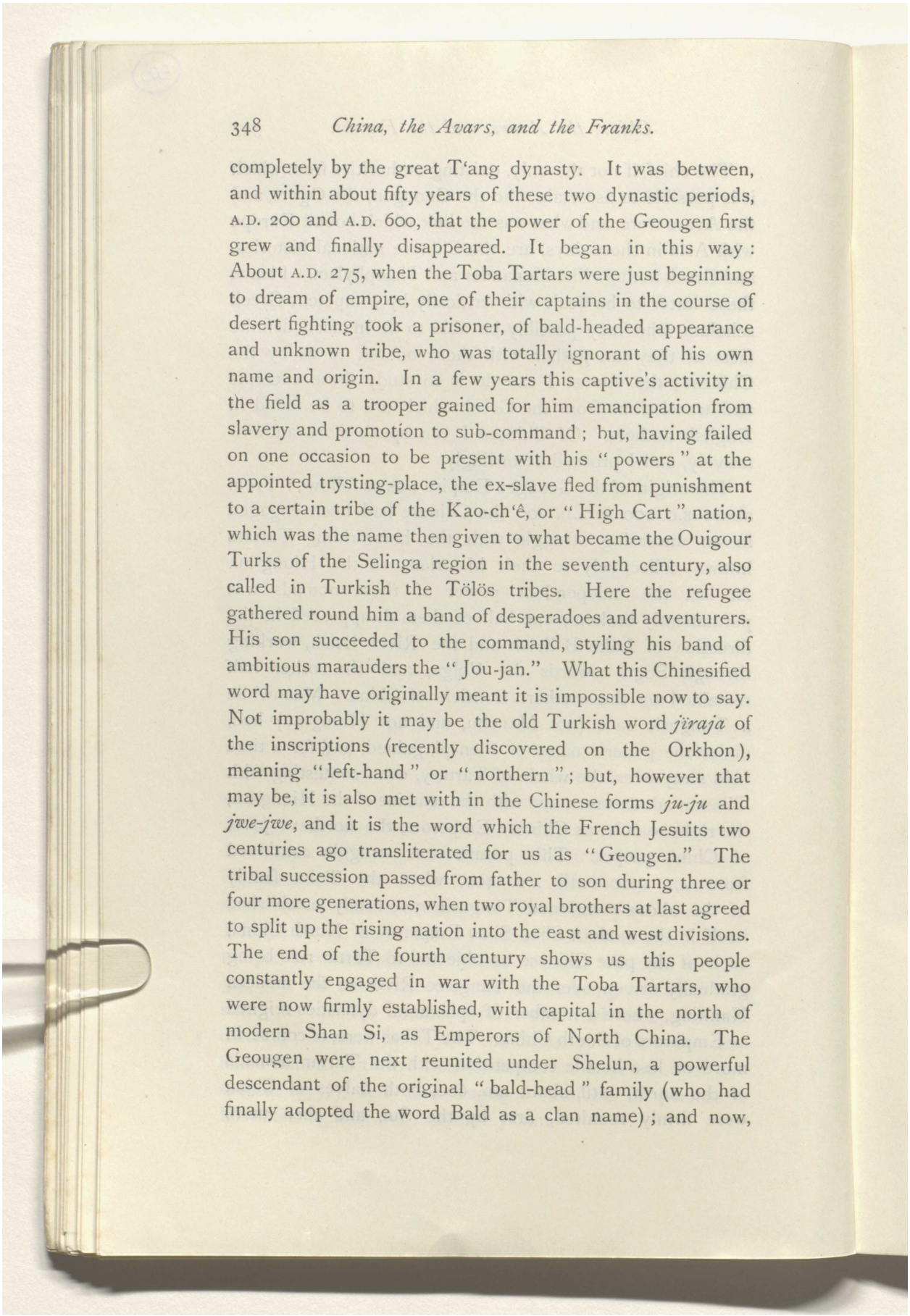
The chief, if not the only, existing authorities from which it is possible to ascertain who the Geougen, the Ogors, and the Avars were, and what was the link which bound Europe with Asia in those days, are the Chinese national histories, and Greek authors like Menander and Theophylact. I leave these latter to be dealt with critically by competent Greek scholars, who may possibly be able to fit in such definite facts as they can gather with those offered to us by the Chinese; the utmost I can do is to study those excerpts and translations from the Greek which are to be found in English authors. Of Chinese I can speak more authoritatively, and I proceed accordingly.

The origin of the Geougen Empire was as follows: From about B.C. 200 to A.D. 200 the Chinese had been engaged in an unceasing struggle with the horse-riding Tartars known collectively to their historians as the Hiung-nu. At last the independent power of these nomads was permanently broken; one half of them disappeared in the direction of Lake Balkash and the River Irtish, working through Sogd towards the Volga, and the other half remained on the northern frontiers of China. Meanwhile a Tungusic race (not Manchu, and not Hiung-nu) had, under the generic name of Sien-pi, gained, and for a time held sway over, the whole of Tartary, even contesting with Tibetan adventurers, and with the remains of the Hiung-nu, the right to rule, as Chinese Emperors, the northern parts of China proper. This promiscuous struggle continued from A.D. 300 until A.D. 400, when the Toba family of the above-mentioned Tungusic race firmly established itself in the modern Shan Si as Emperors of North China, such of the pure Chinese as objected to Tartar rule being gradually driven over the Yangtsze River to the modern Nanking, where a number of ephemeral dynasties reigned as Emperors of South China. The Tobas were, of course, in more or less hostile competition with the Tartar nomads of the north, until, about A.D. 600, both halves of China were firmly reunited, first by the Sui, and then more

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



completely by the great T'ang dynasty. It was between, and within about fifty years of these two dynastic periods, A.D. 200 and A.D. 600, that the power of the Geougen first grew and finally disappeared. It began in this way: About A.D. 275, when the Toba Tartars were just beginning to dream of empire, one of their captains in the course of desert fighting took a prisoner, of bald-headed appearance and unknown tribe, who was totally ignorant of his own name and origin. In a few years this captive's activity in the field as a trooper gained for him emancipation from slavery and promotion to sub-command; but, having failed on one occasion to be present with his "powers" at the appointed trysting-place, the ex-slave fled from punishment to a certain tribe of the Kao-ch'ê, or "High Cart" nation, which was the name then given to what became the Ouigour Turks of the Selinga region in the seventh century, also called in Turkish the Tölös tribes. Here the refugee gathered round him a band of desperadoes and adventurers. His son succeeded to the command, styling his band of ambitious marauders the "Jou-jan." What this Chinesified word may have originally meant it is impossible now to say. Not improbably it may be the old Turkish word *jïraja* of the inscriptions (recently discovered on the Orkhon), meaning "left-hand" or "northern"; but, however that may be, it is also met with in the Chinese forms *ju-ju* and *jwe-jwe*, and it is the word which the French Jesuits two centuries ago transliterated for us as "Geougen." The tribal succession passed from father to son during three or four more generations, when two royal brothers at last agreed to split up the rising nation into the east and west divisions. The end of the fourth century shows us this people constantly engaged in war with the Toba Tartars, who were now firmly established, with capital in the north of modern Shan Si, as Emperors of North China. The Geougen were next reunited under Shelun, a powerful descendant of the original "bald-head" family (who had finally adopted the word Bald as a clan name); and now,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000037

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

apparently for the first time in Chinese history, occurs the word *Khaghan*, or "Emperor." The Khan of the Geougen Tartars, as we shall call him, usually held his Court in what is in our times called the Alashan region, somewhere about mediæval Etzina. He had conquered and annexed most of the High Carts, and also those remains of the earlier Hiung-nu called the Bayirku, lying further to his west. This last word again appears in Turkish on the Orkhon inscriptions of the seventh century, and some of their fighting with Shelun is plainly stated to have been on the Orkhon River. Owing to a misprint in some of the Chinese national histories, De Guignes, and after him Gibbon, erroneously gives this first Khan's name as Toulun, a mistake all the more important in that a century later the Geougen Khan really was named Toulun.

From first to last the Geougen never possessed anything in the shape of a town. They were what the Chinese call a "horse-back State," pure and simple; that is, they were nomads, moving about with their tents, and pitching for a few weeks or months in ever-changing valleys or oases, according to the needs of their flocks and herds, to the supplies of pasturage and water, and to the temperature of the seasons. Whilst we have tolerably full accounts of social usages amongst the ancient Hiung-nu, and their later descendants the Turks, we have very little to show us what were the particular points in Geougen character which differentiated the ruling caste among them from these two—that is, from their predecessors and successors in desert empire; but the bulk of them are clearly stated to have been Hiung-nu tribes too. The evidence of language is, of course, not to be despised. We are given the native trisyllable for "bald-head," and also the native words (as they sounded to Chinese ears) for all the Khans' descriptions or titles. Thus, beginning with Shelun the "Conqueror," we have, in succession, the "Extender," the "Fair," the "Victorious," the "Spiritual," the "Pensive," the "Good," the "Perpetual," the "Merry," the "Successor," the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

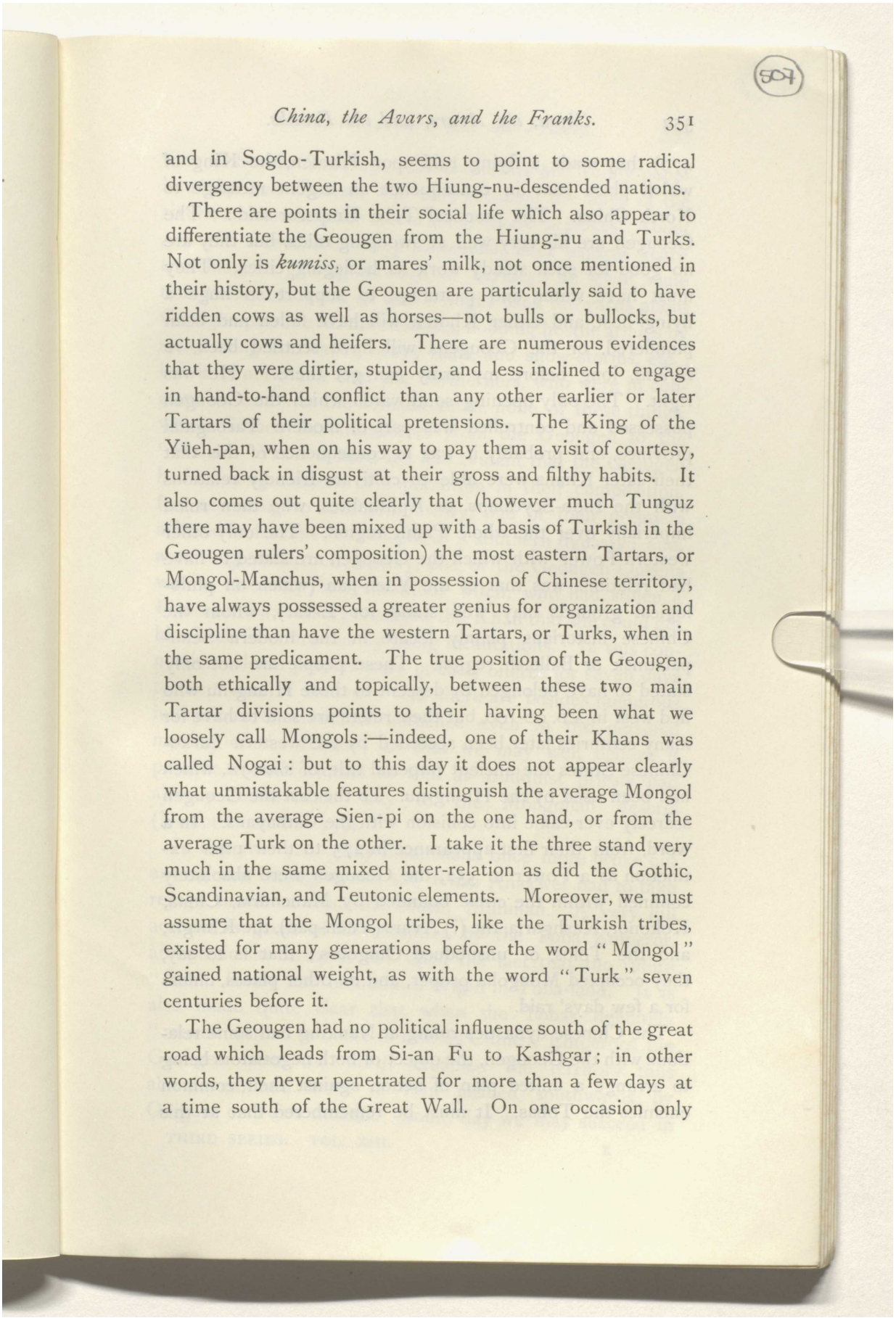
"Subduer," the "Peaceful," and the "Reuniting" Khaghans. All these words must have great potential value in the hands of competent Turkish, Mongol, or Manchu scholars, and such may always obtain the Chinese sounds from me for the asking.

The remarks of Cervantes, who lived long amongst the Turks of the Mediterranean, are here very much to the point: *Es costumbre entre los Turcos ponerse nombres de alguna virtud que en ellos haya.* This is almost word for word what the Chinese say of the Geougen: "The Khans and statesmen of the Geougen are designated according to their deeds and abilities, just as Chinese Emperors are so designated posthumously; but the Geougen appellations, on the contrary, were only used during life." The Prince's wife was called *Khaghatun*, which title, when in 550-552 the Turks overthrew the Geougen, was also applied to the Queen of the Turks, and is the more modern word *Khatun*. There are other evidences suggesting that the Geougen organization, such as it was, was bodily taken over, or at least partly imitated, by the Turks. For instance, the titles *Bagha*, *Teghin*, and *Tarkhan*, which frequently occur in the carved stone Turko-Chinese inscriptions in Sogdo-Aramæan writing discovered and deciphered within the past fifteen years, and which also occur as regularly in Chinese history, are found to have been used by the Geougen at least a century before the name "Turk" (taken from the appearance of the peak under whose shadow they dwelt) was applied to a petty Hiung-nu tribe. In the same way such Chinese imitation words as *tudun*, *bayen*, *djigin*, *djilifat*, and others not yet satisfactorily fitted with proved alphabetical Tartar originals, are proved to have been derived by the Turks from either the Geougen or from a common source; more especially the word *bayen* was used alike by the Geougen and Turks, by the European Avars, and by the Mongols. On the other hand, the entire absence from Geougen history of common Turkish words like *jabgu* and *chör*, found both in Chinese

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



and in Sogdo-Turkish, seems to point to some radical divergency between the two Hiung-nu-descended nations.

There are points in their social life which also appear to differentiate the Geougen from the Hiung-nu and Turks. Not only is *kumiss*, or mares' milk, not once mentioned in their history, but the Geougen are particularly said to have ridden cows as well as horses—not bulls or bullocks, but actually cows and heifers. There are numerous evidences that they were dirtier, stupider, and less inclined to engage in hand-to-hand conflict than any other earlier or later Tartars of their political pretensions. The King of the Yüeh-pan, when on his way to pay them a visit of courtesy, turned back in disgust at their gross and filthy habits. It also comes out quite clearly that (however much Tunguz there may have been mixed up with a basis of Turkish in the Geougen rulers' composition) the most eastern Tartars, or Mongol-Manchus, when in possession of Chinese territory, have always possessed a greater genius for organization and discipline than have the western Tartars, or Turks, when in the same predicament. The true position of the Geougen, both ethically and topically, between these two main Tartar divisions points to their having been what we loosely call Mongols:—indeed, one of their Khans was called Nogai: but to this day it does not appear clearly what unmistakable features distinguish the average Mongol from the average Sien-pi on the one hand, or from the average Turk on the other. I take it the three stand very much in the same mixed inter-relation as did the Gothic, Scandinavian, and Teutonic elements. Moreover, we must assume that the Mongol tribes, like the Turkish tribes, existed for many generations before the word "Mongol" gained national weight, as with the word "Turk" seven centuries before it.

The Geougen had no political influence south of the great road which leads from Si-an Fu to Kashgar; in other words, they never penetrated for more than a few days at a time south of the Great Wall. On one occasion only

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

470) they made a flying raid upon Khoten, the King of which place sent in consequence an urgent message to North China. The practical Toba Emperor said: "The Geougen are all very well at swooping raids, but they are no good for such steady work as besieging cities. They must have water and pasturage to support so huge a flying host, and either Khoten will have fallen and been plundered, or the Geougens will have scuttled back, *re infectâ*, long before my army can get there." He was right. The only opening southwards which the Geougen possessed and controlled was part of modern Tarbagatai province, and probably it was in consequence of this that their later Khans were able to cultivate friendly relations with the Indo-Scythians, or Ephthalites, who then ruled imperially over the whole Pamir region. The only other western Power with which the Geougen are stated to have had relations was that of the Yüeh-pan (which on philological grounds may well stand for E-var), whom the Chinese historians plainly locate in the modern Semipalatinsk or Balkash region. These people are not only stated to have belonged by descent to those Hiung-nu who fled west in A.D. 90-100, but their rulers are said to have for many centuries later been accorded by the western Turko-Chinese States the ancient imperial title of *shen-yü*, which had been used by the Hiung-nu. To the east the Geougen scarcely ever came into collision with the Cathayans. In a word, from their first appearance in 275 to their utter extinction as a Power in 552, the Geougen were absolutely confined within the circle bounded by Manchuria, China, Kokonor, Kashgaria, the (?) Avars (Yüeh-pan), the Khirgiz, and the Tölös, or unsubdued Ouigours; that is to say, they occupied Mongolia proper, and no other places, unless for a few days' raid.

The Chinese dynasties ruling at Nanking had some relations with the Geougen, the object of both negotiators being to arrange a united plan of action against their common enemies the Tobas. It must be remembered that at this

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

time all South China was semi-barbarous and thinly populated by true Chinese, who only occupied the lines of the rivers, and had colonies dotted about at central places. About A.D. 480 a southern envoy succeeded, after several years' travelling, in getting through to Tartary; he spent some time there, and it was he who brought back the yarns about Geougen power over the elements, flooding hostile armies by summoning hurricanes, heavy rains, and snow-storms, etc.; but it is noticeable that the northerners, who were in constant contact with the nomads, relate none of these things, which Gibbon has transferred from the Geougen to the "Huns." Yet it is none the less evident that the Geougen had a strong element of superstition in their composition, for, according to southern history, one of their premiers affected to foretell the collapse of a southern dynasty; and, according to northern history, one of the Geougen Queens was a successful and ambitious witch, who had stolen a Prince, and had then persuaded the Khan that she could get him back from heaven by using incantations. In this connection solemn prayers were publicly offered for seven days to the "God of Heaven," and there are besides numerous indications of Buddhist influence even in the personal naming of the Khans; so that we may well believe it possible that Nestorian as well as Buddhist priests had already found their way to the Mongolian deserts (Nestorius died in 439).

In the year 520 family dissensions once more broke out among the Geougen, and the Khan Anakwei had to take refuge in China from his cousin Brahman. A very full account is given of his reception by the Toba Emperor, and particular stress is laid upon the fact that the ruling "Bald" family had its obscure origin in Toba-land. It is also made quite clear that when the Tobas definitely "moved south" in order to rule as Chinese Emperors, the Geougen from the north occupied the territory thus abandoned, and were in turn pushed southwards by Ouigour or Tölös attacks. Some day we may succeed in

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

unravelling all this, but for the present it is enough to gain a few clear preliminary notions and leading principles. The dispute ended in China's conciliating the two claimants, and arranging to divide the Geougen Empire into the eastern and western divisions. Anakwei was given immense subsidies and settled in the modern Urga region. Brahman, on the other hand, ruled the country about medieval Etzina. Now it was that we first hear of Geougen-Ephthalite relations. Brahman's three wives were all Ephthalite women, and, being dissatisfied with the Chinese settlement, he seems to have sought to avail himself of existing alliances farther west; but he was pursued by Toba armies, captured, and ultimately imprisoned in China, where he died. Meanwhile Anakwei strengthened his position by concluding a marriage alliance with the Tobas.

Now, however, the powerful Toba dynasty began itself to fall into decay, and under the influence of two rival Generals was divided into the West Tobas of Si-an Fu and the East Tobas of modern Ho Nan. At last these Generals, or *maires-de-palais*, constituted for themselves and their sons a hereditary position, and, finally dethroning the *rois fainéants*, blossomed out into the rival empires of Chou and Ts'i. The Hiung-nu principalities dotted along the highroad to the West having during the fifth century been destroyed one after the other by the Tobas, it became possible for the Turks (who had for many generations been employed in the Alashan region as ironworkers by their masters the Geougen) to assert their independent rights. This is the earliest appearance in Chinese history of the word "Turk." Anakwei grew so presumptuous under the powerful Eastern Toba support which he enjoyed, that he offended, not only his patrons, but also his Turkish vassals, who consequently allied themselves with the Western Tobas. The important result of all this was that the first Turkish Khan Tumen almost annihilated the Geougen hosts in the year 552; Anakwei committed suicide, and family feuds about the succession further reduced the Geougens' failing strength.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000090

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

In their despair the royal family, with about 1,000 other households, threw themselves upon the mercy of the Western Tobas at Si-an Fu. As the treacherous mayor of the palace was just contemplating an act of dethronement and the establishment of a dynasty of his own at that very moment, and was therefore most anxious to conciliate the rising Turks, he basely complied with the demand of the Turkish Ambassador, and surrendered to him all the fugitive Geougen in his hands, the Khan included. It is not very easy to find the exact date of this craven massacre, of which even the Chinese historians seem heartily ashamed, but either in 555 or 556 the Turks at the capital were allowed to butcher 3,000 able-bodied Geougen in cold blood, only reserving for slavery or worse ignominy the handsome and sturdy youths. From this moment the very word "Geougen" totally disappears from Chinese history—the Turks absorbed the whole of the Hiung-nu descended tribes; and, although the movements of the Western Turks of the Rivers Oxus and Jaxartes are closely followed by the historians, not a single word is said of any flying Geougen. It is therefore quite unreasonable to suppose that the miserable remains of a people, the whole ruling caste of which was confessedly annihilated in 556 at Si-an Fu, were, or could have been, the Avars who had in 558 already influenced the fortunes of the Slavs and appeared on the political horizon of the West. On the contrary, we are told that in 420-430 the Yüeh-pan were settled north-west of modern Tarbagatai and Ili, and that in 448 the Tobas accepted their offer to assist in attacking the Geougen. The word Yüeh-pan is never once again mentioned in any Chinese history, and both this fact and the evidence of their name point to their being the Avars of 558, who had thus a clear century for emigration movements towards the Danube.

The Western Wei (Tobas) annihilated the Eastern, and Chou was in turn displaced in 581 by a successful Chinese General belonging to the interest of the former family. This

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000063

مكتبة قطر الوطنية
Qatar National Library

General then founded the Sui dynasty, which in 589 also conquered the Southern or Nanking Empire. China was therefore now reunited; and the second Sui Emperor, a man of fitful and restless energy, carried his arms into Corea, "Turkey" (North Ordos), and Kokonor, personally visiting all those places himself, and sending Ambassadors even by sea to Loochoo and to what is now called Siam. He explicitly aimed at emulating the "First Emperor" (255 B.C.), who had revolutionized and recast the Empire 800 years before him. It is stated of this Sui Emperor that he "was often on the point of opening relations with Fuh-lin." In China it has always been the rule that each succeeding dynasty shall make up into historical form the annals of its predecessor, and under the head of "Persia" the Sui History says: "From Persia you go north-west 4,500 *li* (1,500 miles) to Fuh-lin." The extravagances of the above-mentioned ambitious monarch, which were all crowded into a period of twelve years, brought his dynasty to an ignominious end in 618, and nothing further whatever is said of Fuh-lin in the history of it, which was compiled and published a few years later by the succeeding T'ang dynasty. The above retrospective passage about opening relations occurs in the tenth-century history of the T'ang dynasty, which reigned at Si-an Fu from 618 to 904. This history, which of course simply transcribes the stored-up annals, then relates how Fuh-lin is the same country as the ancient Ta-ts'in, and how the "King," Po-to-lik (? Patriarch) of Fuh-lin had sent an overland mission to China in 643. The celebrated Nestorian stone of Si-an Fu is still plain evidence before our eyes; it explains how the Ta-ts'in monk Olopen came to China to preach the "Sublime" Faith. We possess, in a Chinese work published about 900, the original decree of the Chinese Emperor, dated in 638, authorizing the "Persian" priest Olopen to preach the "Orthodox" Faith, and establish a monastery at Si-an Fu. It has been proved to satiety how the Chinese of those times (and very naturally) often confused the Nes-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

torian, Mazdean, Manichean, and possibly other forms of Western religion with "unorthodox" forms of Buddhism and how, in this as in other matters, Persia and Syria were but vaguely differentiated. The fact is, the Chinese themselves never once got beyond the continent of Asia into Europe, of which place they had only hearsay notions; or, if an occasional adventurer ever did so, he never succeeded in acquiring or recording in Chinese distinct conceptions of where the mysterious Ta-ts'in was. The boundaries of the Roman and Persian Empires had been, and were, perpetually shifting, and the eastern people of Ta-ts'in (or first the Roman and then the Eastern Roman Empire) would alone picture to the Chinese imagination the magnificence described to them by Persian and Turkish reports as existing farther west; and it must be remembered the Turks had actually been in Constantinople on a hunt for Avars the year after the Avars had taken prisoner the Frank King Sigibert in Bavaria, whence the Franks subsequently drove the Avars back into Pannonia. Clearly, at about the date A.D. 610, the Chinese must have obtained overland information concerning Fuh-lin, for, as we have seen, a ruler from some eastern part of that ill-defined State actually sent a mission in 643, and China's most adventurous Emperor had left it on record that one generation earlier he had wished to know more of the place.

I take it that Fuh-lin is simply the word Fer-reng, or some such form of the Arab word Afrangh, and I suggest that the first knowledge of the Europeans, subsequent to the vague first-century rumours about Ta-ts'in, was derived by the Chinese through the Avars and Turks. As the French historian Duruy remarks: "Les Francs avaient en effet apporté de la Germanie une idée qu'on ne connaissait plus dans l'Empire, celle de la souveraineté de la nation. . . . Dagobert (628-638) apparaît-il comme chef de tous les barbares établis dans les provinces de l'ancien empire d'Occident. Il était l'allié des Empereurs de Constantinople, et on le voit intervenir dans les affaires des

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000bd

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Wisigoths d'Espagne, auxquels il donna un Roi; dans celles des Lombards d'Italie, etc., etc. . . . Enfin ce fut sur la terre des Francs que les Bulgares fugitifs vinrent chercher un asile. . . . La *France romaine* fut vaincue par la *France teutonique*."

The only *national* designation to be then found in Europe, except that of "Roman," was thus "Frank.' The Emperors Maurice, Phocas, Constantine III., and Constans were all murdered, and Patriarchs for the Latin Church had only just been established in the Eastern Empire, which circumstance soon led to a schism. We have it on historical record that the Nestorian Olopen came from Ta-ts'in; that the same Olopen is confused with a Persian; that Ta-ts'in was the later Fuh-lin; and that a King (apparently "Patriarch") of Fuh-lin sent a mission a few years after Olopen came to China. We have Yüeh-pan totally disappearing from China; and Avars, a century later, suddenly appearing face to face with Franks in Europe. If this is not sound circumstantial evidence, what is?

I have endeavoured to obtain confirmatory evidence from Arabic scholars in England, but as these efforts have not been very successful, I have during the past two years caused careful inquiry to be made by a relative now resident in Egypt. At last a learned Syrian has been discovered by him at Assouan, and this Syrian gentleman, of whom I know no more than that his name is Shakoor Bey, has replied in writing, categorically, to a number of my questions placed before him, without in the least knowing for what purpose these questions were put, or who put them. This is the sum of his replies: "The Caliph Omar (632-644) in his conquests spoke of Europeans as 'Al Roum,' which term includes 'Afrangh.' In narrating his exploits the Arab writers style Europeans 'Afrangh.' The General Kotaiba, in his Turkestan conquests and fights with the Turks sixty years later, speaks of Europeans as 'Roum' or 'Afrangh'; of Turks as 'Tourk;' of Chinese as 'Sineeyien'; of Persians as 'Firs;' of Greeks as 'Roum.' In modern Egypt the vulgar

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

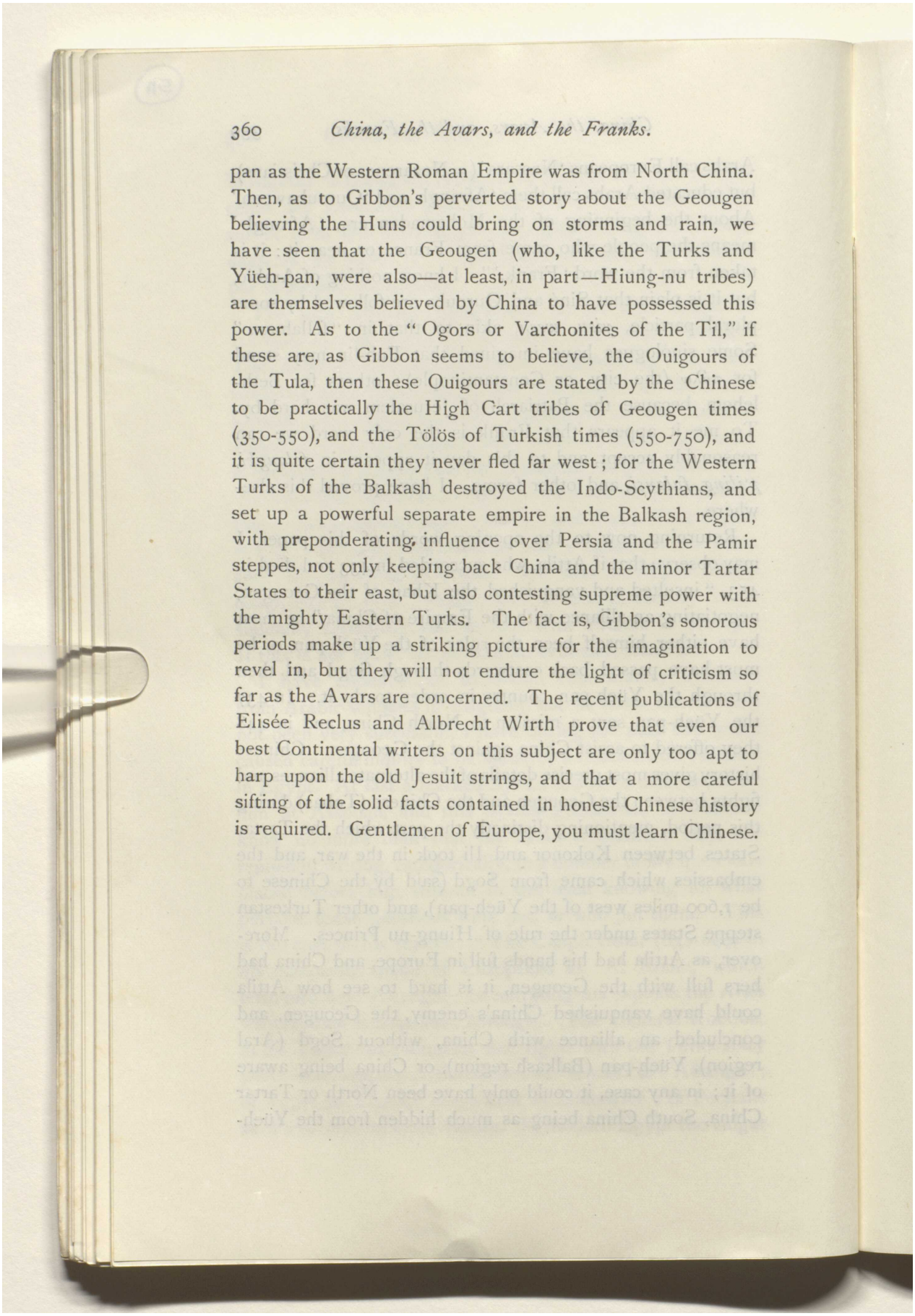
Arabs call Europeans 'Nassara' (= Nazarenes or Christians), but educated Arabs call them 'Afrangh' and 'Ouroubaween.' About the beginning of the Mohamadan era, 'Afrangh' means the people who came from France or near it: it is taken from the word 'Frank.'" I know nothing of Arabic, but it is plain that Siné and Ourouba are followed by some plural particle, *yien*, *ween*, akin to that in "fellah-*een*." Some sinologues have imagined that Fuh-lin may stand for πόλω (the city, or Constantinople); others for Bethlehem, because the Patriarch of Jerusalem was hard by. To me it appears that Frank is the only word we can reasonably accept, and to this day it appears in *folangki*, *p'iling*, *falansi*, and other forms. I have proved this elsewhere.

Returning now to the opening words of this paper, I may observe that if Attila, who succeeded in 433 and died in 453, "insulted and vanquished the Khan of the Geougen, negotiating an alliance with the Empire of China," he must have either himself been the ruler of the Yüeh-pan, or he must have passed back eastwards through Sogd and then through the Yüeh-pan country in order to do it. In 437 the Yüeh-pan sent a mission to North China, and in 448 they offered to assist China against the Geougen. Chinese history gives most precise details of the alternate alliances and fights between the Geougen and the Chinese (Tobas) during this period, mentioning distinctly the part which the Tartar States between Kokonor and Ili took in the war, and the embassies which came from Sogd (said by the Chinese to be 1,600 miles west of the Yüeh-pan), and other Turkestan steppe States under the rule of Hiung-nu Princes. Moreover, as Attila had his hands full in Europe, and China had hers full with the Geougen, it is hard to see how Attila could have vanquished China's enemy, the Geougen, and concluded an alliance with China, without Sogd (Aral region), Yüeh-pan (Balkash region), or China being aware of it; in any case, it could only have been North or Tartar China, South China being as much hidden from the Yüeh-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000045

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



pan as the Western Roman Empire was from North China. Then, as to Gibbon's perverted story about the Geougen believing the Huns could bring on storms and rain, we have seen that the Geougen (who, like the Turks and Yüeh-pan, were also—at least, in part—Hiung-nu tribes) are themselves believed by China to have possessed this power. As to the "Ogors or Varchonites of the Til," if these are, as Gibbon seems to believe, the Ouigours of the Tula, then these Ouigours are stated by the Chinese to be practically the High Cart tribes of Geougen times (350-550), and the Tölös of Turkish times (550-750), and it is quite certain they never fled far west; for the Western Turks of the Balkash destroyed the Indo-Scythians, and set up a powerful separate empire in the Balkash region, with preponderating influence over Persia and the Pamir steppes, not only keeping back China and the minor Tartar States to their east, but also contesting supreme power with the mighty Eastern Turks. The fact is, Gibbon's sonorous periods make up a striking picture for the imagination to revel in, but they will not endure the light of criticism so far as the Avars are concerned. The recent publications of Elisée Reclus and Albrecht Wirth prove that even our best Continental writers on this subject are only too apt to harp upon the old Jesuit strings, and that a more careful sifting of the solid facts contained in honest Chinese history is required. Gentlemen of Europe, you must learn Chinese.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000032

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

SIĀM'S INTERCOURSE WITH CHINA.*

(SEVENTH TO NINETEENTH CENTURIES.)

By Major G. E. Gerini, M.R.A.S

B.—REMARKS ON THE INTRODUCTION OF THE ART OF CROCKERY-MAKING AT SWANKHALÔK.

The crockery wares of Swankhalôk were made at the place now called *Tau Tulīeng*, *i.e.*, "*Tulīeng* Kilns," which lies about two or three miles up-stream from Old Swankhalôk, and on the same (right) bank of the river. I went carefully over the place a few years ago, when I found the remains of a large number of kilns. These apparently continued to work until stopped by the Burmese invasions of A.D. 1765-66. Since that date the manufacture of the Swankhalôk crockery has ceased. The honour of starting the industry is, by local tradition, ascribed to old Master *Tulīeng* (*Tu-liang*?),† said to be one of the Chinese artisans who came to Siam in King Rùang's train. Hence the site of the kilns was named after him. Heaps of débris of broken pottery are still to be seen about the kilns. The style of fabrication and of glazing is evidently Chinese, and the work was undoubtedly carried on by the descendants of the original Chinese starters of the industry, although Siāmese designs were introduced in the course of time. Most of the Swankhalôk wares belong to the *craquelé* type, which constitutes their main distinguishing feature. The crackle is generally wide apart, but on diminutive specimens it is close-set, and well produced, as in the Chinese cracklin wares of the so-called "fish-spawn" or *truité* pattern. The dominating colour is a creamy, and at times a fallow, white; although celadon—the beautiful sea-green tint so much appreciated in old Chinese porcelains—and deep rosedon also occur. Some specimens present a combination of several brilliant hues—for instance, the *pañca-rañga* vases (in Siāmese, *thô beñcharong*), so called from being adorned with representations of expanded lotus flowers exhibiting five different tints. These polychrome wares are, however, uncrackled, and undoubtedly belong to a later period. On the other hand, the white crackled musters and other monochrome specimens seem to have more than one point of analogy with the classical *Kwan-yao* and *Ko-yao* porcelains of the Sung

* For the previous portions of this paper, see our numbers for October, 1900, pp. 365-394; January, 1901, pp. 155-170; April, 1901, pp. 379-385; and January, 1902, 119-147.

† It is possible that some personal name, such as, for instance, *Tu-liang Tu-lien*, etc., is here implied, although the term seems to me to look more like atoponymic, introduced from, and adopted after, some place in China noted for either figuline clay or pottery works. There are, or were, places in China bearing the name of *Tu-liang*, but whether crockery was ever made there or not I am unable to say. On the other hand, the district of *Fu-liang*, very similarly named, has become well known from the fact of the famed King-tê-chên potteries being situated within its territory. Sinologists interested in the subject should be able to throw further light on the origin and purport of this curious term *Tulīang*, handed down to us in Siāmese oral tradition of ages long passed away.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000051

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

dynasty, from which they were very likely imitated in the style of glazing, if not in the excellence of the workmanship. The paste is, in fact, comparatively coarse-grained, and the manufactured article thick and heavy, owing to the inferior quality of the prime material that was at hand; but the enamel is not, so far as I can judge, very considerably behind in excellence that of Chinese porcelains, and it is evident that the ingredients entering into its composition were imported from China. It is nevertheless pretty well certain that, but for the lack on the spot of a figuline clay as fine in quality as the famed *kao-lin* to be met with in the neighbourhood of the most renowned ceramic establishments in China, we would have had real porcelain produced at the Swankhalôk factories, just as good in quality as that turned out from the best Chinese pottery works, whereas the Swankhalôk wares, of which specimens remain, cannot be said to rank above the level of common crockery, although some of them may perhaps be classed in the category of soft porcelain, on account of the whitish paste of which they are composed, and the superior quality of the glaze. As regards the shape of the articles, it should be noted that not only bowls, cups, vases and spittoons were made, but also good-sized jars, terminals of pillars and lamp-posts, figures of animals such as *rājasīhas* (lions), etc., wherewith the Buddhist temples in and about Swankhalôk were adorned. Among the heaps of débris lying about the Tu-lïeng kilns I discovered a torso of *Garuḍa* overlaid with green enamel; several mutilated representations of the *hatthiliṅga* bird (a sort of fabulous vulture with a bill like an elephant's trunk) I picked up amongst the ruins of *Wat Khâu Rang-rëng* (the celebrated monastery of "Vulture-nest Hill"),* and many other interesting specimens of old Swankhalôk ceramic art I gathered amidst the remains of other Buddhist temples of the ancient city, all of which may now be seen in the Royal Museum at Bāngkōk. The chips of broken crockery to be met with about the Tu-lïeng kilns mostly belong to dishes and bowls of a somewhat rough design, glazed with a pale bluish-green crackled enamel recalling to a certain extent the delicate tint of the famed Lung-ch'üan celadons; but the coarseness of the material, as well as the inferiority of the workmanship, concur in indicating that these must be the productions of a later period, when the Swankhalôk factories were far down in the decline. Remains of other kilns are to be met with at other places to the north of the city, this being a proof that the ceramic industry was by no means localized to the Tu-lïeng kilns only. The latter formed, however, its most important centre, and the traditional name that remained to the bend in the river's bank close to the bottom of which the kilns are situated, viz., *Khụng Tap'hau* (*i.e.*, the "ship of junk's bend") well attests that river-craft used to moor and load the wares here, in the halcyon days

* This monastery was, according to the "Northern Chronicles," built by King Rùang himself, hence the *hatthilinga* figures probably belong to the period of that King's reign. It seems that it is this same hill which was reputed to have been at one time the resting-place of a gigantic trunk-billed vulture or *hatthilinga*. According to a legend related in the *Camadevī-vainsa*, a Pāli chronicle of Lamp'hūñ brought out to light by me (Section III.), the Risi Sajjanālaya residing at Swankhalôk made use of that monstrous creature in order to fetch from the ocean depths the huge chank-shell which served as a pattern for tracing the outline of the walls of the new Harïbhuñjaya city (Lamp'hūñ).

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of crockery manufacture, when a populous Siāmo-Chinese village most undoubtedly thrived round about the famed kilns. Local tradition pretends that the craft which frequented this spot were sea-going junks, bringing up merchandise from abroad and taking away the prized products of the kilns to the neighbouring foreign nations, as the name *tap'hau*, usually designating a junk for sea-navigation, implies.* This tale, however, must be accepted with reserve, for although we have admitted and demonstrated that sea-going craft used in the old days to proceed up the river as far as Sukhôthai, and even, perhaps, Swankhalôk, it is scarcely credible that they could, even at high-water season, ascend the rapids existing abreast of the latter-named city. This feat is now performed only by river-boats of shallow draft, and has become easier of accomplishment during the last sixty years or so; before that the rapids appear to have been far more difficult to cross.† Nevertheless, it seems pretty well certain that a large proportion of the Swankhalôk wares were taken down-country in boats, and some of them exported thence to the southern coast of Indo-China, or carried overland across the watersheds.

The Martabani.

Here the much-debated question as to the original place of manufacture of the *Martabani* vases once more comes to the front, as brisk and intricate as ever it was. So much has been written about it, mostly by "arm-chair" Oriental scholars of our Western world, that we cannot afford to pass it unnoticed, as it directly bears upon the subject now under discussion. After due perusal of the principal arguments‡ brought forward by either of the parties engaged in the controversy as to the origin of the *Martabani* celadon dishes, tending on the one side to claim them as having been manufactured in China, and thence exported by the early traders to the Indian or Arabian countries, where they became so celebrated, and on the other to prove that they must been made at some place in Indo-China not far away from Martaban, whence they got their name. I am, on the whole, strongly inclined to side with Professor Karabacek, of Vienna, who has been the propounder and chief upholder of the latter view. The passage he quotes from the celebrated encyclopædist Haji Khalfa, who died in A.D. 1658, to the effect that "the precious, magnifi-

* *Tap'hau*, often spelled *Samp'hau*, seems to be a comparatively modern Siāmese term derived from the Chinese word (*po*, *p'o*, *boh*, etc.), denoting an ocean-going junk. *Ta* and *Sam* are prefixes, the latter standing very likely for (*ch'wan*, *sung*, *shon*, etc.), the Chinese generic name for a boat, ship, etc.

† Rafts of teak-timber do, of course, shoot the rapids during the high-water season, having to stop from about October to July each year, when the rapids become impassable. The rapids termed *Kĕng Lúang*, situated abreast of the old palace, are the most difficult to cross; a half-mile further below there are the rapids named *Kĕng Sāk*. The former are constituted by a quartz reef forming a barrier running across the river, and causing its waters to fall for about 9 feet.

‡ Chiefly as summed up in an able article on "Ancient Porcelain," published by Dr. Hirth in the *Journal, China Branch Royal Asiatic Society*, vol. xxii. (1887), p. 150 *et seq.*, on which my criticisms had to be based, not having access in this far-away land to the original publications of the parties concerned in the controversy.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

cent celadon dishes and other vessels seen in his time were manufactured and exported at Martaban in Pegu," seems to me most decisive, although I believe that a mistake was made by its author in confounding Martaban, the port of shipment, with their place of origin. The latter, I am fain to think, was almost undoubtedly Swankhalôk, the only place I know of in Indo-China where glazed pottery closely approaching Chinese porcelain of the most classical pattern was ever manufactured. Truly, there appear to be two widely different kinds of wares to which the term *Martabani* was applied :* one, according to Jacquemart, presenting a thin, bright green glaze, overlaying a very white biscuit, which allows the light to appear through, and constituting, in the opinion of Professor Karabacek, the finest celadon porcelain to be met with throughout the Muslimic Orient ; the other typified especially, in the words of the same authority, by the "large, heavy, thick, green celadon dishes with the well-known ferruginous ring on the bottom, which have been found spread over all the countries of Arab civilization." Now, it is this latter kind which seems to possess the chief characteristics common to the Swankhalôk wares, and which very probably will some day, when an exhaustive examination and comparison has been instituted by experts, be identified with them. As to the superior class of the *Martabani* first described, they

* Even *three* kinds, if we include under this denomination the large-sized glazed jars, also called *Martabani*, but better known as "Pegu jars," which were famous all over the East for many centuries (see Yule-Burnell Glossary, p. 428). These were and are still chiefly made at Twanté and neighbouring places of the coast of Pegu, and although glazed they have nothing to do with Swankhalôk wares and the class of pottery (celadon dishes, etc.) forming the object of the present discussion ; hence I have refrained from dealing with them in the following pages. I cannot help, at the same time, calling attention here to the fact that this vague term *Martabani* has been made to cover, or designated at different periods, several quite distinct kinds of pottery, ranging from common glazed earthenware to the very finest porcelain ; thence, I think, a good deal of confusion has arisen as to the class of vessels that are more properly implied. On this subject authorities vary very considerably. Dulaurier, for instance, quotes from Father Azar, a Maronite, that *Martaban* means a casket or vase for keeping medicines and comfits, etc. But Colonel Yule observes ("Cathay," vol. ii., p. 476) the word is used for the great vessels of glazed pottery called *Pegu* or *Martaban jars* from the places where they were purchased, and which retained a wide renown up to the present [nineteenth] century. These are likewise the "great pottes of Martavan" mentioned by Linschoten (see Anderson's "English Intercourse with Siam," p. 33), in which palm-wine from the *Nipa*, or *attap*-palm, "was carried from Tenasserim to all places in India" ; and also the large *black-glazed* jars to which Barbosa devotes the passage rendered by Ramusio Navigationi, etc., vol. i., p. 317 a, of the 1563 edition), as follows : "Si lavorano in questo luogo di Martabane grandissimi vasi di porcellana bellissimi e invetriati di color negro, havuti i sommo pregio appresso li Mori : li quali gli levano di qui, come la maggior mercantia che possino havere." Now, these products of an undoubtedly local industry have nothing to do, it seems to me, with the "caskets or vases for keeping medicines," described by Father Azar, and less still with the celadon porcelain vessels known to the Muslimic Orient under the name of *Martabani*, which were certainly not manufactured at the same places where Pegu jars were turned out, and cannot in any way be classed with them. It is with this class of the superior—and perhaps older in date or style—*Martabani* that we propose to concern ourselves in the present discussion, and it will be now seen how necessary it was to draw a line of distinction between the so varied kinds of the wares so named, in order to avoid the confusion that has been made by many of the authorities who treated the subject.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

may have been really manufactured in China, and it is possible that in the course of time—when coarse imitations were made of them in Siām and shipped to Muslimic countries by way of Martaban, becoming thus known by the name of *Martabani*—this same term was applied on account of many points of resemblance to the genuine old Chinese celadons, to the specimens of these articles that had long before that found their way from China to the Muslimic world. It may be also possible, on the other hand, that this superior class of porcelain was, in the early days of the initial establishment of the Chinese ceramic industry at Swankhalôk, manufactured at the latter place as well, its production being afterwards discontinued through decline of the art amongst the Sino-Siāmese descendants of the original starters of that industry. Hence the early thin and transparent *Martabani*, so appreciated for their excellence of material and workmanship, would be superseded by gradually coarser products, as the art went on declining in inexperienced hands, and the secret of the production of the original superior articles became perhaps lost for ever. This latter hypothesis cannot be maintained, however, until some specimen of ancient Swankhalôk wares is found, resembling to some extent in excellency the superior class of the *Martabani*. We accordingly adhere for the present to the view put forward at the outset, ascribing the paternity of the first-rate *Martabani* to China, and the merit of the creation of their inferior imitations to Siām, with Martaban as the port of shipment. This manner of viewing the question agrees, it will be seen, in a literal sense with the opinion expressed by the sinologist side, who claim the product as being of Chinese manufacture, but with the essential difference that, although turned out by Chinese artisans, it is believed by us to have been made in Siām, and not in the Flowery Land. At the same time it tends to strengthen the position taken by Professor Karabacek, who qualifies as a prejudice the idea that during the Middle Ages China was the only country where porcelain was manufactured. But where does Dr. A. B. Meyer, of the Dresden Ethnological Museum—the most *acharné* of Professor Karabacek's opponents—come in with his exclusive theory of the absolute origin on Chinese soil of indistinctly all the classes of *Martabani* vessels, based on the mere negative as well as startling premise that no evidence can be brought forward to show that real porcelain was made at Maulmein (Martaban), Rangoon, or Bangkok [!!]? He might have included Chölon (Saigon) as well in his indictment, thus completing the list of the places most noted to residents in Indo-China for the confection of bricks, and cooking-pots, and water-jars of red earthenware, where no one would certainly dream—in view of the low alluvial character of the soil—of looking for the production of articles in any respect approaching to porcelain. But the most curious of it all is that the worthy doctor—as a friend of mine afterwards informed me—being apprised of my discovery, in the course of my archæological explorations of the country in and about Swankhalôk, of a number of kilns whence glazed wares closely resembling, especially in the style of manufacture and enamelling, the old classical Chinese porcelains were turned out, still persisted in his opinion that positively nothing of the kind was ever produced in Indo-China. My object

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000075

مكتبة قطر الوطنية
Qatar National Library

in penning these lines is not to refute one-sided views of "arm-chair" professors who discourse on topics connected with Far Eastern countries, taking for their chief basis what is said—and too often left unsaid—in superficial and out-of-date books on these lands, to so large an extent still mysterious to us. My aim is, on the other hand, to simply call attention to the fact of the well-authenticated existence in Siām, despite all theoretical demonstrations to the contrary, of ceramic works where glazed wares were manufactured originally by Chinese artisans in imitation of the Chinese porcelains, which fact, so far almost unknown, and in any case as yet totally unproved before my investigations, may contribute to solve the as yet unsettled question as to the real origin of the mysterious *Martabani* vessels.

Two points still remain to be touched upon before dismissing the subject. The first regards the fluted pattern, so often met with in *Martabani* celadons, which Professor Karabacek regards as characteristic of Siāmese origin, and holds to be a specific ornament of Siāmese civilization. In this, I am sorry to say, he is completely mistaken; for not only does not the fluted or ***radialstreifen*** pattern, as he terms it, occur in Swankhalôk and other wares of local manufacture, but is not even, or hardly ever, met with in other works of Siāmese art except very modern ones where it was undoubtedly imitated from Chinese models. I am therefore disposed to regard it, with Dr. Hirth,* as peculiar to Chinese porcelains. What must have induced Professor Karabacek to err was having found it in modern so-called "Siāmese" crockery "made in China."

The next point concerns certain marks that Professor Karabacek has seen engraved on the bottom of some of the celadon dishes in dispute, and which he declared to be of Siāmese origin, while Dr. Meyer—backed in this by Dr. Hirth—attempts to explain them, not a little unsuccessfully, by means of Chinese hieroglyphs. Here are the three marks forming the subject of the debate:  . "Of these," says Dr. Hirth,† "the first is admitted to strongly resemble the sign used in the Chinese running-hand style for *liu*, six. The third one has a decided similarity to Chinese, the running-hand sign for *wu*, five. The middle one is explained by Professor Karabacek as representing the letter L in the Peguan alphabet; however, this says not much, since the mark is especially described as *tief eingegraben*, *mit ausgezackten Rändern*, which seems to be a strong hint as to its having nothing to do with the manufacture of the dish, since an owner's mark drilled or chiselled into the hard paste after the completion of a vessel, may have been made at any time and in any country." This may be very well for sinologists, but for outsiders it does not require, I think, much reflection to see the puerility of the suggestion made as regards the identity of the first mark. The Chinese running-hand form of the number six is ⊥, and this scarcely bears comparison with the mark in question, which looks almost exactly like an inverted pall or Y, each of whose three branches is formed of four circlets or dots, making twelve

* *Loc. cit.*, p. 154. † *Loc. cit.*, p. 156.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000020

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

altogether. This system of representation by means of circlets is commonly employed in Siām and neighbouring countries to depict the stars occurring in the *nakṣatras* or lunar asterisms, according to local astrological ideas. Although none of the asterisms figured in native astrologic treatises exactly resembles mark No. 1, the nearest to it, if taken in an inverted form, being *Uttarāṣāḍhā*, represented as and assigned as a horoscopic constellation to Maulmein, it is quite plain that that mark is either a symbol or a diagram of some mystic meaning, mayhap even a trade-mark; but not certainly a letter, nor a numerical figure. The only Oriental letters resembling it closely are, perhaps, the , or *t*, of the Asóka pillar inscriptions (third century B.C.) and the or *g*, of the Northern Chēra character of the tenth century A.D.* As regards the third mark, its resemblance to the Chinese running-hand sign for five is more than problematic, since the latter is more generally represented in the form . It may be much more favourably compared to the modern Siāmese numeral six, written , whose ancient form was in both Siāmese and Lāu inscriptions; or else, if reversed, to the Mōñ , the sign for *four*. The second mark corresponds to the letter L not only in the Peguan (Mōñ) alphabet, as Professor Karabacek says, but also in several other Indo-Chinese alphabets, as well as in ancient Tamil writing (*circa* 1080 A.D.);† while, on the other hand, it very closely resembles the Lāu numeral *nine*, represented as . There is, therefore, not the slightest ground for assigning a Chinese origin to either of the three marks in question; on the contrary, the weight of evidence points towards their having been made in either Eastern Pegu or Northern Siām, the places whence the celadon dishes bearing them were exported, and where very probably also they were, at least in part, manufactured.

Anent the possibility of the Swankhalôk wares finding their way overland to the Gulf of Martaban, there cannot be the slightest doubt, in view of the very explicit statement made by William Methold to the effect that chinaware (which very likely included also the Siāmese products) was conveyed by this means to Tenasserim. Speaking of the trade of the seaport just named in A.D. 1619, Methold says, in fact, that the merchants of Golconda brought thither various products, "and landing them at Tenassery, carry them from thence to Siām, fourteen days' journey overland, from whence, by the like conveyance, they bring all sorts of China commodities, as porcelain, satins, damasks," etc.‡ It follows quite plainly from this passage, which appears to have escaped the attention of the parties engaged in the *Martabani* controversy, that the vessels or dishes so-named found their way to Tenasserim, and naturally also to Martaban, whether they had been made in China or Siām, along with many other kinds of porcelain and other products of Chinese manufacture, and were shipped thence together with Pegu jars and other glazed

* As represented in Burnell's "Elements of South Indian Palæography," second edition, Plate XI.

† See *ibid.*, Plate XVIII.

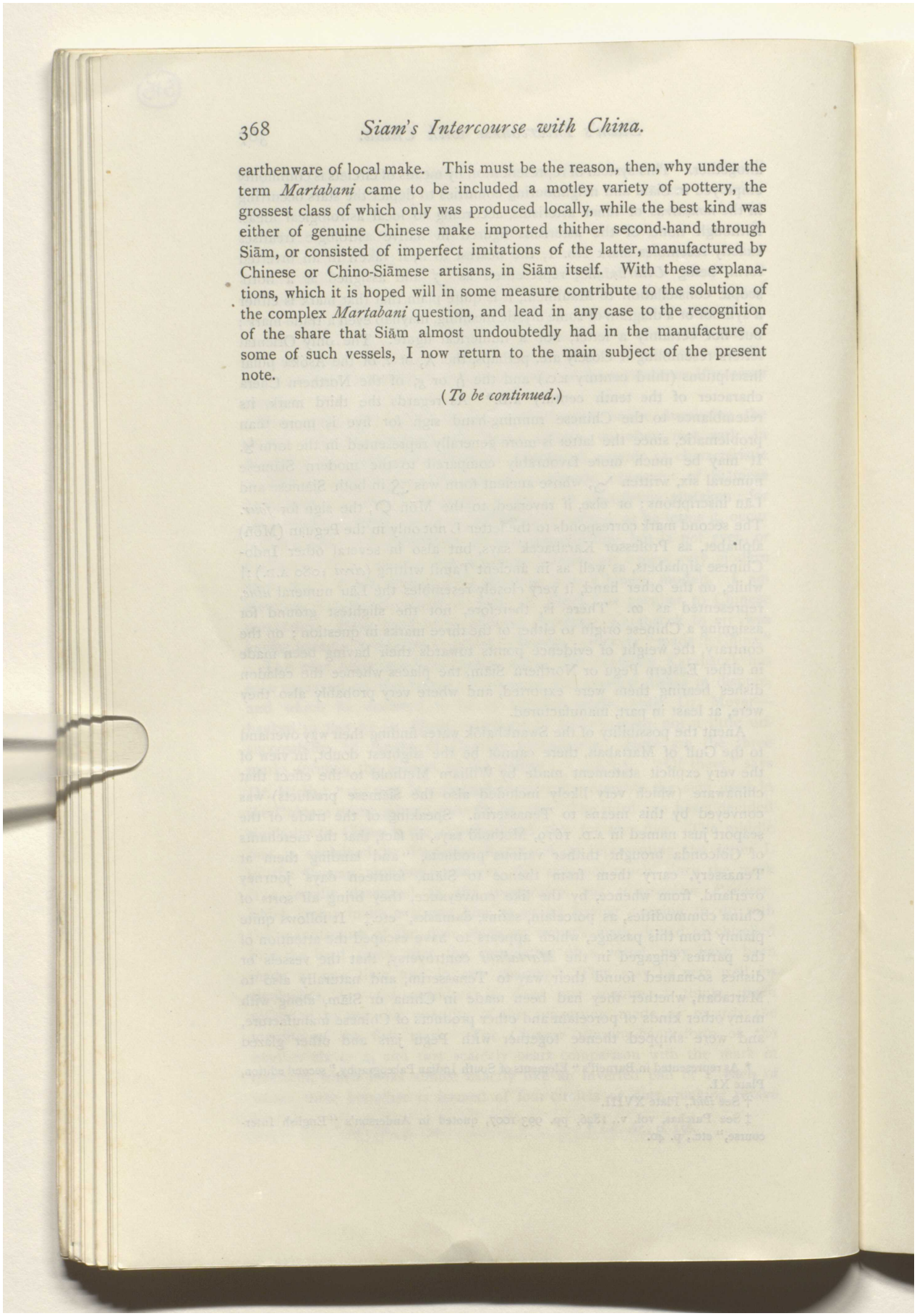
‡ See Purchas, vol. v., 1826, pp. 993-1007, quoted in Anderson's "English Intercourse," etc., p. 40.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



earthenware of local make. This must be the reason, then, why under the term *Martabani* came to be included a motley variety of pottery, the grossest class of which only was produced locally, while the best kind was either of genuine Chinese make imported thither second-hand through Siām, or consisted of imperfect imitations of the latter, manufactured by Chinese or Chino-Siāmese artisans, in Siām itself. With these explanations, which it is hoped will in some measure contribute to the solution of the complex *Martabani* question, and lead in any case to the recognition of the share that Siām almost undoubtedly had in the manufacture of some of such vessels, I now return to the main subject of the present note.

(*To be continued.*)

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

PROCEEDINGS OF THE EAST INDIA ASSOCIATION.

At a meeting of the East India Association held at 3, Victoria Street, Westminster, on Tuesday, January 28, 1902, a paper was read by Alexander Rogers, Esq. (late Member of Council, Bombay), on "The Spread of the Municipal Idea in India." Sir Charles Stevens, K.C.S.I., in the chair. The following among others were present: Sir William Wedderburn, Bart., Dewan Bahadur V. M. Samnath, Mr. David Duncan, LL.D., Mr. F. Loraine Petre, Mr. J. Sturrock, C.I.E., Mr. W. Coldstream, Mr. J. B. Pennington, Mrs. and Miss Arathoon, Mr. H. R. Cook, Miss Gawthrop, Mr. Vishvanath P. Vaidyar, Mr. Reginald Nevill, Mr. Wagle, Mr. F. D. White, Mr. A. Kinlock, Mr. M. D. Sheikh, Mr. G. R. Misra, Mr. C. W. Arathoon, Hon. Sec.

The paper was read.*

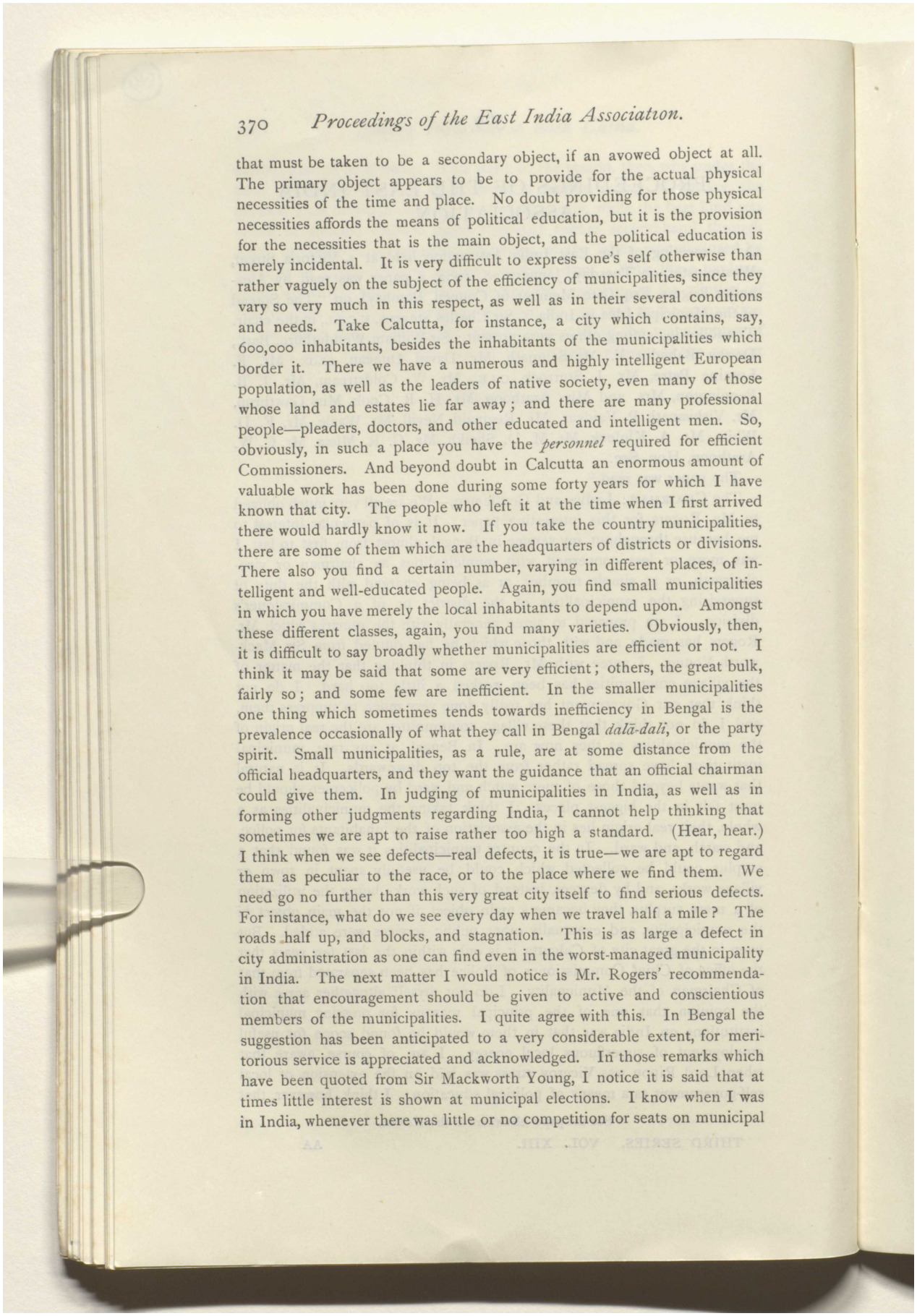
The Chairman: Ladies and Gentlemen,—We are all very much obliged to Mr. Rogers for this interesting paper. It is of particular interest to me because throughout my service in Bengal, almost from first to last, I was more or less concerned with municipalities as chairman or vice-chairman, or as simple member, or as being charged with the duty of supervising the municipalities of the district or of a Commissioner's division. I am prepared to agree generally with the remarks which Mr. Rogers has made, and with those which he has quoted from Sir Mackworth Young. I agree with Mr. Rogers in thinking that the matter of the village communities has been worked a little too hard. I do not think that our Government has really done very much to suppress them, and I do not think that these village communities are the real origin of the municipalities as they now are. In Bengal, at any rate, municipal institutions have spread rather from the top downwards. It is natural that wants beyond those of mere watch and ward by policemen should be most felt in the biggest places. I think, taking the municipalities as a whole, their real origin lies in the association of the inhabitants for police, and watch, and ward. In the country municipalities it was found that a surplus could be collected which could be usefully spent in town or village works, and by degrees, instead of such works being the utilization of a mere surplus, they became a main object, if not the main object of the municipality, and eventually other public services were added. But even in the great city of Calcutta it is only within the last few years that the office of Chief Commissioner of Police has been separated from that of Chairman of the Municpality. I do not myself altogether agree with the opinion that one of the principal reasons for pressing municipal institutions on India was that in them would be found scope for useful employment of superfluous local energy. I am, of course, aware that when Lord Ripon was Viceroy stress was laid on the extension of local self-government as a means of political education. I think, however, that

* See the paper elsewhere in this *Review*.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



that must be taken to be a secondary object, if an avowed object at all. The primary object appears to be to provide for the actual physical necessities of the time and place. No doubt providing for those physical necessities affords the means of political education, but it is the provision for the necessities that is the main object, and the political education is merely incidental. It is very difficult to express one's self otherwise than rather vaguely on the subject of the efficiency of municipalities, since they vary so very much in this respect, as well as in their several conditions and needs. Take Calcutta, for instance, a city which contains, say, 600,000 inhabitants, besides the inhabitants of the municipalities which border it. There we have a numerous and highly intelligent European population, as well as the leaders of native society, even many of those whose land and estates lie far away; and there are many professional people—pleaders, doctors, and other educated and intelligent men. So, obviously, in such a place you have the *personnel* required for efficient Commissioners. And beyond doubt in Calcutta an enormous amount of valuable work has been done during some forty years for which I have known that city. The people who left it at the time when I first arrived there would hardly know it now. If you take the country municipalities, there are some of them which are the headquarters of districts or divisions. There also you find a certain number, varying in different places, of intelligent and well-educated people. Again, you find small municipalities in which you have merely the local inhabitants to depend upon. Amongst these different classes, again, you find many varieties. Obviously, then, it is difficult to say broadly whether municipalities are efficient or not. I think it may be said that some are very efficient; others, the great bulk, fairly so; and some few are inefficient. In the smaller municipalities one thing which sometimes tends towards inefficiency in Bengal is the prevalence occasionally of what they call in Bengal *dalā-dali*, or the party spirit. Small municipalities, as a rule, are at some distance from the official headquarters, and they want the guidance that an official chairman could give them. In judging of municipalities in India, as well as in forming other judgments regarding India, I cannot help thinking that sometimes we are apt to raise rather too high a standard. (Hear, hear.) I think when we see defects—real defects, it is true—we are apt to regard them as peculiar to the race, or to the place where we find them. We need go no further than this very great city itself to find serious defects. For instance, what do we see every day when we travel half a mile? The roads half up, and blocks, and stagnation. This is as large a defect in city administration as one can find even in the worst-managed municipality in India. The next matter I would notice is Mr. Rogers' recommendation that encouragement should be given to active and conscientious members of the municipalities. I quite agree with this. In Bengal the suggestion has been anticipated to a very considerable extent, for meritorious service is appreciated and acknowledged. In those remarks which have been quoted from Sir Mackworth Young, I notice it is said that at times little interest is shown at municipal elections. I know when I was in India, whenever there was little or no competition for seats on municipal

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000047

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

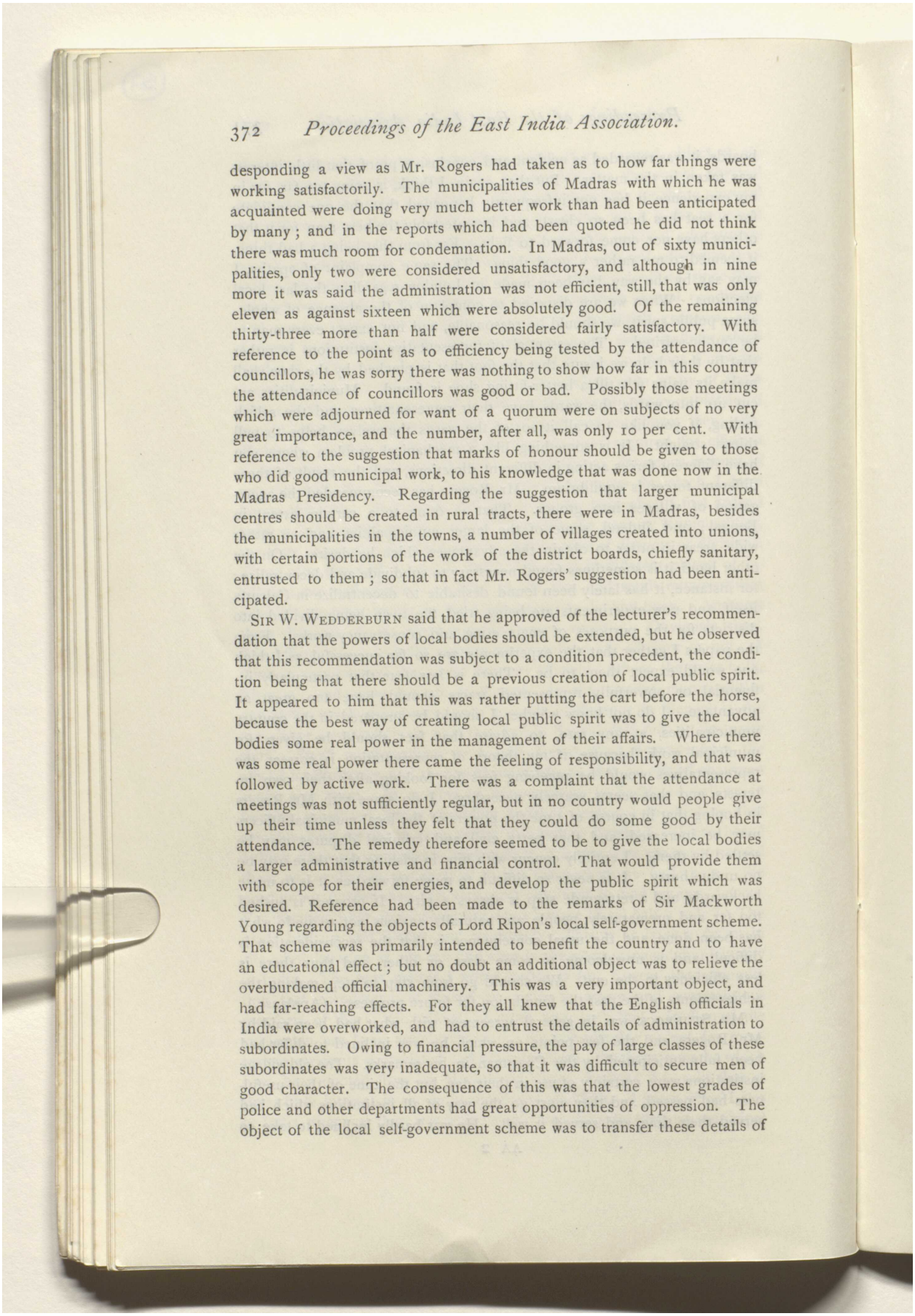
boards, it was regarded as evident and conclusive proof that little interest was taken in the matter. But that, again, I think, is going too far, for in my experience it has not infrequently happened that the one candidate for a seat has been so clearly and incontestably the best man for it that others have not come forward to fight. Far from that being a bad thing, it seemed to me rather a good thing. The same complaint of apathy, I may say by the way, has been made in London regarding the last local elections. When we are disposed to complain of the absence of wholesome public spirit, we should be reasonable, and not expect every man to be public-spirited. The essential of representative institutions is rather that by their help we insure that the foot that is pinched by the shoe shall make its pains felt till a better-fitting shoe is found. Municipalities are cut up into wards, the wards have their representatives, and the selfish feeling, if you like to call it so, of the wards themselves helps to pull things straight. It is something like a mechanical problem where you have different forces acting in different directions, and the result of these different forces is equilibrium. Mr. Rogers has recommended the aggregation of villages into groups. That is done to a certain extent in Bengal; and, indeed, some of the larger municipalities enclose rather wide areas in order to obtain the advantages which he desires. On the other hand, it is sometimes found necessary to subdivide and decentralize; for instance, it has lately been found desirable to decentralize in Calcutta itself, and now experiments are being tried, the town being divided into districts for the purposes of engineering and conservancy works. From the papers I gather that the experiments are so far successful, as I think one would expect them to be. There is less fear that particularly influential or powerfully represented tracts should have too great an advantage. I do not know whether I should be prepared in the country municipalities, at any rate, to advise that fees should be given for municipal work, because, if my theory of representation is correct, the representatives would be receiving fees for looking after their own interests, and that seems scarcely necessary. I do agree with Mr. Rogers in hoping that in course of time the powers of the local municipal officers may be increased, and that petty civil and criminal disputes may be settled by them. I entirely concur with him in wishing that there may be no undue hurry. It is never so difficult to move forward as it is to move backwards, and a retrograde step is always a pity. If progress is pushed too far and prematurely, people are naturally anxious not to undo what has been done, and the usual consequence is that the reconsideration is difficult and is unwelcome to some class or other, and thus there is less efficiency in the end. We should go from step to step, making the achievements of the past the foundation for future progress. (Applause.)

Mr. Sturrock was in general agreement with what had been said by Mr. Rogers, and the few points on which he was inclined to differ had been fully anticipated by the Chairman in his remarks. The old village institutions were certainly of use in their day, but the time of their usefulness had passed, and they must go the way of all institutions which had served their time, and served it well. He was hardly inclined to take so

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000073

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



desponding a view as Mr. Rogers had taken as to how far things were working satisfactorily. The municipalities of Madras with which he was acquainted were doing very much better work than had been anticipated by many; and in the reports which had been quoted he did not think there was much room for condemnation. In Madras, out of sixty municipalities, only two were considered unsatisfactory, and although in nine more it was said the administration was not efficient, still, that was only eleven as against sixteen which were absolutely good. Of the remaining thirty-three more than half were considered fairly satisfactory. With reference to the point as to efficiency being tested by the attendance of councillors, he was sorry there was nothing to show how far in this country the attendance of councillors was good or bad. Possibly those meetings which were adjourned for want of a quorum were on subjects of no very great importance, and the number, after all, was only 10 per cent. With reference to the suggestion that marks of honour should be given to those who did good municipal work, to his knowledge that was done now in the Madras Presidency. Regarding the suggestion that larger municipal centres should be created in rural tracts, there were in Madras, besides the municipalities in the towns, a number of villages created into unions, with certain portions of the work of the district boards, chiefly sanitary, entrusted to them; so that in fact Mr. Rogers' suggestion had been anticipated.

Sir W. Wedderburn said that he approved of the lecturer's recommendation that the powers of local bodies should be extended, but he observed that this recommendation was subject to a condition precedent, the condition being that there should be a previous creation of local public spirit. It appeared to him that this was rather putting the cart before the horse, because the best way of creating local public spirit was to give the local bodies some real power in the management of their affairs. Where there was some real power there came the feeling of responsibility, and that was followed by active work. There was a complaint that the attendance at meetings was not sufficiently regular, but in no country would people give up their time unless they felt that they could do some good by their attendance. The remedy therefore seemed to be to give the local bodies a larger administrative and financial control. That would provide them with scope for their energies, and develop the public spirit which was desired. Reference had been made to the remarks of Sir Mackworth Young regarding the objects of Lord Ripon's local self-government scheme. That scheme was primarily intended to benefit the country and to have an educational effect; but no doubt an additional object was to relieve the overburdened official machinery. This was a very important object, and had far-reaching effects. For they all knew that the English officials in India were overworked, and had to entrust the details of administration to subordinates. Owing to financial pressure, the pay of large classes of these subordinates was very inadequate, so that it was difficult to secure men of good character. The consequence of this was that the lowest grades of police and other departments had great opportunities of oppression. The object of the local self-government scheme was to transfer these details of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

administration from the low-paid official subordinates to the respectable citizens and villagers. He believed that the work would thus be better done, while the people would be more contented. Also English officials, being relieved from much detail, would have leisure to mix more with the people and to learn their wants and wishes; and the result would be that our rule would become more popular. As regarded the ancient village system, he must express his respectful concurrence with such authorities as Sir Henry Maine, Sir Charles Trevelyan, and Sir James Caird, who regarded this system as the sheet-anchor of Indian rural society.

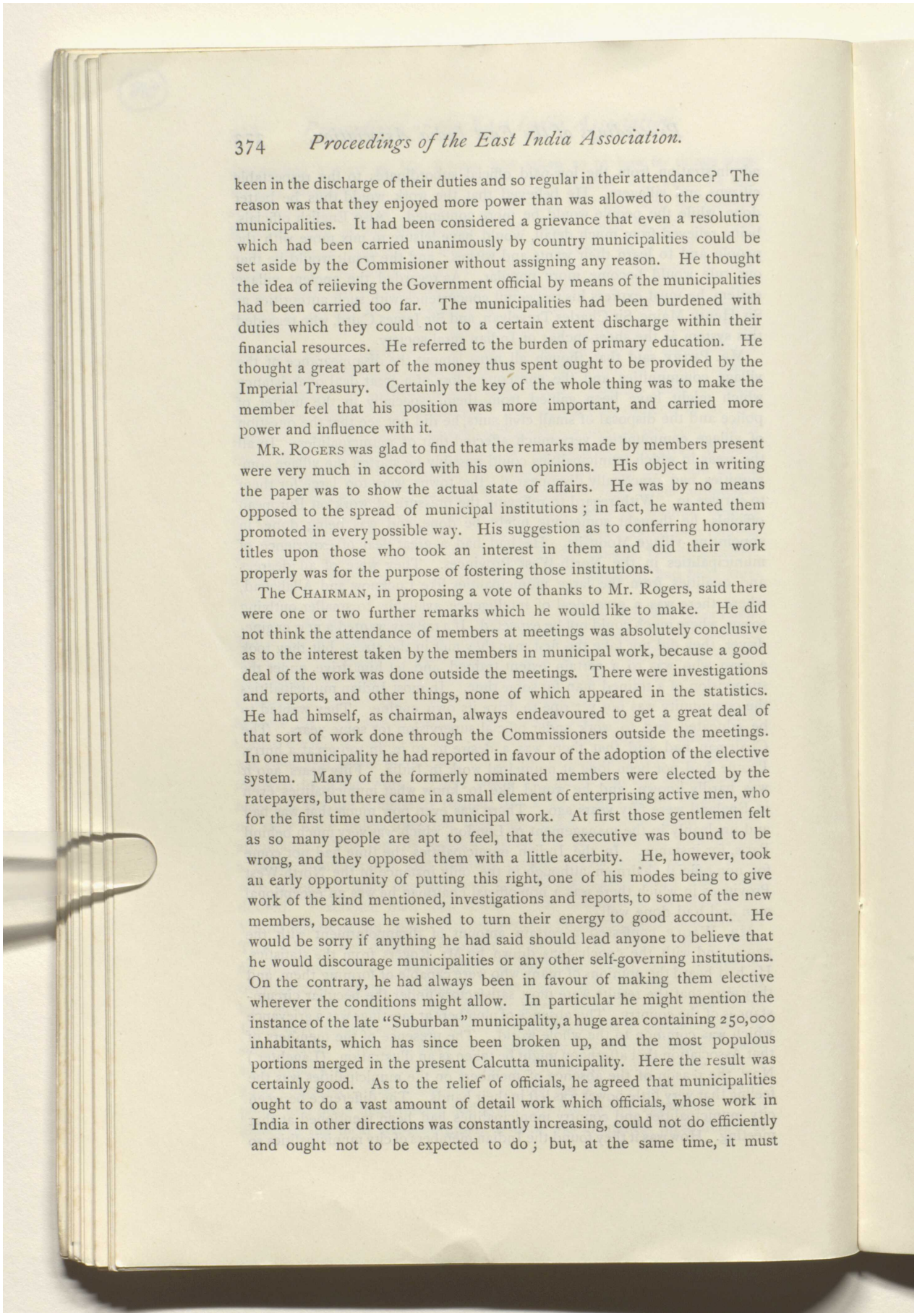
Mr. Petre said that, though all must lament the disappearance of the village communities, and the consequent loss of a great deal of assistance which might have been gained from them, especially in the matter of police and the disposal of small civil suits, he did not see that the question of village communities very much affected that of municipalities. In all the areas in which municipalities could possibly be started the village communities had practically disappeared; the towns were too large for them to survive in. With regard to relieving the pressure of work on European officials, he thought something might be done, and was being done, in appointing village Moonsifs. He had had a great deal of experience of municipalities in the North-West Provinces. They were of all degrees and qualities, from the large municipalities like Lucknow and Allahabad, where there was a great deal of intelligence available, to smaller outlying towns, where much could not be expected. If a railway wanted a new engine-driver, they did not take the first man they met in the street, but they took a man who was to a certain extent trained, and let him drive under the supervision of a trained man for some time. In most Indian municipalities the community was not yet ripe to drive its own engine. They wanted to be educated, and to work under official supervision for some years. The Chairman had said that there was a desire to go in, in too great a hurry. People had not been long at municipal work in India. Fifty years ago it was hardly known, and he would like to know what municipalities even in England were fifty years ago. There was even now much that was bad and uncleanly in the management of London, which was very much behind Paris, for instance. In the Indian municipalities the time had not come for non-official chairmen, although in the only instance in the North-West Provinces in which there was a non-official chairman he was an exceptional man and had done well.

Mr. Wagle confessed a certain amount of disappointment with the paper, and with the conclusions drawn by Mr. Rogers from the statistics. He had heard the opinions of many who were capable of forming them, and they were that the results were most satisfactory under the peculiar circumstances of the country. The absence of members at meetings was a grievance which was common to the whole world. The presence of the members of that Association that afternoon might be taken as an illustration. (Laughter.) Now, the reason of the absence of members on the municipalities was the feeling that very little power was left in their hands. The difference between city municipalities and country municipalities had been mentioned at that meeting. How was it they found the Indian members of city municipalities so

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000ba

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



keen in the discharge of their duties and so regular in their attendance? The reason was that they enjoyed more power than was allowed to the country municipalities. It had been considered a grievance that even a resolution which had been carried unanimously by country municipalities could be set aside by the Commisioner without assigning any reason. He thought the idea of relieving the Government official by means of the municipalities had been carried too far. The municipalities had been burdened with duties which they could not to a certain extent discharge within their financial resources. He referred to the burden of primary education. He thought a great part of the money thus spent ought to be provided by the Imperial Treasury. Certainly the key of the whole thing was to make the member feel that his position was more important, and carried more power and influence with it.

Mr. Rogers was glad to find that the remarks made by members present were very much in accord with his own opinions. His object in writing the paper was to show the actual state of affairs. He was by no means opposed to the spread of municipal institutions; in fact, he wanted them promoted in every possible way. His suggestion as to conferring honorary titles upon those who took an interest in them and did their work properly was for the purpose of fostering those institutions.

The Chairman, in proposing a vote of thanks to Mr. Rogers, said there were one or two further remarks which he would like to make. He did not think the attendance of members at meetings was absolutely conclusive as to the interest taken by the members in municipal work, because a good deal of the work was done outside the meetings. There were investigations and reports, and other things, none of which appeared in the statistics. He had himself, as chairman, always endeavoured to get a great deal of that sort of work done through the Commissioners outside the meetings. In one municipality he had reported in favour of the adoption of the elective system. Many of the formerly nominated members were elected by the ratepayers, but there came in a small element of enterprising active men, who for the first time undertook municipal work. At first those gentlemen felt as so many people are apt to feel, that the executive was bound to be wrong, and they opposed them with a little acerbity. He, however, took an early opportunity of putting this right, one of his modes being to give work of the kind mentioned, investigations and reports, to some of the new members, because he wished to turn their energy to good account. He would be sorry if anything he had said should lead anyone to believe that he would discourage municipalities or any other self-governing institutions. On the contrary, he had always been in favour of making them elective wherever the conditions might allow. In particular he might mention the instance of the late "Suburban" municipality, a huge area containing 250,000 inhabitants, which has since been broken up, and the most populous portions merged in the present Calcutta municipality. Here the result was certainly good. As to the relief of officials, he agreed that municipalities ought to do a vast amount of detail work which officials, whose work in India in other directions was constantly increasing, could not do efficiently and ought not to be expected to do; but, at the same time, it must

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

be remembered that even the municipalities themselves sometimes give the officials a great deal of work. Where things are not going smoothly, and charges and countercharges are freely bought by excited partisans, the official is expected to go down and do justice between the parties. It is very much less troublesome for an official chairman by a phrase or two to stop a dispute orally than to inquire into and adjudicate on it when it has occurred. This is certainly a case in which it is easier to prevent than to cure. Under any circumstances, a considerable load of responsibility and labour rests on those who have to watch, and sometimes to control, municipalities.

The vote of thanks to Mr. Rogers was then put to the meeting, and carried by acclamation.

A vote of thanks to the Chairman for presiding was put by Mr. Pennington, and carried, and the proceedings then terminated.

At another meeting held at Westminster Palace Hotel, on Monday, February 10, 1902, a paper was read by J. B. Pennington, Esq., B.L. (Madras Civil Service, retired), on "The Indian Civil Service, and the Further Admission of Natives of India," the Hon. Percy Wyndham in the chair. The following, among others, were present: Sir William Wedderburn, Bart., Sir Lepel Griffin, K.C.S.I., the Hon. Mrs. Mure, Mr. J. D. Rees, C.I.E., Mr. J. Sturrock, C.I.E., Mr. F. Loraine Petre, Colonel Hutchins, Mr. A. K. Connell, M.A., Mr. W. Coldstream, Surgeon Lieut.-Colonel Ince, M.D., Mr. J. F. and Mrs. Pennington, Mrs. Arathoon, Mr. Nilkant B. Wagle, Mr. Drury Pennington, Mr. V. M. Samarth, Mr. H. R. Cook, Mr. Allbless, Mr. and Mrs. J. A. R. Clark, Mr. Nanabhai D. Daru, Mr. E. le B. Martin, Mr. R. D. Perestman, Mr. J. O. Millar, Mr. P. C. Lobo, Mr. J. F. Brown, Mr. J. E. Champney, Mr. Jayer Rao, Mr. W. Martin Wood, and Mr. C. W. Arathoon, Hon. Sec.

The CHAIRMAN having briefly introduced Mr. Pennington, the paper was read.*

SIR LEPEL GRIFFIN, after the paper was read, said it seemed to him less alarming than he had imagined it might be, and he did not find very much to which he could take objection. It seemed to resolve itself into a mere question of political economy, of expediency, and the question of fact—namely, what is the number of English Civil Servants necessary to rightly and securely carry on the Administration of India? He had lately read several books which endeavoured to make out that British government was a failure, that India was being exploited for the sole benefit of England, and that their whole administration was a calamitous mistake. Any Indian gentleman would know that those books were founded on exaggeration—grotesque exaggeration; and he thought that everyone who had lived in India must admit that the intentions of the Government towards our Indian fellow-subjects were both liberal and beneficent. (Hear, hear.) He did not disagree with Mr. Pennington when he said that they should open in every legitimate way the doors of the Services to all their deserving fellow-subjects in India. He himself desired that, as heartily as any Indian

* See the paper elsewhere in this *Review*.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

gentleman in the room could do. The question of competency for executive, far more than for judicial appointments, must be determined by the Government of India itself, and by the heads of local governments. They could not force upon Governors and Lieutenant-Governors feeble, incompetent men for the executive charge of districts, whose conduct on the Punjab frontier or elsewhere, would be open to a description such as that given by Mr. Rudyard Kipling in one of his famous stories. The local governments must decide this question of competency, but subject to that, he thought every civilian present would most heartily welcome the generous sentiments of the lecturer, and would desire that, so far as was consistent with safety, all appointments should be open to Indian gentlemen.

Sir William Wedderburn said that doubtless a certain amount of European civil agency in India was necessary, in order to preserve the British connection. But some good system of recruitment and distribution should be adopted, so that the agency should be of the best quality, that there should not be more of it than absolutely necessary, and that the Government of India should be able to employ it in those provinces and departments where it would be most useful. Also it was desirable to prevent the unseemly struggle, which so often took place, when a vacancy occurred for which both Europeans and Indians were candidates. He thought that the scheme sketched out in the Minority Report of the Royal Commission on Indian Expenditure would have this effect. The proposed method was suggested by the existing arrangement for the Royal Engineers, when serving in the Public Works Department in India. A young man obtaining his commission in the Royal Engineers occupied a position in a close seniority service. If he went out to India as a Lieutenant or a Captain, and was appointed an Executive Engineer, he drew the pay of his rank, as a personal allowance, plus the pay of an Executive Engineer. An outsider appointed to a similar post drew only the pay of the appointment and no personal allowance. Similarly the prize in the open competition for the Covenanted Civil Service should be simply entry into a close seniority service, enjoying personal pay according to the number of years of service. This would represent compensation for exile, and the retaining fee which bound him to be at the orders of the Government. When he was appointed to any post he would draw the pay of that post plus the pay of his rank. The result of this arrangement would be that the pay of all appointments in India could be reduced to the ordinary market value, and all civil appointments would be held by Indians except those held by the limited number of Covenanted European civilians who came out every year. It would be the duty of the Government each year carefully to consider the smallest number for their requirements, so that no more of this expensive agency should be recruited than was absolutely necessary. Then as regards distribution, the lecturer had pointed out that in the quieter districts the highest judicial and educational appointments might be held by Indians, while Sir Lepel Griffin had urged that in turbulent frontier districts Europeans were necessary for executive posts. This could be met by having a maximum budget allotment for European officers, who might be employed in the provinces and departments as seemed best for

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000016

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

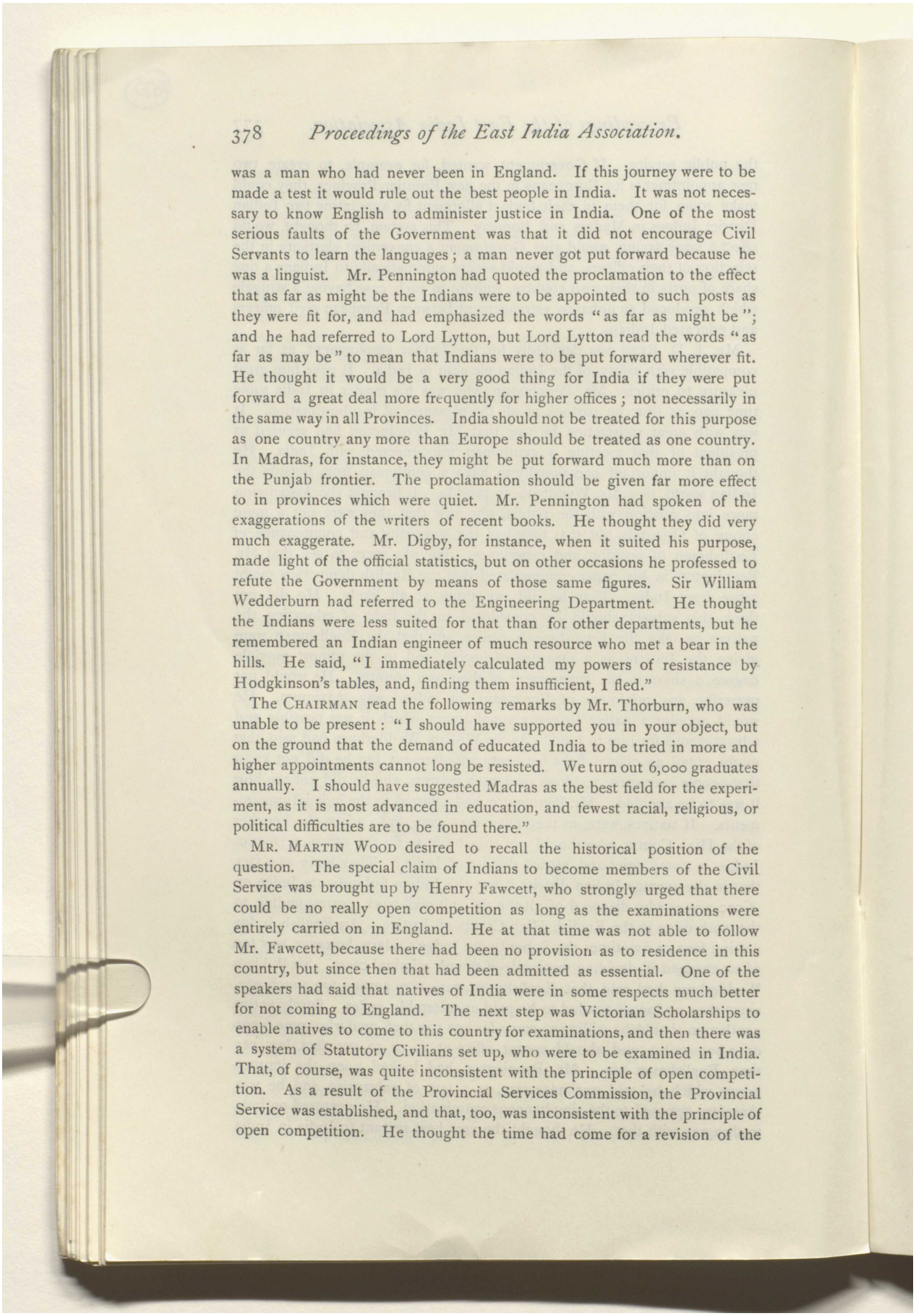
the public service. If Government wanted, for example, to create two new appointments for Europeans in the new Frontier Province, they could make room for them in their budget allotment by appointing two Indian District Judges in Madras and Bombay. This system, he thought, would effect a large saving, would give Government a convenient elasticity in the selection of their officers, and would secure automatically to Indians a due share of posts in their own country, without in each case having a struggle which produced an unhappy estrangement between European civil officers and educated Indians.

Mr. J. D. Rees was decidedly for the further employment, as far as compatible with safety, of the Indian element in India. It gave him great pleasure to criticise Mr. Pennington, who was his master in India some time ago, as thus he partook of all the pleasures of insubordination. It was with great satisfaction he saw that Mr. Pennington had secured as president of that meeting a gentleman unconnected with India. He thought it important occasionally to have a gentleman from outside the Indian world, like Mr. Wyndham, to preside. It brought the Association more into relation with the public, who saw that they were not a mere clique of Orientals, but that they had the sympathy and countenance of Englishmen of position and experience. He was sorry to see that Mr. Pennington in his paper contemplated that the English democracy might retire from India. That he did not think at all likely. He did not think this subject should be considered in the light of educating the natives to take the Englishmen's places, but that the Englishmen were giving the Indians as a measure of justice, and to the utmost possible degree, a share in the government of their own country. He would not prescribe any minimum of Europeans, or indeed any maximum. He would appoint a native to every appointment which it was possible and advantageous for him to hold. As Sir William Wedderburn had said, that might entail an official fight for every appointment, but he did not know that people ever came to blows over such matters, and he did not see how it was to be avoided. Mr. Pennington had referred to the judicial appointments. If natives were, as they knew they were, fit to adorn the benches of the High Courts, why should not they be fit to fill the office of District Judge in every quiet and settled district of India? They knew as a fact that in the average Indian district it was the Indian Subordinate Judge on £500 a year who disposed of all the difficult civil work, corresponding to the work done in the English High Courts of Justice. An English Judge getting four or five times the Subordinate Judge's salary, however, was too often engaged in deciding mere rule-of-thumb criminal cases. Sir William Wedderburn had said that Englishmen were now getting too much pay, since they no longer needed to be paid as miserable exiles. Surely native gentlemen should be willing to serve for less pay than men who came 6,000 or 7,000 miles, and should accept office at 40 or 50 per cent. less pay than Englishmen got. Mr. Pennington had looked upon the journey home, which he said was necessary, as a test of enterprise, and he was therefore opposed to the simultaneous examination. He ventured entirely to disagree with that. He thought the very best servant to India in India

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



was a man who had never been in England. If this journey were to be made a test it would rule out the best people in India. It was not necessary to know English to administer justice in India. One of the most serious faults of the Government was that it did not encourage Civil Servants to learn the languages; a man never got put forward because he was a linguist. Mr. Pennington had quoted the proclamation to the effect that as far as might be the Indians were to be appointed to such posts as they were fit for, and had emphasized the words "as far as might be"; and he had referred to Lord Lytton, but Lord Lytton read the words "as far as may be" to mean that Indians were to be put forward wherever fit. He thought it would be a very good thing for India if they were put forward a great deal more frequently for higher offices; not necessarily in the same way in all Provinces. India should not be treated for this purpose as one country any more than Europe should be treated as one country. In Madras, for instance, they might be put forward much more than on the Punjab frontier. The proclamation should be given far more effect to in provinces which were quiet. Mr. Pennington had spoken of the exaggerations of the writers of recent books. He thought they did very much exaggerate. Mr. Digby, for instance, when it suited his purpose, made light of the official statistics, but on other occasions he professed to refute the Government by means of those same figures. Sir William Wedderburn had referred to the Engineering Department. He thought the Indians were less suited for that than for other departments, but he remembered an Indian engineer of much resource who met a bear in the hills. He said, "I immediately calculated my powers of resistance by Hodgkinson's tables, and, finding them insufficient, I fled."

The CHAIRMAN read the following remarks by Mr. Thorburn, who was unable to be present: "I should have supported you in your object, but on the ground that the demand of educated India to be tried in more and higher appointments cannot long be resisted. We turn out 6,000 graduates annually. I should have suggested Madras as the best field for the experiment, as it is most advanced in education, and fewest racial, religious, or political difficulties are to be found there."

MR. MARTIN WOOD desired to recall the historical position of the question. The special claim of Indians to become members of the Civil Service was brought up by Henry Fawcett, who strongly urged that there could be no really open competition as long as the examinations were entirely carried on in England. He at that time was not able to follow Mr. Fawcett, because there had been no provision as to residence in this country, but since then that had been admitted as essential. One of the speakers had said that natives of India were in some respects much better for not coming to England. The next step was Victorian Scholarships to enable natives to come to this country for examinations, and then there was a system of Statutory Civilians set up, who were to be examined in India. That, of course, was quite inconsistent with the principle of open competition. As a result of the Provincial Services Commission, the Provincial Service was established, and that, too, was inconsistent with the principle of open competition. He thought the time had come for a revision of the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

question. Much had been done to define the matter in point of principle. He had heard much with regard to the proportion of Europeans and natives of India, but he distrusted all prescribed proportional arrangements of that kind. There were, of course, different methods of proving fitness for important posts. Mr. Rees had said he would sweep away all distinctions, and that any Indian in the Service should be open to be appointed to the very highest post, but he did not think there was much danger of that being adopted. A most unwarrantable use had been made of the phrase "as far as may be" in the Proclamation.

Mr. Petre thought too little mention had been made of the Provincial Services, which were practically entirely officered by natives of India. Speaking, at any rate, for the North-West Provinces, he thought the number of high appointments at present reserved for Indians in the Executive was as high as it could with safety be. With regard to the judicial line, he thought the number of posts open to natives might perhaps be increased. It was sometimes forgotten how invidious often was the position of a native in charge of a large district in the Upper Provinces. He assumed that every native in the Civil Service, or in the Provincial Service, was either a Hindu or a Mohammedan. There were Parsees, but in his view a Parsee was nearly as much an alien to the native of India as the European. (Hear, hear, and No, no.) He instanced the case of a Hindu Collector under him, one of whose Mohammedan subordinates insulted the priests of a Hindu Temple by shooting a monkey, and when they complained, beat one of them with a shoe. The end of it was that upon the man's conviction the Collector merely fined him a month's pay. On appeal to him, Mr. Petre, as Commissioner, set the matter right by dismissing the delinquent. The Collector, of whom Mr. Petre held the highest opinion, was led into error by a desire to avoid any appearance of prejudice in favour of his own co-religionist. In one of the more turbulent districts such an occurrence would have raised a blaze of fanaticism which would have made a Hindu or a Mohammedan Collector's position intolerable. Most natives of India would be only too glad to avoid a position of that sort. On the question of economy, the European, he took it, was paid for living the better half of his life in a foreign country and an uncongenial climate. The native who had passed by open competition was paid at precisely the same rate, and was thereby compensated for his voyage to Europe. It was different in the Provincial Service, where the native in charge of a district, having the same authority and the same position as his confrère in the Covenanted Service, received only two-thirds of the pay. If there were to be any such system as that suggested, of the Government bearing the expense of candidates selected to compete for the Civil Service, the corollary would be to differentiate between the pay of such candidates and the pay of the European officers, as was done in the Provincial Services.

Mr. Connell said Mr. Pennington had alluded to a paper which he had the honour to read before the Association thirteen or fourteen years ago. He then had the benefit of a discussion which had been going on for some years in the Indian press on the subject, and of having before him a large amount of the evidence which had been taken in India by the Commission

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

on the Employment of Natives in the Civil Service. It was, he thought, most important to know the results of the labours of that Commission. At that time, roughly speaking, the Civil Service of India was divided into five branches: First, the Covenanted Service, with about 900 members, nearly all Europeans, holding the highest posts; then there came the military officers in civil employ, amounting to about 1,600; then the small and recently established Statutory Service of the natives of India, in which there were only 30; then came the great army of uncovenanted civilians, with salaries of £100 a year and upwards, holding the lower judicial and administrative offices, amounting to 14,500, about half being natives of India. Below them came an army of clerks, village officials, police, and so on. He had made some suggestions that the Indian Civil Service should be divided into the upper, or Imperial Service, chiefly European; the Provincial Service, almost entirely confined to natives; and below that, the great army of Civil Servants, doing a variety of humble work. He believed the Commission reported on somewhat similar lines. He did not know whether Mr. Pennington could tell them the result of the changes which had been since made. The age had been raised for the open competition in England, and he believed with very good results. He understood that a better and maturer class of men had gone out from England to India. As to the effect on the number of Indian candidates, he supposed the result was much as before. He did not think any alteration ought to be made as regards the Indian Imperial Service, except in one respect. He thought it should still be open to competition in England. The coming of the candidate from India to England was in itself a very good test of enterprise and energy. No doubt it limited the competition to men fairly well to do, but this was an advantage, as it probably produced men with larger views of life. One change might be made, that it should as much as possible limit the Imperial Service, which had still to be recruited by open competition, and gradually from the Provincial Service introduce men of proved ability. He agreed with Sir Lepel Griffin that the local governments in India must be responsible for securing adequate tests of competency and executive capacity of men promoted from the provincial administration. Although the competitive test worked fairly well in England under certain conditions, he did not think it would be a good test to apply for the purpose of securing the best administrative ability in India. Therefore, he said that if they wanted to recruit the highest administrative posts and the highest executive posts with Indian gentlemen it must be, not by competitive examination, whether in England or in India, but from men tried in administrative posts under the eye and supervision of British officers. It was that which had been the basis of success in Egypt.

Mr. Allbless thought the tone of Mr. Pennington so reasonable, and his suggestions so sensible, that very few speakers could take any exception to them. He wished to say a few words on the subject of simultaneous examination. As a Parsee he had received the highest possible education at the University of Bombay. He found that that education was not sufficient; it was solid and sound, but not broad enough, and it was only

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

when he went to Cambridge that he received an education in its broadest terms. He feared those who had only received an Indian education had not all the advantages which an English education naturally could give. He believed most of the success which had been achieved by Indian people in India was due to the fact that they had come in contact with Europeans, whose ideas and views they had indirectly acquired, and he thought it would be a calamity to India if the examination were confined altogether to India.

Mr. Nilkant Wagle had no objection to make to the views expressed by Mr. Pennington. Every Indian must feel very much obliged for the noble sentiments which had been expressed at that meeting. There was an Indian saying: "If you have not got a lump of sugar to give me, have not you a word as sweet as sugar?" An Indian was always satisfied with a sweet word as well as with a lump of sugar. The Proclamation of the Sovereign had been referred to which said that any Indian subject would be admitted into the Service without distinction of race or creed, and Mr. Pennington had qualified that Proclamation by quoting Lord Lytton and Sir Robert Peel; but in his opinion the Sovereign had given a promise, and no man in the kingdom could overrule the promise of the Sovereign. He took objection to the rule that candidates must be of European birth, not only with regard to the Indian Service, but with regard to the Service in this country. Let them both be subject to the same tests and the best man get the post. The Proclamation never was intended to go further than to say that all appointments should be open to British subjects. Mr. Naoroji thought the pledges in the Proclamations were given with all sincerity, and that the British people were perfectly prepared to fulfil them. He (Mr. Wagle) was of opinion that the journey to England was necessary, because the whole machinery of the Indian Government was on a Western model, and it would be desirable that he should in person have experience of the working of that machinery. With regard to Indian education, many Indians of the highest position and attainments had never been to England, and he maintained that education could be completed as well in India as in England. It, of course, depended on the individual.

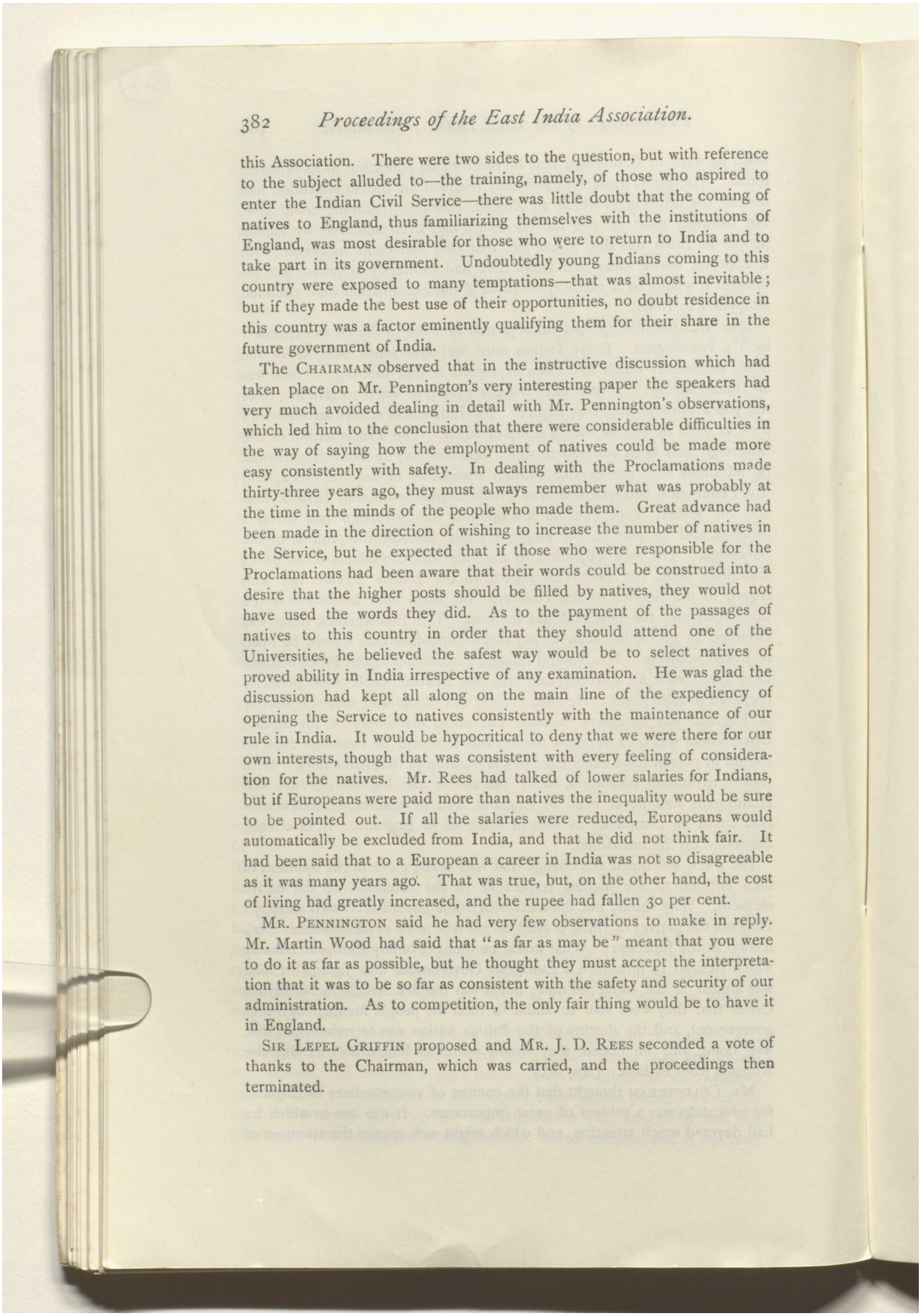
Dr. Ince welcomed the change that had taken place in the opinions of men entitled to the highest respect as to the extension of the native element. Why should not the natives of India govern their own country? Had not the natives of India proved themselves to be as clever and as intellectual as the Japanese? What would be thought of any European country which desired to introduce a European Government into Japan? China was almost in the same position; but it was the first Article in the British Creed that they were sent to India to train the people for their own self-government, and the destiny of the British nation was to retire when that was done, and he hoped they would retire as honourably as did the Romans from Britain. (No, no.)

Mr. Coldstream thought that the coming of young natives to England for education was a subject of great importance. It was one to which he had devoted much attention, and which might well engage the attention of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



this Association. There were two sides to the question, but with reference to the subject alluded to—the training, namely, of those who aspired to enter the Indian Civil Service—there was little doubt that the coming of natives to England, thus familiarizing themselves with the institutions of England, was most desirable for those who were to return to India and to take part in its government. Undoubtedly young Indians coming to this country were exposed to many temptations—that was almost inevitable; but if they made the best use of their opportunities, no doubt residence in this country was a factor eminently qualifying them for their share in the future government of India.

The CHAIRMAN observed that in the instructive discussion which had taken place on Mr. Pennington's very interesting paper the speakers had very much avoided dealing in detail with Mr. Pennington's observations, which led him to the conclusion that there were considerable difficulties in the way of saying how the employment of natives could be made more easy consistently with safety. In dealing with the Proclamations made thirty-three years ago, they must always remember what was probably at the time in the minds of the people who made them. Great advance had been made in the direction of wishing to increase the number of natives in the Service, but he expected that if those who were responsible for the Proclamations had been aware that their words could be construed into a desire that the higher posts should be filled by natives, they would not have used the words they did. As to the payment of the passages of natives to this country in order that they should attend one of the Universities, he believed the safest way would be to select natives of proved ability in India irrespective of any examination. He was glad the discussion had kept all along on the main line of the expediency of opening the Service to natives consistently with the maintenance of our rule in India. It would be hypocritical to deny that we were there for our own interests, though that was consistent with every feeling of consideration for the natives. Mr. Rees had talked of lower salaries for Indians, but if Europeans were paid more than natives the inequality would be sure to be pointed out. If all the salaries were reduced, Europeans would automatically be excluded from India, and that he did not think fair. It had been said that to a European a career in India was not so disagreeable as it was many years ago. That was true, but, on the other hand, the cost of living had greatly increased, and the rupee had fallen 30 per cent.

MR. PENNINGTON said he had very few observations to make in reply. Mr. Martin Wood had said that "as far as may be" meant that you were to do it as far as possible, but he thought they must accept the interpretation that it was to be so far as consistent with the safety and security of our administration. As to competition, the only fair thing would be to have it in England.

SIR LEPEL GRIFFIN proposed and MR. J. D. REES seconded a vote of thanks to the Chairman, which was carried, and the proceedings then terminated.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Another meeting of the Association was held on Wednesday, February 26, at the Westminster Palace Hotel, at which Sir George Birdwood, K.C.I.E., LL.D., took the chair. There were present amongst others: Sir William Wedderburn, Bart., Sir Charles Stevens, K.C.S.I., Lieut.-Colonel H. Wilson, Colonel A. T. Frazer, Dr. David Duncan, Mr. S. S. Thorburn, Mr. J. D. Rees, C.I.E., Mr. William Digby, C.I.E., Mr. Loraine Petre, Mr. W. Coldstream, Mr. Shepherd, Mr. J. Sturrock, C.I.E., Mr. J. B. Pennington, Dr. Bhaba, Mrs. Arathoon, Mrs. Hoppey, Miss Teschemacher, Miss G. F. Pearse, Mr. Alexander Rogers, Mr. J. W. Walker, Mr. Hasted Thorn, Mr. Wagle, Mr. Kehr Singh, Mr. Mahomed Ismail, Mr. N. P. Daru, Mr. Kinloch, Mr. P. P. Pillai, Mr. F. C. Hodgson, Mr. H. R. Cook, Mr. H. Mussenden, Mr. F. H. Brown, Mr. Martin Wood, and Mr. C. W. Arathoon, Hon. Secretary.

Sir Roland Wilson, Bart., read the following paper* entitled "Is State-aided Education in any Shape suitable to the Present Circumstances of India?"

The Chairman, in inviting discussion, said he had been quite unprepared for two digressions in the paper—the first, the attack on Sir William Lee-Warner's "Citizen of India," a truly admirable book on its subject, and which seemed to him a most desirable one to prescribe for the use of the Government schools in India; and the second, the reference in the introductory portion to the controversial question of "the poverty of India." But they all seemed to have Mr. William Digby on the brain just now, and his name having been introduced into the paper, he thought the best course to pursue would be to call on their friend Mr. William Digby to open the discussion.

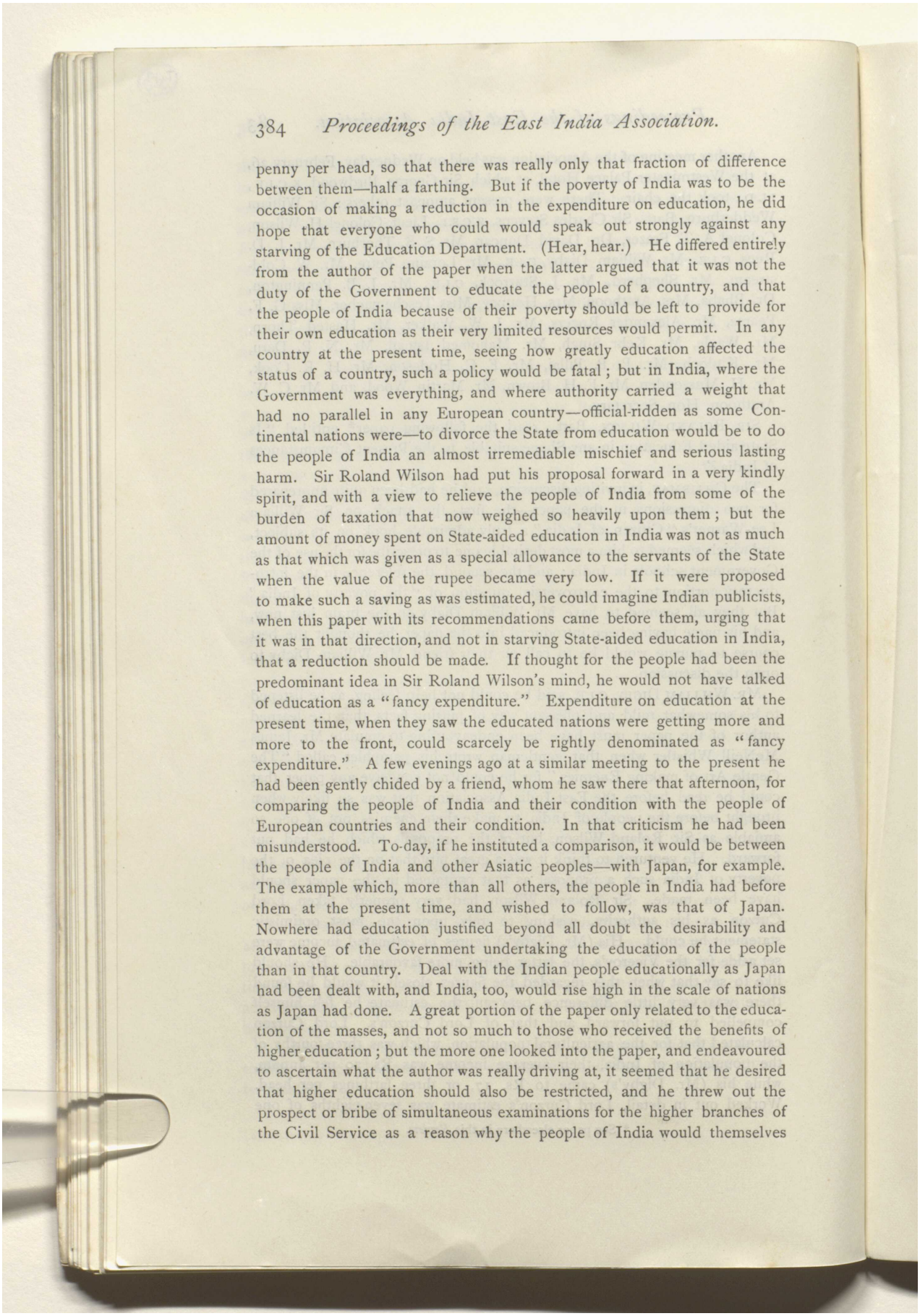
Mr. William Digby, C.I.E., said he could not help feeling, as he listened to his somewhat mild and pleasant way of putting facts, that the learned author of the paper must have been endeavouring to emulate Mr. James McNeill Whistler when that gentleman wrote his pamphlet called "The Gentle Art of making Enemies," for he could not conceive any paper that could be read before the East India Association that was so likely when brought before the people of India, to make them enemies, not of one so amiable as Sir Roland Wilson, but of the proposals which he had put forward. He ventured to think it was a great pity that on the plea of the poverty of India such a proposal as that contained in the paper should have been made. Sir Roland Wilson had very properly taken Lord Curzon as his authority, wishing to rely upon the most optimistic statement he could. His (Mr. Digby's) figures of estimated income were set aside for the Viceroy's, the latter being more favourable. He should like to say that when they regarded the figures closely it would be found there was very little difference between the estimate he felt himself compelled to put forward and that of Lord Curzon's. Lord Curzon calculated that for the agricultural population, which was three-fourths of the population of India, their average income was Rs. 20 per annum, while his (Mr. Digby's) came to Rs. 17, or three farthings per head. Worked out in detail, Lord Curzon's estimate was seven-eighths of one

* See paper elsewhere in this *Review*.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00006c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



penny per head, so that there was really only that fraction of difference between them—half a farthing. But if the poverty of India was to be the occasion of making a reduction in the expenditure on education, he did hope that everyone who could would speak out strongly against any starving of the Education Department. (Hear, hear.) He differed entirely from the author of the paper when the latter argued that it was not the duty of the Government to educate the people of a country, and that the people of India because of their poverty should be left to provide for their own education as their very limited resources would permit. In any country at the present time, seeing how greatly education affected the status of a country, such a policy would be fatal; but in India, where the Government was everything, and where authority carried a weight that had no parallel in any European country—official-ridden as some Continental nations were—to divorce the State from education would be to do the people of India an almost irremediable mischief and serious lasting harm. Sir Roland Wilson had put his proposal forward in a very kindly spirit, and with a view to relieve the people of India from some of the burden of taxation that now weighed so heavily upon them; but the amount of money spent on State-aided education in India was not as much as that which was given as a special allowance to the servants of the State when the value of the rupee became very low. If it were proposed to make such a saving as was estimated, he could imagine Indian publicists, when this paper with its recommendations came before them, urging that it was in that direction, and not in starving State-aided education in India, that a reduction should be made. If thought for the people had been the predominant idea in Sir Roland Wilson's mind, he would not have talked of education as a "fancy expenditure." Expenditure on education at the present time, when they saw the educated nations were getting more and more to the front, could scarcely be rightly denominated as "fancy expenditure." A few evenings ago at a similar meeting to the present he had been gently chided by a friend, whom he saw there that afternoon, for comparing the people of India and their condition with the people of European countries and their condition. In that criticism he had been misunderstood. To-day, if he instituted a comparison, it would be between the people of India and other Asiatic peoples—with Japan, for example. The example which, more than all others, the people in India had before them at the present time, and wished to follow, was that of Japan. Nowhere had education justified beyond all doubt the desirability and advantage of the Government undertaking the education of the people than in that country. Deal with the Indian people educationally as Japan had been dealt with, and India, too, would rise high in the scale of nations as Japan had done. A great portion of the paper only related to the education of the masses, and not so much to those who received the benefits of higher education; but the more one looked into the paper, and endeavoured to ascertain what the author was really driving at, it seemed that he desired that higher education should also be restricted, and he threw out the prospect or bribe of simultaneous examinations for the higher branches of the Civil Service as a reason why the people of India would themselves

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000037

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

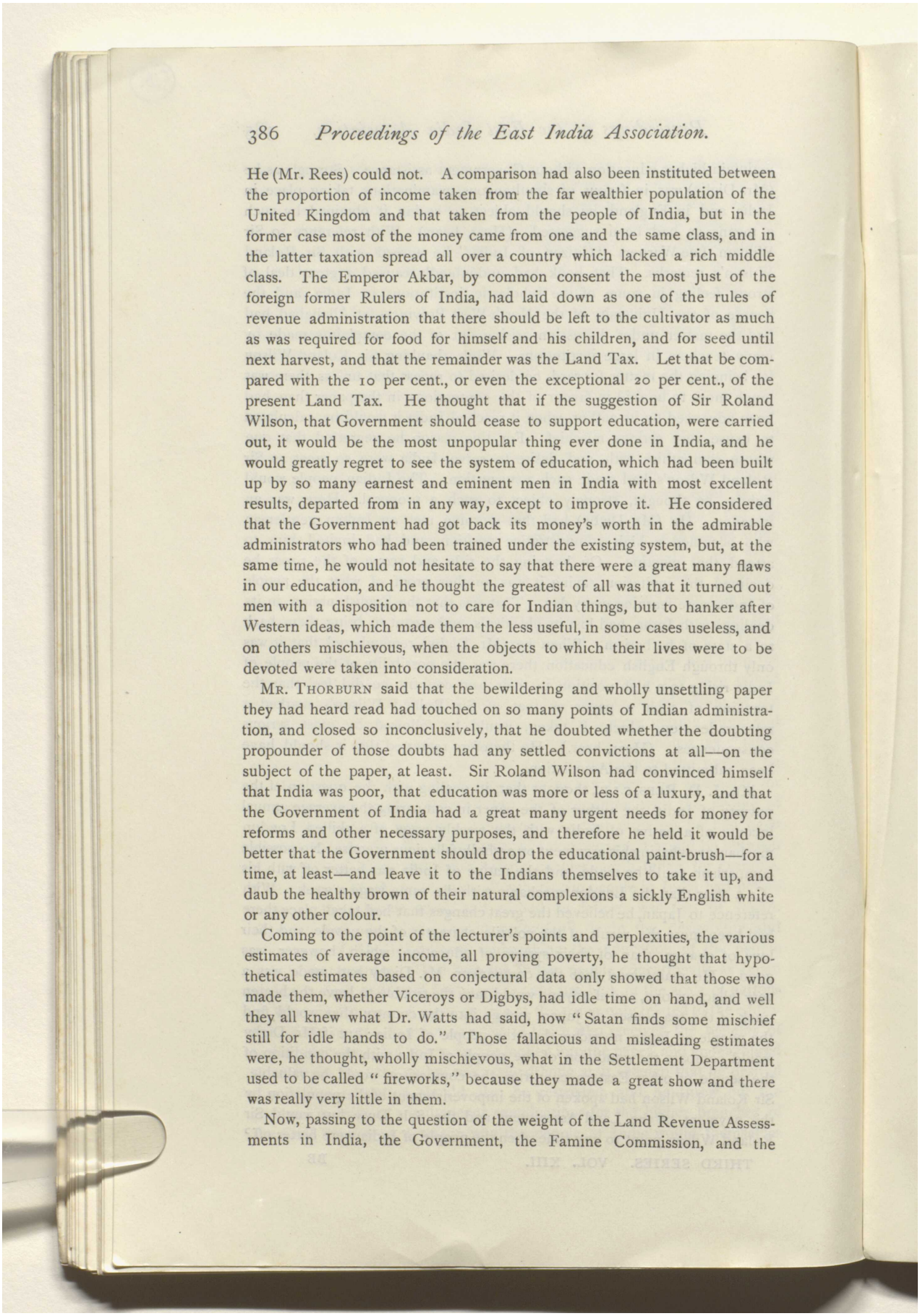
maintain higher education without Government assistance. Strongly as he (Mr. Digby) was in favour of simultaneous examinations taking place in India and in England, he should object to seeing it obtained by such a means as had been suggested. (Hear, hear.) With reference to Sir William Lee-Warners "Citizen of India," he agreed with Sir Roland Wilson's remarks. That book had undoubtedly caused a great deal of strong feeling in some of the scholastic institutions in India, and the Senate of the University of the North-West Provinces at Allahabad had had the matter under discussion arising out of the complaints made by many teachers in large institutions. While thanking Sir Roland Wilson for bringing the matter forward, he desired to repeat that unless there was much more to be said in favour of the contentions in the paper than had been advanced by its author, when it reached India it would be calculated to cause very serious mischief. For this reason he regretted that one whose sympathies with, and desire to serve, India were so great as Sir Roland Wilson's had made such a suggestion. The Indian people would rightly, he thought, strongly object to such a proposal. Here was an instance. He (Mr. Digby) had that morning met an Indian gentleman who occupied a high administrative position, and had invited him to attend that meeting. On learning the title and scope of the paper he declined the invitation, saying it was another proof of what the people of India were learning every day. That was that the English nation, in its dealings with India, had lost its old ideals, and meant to bring them back to a state of barbarism. When he (Mr. Digby) remembered that it was only through English education there was any possibility of the people of India rising to a high position in their own country, he did feel that the teaching of such a paper as that of Sir Roland Wilson's marked a retrograde step, which, if taken, would be followed by most serious consequences. (Hear, hear.) He therefore regretted that it should have been submitted to the Association.

Mr. J. D. Rees, C.I.E., thought that, in dealing with the question of the poverty of India, the author of the paper in comparing the average annual income of a native of India with the weekly wage of a skilled London mechanic was basing his argument on a wholly fallacious premise. No possible comparison could be made, and the native of India was better off with his £2 a year than the London mechanic with the same wage a week. With reference to Japan, he believed the great changes that had taken place there had been more the result of the volatile character of the people, and their love of change, than of their system of education, which, however, was good. He maintained that the comparison Mr. Digby had made was a very fallacious one, and if anyone would take the trouble to leave the beaten track of the tea-houses of Japan, and go into the country, they would find the people of Japan no richer than the people of India; but if Mr. Digby would compare the condition of the people of India with the condition of the people of other Eastern countries, the comparison would be valuable. Sir Roland Wilson had spoken of the impoverishment of the population by the payment of the Land Assessment and the Salt Duty, but would Sir Roland Wilson point to any time when the people of India were better off?

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000084

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



He (Mr. Rees) could not. A comparison had also been instituted between the proportion of income taken from the far wealthier population of the United Kingdom and that taken from the people of India, but in the former case most of the money came from one and the same class, and in the latter taxation spread all over a country which lacked a rich middle class. The Emperor Akbar, by common consent the most just of the foreign former Rulers of India, had laid down as one of the rules of revenue administration that there should be left to the cultivator as much as was required for food for himself and his children, and for seed until next harvest, and that the remainder was the Land Tax. Let that be compared with the 10 per cent., or even the exceptional 20 per cent., of the present Land Tax. He thought that if the suggestion of Sir Roland Wilson, that Government should cease to support education, were carried out, it would be the most unpopular thing ever done in India, and he would greatly regret to see the system of education, which had been built up by so many earnest and eminent men in India with most excellent results, departed from in any way, except to improve it. He considered that the Government had got back its money's worth in the admirable administrators who had been trained under the existing system, but, at the same time, he would not hesitate to say that there were a great many flaws in our education, and he thought the greatest of all was that it turned out men with a disposition not to care for Indian things, but to hanker after Western ideas, which made them the less useful, in some cases useless, and on others mischievous, when the objects to which their lives were to be devoted were taken into consideration.

Mr. Thorburn said that the bewildering and wholly unsettling paper they had heard read had touched on so many points of Indian administration, and closed so inconclusively, that he doubted whether the doubting propounder of those doubts had any settled convictions at all—on the subject of the paper, at least. Sir Roland Wilson had convinced himself that India was poor, that education was more or less of a luxury, and that the Government of India had a great many urgent needs for money for reforms and other necessary purposes, and therefore he held it would be better that the Government should drop the educational paint-brush—for a time, at least—and leave it to the Indians themselves to take it up, and daub the healthy brown of their natural complexions a sickly English white or any other colour.

Coming to the point of the lecturer's points and perplexities, the various estimates of average income, all proving poverty, he thought that hypothetical estimates based on conjectural data only showed that those who made them, whether Viceroys or Digbys, had idle time on hand, and well they all knew what Dr. Watts had said, how "Satan finds some mischief still for idle hands to do." Those fallacious and misleading estimates were, he thought, wholly mischievous, what in the Settlement Department used to be called "fireworks," because they made a great show and there was really very little in them.

Now, passing to the question of the weight of the Land Revenue Assessments in India, the Government, the Famine Commission, and the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000019

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Secretary of State all said that the assessments were very low, and quoted figures. The trilogy, Messrs. Digby, Dadabhai Naoroji, and Dutt, all said the assessments were high. They also quoted figures, and maintained that the height of those assessments were one of the causes of the poverty of Indian agriculturists. His own view was this: that the Government of India was the Overlord of India, and the Land Revenue Assessment were State rent. Indigenous Governments used to take elastically about two rupees to one that our Government took, but the difference was that we took it rigidly, crop or no crop, whereas our predecessors took the lion's share of a crop when there was one only. As a result, our light rigidity was harder on the people than our predecessors' heavy elasticity. (Hear, hear.)

With reference to the remarks made about "The Citizen of India," he had never seen the book, but, according the description given by Sir Roland Wilson, that it dragged in dogmatically a number of points which were really controversial, and that its aim and object was to glorify the British Government—why should it not? As a matter of course, every civilized Government in the world had to introduce text-books into its schools, and among those text-books there must be works on history, political economy, and on the constitution of the State. Would not the Government of India be very foolish if it did not do its best to impress on the young idea that its own way of treating the subject was the best possible? (Hear, hear.) Take the text-books used in French, German, and Russian schools. They were misleading from an English point of view, but from the point of view of the Governments concerned they were what it was necessary to teach.

Now, coming on to what the lecturer had called "the religious difficulty," it had twice recently been discussed before this Association, and he had hoped it was dead and buried, but here it was coming to the fore for the third time. With reference to Dr. Duncan's statement, that in 85 per cent. of the schools of India the religious teachers had a free hand, he (Mr. Thorburn) thought that the great bulk of that large percentage was made up of merely infant rote-schools, attended by babes from two years of age to seven, who were taught like parrots in some classical language which they did not understand.

Coming to the question raised as to the utility of primary education, he was really distressed to hear Sir Roland Wilson remark that there was a great deal of unreality in the argument that, except by teaching the masses of the agriculturists the three R's, these masses would be unable to cope with the wily usurer. His own conviction was that in the extension of primary education among the masses lay the chief hope of raising them from a position resembling that of bovine bipeds with the intelligences of quadrupeds to that of human beings able to take care of themselves through life. (Hear, hear.) As to what the educational system in India might be, and what it should be, he held that it was the absolute duty of the Indian Government to continue and extend a system of State-aided education for the benefit of the agriculturists, who, it must be remembered, contributed nine-tenths of the taxation of India. (Hear, hear.) Further, every rupee taken from them and applied to education ought to be spent on those tax-payers who found the money. With reference to higher education, he was

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000030

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

not sure that Sir Roland Wilson's opinion was not right, that that might now be left to the people of India themselves. Throughout India the commercial and professional classes were numerous and comparatively well off, and in every province there were two or three rupee-millionaires. If the Government would distinguish with titles and in other ways persons who gave large educational benefactions, he was certain that in a short time they would have in every province not one, but half a dozen Carnegies! (Hear, hear.)

Sir Charles Stevens said he agreed with Mr. Rees as to the impossibility of applying an English standard to the condition of the natives of India. The first thing that struck him in Sir Roland Wilson's paper was the absence of detail as to facts, and an absence of discrimination between different classes of education and of schools. No distinction was drawn between educational establishments which were directly managed as Government schools, and those which were technically spoken of as grant-in-aid institutions. It is conceivable that it might be perfectly right for the Government to maintain, for instance, agricultural or technical schools, or to take up schools in particular localities for particular classes of people, and still not advisable for them to manage, or even aid, schools in other localities or among other classes of people; it did not at all follow that an argument applicable to one class of schools was equally applicable to all. Sir Roland Wilson had quoted descriptions by Mr. Carstairs of the system of school inspection with which he (Sir Charles Stevens) could not agree. It certainly did not represent his own experience of the state of affairs in Bengal. The lowest class of inspecting officers (the sub-inspectors) inspected the lower schools. The deputy-inspectors supervised the sub-inspectors and inspected some of the lower schools, while they themselves also inspected higher schools. They in turn were supervised by the inspectors, who had large tracts of country under them, and who inspected some of all sorts of schools except (he believed) the collegiate schools. He was altogether opposed to the withdrawal of State aid from education in India, and he thought Sir Roland Wilson had for the moment forgotten how the educational system did not stand apart, but was bound up in the whole administration of the country. It was admitted that the preservation of order was the first consideration. How was the Government to insist on the provision of efficient magistrates, police officers, civil judges? Doctors, lawyers, engineers, and other professional men, must be educated, if only to carry on the administration; the Government has, therefore, a direct interest in the matter, and, in the speaker's opinion, mere commercial competition could not be depended upon to give the necessary men. With reference to primary schools, he strongly approved of the work that had been begun in Bengal by Sir George Campbell, of bringing the old indigenous schools into touch with the Education Department and improving the teachers. He illustrated the danger and difficulty arising from the want of instruction of this sort by referring to the taking of the census in 1881 among the Sonthals of the Birbhum District, and to the discontent which he had personally traced to the bad treatment of the Sonthals by some enterprising Bengalis, who had taken advantage of their ignorance

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and rented lands to them on perfectly outrageous conditions, such as no one capable of reading and understanding the terms would have accepted. In reporting to Government, he particularly advised the establishment of some primary schools, so that this evil should not be perpetuated. He did not, of course, deny that there is still room for improvement in the educational system of Bengal; and he would particularly like to see it less completely dominated than it is at present by the University. (Hear, hear.)

MR. N. D. DARU objected to the description in the paper of the Government as an alien Government. The proper persons to say that were the natives of the country, and not the Government itself. The Government should try and put itself on a level with the natives of the country, and remove from their minds any idea at all that it was an alien Government. Then, with reference to education, he would put it to the meeting whether primary education, as given in the vernacular schools of India, was in any real sense education at all, and if that was the sort of education the Government were to spend their money on—whether it was a proper return for the money. The retiring of the Government from higher education, or their charging high fees for higher education, would simply mean that poor people would never get it. If the Government did not have institutions of its own, private institutions would spring up on a business basis, and poor people would be shut out. With reference to the introduction of text-books, like Sir William Lee-Warner's book, into schools, although he was not sure he ought properly to say anything, yet he would suggest that it was necessary to exercise great care, as was illustrated by what happened when Butler's Sermons were prescribed for an examination in the Bombay University, and the students, having read the book, invented some plausible arguments against the statements contained in it, and considered they were justified in not believing in the existence of God.

The CHAIRMAN, in moving a vote of thanks to Sir Roland Wilson, said that on some points the paper had been entirely misrepresented, and in others misunderstood. Mr. Thorburn had called it "a most bewildering and wholly unsettling paper." But what valid objection could there be to it on these grounds? The paper was an academical one, and intended to provoke discussion. It was not like a proposal brought forward in Parliament or before an Indian Legislative Council. It was a paper submitted to a debating society, and certainly it had provoked one of the very best discussions he had listened to in that room. Then again, Sir Roland Wilson did not object to higher education; he simply suggested that the cost of it should not be entirely borne by the State. For his own part, he was an out-and-out supporter of primary education, and secondary education, and higher education. It was useless to talk about promoting primary and secondary education and industrial education unless you insisted on higher education being simultaneously promoted to the utmost extent possible. They all hung together, and it would be soon found that primary and industrial education would be of very little benefit to a country if it neglected higher education. The remarkable development of the dyers'

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000055

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

trade in England during the past thirty years, and in all the artistic denominations of textile manufacture, and in furniture and house decoration, was attributable ultimately to the writings of Ruskin and William Morris, and the paintings of Rossetti, Millais, and others. While in India he was an enthusiastic promoter of higher education; but what was wanted in India was that the higher education should not be developed after an exclusively English type. One of the greatest of crimes against a people, and the meanest wrong that could be perpetrated on them, was to dislocate the continuity of their national culture and to destroy their historical and literary personality. Therefore, wherever the people of India had, as in the Madras Presidency and in the Mahratta country, developed a great literature of their own, the most scrupulous and strenuous care should be taken that their higher education should be directed to its ever-increasing cultivation. With reference to the administration of education in India, he had always thought that it should be left more and more in the hands of the people of India themselves. As for the Government expenditure on education in India, he thought a million and a quarter a mere flea-bite. But it was time to remember that there was an enormous reserve for educational purposes—industrial, scientific, and literary—in the temple funds of India. No Government could raise that question; but gradually as the modern educated classes of Hindus became more and more influential, they would bring their influence to bear on the present trustees of the temples, and thus secure certain obvious and spontaneous reforms in the administration of their vast funds, whereby they would be increasingly applied to the relief of poverty and distress, and the promotion of education. The schools would thus everywhere spring up within the sacred precincts of the tutelary village temples, and there would be no more talk then of people being driven by Joseph Butler's "Analogy of Revealed Religion," into atheism. Before moving the formal vote of thanks to Sir Roland Wilson, he must renew his protest against the repeated attacks on Sir William Lee-Warner's book. He only wished it was available for use in the schools in England. He did not know any other book from which students in any country could so comprehensively and thoroughly learn their duties as citizens, and if they were to have State-aided education in India, the Government of the country were bound to instruct the people in their duties to the State, and not only that, but in the duties of the State to the people; and the latter was particularly necessary in a country where the acts of the Government were constantly misrepresented, and that not so much through misunderstandings arising on the spot, as under deliberate instructions circulated by political partisans in this country, the active crater of whose agitation lay within the precinct of Westminster Abbey. In conclusion the Chairman moved: "That the most cordial thanks of the meeting be given to Sir Roland Wilson for his valuable and most interesting paper."

The resolution was carried by acclamation.

Sir Roland Wilson thanked the Chairman for the way in which he had proposed the vote of thanks, and the meeting for the manner in which it had been received. There were only two points he would notice in his present reply. The first was that he should not like to go out to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

India, as Mr. Digby had threatened, that he was an enemy of India. Mr. Digby knew better than that. He was a cordial sympathizer with the Indian National Congress in their general policy, but in this one matter of taxation for educational purposes they did not represent the suffering masses of India whom Mr. Digby had so generously championed. As regards Sir William Lee-Warner's book, the point taken in the paper was that some such book was inevitable under the circumstances; that if the State undertook to teach morals it must include politics; if it undertook to teach politics it must give its own view. And for a partisan statement of things as the Government would wish them to be Sir William Lee-Warner's book was admirable, but they had the testimony of Mr. Digby that it had produced precisely the danger which *a priori* he had expected, and had excited discontent. His remedy was that the State should not undertake the responsibility of teaching morals at all.

A cordial vote of thanks having been unanimously accorded to the Chairman, on the motion of Sir Roland Wilson, the proceedings terminated.

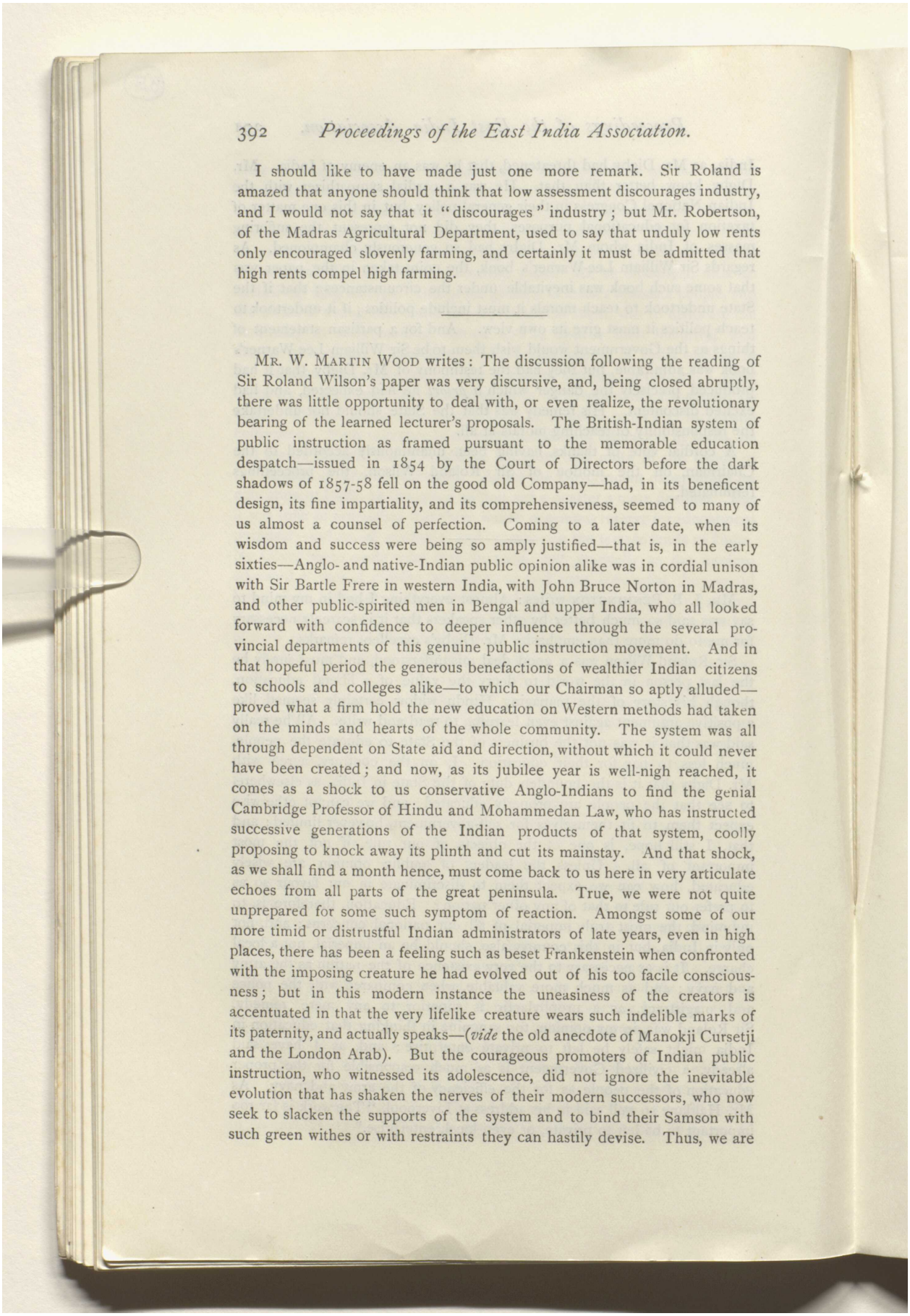
Mr. J. B. Pennington writes: Almost everything I had in my mind to say was said so much better by other speakers that it is scarcely necessary for me to do more than emphasize Mr. Digby's excellent remarks.

Sir Roland Wilson was a good deal misunderstood, and must surely be the last person in the world to decry the value of a liberal education, though his story of the managing Hindu widow certainly seemed like a positive argument against even learning to read and write. All he really said was that it was not the business of the State to educate the people, much less to pay for their education. I, on the contrary, agree with Mr. Digby that it is the bounden duty of the State in India, as elsewhere, to see that the people are properly educated; and we cannot otherwise expect them to fit themselves for self-government, however limited; and that, I still hope, is one of the objects of our rule, if not the most important of all. Unless the leaders of public opinion are wisely educated, how can we expect them to discriminate in our favour so as to prefer our rule to that of any other nation? Education, therefore, is, to my mind, the most truly imperial of all our national concerns; and, not only in India, but in this country also, should be an imperial, not a local charge. It is as necessary to the very existence of the nation as the army and navy; and as much more valuable, when compared with the police and magistracy, as a prophylactic is superior to any mere remedy. Sir Roland was, in my opinion, too sanguine in thinking that education in India might safely be left to private enterprise; and, as I have said already, a civilized Government is as much responsible for the proper education of the people as for the efficiency of the army and navy. As Mr. Haldane so well said in his address at Liverpool, "The work is far too important to be left to private, or even local, enterprise."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000086

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



I should like to have made just one more remark. Sir Roland is amazed that anyone should think that low assessment discourages industry, and I would not say that it "discourages" industry; but Mr. Robertson, of the Madras Agricultural Department, used to say that unduly low rents only encouraged slovenly farming, and certainly it must be admitted that high rents compel high farming.

Mr. W. Martin Wood writes: The discussion following the reading of Sir Roland Wilson's paper was very discursive, and, being closed abruptly, there was little opportunity to deal with, or even realize, the revolutionary bearing of the learned lecturer's proposals. The British-Indian system of public instruction as framed pursuant to the memorable education despatch—issued in 1854 by the Court of Directors before the dark shadows of 1857-58 fell on the good old Company—had, in its beneficent design, its fine impartiality, and its comprehensiveness, seemed to many of us almost a counsel of perfection. Coming to a later date, when its wisdom and success were being so amply justified—that is, in the early sixties—Anglo- and native-Indian public opinion alike was in cordial unison with Sir Bartle Frere in western India, with John Bruce Norton in Madras, and other public-spirited men in Bengal and upper India, who all looked forward with confidence to deeper influence through the several provincial departments of this genuine public instruction movement. And in that hopeful period the generous benefactions of wealthier Indian citizens to schools and colleges alike—to which our Chairman so aptly alluded—proved what a firm hold the new education on Western methods had taken on the minds and hearts of the whole community. The system was all through dependent on State aid and direction, without which it could never have been created; and now, as its jubilee year is well-nigh reached, it comes as a shock to us conservative Anglo-Indians to find the genial Cambridge Professor of Hindu and Mohammedan Law, who has instructed successive generations of the Indian products of that system, coolly proposing to knock away its plinth and cut its mainstay. And that shock, as we shall find a month hence, must come back to us here in very articulate echoes from all parts of the great peninsula. True, we were not quite unprepared for some such symptom of reaction. Amongst some of our more timid or distrustful Indian administrators of late years, even in high places, there has been a feeling such as beset Frankenstein when confronted with the imposing creature he had evolved out of his too facile consciousness; but in this modern instance the uneasiness of the creators is accentuated in that the very lifelike creature wears such indelible marks of its paternity, and actually speaks—(*vide* the old anecdote of Manokji Cursetji and the London Arab). But the courageous promoters of Indian public instruction, who witnessed its adolescence, did not ignore the inevitable evolution that has shaken the nerves of their modern successors, who now seek to slacken the supports of the system and to bind their Samson with such green withes or with restraints they can hastily devise. Thus, we are

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

once more confronted with another of those oft-recurring tests of the sincerity and firmness of the well-founded principles on which we are striving to adapt Western constructive methods to the transition phase of modern Indian peoples. My own conviction is that, in spite of these occasional ebb-tides, that test will stand the strain. Just one word as to Sir Roland Wilson's device and argument for restraint of the noble plan of Indian public instruction,—retrenchment. Really, the disproportion of this relief for the impecuniosity of India is too grotesque for argument. It is, indeed, as he admitted, a mere "flea-bite" as compared with the monster "leech" which from 1876 to 1882 sucked away one hundred millions of India's resources to be worse than wasted *outside* of India altogether; and which, judging by certain incidental remarks in the paper, the honourable Baronet seemed to have forgotten, or regarded with childlike acquiescence.

Sir Roland Wilson's Reply.

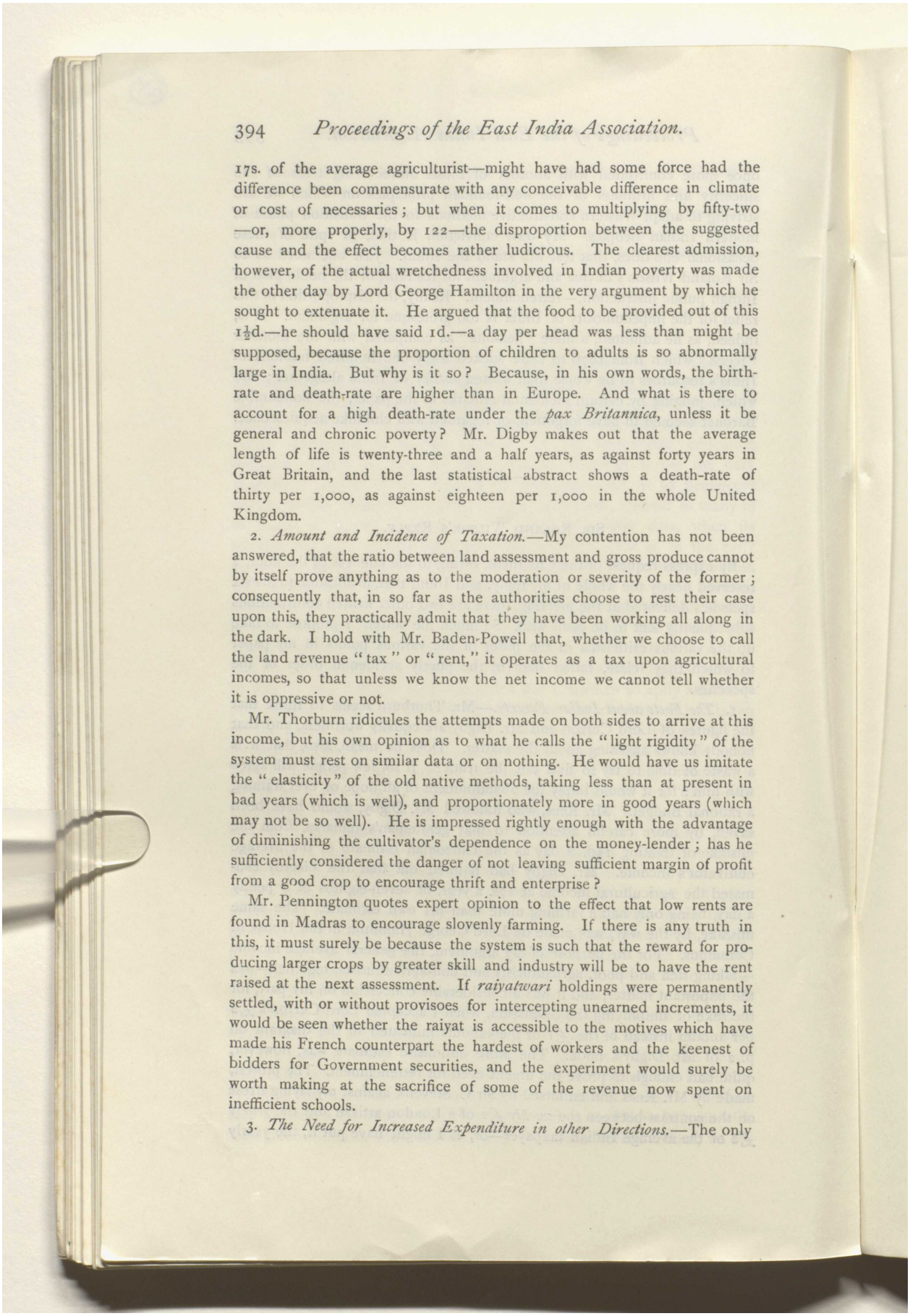
By express request of the Chairman, owing to the lateness of the hour, I reserved nearly the whole of my reply, and I find that, in addition to the six speeches delivered at the meeting, there are two other written contributions subsequently sent to be dealt with. So much the better. I propose to take up the various criticisms in the order of the various points in my paper to which they relate, rather than in the purely accidental order of the speeches.

1. *The Facts about Indian Poverty.*—Mr. Thorburn seems to think that the figures of Lord Curzon and Mr. Digby are equally worthless, and that nobody knows anything about the matter. Does he mean, also, that it is a waste of time to try to find out the truth? If so, few people will agree with him; for it would imply the abandonment of all hope of ever framing a rational Budget. Mr. Rees, who followed Mr. Digby, would have been saved, by more careful attention to that gentleman's remarks, from the mistake of treating 1½d. a day as the Curzonian estimate of the average cultivator's income. Mr. Digby had pointed out that the Viceroy estimated the agricultural income at 17s. a year, or seven-eighths of a penny a day, being only half a farthing more than his own estimate. The same mistake, by the way, was made by Lord George Hamilton in the House of Commons. For the purpose of my argument, the general average income —taking rich and poor, agriculturists and non-agriculturists, together—was the important matter, and it was a considerable concession on my part, for the sake of simplifying the discussion, when I accepted Lord Curzon's £2 per annum instead of the £1 or thereabouts indicated in the diagram on p. 2 of Mr. Digby's book. The more optimistic estimate was, however, quite bad enough to prove the urgent need for retrenchment. The protest, made by Mr. Rees and endorsed by Sir C. Stevens, against my laying stress on the contrast between the *weekly* £2 of a London artisan and the *yearly* £2 of the average Indian taxpayer—or, as I might have put it, the yearly

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



17s. of the average agriculturist—might have had some force had the difference been commensurate with any conceivable difference in climate or cost of necessaries; but when it comes to multiplying by fifty-two —or, more properly, by 122—the disproportion between the suggested cause and the effect becomes rather ludicrous. The clearest admission, however, of the actual wretchedness involved in Indian poverty was made the other day by Lord George Hamilton in the very argument by which he sought to extenuate it. He argued that the food to be provided out of this 1½d.—he should have said 1d.—a day per head was less than might be supposed, because the proportion of children to adults is so abnormally large in India. But why is it so? Because, in his own words, the birth-rate and death-rate are higher than in Europe. And what is there to account for a high death-rate under the *pax Britannica*, unless it be general and chronic poverty? Mr. Digby makes out that the average length of life is twenty-three and a half years, as against forty years in Great Britain, and the last statistical abstract shows a death-rate of thirty per 1,000, as against eighteen per 1,000 in the whole United Kingdom.

2. *Amount and Incidence of Taxation.*—My contention has not been answered, that the ratio between land assessment and gross produce cannot by itself prove anything as to the moderation or severity of the former; consequently that, in so far as the authorities choose to rest their case upon this, they practically admit that they have been working all along in the dark. I hold with Mr. Baden-Powell that, whether we choose to call the land revenue "tax" or "rent," it operates as a tax upon agricultural incomes, so that unless we know the net income we cannot tell whether it is oppressive or not.

Mr. Thorburn ridicules the attempts made on both sides to arrive at this income, but his own opinion as to what he calls the "light rigidity" of the system must rest on similar data or on nothing. He would have us imitate the "elasticity" of the old native methods, taking less than at present in bad years (which is well), and proportionately more in good years (which may not be so well). He is impressed rightly enough with the advantage of diminishing the cultivator's dependence on the money-lender; has he sufficiently considered the danger of not leaving sufficient margin of profit from a good crop to encourage thrift and enterprise?

Mr. Pennington quotes expert opinion to the effect that low rents are found in Madras to encourage slovenly farming. If there is any truth in this, it must surely be because the system is such that the reward for producing larger crops by greater skill and industry will be to have the rent raised at the next assessment. If *raiyatwari* holdings were permanently settled, with or without provisoes for intercepting unearned increments, it would be seen whether the raiyat is accessible to the motives which have made his French counterpart the hardest of workers and the keenest of bidders for Government securities, and the experiment would surely be worth making at the sacrifice of some of the revenue now spent on inefficient schools.

3. *The Need for Increased Expenditure in other Directions.*—The only

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000012

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

remark elicited by this portion of my paper was a reference in Mr. Martin Wood's written notes to the waste of Indian resources in wars beyond the frontier. Here I am with him generally as to the past, and as anxious as he can be that our "forward" policy should be carefully watched and checked in the future. I strongly suspect that, if only the will were present, a way might be found of placing our relations with both Russia and Afghanistan on such a footing that we might save the Afghan subsidy and reduce the numerical strength of our army. But, on the other hand, the cost per man will have to be increased if in the present state of the labour market we are to secure the kind of recruit who will not disgrace the British name by vice and violence. Lumping together the military and civil branches of the absolutely indispensable work of Government, and assuming (contrary to present probability) that all the economies which ought to be effected will be effected, I much doubt the possibility of reducing the total without sacrificing some of the security that the subject has a right to expect.

4. *The Pleas for State Aid to Primary Education.*—Mr. Pennington puts concisely the now dominant view when he writes that "a prophylactic is superior to any mere remedy." I hold with Sir George Cornewall Lewis that in legislation the proverb ought to be reversed, and that more often than not cure is better than prevention. The reason is that the only curative or preventive methods at the disposal of governments are acts so intrinsically mischievous that they rank as crimes when done without special justification. Taxation is *prima-facie* robbery, as arrest is *prima facie* an assault. As a wise Government does not arrest people without strong suspicion of actual or imminent criminality, so neither should it rob them of their money without some more urgent and obvious necessity than a vague idea that the State knows better how it should be spent than the proprietor.

Sir C. Stevens, Mr. Thorburn, and Mr. Pennington all lay stress on the importance of teaching the *raiyat* to read and cipher in order that he may protect himself against being cheated. I will ask them to reckon up on the one hand the cost of providing efficient elementary instruction to any given number of Santal, Punjabi, or Tamil children, and on the other hand the cost of providing efficient petty tribunals in the same localities, numerous enough to be accessible to everyone without the loss of a day's work, to listen patiently to every story, to clear up honest misunderstandings, and to detect and punish wilful impositions, and all this without court fees or other expense to the parties. I am much mistaken if they do not find the latter plan (which we may call the mere remedy, or the more direct prophylactic) both cheaper and more certainly efficacious for its immediate purpose; and I am not at all sure that it would not also be more educative. The right end at which to begin is to teach people in a practical way what fair dealing is, and how it can be enforced; the less important lessons that occupy the attention of school inspectors will follow in due time. In dealing with the prophylactic view of State education, this matter of relative cost is fundamental. In spite of my preliminary *caveat*, several speakers, including the Chairman dwelt on the smallness of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the present educational budget as a reason why the saving to be effected by its abolition was not worth a thought. No one attempted to grapple with my argument, that the choice really lies between abolition and an enormous increase, the present expenditure being altogether insufficient to do any real good. Sir C. Stevens naturally said all he could for the system in the development of which he had taken so active a part; but all the impartial testimony that I have been able to collect tends to confirm the doubt expressed by another speaker (Mr. Daru), "whether primary education, as given in the vernacular schools in India, is in any real sense education at all"; and I repeat that, if not, the money spent on it has not merely been wasted, but has done positive mischief.

5. *The Higher Education.*—I am glad to find myself, on one point at least, in agreement with Mr. Thorburn, who thinks that the commercial and professional classes might now pay for their own higher education, with some help from here and there an Indian Carnegie, instead of charging it on the taxes, nine-tenths of which, he says, are paid by the agriculturists. At the same time, I admit, so far as the principle is concerned, the soundness of Sir C. Stevens' plea that the Government must train its own servants to suit its own requirements, and that it may not be always possible to make candidates for Government employment pay the whole cost of qualifying themselves for the posts that they desire to fill. For instance, I find that, in the period covered by the last Quinquennial Review, the Medical Colleges were a source of considerable expense, while the Law Colleges were practically self-supporting. I am willing to rank public expenditure, for the purpose of securing a sufficient supply of competent army surgeons, sanitary inspectors, and so forth, on the same level of necessity with the actual pay of soldiers and policemen; but I do not admit any similar obligation on the State to provide medical aid for persons not in its service, or medical training preparatory to private practice. It is a question to be settled by experiment in each branch of the public service how far commercial competition can be relied on to produce fit candidates; but much will, of course, depend on the degree of public confidence that the fittest will really be selected and promoted, and, in particular, that Europeans will not be promoted over the heads of equally competent Indians.

With this exception, I should like to see the Government withdraw, not only from financial, but from every sort of responsibility for the higher education, and this for the very reason that leads Mr. Pennington to desire its continuance—namely, because, like him, I want to hasten the day when the people of India will be able to take charge of their own affairs. I agree with him as to the end, but differ as to the means. I believe that at the stage now reached the best preparation for self-government is self-education, using the former term in its conventional sense to denote co-operative and indigenous, as opposed to despotic and foreign, government, and meaning by the latter voluntary, as opposed to compulsory, co-operation for educational purposes, which, of course, implies popular and diversified, as opposed to official and uniform, choice of subjects and methods.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000051

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

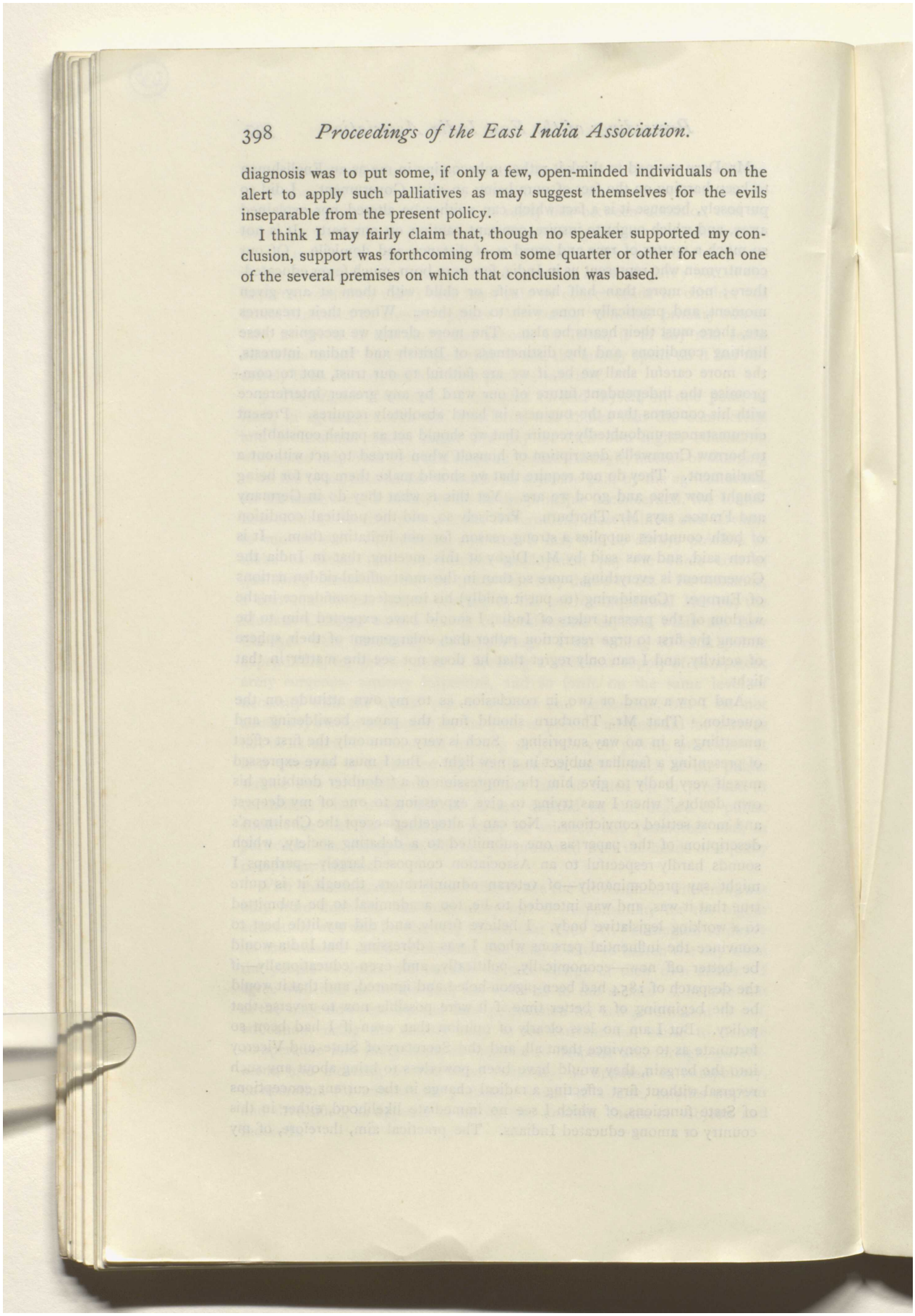
Mr. Daru seemed to think it rather unbecoming in me as an Englishman to keep harping on the fact of ours being an alien Government. I did so purposely, because it is a fact which can neither be altered nor explained away, and which ought to inspire constant caution on our part. It is not so much a matter of race and creed as of distance and domicile. Of our countrymen who represent us in India, few were born, much fewer educated there; not more than half have wife or child with them at any given moment, and practically none wish to die there. Where their treasures are, there must their hearts be also. The more clearly we recognise these limiting conditions and the distinctness of British and Indian interests, the more careful shall we be, if we are faithful to our trust, not to compromise the independent future of our ward by any greater interference with his concerns than the business in hand absolutely requires. Present circumstances undoubtedly require that we should act as parish constable—to borrow Cromwell's description of himself when forced to act without a Parliament. They do not require that we should make them pay for being taught how wise and good we are. Yet this is what they do in Germany and France, says Mr. Thorburn. Precisely so, and the political condition of both countries supplies a strong reason for not imitating them. It is often said, and was said by Mr. Digby at this meeting, that in India the Government is everything, more so than in the most official-ridden nations of Europe. Considering (to put it mildly) his imperfect confidence in the wisdom of the present rulers of India, I should have expected him to be among the first to urge restriction rather than enlargement of their sphere of activity, and I can only regret that he does not see the matter in that light.

And now a word or two, in conclusion, as to my own attitude on the question. That Mr. Thorburn should find the paper bewildering and unsettling is in no way surprising. Such is very commonly the first effect of presenting a familiar subject in a new light. But I must have expressed myself very badly to give him the impression of a "doubter doubting his own doubts," when I was trying to give expression to one of my deepest and most settled convictions. Nor can I altogether accept the Chairman's description of the paper as one submitted to a debating society, which sounds hardly respectful to an Association composed largely—perhaps I might say predominantly—of veteran administrators, though it is quite true that it was, and was intended to be, too academical to be submitted to a working legislative body. I believe firmly, and did my little best to convince the influential persons whom I was addressing, that India would be better off now—economically, politically, and even educationally—if the despatch of 1854 had been pigeon-holed and ignored, and that it would be the beginning of a better time if it were possible now to reverse that policy. But I am no less clearly of opinion that, even if I had been so fortunate as to convince them all, and the Secretary of State and Viceroy into the bargain, they would have been powerless to bring about any such reversal without first effecting a radical change in the current conceptions of State functions, of which I see no immediate likelihood, either in this country or among educated Indians. The practical aim, therefore, of my

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000045

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



diagnosis was to put some, if only a few, open-minded individuals on the alert to apply such palliatives as may suggest themselves for the evils inseparable from the present policy.

I think I may fairly claim that, though no speaker supported my conclusion, support was forthcoming from some quarter or other for each one of the several premises on which that conclusion was based.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000024

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CORRESPONDENCE, NOTES, AND NEWS.

FAMINE IN INDIA: ITS CAUSES AND EFFECTS.

SIR,

In Mr. Hare's pamphlet on "Famine in India: its Causes and Effects," published by Messrs. P. S. King and Son, Westminster, I had hoped to find something more practical in the way of remedy than we have hitherto seen. If we could be clear as to the causes of famine, we should, perhaps, be led to the proper remedy.

What, then, does Mr. Hare's indictment amount to? Simply, I think, that labour is always and everywhere deprived of its fair share of the produce of labour; and that, I think, is true not only in India, but in England also, and still more conspicuously so in Italy and Russia, and most other countries, except, perhaps, America. What is the whole secret of American prosperity? High wages and (comparative) temperance, or "thrift" amongst the labouring classes, says Mr. Schwab. In England, on the other hand, it is an elaborate and enormously expensive poor law, which spends (or wastes) £6,000,000 *every* year in the "famine relief" of 40,000,000 of people, as compared with about the same amount, too frequently, indeed, but *not* yet *every* year, on 220,000,000 of people in India. Has it every occurred to our critics that the proportion of people who in ordinary years never have enough to eat is practically the same in India as in England—viz., about 30 per cent.? I see Mr. Hare has evidently not quite overlooked this significant fact (p. 20).

It seems to me, however, that there is some confusion in his interesting and instructive essay. It apparently proceeds upon the assumption that in India only the labouring classes (coolies) suffer from famine; but it is very largely the petty land-holders (ryots) themselves who are affected. Then, the suggested remedy—the storage of grain—applies only to land-holders, and was surely never a practice of the unskilled labouring classes proper. They scarcely ever save anywhere. Moreover, if the British Government is to bear the blame for the disastrous results of modern civilization in the rest of India, it must be allowed some credit for the fact that since 1770 there has been no famine to speak of in Bengal proper. Mr. Hare's crosses against Bengal in 1865, 1885, 1891, and 1897, must be the result of some slip, and everyone knows that the so-called Bengal famine in 1873 was nothing of the kind. And yet practically the same system of administration prevails in Bengal, so far as the actual cultivator or labourer is concerned, the only difference being that the Government has made over about £5,000,000 a year of its legitimate revenue to a set of middlemen, who have become the wealthy zemindars so well known all over the world, whilst the rights of the actual cultivating ryot have been, until quite lately, entirely overlooked, and even now he is nothing but a tenant with certain rights more or less secured by law. How does Mr. Hare account for the comparative prosperity of the Bengali

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

cultivator? He does not seem to admit that climatic considerations are responsible at all. Trade is just as brisk in the Ganges Valley as elsewhere, and I have no doubt the ryots rejoice in the steady demand for their crops, which enables them to realize their value promptly. Being prosperous themselves, they perhaps treat their labourers liberally, and perhaps pay them in grain, as they did in Tanjore when I was there, in which case the rise or fall of prices affects them not at all.

I am not personally acquainted with Lower Bengal, but I feel sure the ryots there no longer follow the antiquated practice of storing grain as a safeguard against famine. Nature is bountiful, and no doubt the careful and more intelligent ryot there has learnt that it is better and easier to store his crop in the form of rupees. Mr. Hare's whole book is an attack on trade, and what he calls "the curse of modern civilization." Evidently he would agree with Horace where he says (with some reason, no doubt):

"Beatus ille, qui procul negotiis,
Ut prisca gens mortalium,
Paterna rura bobus exercet suis,
Solutus omni fœnore;"

but is it likely he can so put back the clock, or "Juggernaut car of Western progress," as Mr. Thorburn calls it? The survival of the fittest seems to be one of Nature's apparently cruel laws, and just now it is the agricultural labouring classes everywhere—not in India alone—who are suffering from it. As far as I can see, Mr. Hare has no practical remedy to suggest, and Mr. Digby now despairs of any. But surely the case is not quite hopeless even yet. Land nationalizers insist that if land is made freely accessible to labour all will be well; and, certainly, when every labouring man has the option of taking land for himself, instead of working for someone else, he will have been truly emancipated for the first time in the history of England. But that his right to get land will not save him from famine is, in India at any rate, a matter of sad experience; for, whatever defects it may have, the Madras ryotwari system of land-holding is, in fact, land nationalization, and everyone in Madras can almost always get land direct from the Government if he really wants it, or can do well by emigrating, and can also have land in his village *free of charge* on which to build his humble home.

It is useless to complain of evils unless one is prepared to at least suggest a remedy, and I, unfortunately, have no panacea to offer; but I do think that we should do all in our power to educate the natives to manage their own affairs, and reduce the number of Europeans employed, as far as may be compatible with safety. In other words, I would endeavour to make our rule more "enlightened" and less "selfish" every year, and I am inclined to agree with Mr. Thorburn that the tendency is in that direction, though progress is desperately slow. As I have said elsewhere, Mr. Hyndman's idea that we should extend the Mysore system, with its native administration "under light English guidance," seems the most practicable solution of our troubles that I have yet met with.

It is not likely that an intelligent ryot could be persuaded to sell his

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

reserves unless he has first fallen into the power of the money-lender; and certainly something might be done by well-to-do friends of India in the way of setting up agricultural banks; but they must be started by natives of the country, as Mr. Nicholson has pointed out in his invaluable report, and will be warmly welcomed by our present enlightened Government. After all, when a man sells his produce, he has (or ought to have) the value of it in cash, and would have it always but for want of "thrift"; the thrifty ones manage to keep it, and do not suffer. Moreover, it is probably true that but for the railways, which it is the fashion with our critics to decry, much of the grain that is exported would never have been grown at all, or would even have rotted on the ground, as it often used to do in inaccessible regions. Mr. Hare's discovery that districts mostly affected by famine are those through which the railways run—as if the railways had caused the famines—reminds me of the pious monk's comment on the goodness of Providence in causing all the great rivers to flow past the great towns. The railways were largely laid out through famine tracts, because they were so liable to famine.

Chapter ii., p. 9.—The most easily accessible stock is *money*—not grain, which is liable to all kinds of damage. It is not quite true that "the controllers of land and capital *always* pursue the working classes to their doom" (p. 11). On the contrary, the more intelligent and thrifty of the working classes frequently displace the others. I should say history familiarizes us with some famines in the old times which were even more terrible than any we have now, and when nothing was done to alleviate them. It is *not true* that "man" in those days "grappled with Nature, and was able to avert by common-sense the inevitable starvation." On the contrary, in those famines cannibalism was not uncommon, and even Brahmins were often reduced to eating dogs. "Common-sense," or, in other words, "thrift," would often avert starvation even now. Mr. Hare seems to recommend a return to the system of collecting the revenue in kind—the worst system ever known, as he will see by reading a report of the Hon. A. Seshiah Shastri on the State of Puducottah in 1881. I have had some experience of that system myself in Puducottah, and I know that Seshiah is entirely right. Under the old communal system no progress was possible, but that may be Mr. Hare's reason for approving of it.

The argument that because under British rule land has become more valuable (or, rather, individual rights to land have been largely developed), *therefore* the owners are worse off than before, because they are tempted to mortgage their land, and so get into debt, seems somewhat paradoxical to the ordinary mind, but is supported by Mr. Thorburn, and has been accepted as a basis of legislation in the Punjab. I cannot believe that any such legislation would be endured in Madras, where private property in land has existed for at least a century.

Some of Mr. Hare's statements are open to question. For instance, he says "Lord Curzon *will not* devote himself to the causes of famine or its prevention." But how can he possibly have any information on that subject? Lord Curzon may decline to speak because he has not satisfied himself as to the real causes of famine, or how it is to be prevented; but,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

as a matter of fact, we know from a recent resolution that he has been devoting a good deal of thought to the question, and has practically accepted some of the suggestions recently made for mitigating the rigour of collection. In a note on p. 18 it is stated that "between one and two million die of insufficient food in every year of so-called plenty." I doubt if there is any good authority for such a statement. A great many—perhaps rather a larger proportion than in England—always suffer from "insufficient food," and some, no doubt, die of starvation and misery every year in both countries, but hardly, I think, a million. I am not aware if there are any trustworthy statistics as to the comparative prevalence of suicide in India and Europe, but I should be surprised if suicide from want and misery was not more common in Europe, (except, of course, amongst widows,) than in India. The digest of Lord Curzon's speech on pp. 18, 19, and the statement that all the officials in India and a great many others have conspired to say what they know to be untrue, is not very intelligible to me, but is certainly very libellous and offensive. It is strange that so many writers seem to think officials have neither the feelings nor the rights of ordinary people, and may be grossly insulted without the smallest hesitation. Speaking as an official myself, I have no doubt they are generally quite as conscientious as their critics.

The real question is, Why the ryots, when they have sold their produce, have no money in their pockets to buy food. That the unskilled labouring classes have none is not unusual or surprising, and the only remedy for them against starvation is to receive their wages in grain or emigrate, as many of them do in the South of India. Emigration is their great weapon when their employers are unjust, and many are the devices resorted to by the large farmer to keep his serfs at home one of the commonest being to keep a loan running against them, and a udgment of the court held over them *in terrorem*—not for actual use, except in case of attempted flight.

As to the interesting table on p. 25, it must be remembered that it was not till the Orissa famine of 1865 that we as a nation became fully alive to our responsibilities in this matter. The really terrible loss of life on that occasion aroused such indignation that for some time there was certainly a tendency to find famines where none existed—as, for instance, in Bengal in 1873—and scarcity was sometimes exaggerated into famine by district officers afraid of being charged with losing a single life contrary to the stringent orders then in force. It was partly in consequence of this feeling that the number of famines largely increased since 1865, so that we have nine famines in the thirty-five years from 1866 to 1900, and, unfortunately a greater number of provinces were affected in the two last than in any previous years. Then it will be observed that Madras seems to have suffered more constantly than any other province, with eleven famines in 119 years—from 1781 to 1900; but it must be remembered that Madras extends from Ganjam to Tinnevelly, 950 miles, with a breadth of 450, and an area of more than 138,000 square miles, with a great variety of climates, so that there will often be famine in one part of it while there are copious harvests in another; and the great famine of 1877 was the only one that

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

was at all general. It need hardly be added that none of them affected the river-irrigated districts.

Mr. Hare's final recommendation is that "the affairs of India must be administered in the interest of her people, and not in the interest of the people who receive their annual tribute of £30,000,000." That either means that all the Europeans are to leave the country or that they are to give their services gratuitously. Does Mr. Hare seriously contemplate either alternative as an immediate remedy?

J. B. PENNINGTON.

March, 1902.

AN IMPENDING FAMINE IN INDIA—A FORECAST.

(FROM OUR INDIAN CORRESPONDENT.)

It is generally acknowledged by Indian authorities that failure of monsoon and famine are convertible terms.

Lord Curzon most emphatically declared in a recent Government resolution that the relation, as of cause and effect, between a good rainfall, abundant crops, and agricultural prosperity on the one hand, is not more obvious than that between a bad monsoon, failure of crops, and a starving population on the other.

Such being the case, I venture to predict that the year 1902 will be memorable in Indian history chiefly for a famine of unprecedented severity, affecting large tracts of country, and causing untold misery to the people and loss of revenue to the Government.

I base my prediction upon a general experience of the Indian climate for several decades past, and also upon the fact that this year the cold weather temperature—*i.e.*, since the commencement of January—has been on an average about twelve degrees higher over the greater portion of the Indian peninsula than it should be, as compared to previous years. I may note here what has doubtless been observed by others, that the mango-trees have commenced to blossom about six months before their time—at least, in this part of India, the N.W. Provinces—which is a very bad sign.

An abnormally high temperature in the winter months means an early hot weather of exceptional severity. It also means a prolonged hot weather and delay in the advent of the periodical S.W. monsoon.

The result of these conditions will be that the soil will get thoroughly baked and hard as iron between now (February 7) and, say, June 15 next, rendering all agricultural operations difficult and unsatisfactory, and cattle will suffer terribly from want of grass. I have lived many years in India, and am not exaggerating when I tell you that already (February) there is great scarcity of grass in this the most fertile part of India, viz., the Gangetic valley. What it will be like in June I am afraid to think.

I have said above that the soil will get thoroughly baked and hard, and I may add that this condition will be greatly aggravated by the want of trees, which is a very noticeable feature in the plains of India—at least, in the Panjab and the N.W. Provinces of India. The protection which the shade of trees gives to excessive evaporation of moisture and drying of soil is wanting to a lamentable extent, and, whatever the causes, India

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

is fast becoming a vast, arid waste—so far, at least, as these provinces are concerned.

One thing leads to another, and the result of this excessive baking and drying of soil for some six months before the advent of the S.W. monsoon will be that the whole volume of atmosphere over the Indian peninsula from north to south, and from east to west, will be abnormally heated up and deficient in humidity, which is a necessary factor in the production of rain-bearing clouds, and this defective production of rain-bearing clouds must, in its turn, lead to the general failure of the S.W. monsoon for 1902.

It is this abnormal local condition of an enormous volume of dry and heated atmosphere all over India, antecedent to the advent of the S.W. monsoon, which, I think, largely determined the total quantity of rain which that monsoon would give. Why is it that Siam, Burma, Assam, Manipur, Chin-Lushai, and Bengal proper seldom or never suffer from a total failure of rains? It is because these countries are well wooded and their climate more or less moist all the year round. The Meteorological Department in India, and the Indian public generally, ignore, I think, the local condition above described, and believe that the causes of a good or bad monsoon are entirely outside India, in the Indian Ocean and the countries to the S.W. of that ocean. This, I think, is a mistake. It is reasonable to suppose that the total production of rain-bearing clouds in the Indian Ocean, and the strength of the S.W. wind that brings these clouds from the ocean to India, are important factors in the quality of the monsoon; but what I believe is that, no matter how favourable to a good monsoon these factors may be, their favourable influence is rendered negative by an unfavourable "local condition" obtaining in India prior to the advent of the monsoon. If it takes two to make a quarrel, it also takes two to produce a good monsoon in India. Both external and internal causes must be taken into consideration. This year the heat promises to be phenomenal and the humidity very small, so, if my theory be correct, the S.W. monsoon will be poor and a famine may safely be predicted, while the fact that the spring crops in the Panjab dependent upon winter rains have almost entirely failed already will not tend to improve the situation.

Unfortunately, this "local condition" of excessive heat and dryness of atmosphere threatens to recur every year and thus become permanent, as India is now greatly denuded of trees and the absence of protection of shade in controlling excessive heat and dryness has likewise become permanent. One might be led to think from this that the gradual reafforestation of India (how nice it sounds!) is the one thing needful for India; in fact, this suggestion has been publicly made, and it is to show that it is economically unsound that I refer to it here. However fascinating the idea may be to convert India into a primeval forest once again, a little consideration will show that it will not be expedient to carry out the idea. India is essentially an agricultural country—it never will be anything more in spite of all fine talk about high education and technical industry—and for agriculture you want open fields and not forests. It is certain that you

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

cannot have fields and forests growing upon the same spot any more than two lines can occupy the same space, and anything like a general reafforestation of India is therefore out of the question. It may be laid down as an axiom that as populations increase forests must decrease, and the population of India now stands somewhere near three hundred millions. By all means plant your trees where there may be waste and fallow lands, but I doubt if their total effect upon the rains will be anything appreciable.

The moral of it all is that the Government of India will do well to take time by the forelock and to undertake extensive irrigation works over the length and breadth of the country before it becomes another Sahara Desert by the end of, say, the year 2400—*i.e.*, in another 500 years—though this, I think, is a very liberal calculation.

Much time has been lost by Indian economists, but it is never too late to begin. India is fortunate in having in Lord Curzon an energetic Viceroy and a far-seeing statesman, and it is a happy augury of the times that he has appointed an Irrigation Commission with a very able officer as its president, whose deliberations soon ought to be in print. I only hope this Commission will recommend no cheese-paring policy, as half-measures are always unsatisfactory.

Nature has provided India with many mighty rivers, the waters of which, alas! find their way to the ocean year in, year out. If only a quarter of the water that is thus wasted were turned to account, what a different story it would be! India would doubtless be a rich and prosperous country beyond the wildest dreams of avarice, and the gaunt spectre of famine laid low for ever.

It is true we have some irrigation works in India, but, unfortunately, it is also true that the amount of land for which irrigation is available is as yet a mere fraction of the land totally dependent upon rainfall for cultivation; and if, as recently stated somewhere, irrigation pays 6 per cent. upon the outlay, it is past all understanding why the Indian Government do not boldly go forward and devise means for irrigating the whole country without further heckling. What the Nile is to the Egyptians the Ganges, the Brahmaputra, and a hundred other mighty rivers in India should be to the Indians.

In America President Roosevelt lately declared that in the western countries of the States, irrigation should be extensively adopted, as those countries can feed untold millions of people if so irrigated, and, depend upon it, Roosevelt will do what he will say, no matter what it may cost. It is necessary for India, I think, to follow the good example of Egypt and America in this respect, or permanent bankruptcy and ruin must result in the long-run.

It has been calculated that the Government of India have spent a hundred millions sterling upon railways within the last twenty years, while they have spent only twelve millions sterling upon irrigation works within the same period. Whatever be the reasons for this rush of railways in the past, it is certain that in the future policy of the Government of India irrigation must take precedence of railways, or an economic crisis will

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

inevitably result in the near future, presuming that bad monsoons will be the rule and good ones the exception in future years.

One word more and I have done. We have a Meteorological Department in India whose business it is to collect and publish information on different points connected with the monsoon, and to issue forecasts. The information they give is generally worded in such vague and mystical language that few can understand it or draw any conclusions from it. Instead of an endless repetition of such expressions as "centre of depression," "mean temperature," "cyclonic area," and other choice expressions which are crammed down the throats of the public with painful monotony, if they will condense their reports and issue a forecast fortnightly or monthly, and merely say that the monsoon will be strong or weak for such and such a part of India and for such and such a period, the Department might be able to justify its existence.

It is to be hoped that they will issue their first forecast soon, and that it will be a little more cheerful than mine.

INDIA, *February* 7, 1902.

AGREEMENT BETWEEN GREAT BRITAIN AND JAPAN.

The Marquis of Lansdowne, in forwarding the recent Treaty to His Majesty's Minister at Tôkio, Sir C. MacDonald, explains that this agreement may be regarded as the outcome of the events which have taken place during the last two years in the Far East, and of the part taken by Great Britain and Japan in dealing with them.

"Throughout the troubles and complications which arose in China consequent upon the Boxer outbreak and the attack upon the Peking Legations, the two Powers have been in close and uninterrupted communication, and have been actuated by similar views.

"We have each of us desired that the integrity and independence of the Chinese Empire should be preserved; that there should be no disturbance of the territorial *status quo* either in China or in the adjoining regions; that all nations should, within those regions, as well as within the limits of the Chinese Empire, be afforded equal opportunities for the development of their commerce and industry; and that peace should not only be restored, but should, for the future, be maintained.

"From the frequent exchanges of views which have taken place between the two Governments, and from the discovery that their Far Eastern policy was identical, it has resulted that each side has expressed the desire that their common policy should find expression in an international contract of binding validity.

"We have thought it desirable to record in the preamble of that instrument the main objects of our common policy in the Far East to which I have already referred, and in the first article we join in entirely disclaiming any aggressive tendencies either in China or Corea. We have, however, thought it necessary also to place on record the view entertained by both the High Contracting Parties, that should their interests as above described be endangered, it will be admissible for either of them to take such

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

measures as may be indispensable in order to safeguard those interests, and words have been added which will render it clear that such precautionary measures might become necessary and might be legitimately taken, not only in the case of aggressive action or of an actual attack by some other Power, but in the event of disturbances arising of a character to necessitate the intervention of either of the High Contracting Parties for the protection of the lives and property of its subjects.

"The principal obligations undertaken mutually by the High Contracting Parties are those of maintaining a strict neutrality in the event of either of them becoming involved in war, and of coming to one another's assistance in the event of either of them being confronted by the opposition of more than one hostile Power. Under the remaining provisions of the Agreement the High Contracting Parties undertake that neither of them will, without consultation with the other, enter into separate arrangements with another Power to the prejudice of the interests described in the Agreement, and that whenever those interests are in jeopardy they will communicate with one another fully and frankly.

"The concluding article has reference to the duration of the Agreement, which, after five years, is terminable by either of the High Contracting Parties at one year's notice.

"His Majesty's Government have been largely influenced in their decision to enter into this important contract by the conviction that it contains no provisions which can be regarded as an indication of aggressive or self-seeking tendencies in the regions to which it applies. It has been concluded purely as a measure of precaution, to be invoked, should occasion arise, in the defence of important British interests. It in no way threatens the present position or the legitimate interests of other Powers. On the contrary, that part of it which renders either of the High Contracting Parties liable to be called upon by the other for assistance can operate only when one of the allies has found himself obliged to go to war in defence of interests which are common to both, when the circumstances in which he has taken this step are such as to establish that the quarrel has not been of his own seeking, and when, being engaged in his own defence, he finds himself threatened, not by a single Power, but by a hostile coalition.

"His Majesty's Government trust that the Agreement may be found of mutual advantage to the two countries, that it will make for the preservation of peace, and that, should peace unfortunately be broken, it will have the effect of restricting the area of hostilities.

"THE EXACT TEXT OF THE AGREEMENT.

"The Governments of Great Britain and Japan, actuated solely by a desire to maintain the *status quo* and general peace in the extreme East, being moreover specially interested in maintaining the independence and territorial integrity of the Empire of China and the Empire of Corea, and in securing equal opportunities in those countries for the commerce and industry of all nations, hereby agree as follows :

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000001

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

"ARTICLE I.

"The High Contracting Parties having mutually recognised the independence of China and of Corea, declare themselves to be entirely uninfluenced by any aggressive tendencies in either country. Having in view, however, their special interests, of which those of Great Britain relate principally to China, while Japan, in addition to the interests which she possesses in China, is interested in a peculiar degree politically, as well as commercially and industrially, in Corea, the High Contracting Parties recognise that it will be admissible for either of them to take such measures as may be indispensable in order to safeguard those interests if threatened either by the aggressive action of any other Power, or by disturbances arising in China or Corea, and necessitating the intervention of either of the High Contracting Parties for the protection of the lives and property of its subjects.

"ARTICLE II.

"If either Great Britain or Japan, in the defence of their respective interests as above described, should become involved in war with another Power, the other High Contracting Party will maintain a strict neutrality, and use its efforts to prevent other Powers from joining in hostilities against its ally.

"ARTICLE III.

"If in the above event any other Power or Powers should join in hostilities against that ally, the other High Contracting Party will come to its assistance and will conduct the war in common, and make peace in mutual agreement with it.

"ARTICLE IV.

"The High Contracting Parties agree that neither of them will, without consulting the other, enter into separate arrangements with another Power to the prejudice of the interests above described.

"ARTICLE V.

"Whenever, in the opinion of either Great Britain or Japan, the above-mentioned interests are in jeopardy, the two Governments will communicate with one another fully and frankly.

"ARTICLE VI.

"The present Agreement shall come into effect immediately after the date of its signature, and remain in force for five years from that date.

"In case neither of the High Contracting Parties should have notified twelve months before the expiration of the said five years the intention of terminating it, it shall remain binding until the expiration of one year from the day on which either of the High Contracting Parties shall have denounced it. But if, when the date fixed for its expiration arrives, either ally is actually engaged in war, the alliance shall, *ipso facto*, continue until peace is concluded.

"In faith whereof the Undersigned, duly authorized by their respective

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000075

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Governments, have signed this Agreement, and have affixed thereto their seals.

"Done in duplicate at London, the 30th January, 1902.

"(L.S.) (Signed) LANSDOWNE,
His Britannic Majesty's Principal Secretary of State for Foreign Affairs.

"(L.S.) (Signed) HAYASHI,
Envoy Extraordinary and Minister Plenipotentiary of His Majesty the Emperor of Japan at the Court of St. James's."

THE NATIONAL DEBT OF JAPAN.

Yasufumi Sawaki, in an interesting article in the *North American Review* of February last, sums up the National Debt of Japan as follows: "The present outstanding debts of Japan amount to 502,967,249 yen, of which 191,143,650 yen are devoted to remunerative objects. The population being forty-four millions, the amount of non-remunerative public debts per head is little more than 7 yen. The system of currency is based on the gold standard. Imports and exports are increasing every year. The total imports and exports, which were 143,494,000 yen in 1891, rose to 435,330,000 yen in 1899. Wine, spirits, tobacco, etc., are still subjected to a very light tax, while silk, tea, beer, and many other articles, are wholly exempt from taxation."

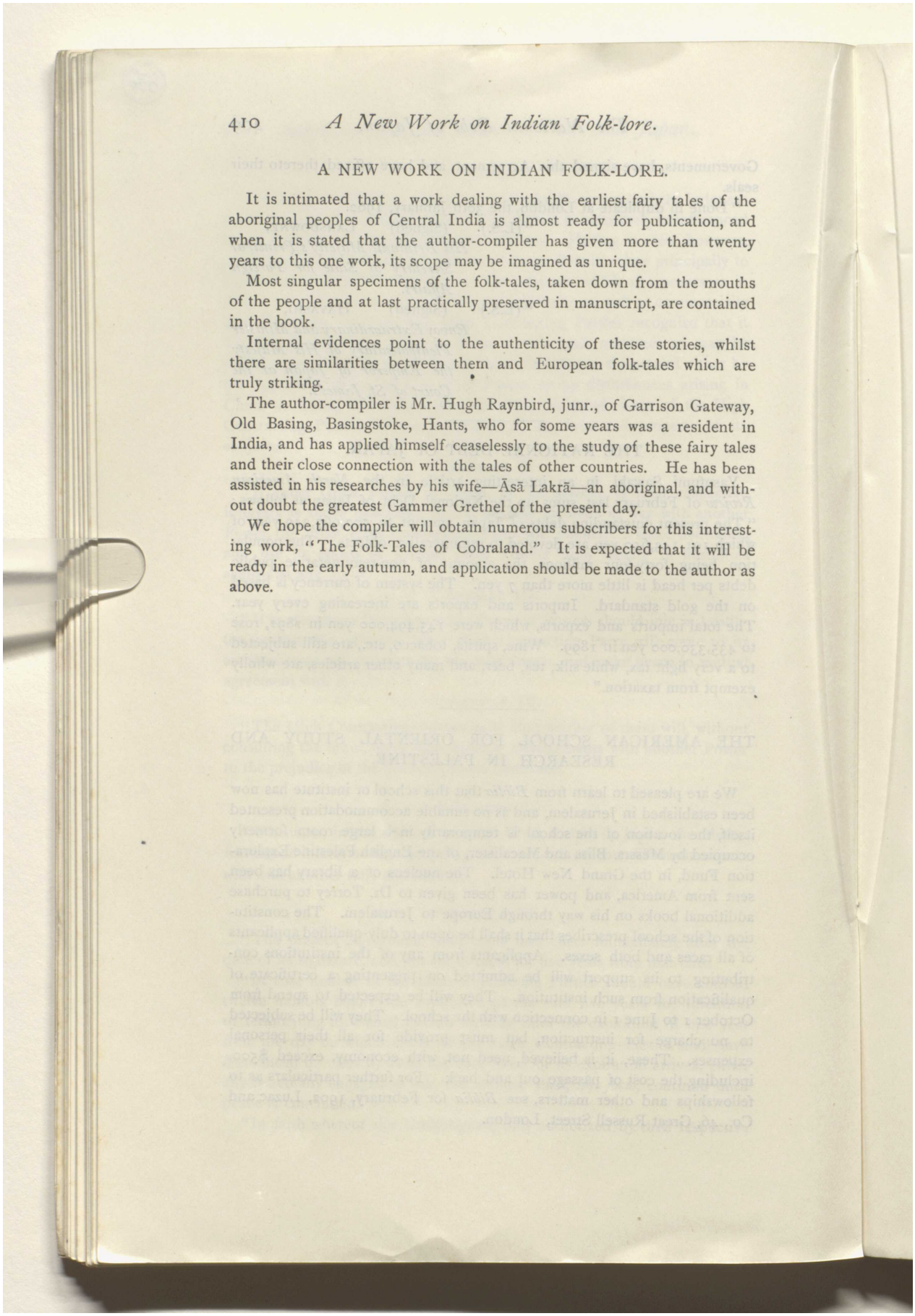
THE AMERICAN SCHOOL FOR ORIENTAL STUDY AND RESEARCH IN PALESTINE.

We are pleased to learn from *Biblia* that this school or institute has now been established in Jerusalem, and as no suitable accommodation presented itself, the location of the school is temporarily in a large room formerly occupied by Messrs. Bliss and Macalister, of the English Palestine Exploration Fund, in the Grand New Hotel. The nucleus of a library has been sent from America, and power has been given to Dr. Torrey to purchase additional books on his way through Europe to Jerusalem. The constitution of the school prescribes that it shall be open to duly-qualified applicants of all races and both sexes. Applicants from any of the institutions contributing to its support will be admitted on presenting a certificate of qualification from such institution. They will be expected to spend from October 1 to June 1 in connection with the school. They will be subjected to no charge for instruction, but must provide for all their personal expenses. These, it is believed, need not, with economy, exceed $500, including the cost of passage out and back. For further particulars as to fellowships and other matters, see *Biblia* for February, 1902, Luzac and Co., 46, Great Russell Street, London.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



A NEW WORK ON INDIAN FOLK-LORE.

It is intimated that a work dealing with the earliest fairy tales of the aboriginal peoples of Central India is almost ready for publication, and when it is stated that the author-compiler has given more than twenty years to this one work, its scope may be imagined as unique.

Most singular specimens of the folk-tales, taken down from the mouths of the people and at last practically preserved in manuscript, are contained in the book.

Internal evidences point to the authenticity of these stories, whilst there are similarities between them and European folk-tales which are truly striking.

The author-compiler is Mr. Hugh Raynbird, junr., of Garrison Gateway, Old Basing, Basingstoke, Hants, who for some years was a resident in India, and has applied himself ceaselessly to the study of these fairy tales and their close connection with the tales of other countries. He has been assisted in his researches by his wife—Āsā Lakrā—an aboriginal, and without doubt the greatest Gammer Grethel of the present day.

We hope the compiler will obtain numerous subscribers for this interesting work, "The Folk-Tales of Cobraland." It is expected that it will be ready in the early autumn, and application should be made to the author as above.

Reference: Mss Eur F111/393. Copyright for this page: Unknown
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000062

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

REVIEWS AND NOTICES.

K. B. Basu; 106, Grey Street, Calcutta, 1901.

1. *Memoirs of Maharaja Nub Kissen Bahadur*, by N. N. Ghose, Barrister-at-Law, Advocate High Court, Calcutta, Fellow of the University of Calcutta, author of "Kristo Das Pal: A Study." The learned author, with the view of making the memoirs as complete as possible, searched, or caused to be searched, all the official documents in the libraries of the respective departments in India and at home, including the British Museum and the India Office in London. The work has been written at the request of Raja Binaya Krishna, a descendant of Nub Kissen; also the expenses of printing and collecting the materials have been borne by him.

The volume is well printed. It contains a copious index, and very many interesting and beautiful portraits of Rajas and Maharajas connected with the subject of the memoirs. All available facts, political or private, of the Maharaja's career, and the circumstances of the times, are so collected together from official documents as to form a most interesting narrative. His first appointment was as Persian tutor to Warren Hastings, afterwards Moonshee to the East India Company, and subsequently to Hastings and Clive. Ultimately he acquired, step by step, higher appointments, and in consequence of his faithful services, sometimes at the risk of his life, he acquired wealth and position, and hence founded his family. The work reflects great credit, ability, and skill on the part of the author.

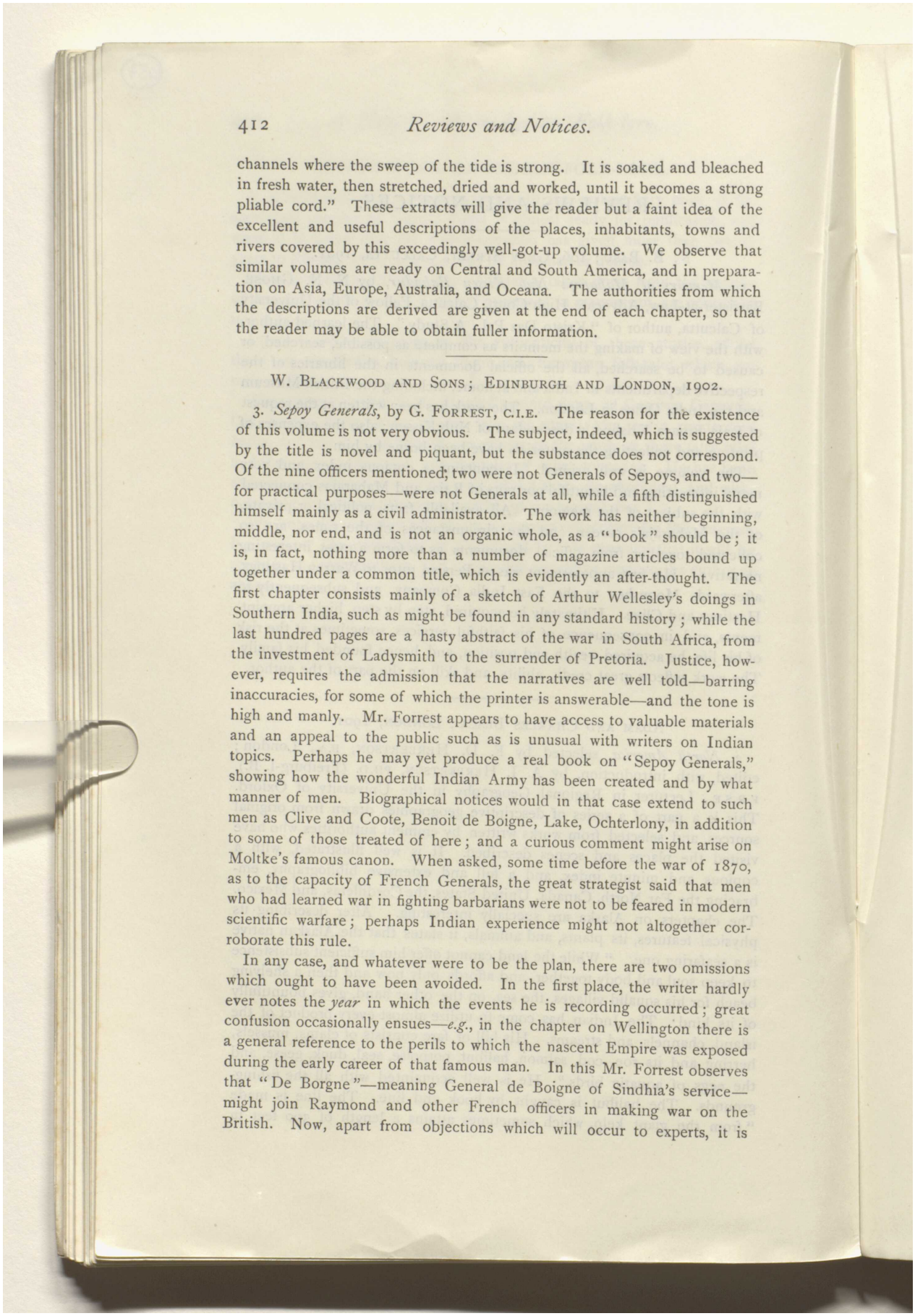
Adam and Charles Black; London, 1901.

2. *North America*, selected by F. D. Herbertson, B.A., London; edited, with introduction, by A. J. Herbertson, Ph.D. (Freiburg-i. B.), F.R.S.E., Lecturer in Regional Geography in the University of Oxford. This is a part of a series of descriptive geographies drawn from original sources, and selected from works written by eminent authorities who have visited the places and scenes described. It is well illustrated, with a copious and minute index, and a full and extensive bibliography, embracing the Far North, Canada, United States, the Cordilleras, and Mexico. The chapters on Alaska are specially interesting. After describing its physical features, its plants, and animals, it states that the Alaskan native is a seafaring one. "While the land cannot offer him sufficient subsistence to keep soul and body together, and affords only now and then a shelving beach for his squalid villages, the sea, on the other hand, gives bountifully of its kind. The Indian has come to utilize almost every product of the island, channels, and streams. His bill of fare consists of clams, mussels, herring and its roe, cod, salmon, halibut, porpoise, seal, duck, geese, and the eggs of aquatic birds." He is well acquainted with all the fishing-grounds. The halibut is caught by hook and line. The line is made "from the giant kelp, which sometimes attains a length of 300 feet in

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



channels where the sweep of the tide is strong. It is soaked and bleached in fresh water, then stretched, dried and worked, until it becomes a strong pliable cord." These extracts will give the reader but a faint idea of the excellent and useful descriptions of the places, inhabitants, towns and rivers covered by this exceedingly well-got-up volume. We observe that similar volumes are ready on Central and South America, and in preparation on Asia, Europe, Australia, and Oceana. The authorities from which the descriptions are derived are given at the end of each chapter, so that the reader may be able to obtain fuller information.

W. Blackwood and Sons; Edinburgh and London, 1902.

3. *Sepoy Generals*, by G. Forrest, C.I.E. The reason for the existence of this volume is not very obvious. The subject, indeed, which is suggested by the title is novel and piquant, but the substance does not correspond. Of the nine officers mentioned, two were not Generals of Sepoys, and two—for practical purposes—were not Generals at all, while a fifth distinguished himself mainly as a civil administrator. The work has neither beginning, middle, nor end, and is not an organic whole, as a "book" should be; it is, in fact, nothing more than a number of magazine articles bound up together under a common title, which is evidently an after-thought. The first chapter consists mainly of a sketch of Arthur Wellesley's doings in Southern India, such as might be found in any standard history; while the last hundred pages are a hasty abstract of the war in South Africa, from the investment of Ladysmith to the surrender of Pretoria. Justice, however, requires the admission that the narratives are well told—barring inaccuracies, for some of which the printer is answerable—and the tone is high and manly. Mr. Forrest appears to have access to valuable materials and an appeal to the public such as is unusual with writers on Indian topics. Perhaps he may yet produce a real book on "Sepoy Generals," showing how the wonderful Indian Army has been created and by what manner of men. Biographical notices would in that case extend to such men as Clive and Coote, Benoit de Boigne, Lake, Ochterlony, in addition to some of those treated of here; and a curious comment might arise on Moltke's famous canon. When asked, some time before the war of 1870, as to the capacity of French Generals, the great strategist said that men who had learned war in fighting barbarians were not to be feared in modern scientific warfare; perhaps Indian experience might not altogether corroborate this rule.

In any case, and whatever were to be the plan, there are two omissions which ought to have been avoided. In the first place, the writer hardly ever notes the *year* in which the events he is recording occurred; great confusion occasionally ensues—*e.g.*, in the chapter on Wellington there is a general reference to the perils to which the nascent Empire was exposed during the early career of that famous man. In this Mr. Forrest observes that "De Borgne"—meaning General de Boigne of Sindhia's service—might join Raymond and other French officers in making war on the British. Now, apart from objections which will occur to experts, it is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

enough to note that 1798 must be the year intended, and that in that year both the officers named had passed away, one by death, and the other by retirement. Secondly, whenever a critical point in the story of one of his heroes occurs, it is either ignored or dismissed with a few insufficient words. Thus, there is no light thrown on the annexation of Sindh in the chapter on Napier, though the veteran himself grimly confessed that "we have no right to seize it," and though another of his heroes—John Jacob—condemned the measure, root and branch, as did the chivalrous Outram. Indeed, Napier's high-handed, yet by no means straightforward conduct of that affair, involved a very strange aspect of a character otherwise noble and great.

As a sample of slipshod workmanship may be noticed the mention of the Governor of the Isle of France, with whom Tipu of Seringapatam had the intercourse which led to that singular chief's ruin. The Frenchman was General Malartic, in whose honour a monument still exists on the Champ-de-Mars at Port Louis. In the work under notice he is disguised as "Mr. Malartie."

F. Bruckmann; Munich.

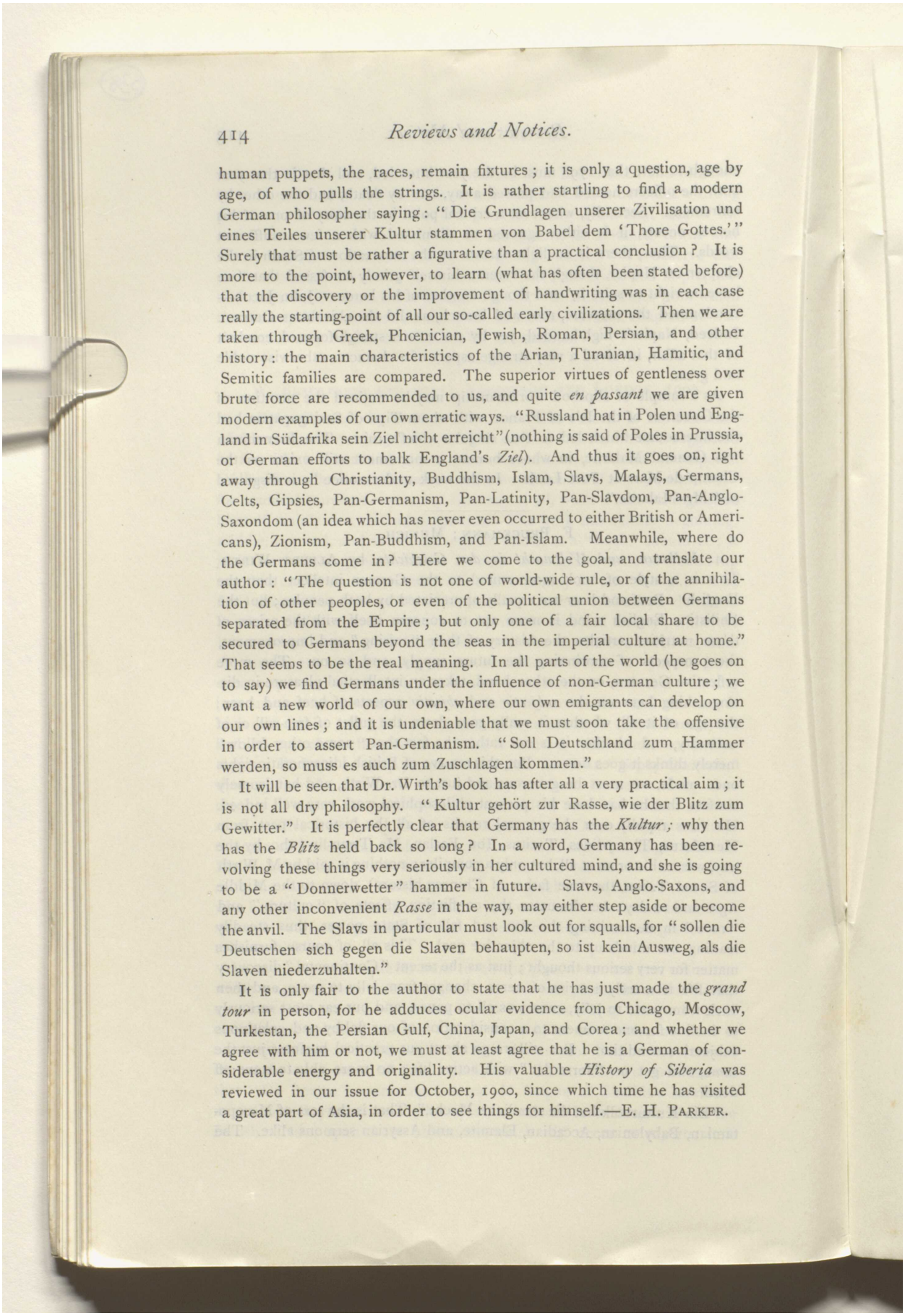
4. *Volkstum und Weltmacht in der Geschichte*, by Albert Wirth. This is a style of book more suited to the German intellect than the English. Beef and beer are equally appreciated by both peoples; but the Philistine English mind is more apt to concern itself with the prices of those nutritive articles, the history of their "raising" and improvement, the prospects of continuing the future supply, and so on. The more reflective German, on the other hand, takes an intellectual pleasure in distinguishing between the *subjectiv* and *objectiv* aspects of beef and beer; the *ego* of it all, whether it really goes down the gullet of free-will or of necessity, and whether it is not rather the fact that "some other fellow" merely thinks it goes down. But, this reserve of British idiosyncratic rights once made, we must be generous and just to Dr. Wirth, and handsomely confess that he has done his present philosophical work very well indeed. He runs rapidly over the general results of all the historical past, from Herodotus, Thucydides, Tacitus, Ibn Fozlan, Ma Twan-lin (who, by the way, was no historian at all, but only a compiler; nothing is said by M. Wirth of Sz-ma Ts'ien, the true father of Chinese history), down to the Middle Ages and to-day: he discusses the conflicting effects of "culture" and "race" in determining the rise and fall of State power, thus steadily leading our minds up to the objective goal. This all, of course, furnishes matter for very serious thought; just as the recent "Continental" discovery that life is merely a series of nerve changes from jelly to paste, and then back from paste to jelly, causes us all to pause, and our ear most seriously to incline for one moment to a consideration of our flabby and gelatinous subjective condition. But still we go about our practical business just the same, and get no "forrarder" with active life; no more able to stave off death.

"Ein Kulturvolk hat die staatliche Macht." That is the text of Mesopotamian, Babylonian, Accadian, Elamite, and Assyrian sermons alike. The

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



human puppets, the races, remain fixtures; it is only a question, age by age, of who pulls the strings. It is rather startling to find a modern German philosopher saying: "Die Grundlagen unserer Zivilisation und eines Teiles unserer Kultur stammen von Babel dem 'Thore Gottes.'" Surely that must be rather a figurative than a practical conclusion? It is more to the point, however, to learn (what has often been stated before) that the discovery or the improvement of handwriting was in each case really the starting-point of all our so-called early civilizations. Then we are taken through Greek, Phœnician, Jewish, Roman, Persian, and other history: the main characteristics of the Arian, Turanian, Hamitic, and Semitic families are compared. The superior virtues of gentleness over brute force are recommended to us, and quite *en passant* we are given modern examples of our own erratic ways. "Russland hat in Polen und England in Südafrika sein Ziel nicht erreicht" (nothing is said of Poles in Prussia, or German efforts to balk England's *Ziel*). And thus it goes on, right away through Christianity, Buddhism, Islam, Slavs, Malays, Germans, Celts, Gipsies, Pan-Germanism, Pan-Latinity, Pan-Slavdom, Pan-Anglo-Saxondom (an idea which has never even occurred to either British or Americans), Zionism, Pan-Buddhism, and Pan-Islam. Meanwhile, where do the Germans come in? Here we come to the goal, and translate our author: "The question is not one of world-wide rule, or of the annihilation of other peoples, or even of the political union between Germans separated from the Empire; but only one of a fair local share to be secured to Germans beyond the seas in the imperial culture at home." That seems to be the real meaning. In all parts of the world (he goes on to say) we find Germans under the influence of non-German culture; we want a new world of our own, where our own emigrants can develop on our own lines; and it is undeniable that we must soon take the offensive in order to assert Pan-Germanism. "Soll Deutschland zum Hammer werden, so muss es auch zum Zuschlagen kommen."

It will be seen that Dr. Wirth's book has after all a very practical aim; it is not all dry philosophy. "Kultur gehört zur Rasse, wie der Blitz zum Gewitter." It is perfectly clear that Germany has the *Kultur*; why then has the *Blitz* held back so long? In a word, Germany has been revolving these things very seriously in her cultured mind, and she is going to be a "Donnerwetter" hammer in future. Slavs, Anglo-Saxons, and any other inconvenient *Rasse* in the way, may either step aside or become the anvil. The Slavs in particular must look out for squalls, for "sollen die Deutschen sich gegen die Slaven behaupten, so ist kein Ausweg, als die Slaven niederzuhalten."

It is only fair to the author to state that he has just made the *grand tour* in person, for he adduces ocular evidence from Chicago, Moscow, Turkestan, the Persian Gulf, China, Japan, and Corea; and whether we agree with him or not, we must at least agree that he is a German of considerable energy and originality. His valuable *History of Siberia* was reviewed in our issue for October, 1900, since which time he has visited a great part of Asia, in order to see things for himself.—E. H. Parker.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

DEAN AND SON, LTD.; 160A, FLEET STREET, LONDON, 1901.

5. *My Fourth Tour in Western Australia*, by ALBERT F. CALVERT, F.R.G.S., author of "The Discovery of Australia," "The Exploration of Australia," "The Aborigines of Western Australia," etc. Second edition. A handsome quarto volume of 360 pages, profusely illustrating various places and incidents which came under the author's own personal purview. He has set down, as he himself says, "only such things as I saw and heard during my visit, and in so doing I have, to a large extent, sacrificed my opportunities of unfailing information in order to confine myself to a narrative of personal experiences. In previous books my object has been to advance the interests of the colony, and draw attention to her wonderful, but little-known, resources. But the object of the present volume is to interest and amuse." Apart from the ordinary statistical hand-books, there is no other work yet produced which affords so much accurate information and which creates so much interest. There are beautiful maps, also very numerous sketches of persons, places and incidents. Among the places visited are Albany, Perth, the Goldfields of Coolgardie, Geraldton, Cue, the Murchison, Roebourne, the Coast, Tambourah Creek, Nullagine, Talga-Talga and other places. The work is magnificent, and for the purpose intended it cannot be excelled.

WILLIAM HEINEMANN; LONDON, 1902.

6. *The Garden of Káma, and other Love Lyrics from India*, arranged in verse by LAURENCE HOPE. To give an idea of the merits of this work, it will, perhaps, be fairest to notice, in the first instance, the composition at p. 133, viz., "The Garden of Káma, the Indian Eros," from which its title is derived, and from which we quote as follows:

Verse 1. "The daylight is dying,
The flying fox flying,
Amber and amethyst burn in the sky.
See, the sun throws a late,
Lingering roseate
Kiss to the landscape to bid it good-bye.

Verse 3. "We know not Life's reason,
The length of its season,
Know not if they know, the great Ones above.
We none of us sought it,
And few could support it,
Were it not gilt with the glamour of love."

The story of Lilavanti (p. 73), which is, of course, meant to be intensely pathetic, contains the following description of a drowned "unfortunate":

"By women here, who knew her life,
A leper husband, I am told,
Took all this loveliness to wife
When it was barely ten years old.
And when the child in shock'd dismay
Fled from the hated husband's care,
He caught and tied her, so they say,
Down to his bedside by her hair."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000042

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

It is really difficult to know where to begin the criticism of such effusions as these, of which the book contains 172, almost equally vapid, full of tawdry sentiment, imperfect metre, and occasional bad grammar. Some of the incidents related appear to describe personal adventures in varied regions of the East, ranging from Burma to Cashmere, and would be worthy of treatment by an abler Muse; while others, such as that of "His Rubies, told by Valgovind," and the story of "Udaipore, told by Lalla-ji, the Priest," are so *outré* as to be unworthy of publication.

A. R.

CHARLES H. KELLY; 2, CASTLE STREET, CITY ROAD, AND 26, PATERNOSTER ROW, LONDON, E.C.

7. *Scenes and Studies in the Ministry of our Lord, with Thoughts on Preaching*, by the REV. JAMES H. RIGG, D.D., Principal of Westminster Training College, twice President of the Wesleyan Conference. This admirable and useful volume, by a veteran educationist and preacher in connection with the Wesleyan denomination, will be read with much interest and no little profit. The "Scenes and Studies" are not sermons, but relate to passages of Scripture of special interest and importance in the history of Christ, such as His Baptism, His First Disciples, the Woman of Samaria at Jacob's Well, the Calling of the Apostles, the Sisters of Bethany, and many other incidents in the history of Christ, which have been favourite subjects of study during Dr. Rigg's long ministry and educational work as the head of the eminent training college in Westminster. Perhaps his History of Preaching in the Christian Church, Ancient and Modern, and his Thoughts on Extemporaneous Preaching, will be perused with special interest and usefulness by the sincere and faithful preachers of the Gospel of all Christian denominations. There is in the Appendix an interesting note on the eloquence and power of Dr. Newton's preaching. He was "charming as a half-colloquial orator; he was pathetic in his strokes of tenderness and pictures of distress; he was thrilling and powerful in his appeals; but he also deserves a reputation which has not always been accorded to him—that of a clear, able, consecutive expositor of Scripture, both textual and doctrinal."

LONGMANS, GREEN AND CO.; LONDON, NEW YORK, AND BOMBAY, 1901.

8. *The Oriental Club and Hanover Square*, by A. F. BAILLIE, F.R.G.S. The sumptuous volume before us is worthy of the spacious and eminently select club which occupies one corner of Hanover Square. The Oriental is an elderly, but not an ancient club; it dates from 1824, and was formed by a distinguished society of Oriental officers, chiefly Anglo-Indians, with the Duke of Wellington for President and Sir John Malcolm for its first chairman. The clubs of the eighteenth century were either dining societies or were devoted to play or politics. They were succeeded by various clubs of the modern fashion when George IV. was King; and among these the Oriental was one of the earliest. The age of the Nabobs had passed; men no longer amassed colossal fortunes, or combined the functions of soldier,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

civilian, diplomatist, and merchant all in one; and the age of officials had come in. This new race of Anglo-Indians had spent the better part of their lives in the East; they were out of touch with English politics; their old acquaintances were scattered, their relatives lukewarm, and their interests were mainly centred in each other. And so they founded the Royal Asiatic Society, and out of the Asiatic Society, where men met to read the papers and discuss things new as well as old, the Oriental took shape. The Asiatic has since then given birth to various learned associations, and its social gatherings are still as much appreciated as its lectures, but we do not think it has given rise to another club. Of course, the Oriental did not profess to be merely a sodality of good fellows, meeting because they loved to meet and enjoy their leisure after their own fashion. It took itself quite seriously like many other clubs; it was to instruct the world on the condition of the East. And, as in the case of most other clubs, this part of its programme has fallen into the background; like the Sultan's programmes, it is an excellent make-belief, and a man may enjoy as sound a siesta in its unfrequented library on a warm summer afternoon as in most other club libraries, or even in the British Museum Reading Room. The Oriental started with a very catholic constitution; it admitted all who could show any connection with the East, although they had never been there. This led in 1847 to the creation of a second club for officials only—the East India United Service Club, in St. James's Square. This secession was also, perhaps, partly due to the situation of the Oriental, far away from ordinary "Clubland" in Hanover Square. Our author explains that in the early days of Queen Victoria Anglo-Indian magnates chiefly affected the large and solemn houses in Harley Street and Wimpole Street. The loss of a considerable part (but by no means the whole) of the official element was compensated by amalgamation with the Albert, a club with a literary reputation which had numbered Lord Byron among its members, and so many Bishops that a witty Lord remarked he could not enter the place without being reminded of his Catechism. Since the amalgamation with the Albert, there has been no further change in the constitution of the club, although, like all Anglo-Indian haunts, it has lost something of its distinctive character. Our author gives us some lively glimpses of the generation which frequented the club in the forties and early fifties: the ancient warriors with jingling spurs whose horses were led up and down before the hall door; the sallow-faced, irascible gentlemen who lived on hot curries and tugged at their mustachios; the member who would dine on many courses at 11 p.m.; and the members whose hair-dye stained the club brushes. Among these striking figures of the past the author recognises General Charles Carmichael as a prototype of Colonel Newcome. The General was a man of action. One day when the club committee happened to be sitting, a chop was served not to the General's liking, and the General promptly ordered it to be laid with his compliments, before the committee. The newspaper wits occasionally made fun of these ancient warriors after the not over-refined fashion of the day, and the youthful students of the Royal Academy of Music used to treat them to a fanfaronade of all the wind instruments

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000091

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

from the windows opposite. Since 1860 the club has pursued the even tenor of its prosperous way, disturbed only by those questions which are a standing difficulty with every club committee—the admission of strangers, the rules as to smoking, and the coffee-room expenditure. The Oriental Club evidently regarded the last with a tender eye, for when their *chef* was imprisoned for stealing the club property, the committee pensioned his wife and family. There are many excellent stories scattered through these pages, and the author has made a readable work from unpromising material, but there is one defect: the references to India are very few, but they are generally wrong.

K.

LUZAC AND CO.; 46, GREAT RUSSELL STREET, LONDON, 1901.

9. *Arabic Manual.* A Colloquial Handbook in the Syrian Dialect, for the Use of Visitors to Syria and Palestine, containing a Simplified Grammar, a Comprehensive English and Arabic Vocabulary and Dialogues. The whole in English characters, carefully transliterated, the pronunciation being fully indicated, by F. E. CROW, late H.B.M. Vice-Consul at Beirut. This is No. IV. of Luzac's "Oriental Grammar Series," the other three being "Manual of Hebrew Syntax," "Manual of Hebrew Grammar," and "A Modern Persian Colloquial Grammar." The title fully explains the contents of this handy volume of 333 pages, which is a practical guide to the spoken languages of Syria and Palestine. It will be found most useful by both visitors to the East and students. We can fully recommend it.

MACMILLAN AND CO., LTD.; LONDON, 1901.

10. *The Brahmo Samaj and Arya Samaj in their Bearing upon Christianity:—a Study in Indian Theism*, by FRANK LILLINGSTON, M.A. This little book is the work of a cultured and sympathetic mind, a study from the Christian standpoint of the best-known theistic schools of modern India. The author apparently addresses himself primarily to European readers, although not without a hope that his work may catch the eye of native students also; but in this, as in some other matters, he is occasionally too busy with his own intentions and ideas to explain himself clearly to his audience. The introduction deals with the past history of monotheism in India, but this is much the poorest part of the book. The writer is at his best in dealing with the Brahmo Samaj, where the influence of Western thought, becoming very visible, enables him to get into contact with the Eastern mind. He has sketched fully and clearly the difference between the easy eclecticism of the earlier Samaj, founded by Ram Mohan Rai, and the more ardent and enthusiastic school of Keshab Chander Sen. Ram Mohan Rai, the founder of the original Samaj, who made a fortune as head-clerk in a Government office, and always displayed a lively sense of the good things of this life, was hardly the man to count the world well lost for the love of God. Endowed with a lively intellect, an open mind, and a true admiration for virtue, he was able to found a philosophic school which imparted a certain elevation of character to its disciples,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and incited them to combat some of the grossest abuses of idolatry, but which could not be a seminary of enthusiam or create any radical reform. A further step was necessary, and it was taken by Keshab Chander Sen, a man unlike his predecessor in everything except his openness to impressions from outside the circle of his ancestral creed. Keshab Chander Sen was a born enthusiast, not always consistent, it is true, but always eloquent, ardent, devoted, and emotional, and able to inspire the society which he founded with like feelings to himself. No wonder that he has prospered where the other failed. Mr. Lillingston's criticism of this new creed is just. He points out its subjective character, he says with truth that it sets up individual feeling and intuition as the sole test of objective truth, and he dwells on its want of a historical basis. All this is true and excellently put. Unfortunately, the very points he selects for condemnation are the points which commend it to the Hindoo mind. The dreamy character of Hindoo speculation is always subjective, and the Hindoo mind has rarely, if ever, felt the need of historical truth. Moreover, although Hindoo speculation has always been receptive of external influences, it never abandons its fundamental tenets; it adopts, it syncretises, it assimilates, but it does not radically change. And, above all, a faith which hopes to make converts must flatter the national vanity, it must assume a national basis, and it must exalt the Indian sages, with their aureole of traditional wisdom, to a level with any that the West can boast, if not to a pinnacle above them. This feeling, inherent in every religious movement of the Hindoo mind, is most apparent in Dayanandan Sarasvate's Arya Samaj, whose monotheism is tempered with pronounced hostility to Christianity. At the bottom of the feeling there is a germ of good which must be carefully preserved, if the Hindoo mind is to retain its self-respect; but politics have been the bane of religion in the East, not only of the pagan faiths, but of Muhammadanism and of Christianity itself. How to preserve the good and eradicate the evil is the problem which faces administrator and missionary alike. And for the solution of the problem the first and truest key is sympathy, and of that sympathy this little work shows a generous and abundant proof. K.

11. *Kim*, by RUDYARD KIPLING. A remarkably interesting and instructive story of a certain phase of Indian life, its habits and peculiarities. It is interspersed with graphic descriptions of Indian towns and modes of travelling. It is beautifully illustrated. The author, from his intimate knowledge of Indian ways, has elucidated with accuracy the peculiar trait of Oriental thought and action. Kim is introduced as "white—a poor white of the very poorest." The half-caste woman who looked after him (she smoked opium, and pretended to keep a second-hand furniture shop by the square where the cheap cabs wait) told the missionaries that she was Kim's mother's sister; but his mother had been nursemaid in a Colonel's family and had married Kimball O'Hara, a young colour-sergeant of the Manericks, an Irish regiment. He afterwards took a post on the Sind, Punjab, and Delhi Railway. Kim's mother died, and the father took to drink and loafed about the line with the keen-eyed three-year-old baby. The child became the object of solicitude on the part of societies and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000011

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

chaplains, as well as the Colonel (as the father said) "of one of the finest regiments of the world." Kim was left an orphan, but became adept as a message-boy, and carried messages of intrigue, during the night, from "sleek and shiny young men of fashion," who usually crowded the house-tops. In his peregrinations he came in contact with the faquirs, who frequent the shrines of Lahore, and from his alacrity and courtesy he was nicknamed "The Little Friend of All the World." He came in contact with a stranger, the like of whom he never saw before. He was old, nearly six feet high, and wore a peculiar garb. He had come from the hills and snow, "where the air and water are fresh and cool"—Bhotiyal (Tibet). He was a lama, on a pilgrimage to see "the Four Holy Places before I die." Kim became his companion and attendant on his pilgrimage to the holy places of Benares. The story details the various incidents during this pilgrimage, and the various grades of characters whom they met, and also an accurate description of the scenes and places on their way, all indicating the life and characteristics and mode of thought of the masses of the people. For a time Kim became separated from the lama, having been induced to enter a school (St. Xavier's), but he did not like the atmosphere and discipline of the school, and, taking advantage of a holiday, contrived to meet the lama, who received him again with fond affection. Having determined to return home from the object of his research, Kim accompanied him to the "mountains and the snow," and remained with him till his death.

METHUEN AND CO.; 36, ESSEX STREET, LONDON, W.C., 1902.

12. *A Short History of the British in India*, by ARTHUR D. INNES, sometime scholar of Oriel College, Oxford. With eight maps. The object of this concise work is to set out clearly and in an attractive form the history of the various steps by which British supremacy was obtained in India. Such a volume forms an excellent basis for a more minute study of larger works. The analytical contents and the chronological summary of the leading events, under classified heads, from 664 to the transfer, in 1858, of the Government of India to the Crown, is extremely useful. There is also a copious index.

JOHN MURRAY; ALBEMARLE STREET, LONDON, 1901.

13. *The Great Persian War and its Preliminaries: a Study of the Evidence, Literary and Topographical*, by G. B. GRUNDY, M.A., Lecturer at Brasenose College and University Lecturer in Classical Geography, Oxford. With illustrations. This volume deals exclusively with the Græco-Persian wars up to the end of 479 B.C. The author gives us fresh evidence as to the old history of these wars, and is of opinion that the treatment of pre-existing evidence is not satisfactory from a historical point of view. "Herodotus' evidence as an historian," he says, "differs greatly in value, according as he is relating facts or seeking to give the motives or causes lying behind them." The book consists of 579 pages, divided into fourteen chapters, under the following headings: Greek and Persian — Persian

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000020

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and Greek in Asia; The Scythian Expedition—The Ionian Revolt—Persian Operations in Europe: B.C. 493-490; Marathon—The Entr'acte: B.C. 490-480—The March of the Persian Army: Preparations in Greece—Thermopylæ—Artemisium—Salamis—From Salamis to Platæa—The Campaign of Platæa—Mykale and Sestos—The War as a Whole—Herodotus as the Historian of the Great War. There are over thirty illustrations and six maps. We can cordially recommend this work to scholars and lovers of topography.

HAY NISBET AND CO., LTD.; 19, QUEEN STREET, GLASGOW, 1901.

14. *Russia: its Industries and Trade.* Issued by order of State Secretary S. J. De Witte, Imperial Russian Minister of Finance. The Glasgow International Exhibition, 1901. The object of this work is to make known the trade, the commerce, the industries, and the vast capacities, of the Russian Empire, so little known in Great Britain. With this view the Minister of Finance State Secretary ordered the production of this work, in connection with the recent International Exhibition in Glasgow, replying to questions that may interest Great Britain, in order to promote mutual commerce and industrial relationships. The volume treats of the social and economical conditions, land transport, waterway communications, workmen and labour laws, education, finance, home and foreign trade, joint stock companies, cereals, flour, industrial plants, pastures, horticulture, viticulture and wine-making, beet culture and sugar industry, the liquor traffic, tobacco-growing, hops, live-stock, poultry, fisheries, mining and metallurgy, and forests. There is also a magnificent map showing the gigantic railways already opened and those under construction and projected up to July 16 last. The progress of those railways is astonishing, and the products and capacities of the vast and various regions through which they pass are incalculable.

OLIPHANT, ANDERSON, AND FERRIER; EDINBURGH AND LONDON.

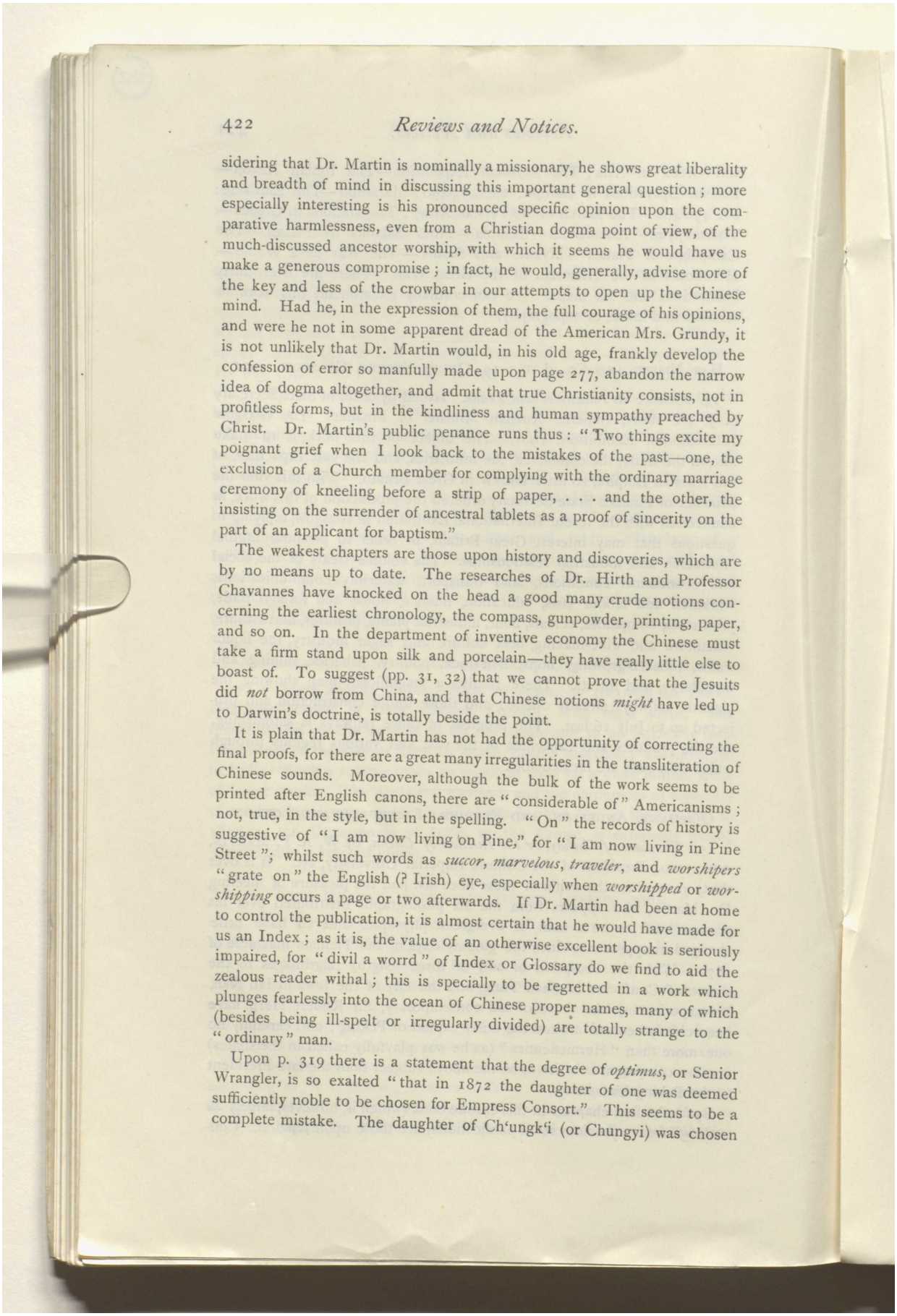
15. *The Lore of Cathay, or the Intellect of China*, by W. A. P. MARTIN, D.D., LL.D., President of the Chinese Imperial University, etc. It is over thirty years since the writer of these lines last had the pleasure of meeting Dr. Martin, who appears from the six photographs distributed over his present book to be a man of evergreen physique, and to have little changed in appearance since the gloomy days of the Tientsin massacre of 1870. With the exception of two or three lengthy pilgrimages to the shrine of Confucius in Shan Tung, and the city of the Jews in Ho Nan, his experiences, like those of his contemporary, Sir Robert Hart, have been chiefly centred around the dusty capital of Peking; and certainly no one more than "Hermeneutics" (as he was playfully called in the sixties) is more competent to write upon the above subject than the late President of the Peking University.

By far the best chapters in this erudite book (which is, however, largely *du rechauffé* from a previous set of publications) are those upon religion. Con-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000045

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



sidering that Dr. Martin is nominally a missionary, he shows great liberality and breadth of mind in discussing this important general question; more especially interesting is his pronounced specific opinion upon the comparative harmlessness, even from a Christian dogma point of view, of the much-discussed ancestor worship, with which it seems he would have us make a generous compromise; in fact, he would, generally, advise more of the key and less of the crowbar in our attempts to open up the Chinese mind. Had he, in the expression of them, the full courage of his opinions, and were he not in some apparent dread of the American Mrs. Grundy, it is not unlikely that Dr. Martin would, in his old age, frankly develop the confession of error so manfully made upon page 277, abandon the narrow idea of dogma altogether, and admit that true Christianity consists, not in profitless forms, but in the kindliness and human sympathy preached by Christ. Dr. Martin's public penance runs thus: "Two things excite my poignant grief when I look back to the mistakes of the past—one, the exclusion of a Church member for complying with the ordinary marriage ceremony of kneeling before a strip of paper, . . . and the other, the insisting on the surrender of ancestral tablets as a proof of sincerity on the part of an applicant for baptism."

The weakest chapters are those upon history and discoveries, which are by no means up to date. The researches of Dr. Hirth and Professor Chavannes have knocked on the head a good many crude notions concerning the earliest chronology, the compass, gunpowder, printing, paper, and so on. In the department of inventive economy the Chinese must take a firm stand upon silk and porcelain—they have really little else to boast of. To suggest (pp. 31, 32) that we cannot prove that the Jesuits did *not* borrow from China, and that Chinese notions *might* have led up to Darwin's doctrine, is totally beside the point.

It is plain that Dr. Martin has not had the opportunity of correcting the final proofs, for there are a great many irregularities in the transliteration of Chinese sounds. Moreover, although the bulk of the work seems to be printed after English canons, there are "considerable of" Americanisms; not, true, in the style, but in the spelling. "On" the records of history is suggestive of "I am now living on Pine," for "I am now living in Pine Street"; whilst such words as *succor*, *marvelous*, *traveler*, and *worshipers* "grate on" the English (? Irish) eye, especially when *worshipped* or *worshipping* occurs a page or two afterwards. If Dr. Martin had been at home to control the publication, it is almost certain that he would have made for us an Index; as it is, the value of an otherwise excellent book is seriously impaired, for "divil a worrd" of Index or Glossary do we find to aid the zealous reader withal; this is specially to be regretted in a work which plunges fearlessly into the ocean of Chinese proper names, many of which (besides being ill-spelt or irregularly divided) are totally strange to the "ordinary" man.

Upon p. 319 there is a statement that the degree of *optimus*, or Senior Wrangler, is so exalted "that in 1872 the daughter of one was deemed sufficiently noble to be chosen for Empress Consort." This seems to be a complete mistake. The daughter of Ch'ungk'i (or Chungyi) was chosen

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

because he was a high-born Manchu, and no Manchu can (by rule) be a Senior Wrangler; his was, however, a notorious exception.

On the whole, it is possible to speak very highly of Dr. Martin's book, and he may be congratulated upon having refrained from denouncing British and French barbarity—and that but lightly—more than twice; it is not noticeable that he anywhere adversely criticises American policy; for instance, their Exclusion Bills, their violent attacks upon Chinese in the Far West, their rather ungenerous restrictions inManila, etc. The gifted author himself was, a year ago, taken to task by the Shanghai press for his unmeasured *delenda est Cambalu* opinions which followed immediately upon his escape from the "Boxer" attacks at Peking. Probably it is partly on this account that the new University is now being organized under other presidency; not that the Chinese are petty or unforgiving in such matters, but because they may well be excused for taking the opportunity thus offered to separate on friendly terms from an old servant whose years may well excuse a little petulance. Either he or the old Dowager (who, it is believed, once nominated him for the Inspector-Generalship of Customs) may say to the other:

> "How sharper than a serpent's tooth it is
> To have a thankless child."

It will be for the advantage of us all if Dr. Martin will settle down to polish up and reconstruct his stores of knowledge in better digested and sweeter form. In North China, or at least in Peking, the name of Ting Wei-liang (=William [Mar]tin) will for many years be a household word.—E. H. Parker.

The Religious Tract Society; 56, Paternoster Row, London, E.C., 1901.

16. *The Ainu and their Folklore*, by the Rev. John Batchelor, F.R.G.S. (C.M.S. Missionary to the Ainu). Illustrated. Mr. Batchelor's book on "The Ainu and their Folklore" differs from most works of missionaries who have visited obscure regions of the earth for the purposes of evangelization. He has not entered upon statistics of the number of souls he believes he has influenced, but he gives us a somewhat closer acquaintance of this individual, curious and ancient tribe, whose peculiarities form a most interesting study. His work claims the attention of the historian, traveller, ethnologist, and missionary. All he has related aids us to a better understanding of the aborigines of Japan, who have been driven so far northward that their days seem numbered and their dynasty about to fail. The folklore stories may appear on a level of merit, but they faithfully delineate the minds of this child-like race, whose nature seldom rises to the fever-heat of passion or to the storms of sensational venture. Yet these legends have a charm which cannot be overlooked, inasmuch as they touch upon and interpret, here and there, the verbal histories of other lands, with remarkable parallels, that set us wondering through what agency the gossamer web of thought has found a foothold in regions so far remote.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Mr. Batchelor may be considered the pioneer of Jezo, and those who follow in his footsteps will find the land well surveyed; they should make no mistakes when approaching these people, or in the manner in which to proclaim "the glad tidings" of a higher, nobler life, a great hereafter, of an example to follow, of a life worth living. Yet the Ainu is not without his good qualities. Prehistoric barbarism has been supplanted by gentler characteristics; there is but little cruelty left in their nature. Animal creation is cared for—nay, even worshipped. Flowers and trees, reptiles, and other living things which surround them, play important parts of a strange faith that has satisfied dead generations. A religious system still exists of a belief in things present, established by virtue of ancestral convictions—accepted, but not proved. Weighed down by superstition, trammelled by customs, the Ainus, grand of physique though childlike in disposition, must not be forgotten or overlooked. The passive nature needs arousing, for, save for such able men as Mr. Batchelor, they would be more than content to remain as they are, or lag behind in this momentous era of the world's history, utterly ignoring the civilizing influence now penetrating to the farthest stretch of Eastern territory.—S.

SMITH, ELDER AND CO.; 15, WATERLOO PLACE, LONDON, 1901.

17. *The Tale of the Great Mutiny*, by W. H. FITCHETT, B.A., LL.D., author of "Deeds that won the Empire," "Fights for the Flag," "How England saved Europe," "Wellington's Men," etc., with portraits and maps. This is a very concise and well-written tale of the great Mutiny in India. It ought to be perused and studied as a serious and an instructive lesson by the present generation, in whose keeping the just administration of Indian affairs rests. The work contains excellent portraits of Lord Roberts, Lieutenant George Willoughby of the Bengal Artillery, Sir Henry Lawrence, Sir Henry Havelock, Lord Lawrence, Sir Herbert Edwardes, John Nicholson, and Sir James Outram, all illustrious in their respective spheres of heroic action, in defence of the British position in India, and which has resulted in inestimable blessings to the rulers and natives of the country. There are also maps, illustrating the military operations at Cawnpore, Lucknow, and Delhi, and the distribution of our troops on May 1, 1857, with a minute and carefully prepared index. The work is an admirable résumé of a most critical period of British history in India.

SMITHSONIAN INSTITUTION, GOVERNMENT PRINTING OFFICES; WASHINGTON, 1901.

18. *Annual Report of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the Year ending June* 30, 1897. This Annual Report, ending June 30, 1897, contains Part II. of the U.S. National Museum. It opens with an admirable memorial of George Brown Goode, together with a selection of his papers on "Museums" and on the "History of Science in America." There are no fewer than 109 well-executed portraits of men of science and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000064

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

literature, and concise memoirs, occupying more than 500 pages. There is also a very valuable index of men and subjects referred to in the volume.

The Annual Report for the year ending June 30, 1899, and a report of the U.S. National Museum, contain valuable and most interesting papers on anthropology, biology, geology, and other subjects of discovery and research; also papers describing and illustrating the collections in the Museum. The plates of the various objects are exceedingly well executed. The volume of nearly 600 pages closes with a minute index.

THEOSOPHICAL PUBLISHING SOCIETY; LONDON AND BENARES, 1901.

19. *Apollonius of Tyana, the Philosopher-Reformer of the First Century A.D.*, by G. R. S. MEAD, B.A., M.R.A.S. This well-written volume affords a critical study of the only existing record of the life of Apollonius of Tyana. It also contains an account of the war of opinion concerning him, and a valuable introduction with respect to the religious associations and brotherhoods of the time, and an examination as to the possible influence of Indian thought on Greece. His principles, his mode of teaching, his travels in the East and in the South and West, his mode of life, his sayings, sermons, letters, and writings, and bibliographical notes, are all set forth in a clear and interesting style.

T. FISHER UNWIN; LONDON.

20. *Prosperous British India: a Revelation*, by W. DIGBY, C.I.E. This book is full of very painful reading to anyone who is interested in the future of India, but it is difficult to criticise it within reasonable limits. Personally I am quite satisfied that Mr. Digby greatly underestimates the produce of the country in an ordinary year, and what might have been an admirable book of reference is, to my mind, sadly marred in parts by a sensational and sarcastic style ill-suited to the tragic character of the subject.

Some of the conclusions seem to me to be contradictory, and he proves too much when he says that the country only provides 3s. 4d. a head for each of its inhabitants, and yet exports large quantities of food grain. If there is no food in the country, how do the money-lenders support so many millions for several months every year?

It is too long since I left India for me to depend on my own knowledge of the condition of the people as I used to do, and it may have deteriorated in fifteen years, as he says it has; but the figures on which he bases his conclusions are quite hypothetical, and, in my opinion, untrustworthy. All these calculations as to the gross produce depend on an assumed ratio between it and the Government assessment, as to which ratio none of us agree. Mr. Digby quite arbitrarily takes it at 10 per cent., Mr. Naoroji used to make it 12½, but the Government of India say it is from 5 to 8, and I am inclined to think it must be even less than 5 per cent. in Bengal. Obviously there is room for great errors in such calculations.

Unfortunately, however, many of them are based on figures furnished by the Government itself, and on statements of officials still in the service of the Government. But mistakes are not uncommon even in Government

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

statistics, as, for instance, on p. 559, where the half of R6.13.3, being (apparently) given as R5.8.7, instead of R3.6.7, has led Mr. Digby, and perhaps Mr. Dutt, to believe that it is quite usual in Madras to take 31 per cent. of the gross by way of assessment. We all know that such cases are quite exceptional, though I am aware that there is land assessed as low as four annas an acre, which never could show any "net" produce at all if the cultivation expenses are calculated on the principles of the Settlement Department. Such land is held on puttah for other reasons altogether, sometimes simply to prevent a stranger from taking it up.

On the whole, however, Mr. Digby seems to me to have made out a case from the mouth of the Indian Government itself which loudly calls for some such minute inquiry as has been suggested (apparently in vain) by the Famine Union.—J. P.

OUR LIBRARY TABLE.

Picturesque New South Wales: a Guide for Settler and Tourist, prefaced under the direction of T. A. COGHLAN. (Sydney: William Applegate Gullick, Government printer. Agent-General's Office, 9, Victoria Street, Westminster, S.W.) This well-known author has condensed his vast knowledge of New South Wales in a short but picturesque volume for the guidance of settlers and tourists. It contains a historical sketch, the geography and climate of the colony, its fauna and flora, its government and social and commercial conditions up-to-date, its industries, Sydney and its surroundings, and the Western, Northern, and Southern districts. The illustrations of scenery, places of industry, and other objects of interest are beautifully executed, and the statistics and other information drawn from official records are concise and accurate.

A Sketch of the Vedânta Philosophy, to which is prefixed that of the Life of Sujna Gokulaji Zâlâ, a Typical Vedântin, by MANASSUKHARÂMA SÛRYARÂMA TRIPÂTHI. Second edition. (Bombay: N.M.T. and Company, Kâlikâdevi Road, 1901.) A well-written and interesting biography of one who, by his zeal, perseverance, honesty, and religious principles, rose from the ranks to be the trusted and high official of the Junagâdh States. The biography is accompanied with a concise outline of the Vedânta philosophy derived from various sources. There are also an excellent photogravure of Zâlâ and a minute index.

Hindustanī Self-Taught, with English Phonetic Pronunciation, containing Vocabularies, Idiomatic Phrases and Dialogues, Travel Talk, Military, Legal, Religious, Commercial, Shooting, Fishing terms, Money, Weights, Measures, Indian Titles, Castes, Festivals, by C. A. THIMM, F.R.G.S. (London: E. Marlborough and Co., 51, Old Bailey, E.C., 1902.) The title explains the object of this handy work, and will be of practical service to travellers, traders, missionaries, and soldiers, as well as students, who find themselves among those of whose language they are totally ignorant. The second part, the "Grammar Self-Taught," is in course of preparation. In the first column the English word is given, in the second the Hindustani words are given in Roman characters, and the pronunciation phonetically in the same characters in the third column.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Rise of British West Africa, comprising the Early History of the Colony of Sierra Leone, the Gambia, Lagos, Gold Coast, etc., by CLAUDE GEORGE, of the Colonial Secretary's Office, Sierra Leone. Part I., complete in five parts. (London: Houlston and Sons, 7, Paternoster Buildings, E.C. Plymouth: William Brendon and Son, 1902.) This work promises to be interesting and valuable. It is to be completed in five parts. The present part is well printed, commencing with the statement of Herodotus as to the voyage and exploration of Africa by Pharaoh Necho, King of Egypt (B.C. 600). When the whole work is completed there will, no doubt, be the usual title-page, contents, and index. The information contained in the present part is derived from interesting letters, and other official documents.

Travel in the First Century after Christ, with Special Reference to Asia Minor, by CAROLINE A. J. SKEEL, former Student of Girton College, Cambridge; Lecturer in History, Westfield College, Hampstead. (Cambridge: University Press, 1901.) A well-written and interesting history of the mode and roads of travelling by all classes, from the prince to the peasant, from the merchant to the travelling beggar, in the first century of the Christian era, throughout the Roman Empire in the West and Asia Minor in the East. The work is accompanied with good maps and a minute index. The information of the author has been derived from ancient classical authors as well as from modern writers, and she has executed her task with accuracy and skill.

Famine in India: Its Causes and Effects, by WILLIAM L. HARE, Editor of the *Candlestick*, with a foreword by WILLIAM DIGBY, C.I.E. (London: P. S. King and Son, Orchard House, Westminster.) See Mr. Pennington's letter elsewhere in this *Review*.

The Chronology of Ancient India, by VELANDAI GOPALA AIYER, B.A., Pleader, Chittoor. (Madras: G. A. Natesan and Co., Esplanade, 1901.) This is a short and valuable treatise, the first of a series. It contains researches, beginning with the Kali Yuga, next the date of the Mahabharata War, closing with the Four Yugas. The second volume is expected to be ready this year, containing an inquiry as to the Kaliyuga, which the learned author maintains began in 1177 B.C. instead of 3102 B.C., and as to the dates of Vishnu Purana, the Rigveda, the Aryan immigration, and other interesting subjects relating to Indian Chronology.

The Gold Coast Guide, by the REV. J. B. ANAMAN, F.R.G.S., F.R.M.S., author of the "Fanti Spelling Book," assistant author of the "Fanti-English Dictionary," etc. (*Christian Herald* Office, 6, Tudor Street, London, E.C., 1902.) An exceedingly well-got-up guide of the Gold Coast. The first edition was published at Cape Coast in 1894, and the present edition was published in London, greatly improved, at the end of last year. It contains, under specific heads, every possible information on geography, history, education, agriculture, commerce, population, hints on outfit, the preservation of health, missionaries, and various other particulars interesting and useful to European inhabitants and intending emigrants.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

On Traces of an Indefinite Article in Assyrian, by R. CAMPBELL THOMPSON, M.A., Assistant in the Department of Egyptian and Assyrian Antiquities, British Museum. (London: David Nutt, 57, Long Acre, 1902.) Mr. Thompson in his reading and copying certain Babylonian and Assyrian cuneiform texts preserved in the Museum, has noted from time to time a considerable number of passages in which the case-endings of the noun have been dropped, notwithstanding the fact that the noun is obviously not in the construct state. Other Assyrian scholars have noticed the same thing. Mr. Thompson in his short treatise discusses the whole matter, and gives beautifully executed representations of inscriptions, illustrating his conclusions. The treatise will prove interesting to all Assyrian scholars.

Presidential Address of the Seventeenth Indian National Congress, Calcutta, December 26 to 30, 1901. The President, MR. D. E. WACHA. This important address deals with a variety of subjects, such as famine, in its various aspects, State and private relief, the policy of administration, agrarian legislation, irrigation *versus* railways, agricultural banks, grain storage, the condition of the masses, the economic evils of absenteeism, Indian finance, taxation and currency, military and other public expenditure, industrial development, and other public questions, all of which deserve the close and sincere attention of the Government, and the statesmen who control Indian affairs both at home and in India.

The Briton's First Duty: the Case for Conscription. Cheap edition. Revised throughout. By GEORGE F. SHEE, M.A. (with an introduction by COLONEL LONSDALE HALE). With diagrams. (London: The Army League and Imperial Defence Association, 8, King Street, Cheapside, E.C., 1901.) A well-written patriotic production, showing the necessity for more vigorous action towards home defence as the heart and keynote of the defence of the whole Empire. The diagrams are very instructive, interesting and important, and ought to be carefully studied by every citizen who loves his country and homestead.

The Things Above: Helps Heavenward (second series), by GEORGE G. FINDLAY, B.A., D.D. (London: Charles H. Kelly, 2, Castle Street, City Road, E.C., and 26, Paternoster Row, E.C., 1901.) This volume forms part of the second series entitled "Helps Heavenward." It embraces, among other subjects, "Coming to Mount Zion," "Serving and Waiting," "Maran Atha," the "Ascension," and "Resurrection." The author's style is clear and laconic, as will be seen from the following quotation: "Without the sun in heaven there is neither day nor life; and without God and the immortal future there is neither man nor duty, neither safe guidance nor a worthy end for our present faith." The perusal of the work will be highly profitable and refreshing to the Christian.

Books for Bible Students, edited by the Rev. ARTHUR E. GREGORY, D.D., Principal of the Children's Home. *The Epistles of Paul the Apostle to Timothy and Titus*, by R. MARTIN POPE, M.A. (London: Charles H. Kelly, 2, Castle Street, City Road, and 26, Paternoster Row, E.C., 1901.) A very useful and valuable work, not only to students of the Greek text, but also to lay preachers and Christian workers.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00003e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Great Symbols, by W. J. TOWNSEND, D.D. (London: Charles H. Kelly, 2, Castle Street, City Road, and 26, Paternoster Row, E.C., 1901.) This volume contains a valuable introduction on the meaning of the scriptural and ecclesiastical term "Symbol," and on the "Sanctuary," "the Ark of God," "the Cherubim," the "Sacrifice for Sin," "the High Priest and his Vestments," "the Seven-branched Lamp Stand," "the Altar of Incense," "the Table of Shewbread," "the Laver," "the Abolition of Symbolism," "the Veil before the Holiest." All these served their purpose, but all passed away by the death and resurrection of Christ.

We beg to acknowledge the receipt of the following publications of George Newnes, Ltd.: *The Captain*, January, February, March;—*The Sunday Strand*, January, February, and March;—*The Strand Magazine*, January, February, and March;—*The Citizen's Atlas*, parts 8-12;—*The Wide World Magazine*, January, February, and March;—*From Cradle to Crown: King Edward VII.*, part 1, to be completed in twenty parts;—also *Archæological Survey of India*, a Report on a Tour of Exploration of the Antiquities in the Tarai, Nepal, the region of Kapilavastu, during February and March, 1899; illustrated by 32 plates by Babu Purna Chandra Mukherji, with a prefatory note by Mr. Vincent A. Smith, B.A.; No. 26, part 1 of the Imperial Series (Calcutta: Office of the Superintendent of Government Printing, India, 1901);—*Proceedings of the Council of the Governor of Bombay assembled for the purpose of making Laws and Regulations*, 1900, vol. xxxviii., published by authority of His Excellency the Governor; and *Report of the Director of Public Instruction in the Bombay Presidency for the Year* 1900-1901 (Bombay: printed at the Government Central Press, 1901);—*Annual Progress Report of the Archæological Survey Circle, North-Western Provinces and Oudh, for the Year ending March* 31, 1901 (Allahabad);—*The Indian National Congress Cartoons from the Hindi Punch (from* 1886 *to* 1901), *with a selection of the Indian Social Conference Cartoons* (2nd edition, greatly enlarged), edited by Barjorjee Nowrosjee (Bombay: "Bombay Samachar" Press, Frere Road, Fort);—*Transactions of the Korea Branch of the Royal Asiatic Society*, vol. ii., part 1 (Seoul, Korea: Hon. Librarian; London: Kegan, Paul and Co., Ltd.; Leipzig: Otto Harrassowitz, etc., 1901);—*Catalogue of the Páli, Sinhalese, and Sanskrit Manuscripts in the Colombo Museum Library* (Colombo, Ceylon: H. C. Cottle, acting Government Printer, 1901);—*The Doctrine of the Perfect One, or the Law of Piety*, compiled by Major-General D. M. Strong, C.B. (London, Luzac and Co., 1902);—*Biblia*, a monthly journal of Oriental Research in Archæology, Ethnology, Literature, Religion, History, Epigraphy, Geography, Languages, etc. (Biblia Publishing Co., Meriden, Conn., U.S.A.);—*The Indian Magazine and Review* (London: A. Constable and Co.);—*The Indian Review* (G. A. Natesan and Co., Madras);—*The Madras Review*;—*The Review of Reviews* (published by Horace Marshall and Son, 125, Fleet Street, London, E.C.);—*Revue Tunisienne*, publiée par le comité de l'Institut de Carthage, sous la direction d'Eusèbe Vassel (Tunis, au Secrétariat Général de l'Institut);—*Mittheilungen der Anthropologischen Gesell-*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000002

مكتبة قطر الوطنية
Qatar National Library

schaft in Wien (Vienna: Alfred Hölder);—*Sphinx*, revue critique, embrassant le domaine entier de l'Egyptologie, par Karl Piehl (Upsala: C. J. Lundström; London: Williams and Norgate);—*Die Kultur*, Zeitschrift für Wissenschaft, Litteratur und Kunst (Vienna and Stuttgart: Jos. Roth);—*The Contemporary Review*;—*The North American Review*;—*Public Opinion*, the American weekly (New York);—*The Living Age* (Boston, U.S.A.);—*The Monist* (The Open Court Publishing Co., Chicago, U.S.A., and Kegan Paul and Co., London);—*Current Literature* (New York, U.S.A.);—*The Canadian Gazette* (London);—*The Harvest Field* (Foreign Missions Club, London);—*Journal of the Royal Colonial Institute* (The Institute, Northumberland Avenue, London);—*Imperial Institute Journal* (London: Waterlow and Sons);—*Journal of the United Service Institution of India*, (Simla: Government Central Printing-Office);—*Palestine Exploration Fund Quarterly Statement* (38, Conduit Street, London, W.);—*The Light of Truth, or Siddhanta Deepika* (Black Town, Madras);—*The American Journal of Semitic Languages and Literatures*, continuing "Hebraica" (University of Chicago Press);—*Canadian Journal of Fabrics* (Toronto and Montreal);—*The Canadian Engineer* (Toronto: Biggar, Samuel and Co.);—*The Kayastha Samachar*, a monthly record and review, edited by Sachchidananda Sinha, B.A.L. (The Imperial Press, Allahabad);—*The Cornhill Magazine*;—*The Zoophilist and Animals' Defender*;—*Minerva, Rivista delle Riviste* (Rome);—*The Magazine-i-Hind* (Meerut);—*Boletim da Sociedade de Geographia de Lisboa* (Lisbon: Imprensa Nacional, 1901);—*United India*, vol. i. Nos. 1, 2, 3 (a newspaper published and printed by G. Subramania Iver, at the Swadesamitran Press, Madras).

We regret that want of space obliges us to again postpone till our next issue *Burma under British Rule, and Before*, by John Nisbet, D.Œ.C., late Conservator of Forests, Burma, author of "British Forest Trees," etc., in two volumes, with maps (London: Archibald Constable and Co., Ltd., 2, Whitehall Gardens, 1901), and also the following: *With the "Ophir" round the Empire: an Account of the Tour of the Prince and Princess of Wales*, 1901, by William Maxwell, special correspondent of the *Standard*, illustrated (Cassell and Co., Ltd., London, Paris, New York and Melbourne, 1902);—*Naval Brigades in the South African War*, 1899-1900, written by officers attached to the various brigades, and edited by Surgeon T. T. Jeans, R.N., with an introduction by Commander Chas. N. Robinson, R.N. (retired), with maps, plans, illustrations, etc. (London: Sampson Low, Marston and Co., St. Dunstan's House, Fetter Lane, E.C., 1901);—*The Victorian Anthology*, edited by the Right Hon. Sir Mountstuart E. Grant Duff, G.C.S.I., F.R.S., late Governor of the Madras Presidency (London: Swan Sonnenschein and Co., Ltd., 1902);—*The Gospels and the Gospel: a Study in the most Recent Results of the Lower and the Higher Criticism*, by G. R. S. Mead, B.A., M.R.A.S. (London and Benares Theosophical Publishing Society, 1902);—*A Ride in Morocco among Believers and Traders*, by Frances Macnab, author of "Relics," "On Veldt and Farm," "British Columbia for Settlers," etc. (London: Edward Arnold, 1902);—

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

On Active Service with the Chinese Regiment: a Record of the Operations of the First Chinese Regiment in North China from March to October, 1900, by Captain A. A. S. Barnes (London: Grant Richards, Leicester Square, 1902);—*The Story of Burma*, by Ernest George Harmer (London: Horace Marshall and Son, Temple House, E.C.);—*Speeches Delivered in India*, 1884-88, by the Marquis of Dufferin and Ava. *Our Viceregal Life in India*, by the Marchioness of Dufferin and Ava, with map. New and cheap edition (London: John Murray, Albemarle Street, W.);—*The Oxford English Dictionary:* A New English Dictionary on Historical Principles, edited by Dr. James A. H. Murray, with the assistance of many scholars and men of science. *Lap—Leisurely* (vol. vi.), by Henry Bradley, Hon. M.A. Oxon. (Oxford: at the Clarendon Press; London, Edinburgh, Glasgow and New York; Henry Frowde);—*Shakespeare's Macbeth and the Ruin of Souls*, by William Miller, C.I.E., D.D., LL.D., Principal of the Madras Christian College, and Vice-Chancellor of the University of Madras (Madras: G. A. Natesan and Co., Esplanade Row);—*With the Tibetans in Tent and Temple: Narrative of Four Years' Residence on the Tibetan Border, and of a Journey into the Far Interior*, by Susie Carson Rijnhart, M.D. (Oliphant, Anderson and Ferrier, Edinburgh and London, 1901). *Who's Who in America: a Biographical Dictionary of Notable Living Men and Women of the United States*, 1901-02, edited by John W. Leonard (Chicago: A. N. Marquis and Co.);—*The Subjects of the Shah, etc.* (London: Church Missionary Society);—*The Udāna; or, the Solemn Utterances of the Buddha*, translated from the Pali by Major-General D. M. Strong, C.B. (London: Luzac and Co., 1902);—*Japan, Our New Ally*," by Alfred Stead, illustrated (London: T. Fisher Unwin, 1902);—*British India and England's Responsibilities*, by J. Clarke, M.A. The Ethical Fellowship Series, vol. i. (London: Swan Sonnenschein and Co., Ltd., 1902).

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000022

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

SUMMARY OF EVENTS.

INDIA: GENERAL.—On February 14 Lord Curzon issued a proclamation formally announcing that the Coronation festivities in connection with the accession of the King will take place in January, 1903, at a special Darbar to be held at Delhi. Governors, Lieutenant-Governors, heads of administrations, princes, chiefs, nobles, and representatives of the people, will be invited, and orders in the Viceroy's Council will be issued forthwith for appropriate public ceremonies and rejoicings.

A Government resolution announces that an annual provision of one lac of rupees will be made for the preservation of ancient monuments, and urges that the provinces should also fix annual payments for this purpose.

The Budget estimates for 1902-3 show a surplus of £838,000, with closing balances on March, 1903, of £10,832,000 in India, and £4,851,000 in England.

The Government has issued a resolution dealing with recent attacks on the land revenue system. It explains the principles of the system, replies to the criticisms urged against it, and maintains that the system is well suited to the present conditions of the country, and compatible with its future development; and that the revenue which it provides, and which is more lenient in its incidence than at any previous stage of Indian history, is capable of being levied from the people with surprisingly little hardship and without discontent.

In the middle of March the number of persons in receipt of famine relief was 380,000. There was still no sign of rain.

The seventeenth Indian National Congress was opened in Calcutta at the end of last December. Mr. D. E. Wacha presided, and over 5,000 persons were present. Resolutions were passed on the questions of famine, the separation of judicial and executive functions, the strengthening of the Privy Council by the appointment of Indian lawyers, police reforms, and other subjects.

The Indian Social Conference was also held at the same time, under the presidency of Raja Benoy Krishna Deb Bahadur, the leader of the Calcutta Orthodox Hindu community. The conference emphasized the necessity of widespread female education at home and in public institutions. Other resolutions referred to the sea-voyage movement, the admission into Hindu society after a sea-voyage, the fusion of the subcastes, the curtailment of marriage expenses, the raising of the marriageable age, the relaxation of the rules regarding intermarriages, child-widow marriages, the admission of converts to Hindu society, the establishment of orphanages, and the spread of temperance and purity. With the exception of the widow remarriage and subcaste fusion questions, all the other resolutions were unanimously carried.

The conferences on Rajkumar Colleges, over which His Excellency the Viceroy presided daily, ended on January 30. All the main questions were fully thrashed out, and a select committee, consisting mainly of heads

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of colleges, continued to sit and submit proposals regarding the best curriculum to be adopted in future.

The Sind Muhammadan Educational Conference met at Haidarabad on January 4 and 5. A number of resolutions were passed, amongst which were those relating to the organization of committees, the opening of rural schools with religious instruction, the teaching of subjects of practical utility, the provision of boarding-houses for the sons of Zemindars at ten of the principal centres, also dealing with the education of those boys desirous of entering Government service, and for the acquisition of suitable text-books for the moral and religious instruction of Muhammadans, etc., etc.

The Lieutenant-Governor of the Panjab on New Year's Day unveiled a statue of the late Queen-Empress which has been erected in Lahore as a memorial of the Diamond Jubilee.

Colonel Sir T. J. Gallwey has been appointed principal medical officer in India.

Professor J. H. Marshall, late of King's College, Cambridge, has been appointed to the newly-created post of Director-General of the Archæological Survey of India.

Mr. H. A. Kirk, Director of Traffic of the Indian Traffic Department, has taken up his new appointment of Director-in-Chief of the Indo-European line (Karachi-Teheran section).

The tariff between Great Britain and India and Burma has been reduced from 4s. and 4s. 2d. per word respectively to 2s. 6d. from last month.

The final revised census returns show that the population of India is 294,266,701.

The out-turn of the tea crop for the year 1901 was 165,263,453 pounds, as against 177,677,257 in 1900.

Indian Railway earnings in the nine months ending December 31 last were no less than one and three-quarter crores above the earnings in the corresponding months of 1900.

The Victoria Memorial Fund now amounts to nearly 39 lacs.

Dr. Sven Hedin, the famous explorer, paid a visit last January to India, at the Viceroy's invitation. He came from Ladakh, and returned to Sweden by Ladakh, Kashgar, and Russia.

His Highness the Maharaja of Darbhanga and Rai Bahadur Bipen Krishna Bose have been appointed additional members of the Viceroy's Legislative Council.

Sir Harman Singh has given Rs. 50,000, to be managed by a committee, for scholars and for poor Indian Christian students in the Panjab.

Passengers proceeding to Australia from India are required by the Australian Government to be certified as British subjects before being allowed to land. Applications for certificates of identity should be addressed to the local Governments of the Provinces to which intending passengers belong, and not to the Government of India.

INDIA : FRONTIER.—Punitive columns left Jandola, Jam Khel and Datta

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Khel on January 1, under the command of General Dening, Colonel Macrae, and Colonel Tonnochy respectively, for further operations against the Mahsud Waziris. The columns destroyed many of their strongholds and villages before they gave in. They have now paid the fine imposed (Rs. 20,000) in full, and delivered up the rifles demanded. The blockade has now been withdrawn, the Mahsuds having given security for replacing looted cattle, and for the expulsion of certain outlaws from their country. The Reserve Brigade has already moved back.

On February 9 between 200 and 300 Afridis raided a village ten miles from Jamrud, carrying off some cattle. They were, however, overtaken by a company of Khaibar Rifles, who recovered the cattle and took eleven Afridis prisoners.

CEYLON.—General satisfaction prevails amongst all classes at the extension of Sir J. West Ridgeway's term of office as Governor till October, 1903. His Excellency will visit England to represent the Eastern Colonies at the Coronation ceremonies.

The Bishop of Colombo has been appointed to succeed Dr. Welldon as Bishop of Calcutta and Metropolitan of India.

The population of the colony has increased in the thirty years 1871-1900 from 2,417,000 to 3,530,000 in round numbers. About half this was due to immigration.

BURMA.—In January last the Lieutenant-Governor opened the Mandalay Canal at the Sedaw head works, which will irrigate an area of 89,000 acres, and yield, it is calculated, a revenue of 337,555 rupees, the net return on expenditure being estimated at 7·55 per cent. The canal is from 30 to 35 feet deep, and the average width about 57 feet.

PERSIAN GULF.—All is quiet at Koweyt. The Sheikh Mubārak's capital is in a state of defence.

The Resident at Bushire, Colonel Kemball, made his annual tour round the Gulf in January; he visited Lingah, Bandar Abbas, the Arabian Coast, and the Shatt-ul-Arab.

Lieutenant-Colonel John Meade, C.I.E., has been appointed Consul-General for the Provinces of Fars, Khuzistan and Laristan, and the district of Lingah, and for the coasts and islands of the Persian Gulf being within the dominion of Persia, to reside at Bushire.

AFGHANISTAN.—As the Amir was anxious that the refugees who had left the country in recent years should return to their former homes, a large party of them have taken advantage of the Amir's offer. Amongst others were Mir Khāja Jān Sāhibzādah and Mir Abdur Rasul Sāhibzādah of Kūhistan, with their families. General Mir Atta Khan, formerly Commander-in-Chief, who was imprisoned a year ago by the late Amir, has been released and reappointed to his former post.

There appears to be a feeling of unrest due to the predominance of the fanatical element, fomented by the Hadda Mulla, who is said to have the Amir completely under his influence.

The season has been abnormally dry, and apprehensions of impending severity are beginning to be felt. The Amir, as a precautionary measure, has stopped all export of grain from the country.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00005a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

BALUCHISTAN AND MEKRAN.—A gang of raiders from Persia, under the leadership of Muhammad Ali, had last year successfully raided Kantdar, in Mekran, and had seized the fort of Nodiz, belonging to Muhammad Omar. Here they were blockaded by the Nazim of Mekran with 985 men, who besieged the fort for fifty-three days, but, having no artillery, failed to capture it. Later a force under Major Showers arrived and took the place by assault. Muhammad Ali was killed and the band broken up.

The Government of India has sanctioned a grant of $3\frac{1}{2}$ lacs of rupees for increasing and improving the water-supply of Quetta.

The Amir of Bukhara has lately paid a visit to St. Petersburg.

TURKEY IN ASIA.—The line of the Damascus-Mecca Railway has been completed from El Mezarib (63 miles south of Damascus) for another 25 miles southwards, and the earthworks for a distance of another 40 miles. The total amount subscribed towards the cost of the undertaking up to the present is over £400,000.

Abdul Aziz bin Feysul, a descendant of the old Wahabi Amirs, with an army of 2,000 men, has captured the city of El Riad in Central Arabia. It is believed that the Wahabi dynasty is endeavouring to regain the supremacy, to overthrow Ibn Rashid, and to conquer Nejd. Many tribes are flocking to the Wahabi banner.

Many cases of cholera have been reported at Medina, and some at Mecca. Quarantine has been imposed by Turkey on arrivals from the Hejaz coast between Yambo and Mamūrat-el-Hamidiyyeh.

RUSSIA IN ASIA.—An earthquake occurred in the Shemakha district of Transcaucasia on February 13 last, which was attended by very great loss of life. The town of Shemakha, inhabited mainly by Muhammadans, was almost completely destroyed. Over 2,000 persons were killed, 4,500 houses were destroyed, and 25,000 inhabitants rendered homeless and foodless; 126 villages were affected by the disturbance and numbers of cattle perished. Near the village of Marasa, east of Shemakha, a volcano is in active eruption.

CHINA.—The Chinese Court returned to Peking on January 7, the Imperial *cortège* passing between a double line of soldiers, all kneeling, who lined the route for a distance of four miles. The Emperor and Empress-Dowager were attended by 1,000 Chinese noblemen.

The total claims filed against China amount to 461,000,000 taels, while the amount of the indemnity for which China has given a general bond is 450,000,000 taels. Negotiations are proceeding for the subtraction of 11,000,000 taels from the claims, but no agreement has been reached. The proposal for a *pro rata* reduction is entirely unjust. The British claim is considerably less than the actual military expenses and the losses of British subjects, and Sir E. Satow has refused to accept any reduction in view of the exorbitant claims of several secondary Powers, which enormously exceed their expenditures and losses.

The Government is paying the indemnity to the Powers in monthly instalments, in accordance with a protocol.

On February 3 an agreement was signed between Mr. Detring, representing the Inspector-General of Customs, and the Provisional Government

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000022

مكتبة قطر الوطنية
Qatar National Library

of Tien-tsin, regarding the collection of the *likin* dues at present collected by the Provisional Government. The latter agrees to pay the foreign Customs 700,000 taels per annum in twelve monthly instalments, commencing on March 1 last, during the continuance of the Provisional Government, and on its cessation the whole revenue derived from the dues, the staff, the books and offices, etc., shall revert to the foreign Customs, the collection of the Tien-tsin *likin* being thus brought under the foreign Customs control.

Russia has informed the Chinese plenipotentiaries that she refuses to amend the Manchurian treaty.

The condition of the interior of Manchuria is said to be unsatisfactory and the animosity to Russia is increasing. The Russian troops in the province number about 63,000 men.

A rebellion which broke out in the Nan-ning district threatened to become grave, many soldiers having joined the ranks of the insurgents. Marshal Su has arrived at the scene of rebellion from Hu-pei, and has defeated the rebels at Lang-chau.

Cheng Te-yi has been appointed Chinese Minister to Great Britain in the place of Sir Chihchen Lofêngluh.

KOREA.—The Government has officially notified to the French Minister that it considers the loan contract of last April void and ended through lapse of time, and the absence in the contract of power to transfer loan rights to another syndicate or any third party.

JAPAN.—The foreign trade of the country for 1901 shows 251,750,000 yen of exports, and 255,500,000 yen of imports, against 198,750,000 yen and 282,500,000 yen respectively for the preceding year. The outflow of gold was 800,000 yen.

The question of the purchase of railways by the State is now being revived, and it is understood that the Premier is in favour of this step on strategical grounds.

The Budget shows ordinary revenue amounting to 225,000,000 yen, and ordinary expenditure to 177,500,000 yen. The surplus, together with 38,000,000 yen obtained by selling the Chinese new indemnity bonds, and 15,500,000 yen taken from the Chinese old indemnity and miscellaneous sources, is proposed to be devoted to redeeming the national debt, building railways and telegraphs, and restoring the naval maintenance fund.

The capital of the newly-established Crédit Mobilier (10,000,000 yen) was subscribed three times over.

An important agreement has been concluded between Great Britain and Japan, the text of which will be found amongst our "Notes." The Emperor, in connection with the conclusion of the agreement, has conferred titles on several of the Ministers, and has made Baron Hayashi, Minister to Great Britain, a Viscount.

The issue of Exchequer Bills to the amount of 10,000,000 yen has been highly successful. The application reached a total of 15,500,000 yen.

PHILIPPINES.—The situation in the islands appears to be slowly improving, but some time must elapse before the number of American troops can be materially lessened.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

EGYPT.—It has been proposed to create a commercial port at Port Said and connect it with the Egyptian railway system. It is understood that an agreement has been arrived at between the Government and the Suez Canal Company on this subject. This scheme would greatly tend to promote the development of Egyptian commerce.

The Caisse of the Public Debt has agreed to grant to the Government the extra expenditure incurred in the Assuan and Assiut reservoirs out of the Reserve Fund. The original estimate amounted to £2,000,000 sterling, provision for which was made by the Government at the time. The extra cost, now given by the Caisse, amounts to £1,500,000 sterling.

The accounts for 1901 show that the revenue amounted to £E12,160,000, as against £E11,663,000 during 1900, an increase of nearly £E500,000. The actual expenses incurred during 1901 amounted to £E9,924,000, being an increase of £E24,000 as compared with 1900. The balance of £E2,236,000 has been employed as follows: £E64,000 has been paid into the Sinking Fund, £E265,000 to the Economies Fund, and £E1,143,000 to the General Reserve Fund, which is controlled by the Caisse of the Public Debt. The remainder, £E764,000, represents the surplus at the disposal of the Government. The balances of the various reserve funds at the end of 1901 were as follows: Economies, £E4,491,000; General Reserve, £E3,795,000; Special Reserve, £E1,287,000; total £E9,573,000.

A camel caravan proceeding to Kumbek, some 210 miles north-west of Lado, was attacked by Dinkas, and during the fighting which ensued the officer in command, Lieutenant Scott-Barbour, of the Highland Light Infantry, was killed. A small detachment of Sudanese troops was immediately despatched to Kumbek from Gaba Shambeh, the nearest point on the Nile.

ABYSSINIA.—The two hundred and first kilometre of the Jibuti and Harar Railway has been opened. The Negus was present, and expressed his satisfaction at the progress of the line.

EAST AFRICA AND UGANDA.—The laying of the rails of the Mombasa-Uganda Railway has been completed, the railhead having reached the shore of Lake Victoria Nyanza. The first locomotive arrived at Port Florence on December 20 last. The railway is 572 miles in length. The expenditure incurred up to the end of the last financial year amounted to £4,115,002, or, including the estimates for the current year, to £4,815,602. The population of the district traversed amounts to nearly 4,000,000.

Colonel Hayes Sadler has been appointed Commissioner for the Uganda Protectorate.

DELAGOA BAY.—An agreement has been come to between Great Britain and Portugal for the opening of the Delagoa Bay railway line for the transit of civil merchandise. It establishes through traffic rates on the old classification, and provides that no exceptions shall be made either as regards individuals or nationality in the forwarding of goods.

NATAL.—The imports for the year 1901 amounted to £9,789,104, against £6,075,227 in 1900. The exports were £4,792,097, against £1,135,322 during the previous year.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The estimates for the current financial year amount to £5,471,000 as compared with £4,674,967 last year. The loan expenditure shows an increase of £500,000, chiefly for the Cape-Natal Railway.

ORANGE RIVER COLONY.—The net revenue for the six months ended December 31 last amounts to £32,000, notwithstanding that nothing has yet been received on account of railway profits, which in normal times varied from £400,000 to £500,000 a year. The total receipts for the period named were £131,000, while the expenditure amounted to £99,000.

A sum of £400,000 has been spent on the refugee camps, including £30,000 for the native camps. The whole of this expenditure has been recovered from Army funds.

CAPE COLONY.—The imports for the year ended December 31 last amounted to £23,990,543, against £19,678,336 in 1900. This total includes specie £2,575,871, against £2,516,525 in 1900. The exports amounted to £10,873,273, against £8,147,670 in the previous year. The main items are colonial products, £4,017,158; diamonds, £4,930,104; and gold, £1,225,899.

The net earnings of the Cape Government Railways during 1901 were equal to a dividend of £4 8s. 4d. per cent.

SOUTH AFRICA: THE SEAT OF WAR.—In January continuous rains everywhere interrupted operations in the Transvaal. Lord Methuen's column overtook a Boer commando near Boschport, and captured the whole laager. Kekewich surprised Klassen's laager at Paardeberg, taking prisoners. The Boers in the Eastern Transvaal have become demoralized on account of numerous captures made there by us. Commandant Hans Botha, General Ben Viljoen, and General Erasmus, and many other Boer officers, have been captured, and General J. D. Opperman killed. The blockhouse line has been several times rushed by the enemy by means of immense droves of cattle, and many of the enemy have crossed. Colonel Firman's camp at Tweefontein was successfully rushed by a large force of 1,200 under De Wet, when 6 officers, including Major Williams, and 50 men were killed, and 8 officers wounded. Lord Kitchener has given permission to the Boer General Vilonel to raise a new burgher corps of 1,500 men, and the General has written to ex-President Steyn telling him that the formation of the corps is the outcome of his obstinacy. The activity of some of the Boer leaders, notably De Wet and Delarey, is shown by a grave reverse which has lately befallen Lord Methuen's column, in the Western Transvaal. Nine hundred mounted troops, under Major Paris, with 300 infantry, 4 guns, and a pom-pom, were moving from Vryburg to Lichtenburg early on March 7, when they were attacked by Delarey's force. The column was thrown into confusion, mules stampeded, and a part of the mounted troops became panic-stricken. Five hundred troops escaped to Kraaipan. Major Paris, after a gallant defence, surrendered, together with Lord Methuen, who was dangerously wounded.

WEST AFRICA: THE EXPEDITION AGAINST THE AROS.—Colonel Festing's column, after a vigorous pursuit, defeated the enemy and demolished the "Long Juju," and captured Loko on January 2. Columns 1, 2, and 4, under Major Aplin, Colonel Festing, and Colonel Heneker,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000071

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

551

THE IMPERIAL

AND

ASIATIC QUARTERLY REVIEW

AND

Oriental and Colonial Record.

THIRD SERIES—VOLUME XIII. Nos. 25 & 26.

JANUARY—APRIL, 1902.

"One hand on Scythia, th' other on the More."—SPENSER.

Woking:
THE ORIENTAL UNIVERSITY INSTITUTE.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CONTENTS.

	PAGE
BONDS OF EMPIRE. By the Hon. Mr. C. L. Tupper, C.S.I.	*Inset*
IS THE EDUCATION SYSTEM OF INDIA A FAILURE AS REGARDS MORAL TRAINING? By D. Duncan, LL.D.	1
THE INDIAN CIVIL SERVICE AS A CAREER. By W. Egerton, I.C.S.	21
AGRICOLA REDIVIVUS. By A. Rogers	42
UNITY OF COINAGE FOR THE EMPIRE. By Alec McMillan, I.C.S. (Retired)	54
THE RELIGIOUS ORDERS OF MOROCCO. By Professor Dr. E. Montet	62
BRITISH DOMINION IN EASTERN AFRICA. By Harold Bindloss	71
QUARTERLY REPORT ON SEMITIC STUDIES AND ORIENTALISM. By Professor Dr. E. Montet	81, 317
TWO BODLEIAN MSS. By H. Beveridge	86
A HISTORY OF THE FRENCH MISSIONS TO SIAM. By Pinya	91
ANGLO-INDIAN MINIATURISTS. By A. Francis Steuart	106
THE PELASGIANS: A NEW THEORY. By L. C. Innes	113
SIAM'S INTERCOURSE WITH CHINA. By Major G. E. Gerini	119, 361
TANSAR'S ALLEGED LETTER. By Professor Lawrence Mills, D.D.	148
PROCEEDINGS OF THE EAST INDIA ASSOCIATION	157, 369
THE PERSIAN GULF. By H. F. B. Lynch	225
IS STATE-AIDED EDUCATION IN ANY SHAPE SUITABLE TO THE PRESENT CIRCUMSTANCES OF INDIA? By Sir Roland K. Wilson, Bart.	235
LORD CANNING AND LORD MILNER. By Sir John Jardine, K.C.I.E.	254
THE PROGRESS OF THE MUNICIPAL IDEA IN INDIA. By A. Rogers	270
THE INDIAN CIVIL SERVICE AND THE FURTHER ADMISSION OF NATIVES OF INDIA. By J. B. Pennington	280
THE POVERTY OF THE RAYAT. By Rusticus	287
MOROCCO: THE SULTAN AND THE BASHADOURS. By Ion Perdicaris	294
THE PRINCE OF WALES PROFESSORSHIP OF HISTORY AT THE SOUTH AFRICAN COLLEGE. By Professor H. E. S. Fremantle, M.A.	306
THE AGE OF MÁNIKKA VÁÇAGAR. By L. C. Innes	321
JAPANESE MONOGRAPHS. IX.—CONCERNING MARRIAGE CUSTOMS. By Charlotte M. Salwey, M.J.S.	336
CHINA, THE AVARS, AND THE FRANKS. By E. H. Parker	346
CORRESPONDENCE, NOTES, ETC.	165, 399
Storage of Water and Irrigation of India.—"Poverty and un-British Rule in India."—Archæological Exploration in India.—Oriental Studies, London	165—175
Famine in India: its Causes and Effects.—An Impending Famine in India: a Forecast.—Agreement between Great Britain and Japan.—The National Debt of Japan.—The American School for Oriental Study and Research in Palestine.—A New Work on Indian Folklore	399—410

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000be

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

PAGE

REVIEWS AND NOTICES 176, 411

A Grammar of the Classical Arabic Language, by M. S. Howell, C.I.E., LL.D., Indian Civil Service (ret.).—The Life of Major-General Sir Robert Murdoch Smith, K.C.M.G., Royal Engineers, by his son-in-law, William Kirk Dickson, with portraits, maps, and other illustrations.—Asoka: the Buddhist Emperor of India, by Vincent A. Smith.—Australasia, Old and New, by J. Grattan Grey, author of "His Island Home," etc.—Assyrian Language, by L. W. King, M.A.—Life of Sir William Wilson Hunter, K.C.S.I., M.A., LL.D., a Vice-President of the Royal Asiatic Society, etc., by Francis Henry Skrine, F.S.S., late His Majesty's Indian Service, author of "An Indian Journalist" and joint author of "The Heart of Asia," etc.—Armenia: Travels and Studies, by H. F. B. Lynch, with 197 illustrations reproduced from photographs and sketches by the author. Numerous maps and plans, a bibliography, and a map of Armenia and adjacent countries. Vol. II.—The Theory of Credit, by Henry Dunning MacLeod, M.A., Trinity College, Cambridge, and the Inner Temple, Barrister-at-Law. Second edition.—Last Essays, by the late Professor Max Müller. Second series.—The Vedânta Philosophy, by Max Müller, K.M.—A Sanskrit Grammar for Beginners, by Arthur A. Macdonell, M.A., Ph.D., Boden Professor of Sanskrit in the University of Oxford, and Fellow of Balliol College.—A Pāli Reader, with Notes and Glossary, by Dines Andersen, Ph.D., Assistant Librarian to the University, Copenhagen. Part I.: Text and Notes.—At the Court of the Amîr, a narrative by John Alfred Gray, M.B. (Lond.), late Surgeon to H.H. the (late) Amîr of Afghanistan.—The Settlement after the War in South Africa, by M. J. Farrelly, LL.D., B.A.L., Advocate of the Supreme Court of Cape Colony.—In the Far East. Letters by Geraldine Guiness.—Stringer Lawrence, the Father of the Indian Army, by Colonel J. Biddulph, Indian Staff Corps, author of "The Nineteenth and their Times."—The Spoken Arabic of Egypt, by J. Selden Willmore, M.A.—From Cyprus to Zanzibar by the Egyptian Delta, I. The Adventures of a Journalist in the Isle of Love, the Home of Miracles, and the Land of Cloves. By Edward Vizetelly (Bertie Clere), War Correspondent, author of "The Reminiscences of a Bashi-Bazouk," etc. Illustrated with many photographs by L. Fiorillo, of Alexandria, and others.—The Thirteen Colonies, by Helen Ainslie Smith, author of the "One Hundred Famous Americans" "Stories of Persons and Places in America," "The Colonies," "Animals, Wild and Tame," etc.—The Chinese Crisis from Within, by Wen Ching. Edited by Rev. G. M. Reith, M.A., Edinburgh.—A Short Sketch of the Lives of Francis and William Light, the Founders of Penang and Adelaide, with Extracts from their Journals, by A. Francis Steuart, Advocate.—A Manual of Pushtu, by Captain G. Roos-Keppel, C.I.E., with Native Assistants.—What's What: a Guide for To-day to Life as it Is and Things as they Are, by Harry Quilter, M.A., Trinity College, Cambridge, Barrister-at-Law.—China under the Search-light, by William Arthur Cornaby, editor of the *Chung-si-Chiao-hui-pao*, author of "A String of Chinese Peach Stones," etc.—Les Mémoires Historiques de Se-ma Ts'ien, by Professor Edouard Chavannes. Vol. IV., 500 pages.—The Latest Map of Manchuria, by L. Borodowsky, published under the authority of the Ministry of Finance, St. Petersburg.—Variétés Sinologiques, No. 19: The Term "Lord of Heaven" ("T'ien-chu," used by the Romanists)—apropos of a Buddhist column found at Ch'êng-tu, capital of Sz Ch'wan, by Père Havret, S.J. . . . . 176—193

Memoirs of Maharaja Nub Kissen Bahadur, by N. N. Ghose, Barrister-at-Law, Advocate High Court, Calcutta, Fellow of the University of Calcutta, author of "Kristo Das Pal: a Study."—North America, selected by F. D. Herbertson, B.A., London; edited, with introduction, by A. J. Herbertson, Ph.D. (Freiburg-i. B.), F.R.S.E., Lecturer in Regional Geography in the University of Oxford.—Sepoy Generals, by G. Forrest, C.I.E.—Volkstum und Weltmacht in der Geschichte, by Albert Wirth.—My Fourth Tour in Western Australia, by Albert F. Calvert, F.R.G.S., author of "The Discovery of Australia," "The Exploration of Australia," "The Aborigines of Western Australia," etc. Second edition.—The Garden of Kâma, and other Love Lyrics from India, arranged in

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00005e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

PAGE

verse by Laurence Hope.—Scenes and Studies in the Ministry of our Lord, with Thoughts on Preaching, by the Rev. James H. Rigg, D.D., Principal of Westminster Training College, twice President of the Wesleyan Conference.—The Oriental Club and Hanover Square, by A. F. Baillie, F.R.G.S.—Arabic Manual. A Colloquial Handbook in the Syrian Dialect, for the Use of Visitors to Syria and Palestine, containing a Simplified Grammar, a Comprehensive English and Arabic Vocabulary and Dialogues. The whole in English characters, carefully transliterated, the pronunciation being fully indicated, by F. E. Crow, late H.B.M. Vice-Consul at Beirut.—The Brahmo Samaj and Arya Samaj in their Bearing upon Christianity: a Study in Indian Theism, by Frank Lillingston, M.A.—Kim, by Rudyard Kipling.—A Short History of the British in India, by Arthur D. Innes, sometime scholar of Oriel College, Oxford. With eight maps.—The Great Persian War and its Preliminaries: a Study of the Evidence, Literary and Topographical, by G. B. Grundy, M.A., Lecturer at Brasenose College and University Lecturer in Classical Geography, Oxford. With illustrations.—Russia: its Industries and Trade. Issued by order of State Secretary S. J. De Witte, Imperial Russian Minister of Finance. The Glasgow International Exhibition, 1901.—The Lore of Cathay, or the Intellect of China, by W. A. P. Martin, D.D., LL.D., President of the Chinese Imperial University, etc.—The Ainu and their Folklore, by the Rev. John Batchelor, F.R.G.S. (C.M.S. Missionary to the Ainu). Illustrated.—The Tale of the Great Mutiny, by W. H. Fitchett, B.A., LL.D., author of "Deeds that Won the Empire," "Fights for the Flag," "How England saved Europe," "Wellington's Men," etc., with portraits and maps.—Annual Report of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures, and Condition of the Institution for the Year ending June 30, 1897.—Apollonius of Tyana, the Philosopher-Reformer of the First Century A.D., by G. R. S. Mead, B.A., M.R.A.S.—Prosperous British India: a Revelation, by W. Digby, C.I.E. . . . . 411—426

OUR LIBRARY TABLE 193, 426

SUMMARY OF EVENTS IN ASIA, AFRICA AND THE COLONIES . 196, 432

APPENDIX 206

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000036

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

concentrated at Akwete on February 1. Opposition has been constantly encountered, but the results obtained were satisfactory, several important towns having submitted. The above columns moved on March 1 northwards from Olele, Asa, and Obegu respectively.

NORTHERN NIGERIA.—A force under Colonel Morland, the commandant, left for Lake Chad at the end of January, viâ Bauchi. Owing to the great distances to be traversed, some time must elapse before any detailed account of the expedition can be received. There is reason to believe that this expedition will mark the commencement of a permanent occupation of this remote portion of the British sphere, and that a garrison under white officers will be established at some point on the shores of the lake.

A British Resident has been established at Zaria, an important Hausa town belonging to the Amir of Sokoto. A new and important garrison has been established at Ilorin.

CANADA.—The total population of the Dominion at the end of 1901 was 5,369,666.

In Rossland and the boundary districts of British Columbia the gold and copper ore output for last year amounted in aggregate to 660,000 tons.

A bulletin issued by the Minister of Mines estimates the value of the mineral production of British Columbia in 1901 at $20,713,501, being an increase of 25 per cent. over the previous year. The lode mines show an increase over 1900 of 57 per cent.

The treatment of lead ore by the Canadian Pacific Company's smelter, the reduced freight, and the Dominion bonus, will greatly stimulate the silver industry.

The aggregate foreign trade for the six months ended December 31 last showed an advance of $13,605,066 over the same period in 1900. The imports increased by $8,076,537, and the exports by $5,528,529. The additional exports include nearly $2,000,000 in fisheries, over $4,000,000 in agriculture, and $750,000 in manufactures.

Since the beginning of the Boer War, the Dominion has sent food and forage to the value of $7,000,000 to South Africa on behalf of the War Office.

Sir Oliver Mowat, the Lieutenant-Governor of Ontario, opened the Legislative Council on January 8.

The Dominion Parliament was opened by Lord Minto, the Governor-General, on February 13.

Senator Templeman, of British Columbia, has entered the Cabinet as Minister without portfolio.

Mr. David Mills, K.C., Minister of Justice in the Dominion Cabinet, has resigned his portfolio, and accepted a Judgeship of the Supreme Court of Canada. He is succeeded by Mr. C. Fitzpatrick, K.C., the Solicitor-General.

Mr. Gordon Hunter, K.C., has been appointed Chief Justice of British Columbia.

The Royal Commission on the subject of Chinese immigration, after a thorough investigation, recommends that the further immigration of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000016

مكتبة قطر الوطنية
Qatar National Library

Chinese labourers into the Dominion be prohibited, and suggests a treaty to accomplish this end. In the meantime it is proposed that the capitation tax be increased to $500.

NEWFOUNDLAND.—The Revenue for the last quarter of 1901 was $526,000, against $504,000 for the same period of 1900. This is the largest total in the history of the colony.

The Government has renewed the *modus vivendi* with reference to the French shore for another year.

The winter herring fishery on the southern and western coast was one of the best on record. American fishermen have paid the coast folk $220,000 for herring.

The census of 1901 shows that the population of the colony and Labrador numbers 220,249, against 202,040 in 1891.

AUSTRALASIA: NEW SOUTH WALES.—The revenue for the half year ended December 31 last amounted to £5,102,893, being a decrease of only £2,033, notwithstanding the large deduction for the transferred services. For the eight months ended February 28 it was £7,085,903, an increase of £120,876 as compared with the corresponding period of the previous year.

During the last ten years the tonnage of ships arriving in the ports of the colony have increased from 5,700,000 to 8,000,000, and during the last three years the exports have increased in value from £22,000,000 to upwards of £28,000,000, and the imports from £16,000,000 to £27,500,000 in value.

Vice-Admiral Sir Harry H. Rawson, K.C.B., has been appointed Governor.

VICTORIA.—The revenue for the last six months of 1901 amounted to £3,943,076, an increase of £213,971.

Mr. Barton, the Federal Premier, has said that Australia must take a share in all matters affecting the integrity of the Empire, sending men and ships abroad, if necessary, to help in its wars.

The Bengal Chamber of Commerce has made remonstrance against the Australian Bill stipulating that no postal contract shall be given unless white labour only is employed on the mail steamers.

WESTERN AUSTRALIA.—On the resignation in December last of Mr. Morgan's Ministry, Mr. Leake was summoned to form a new one, which is now composed as follows: Mr. G. Leake, Premier and Attorney-General; Mr. Kingsmill, Commissioner of Railways; Mr. Illingworth, Treasurer and Colonial Secretary; Mr. Gregory, Minister of Mines; Mr. Rason, Director of Public Works; Dr. Jameson, Commissioner of Crown Lands; Mr. Holmes, Honorary Minister in Council. Mr. Leake and Mr. Cornthwaite Rason have been re-elected in their constituencies by heavy majorities on assuming office.

SOUTH AUSTRALIA.—The revenue for the last six months of 1901 was £1,085,752, a decrease of £224,193.

TASMANIA.—The revenue returns for 1901 are about £100,000 less than in 1900, the chief shortage being in Customs, which, owing to the Commonwealth tariff, yielded £72,000 less than in the previous year.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000022

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The total revenue collected by the Commonwealth and the State was £954,000, as against £1,055,000 in the previous year.

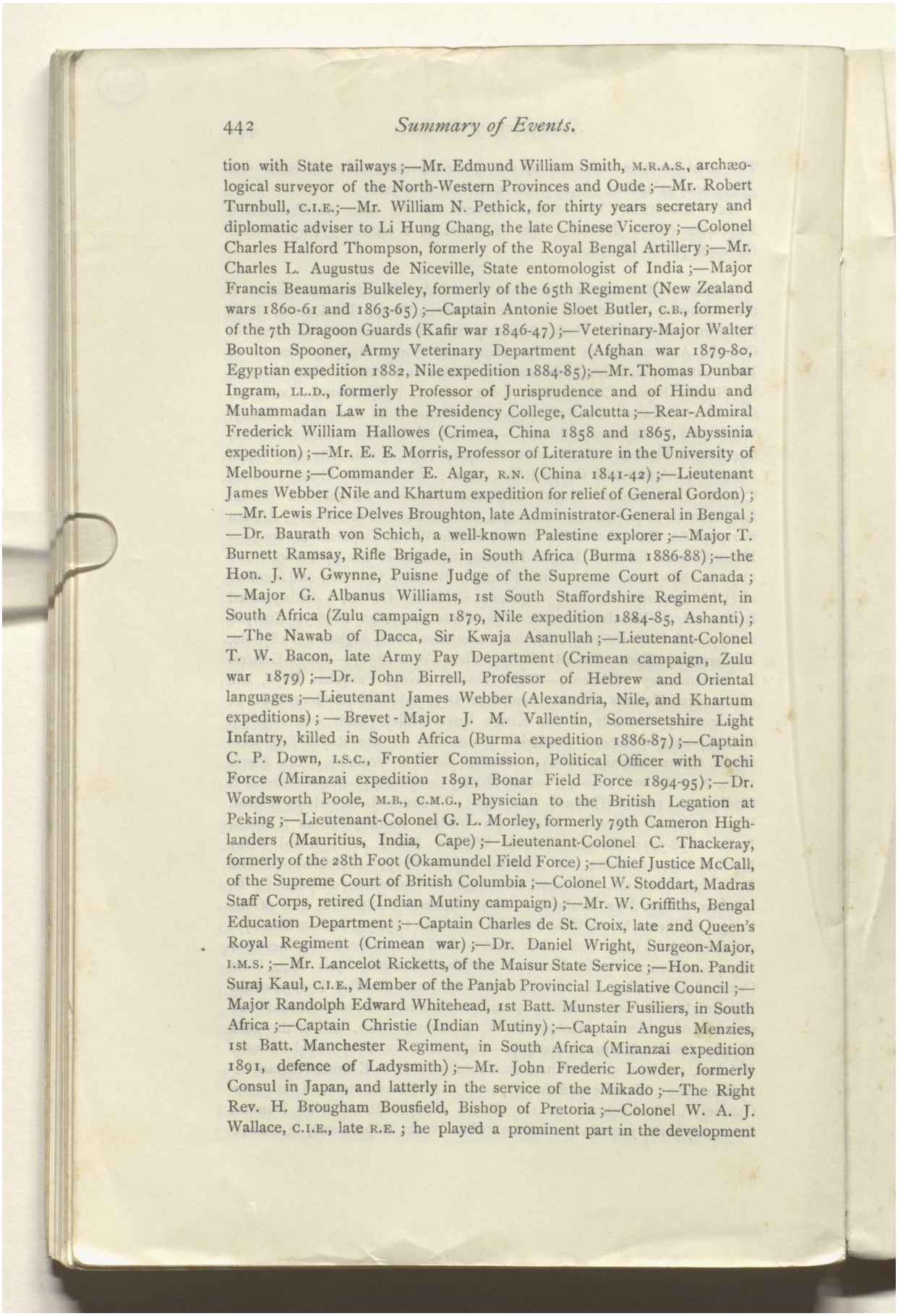
NEW ZEALAND.—The revenue returns for the nine months ended December 31 last showed a total of £4,211,612, against £4,030,626 for the same period of 1900.

Obituary.—The deaths have been recorded during the last quarter of the following :—Frederick Temple Hamilton-Temple-Blackwood, Lord Dufferin, successively Under-Secretary for India, Governor-General of Canada, Ambassador at St. Petersburg and Constantinople, Viceroy of India 1884-88, and also Ambassador at Rome and Paris ;—Field-Marshal Sir Neville Bowes Chamberlain, G.C.B., G.C.S.I. (Afghanistan, Candahar, Ghazni and Kabul, Gwalior campaigns, second Sikh campaign, Mutiny, Waziri and Umbeyla expeditions) ;—General Sir Penrose Charles Penrose, late Royal Marines (North coast of Spain 1838, China 1841-42, Japan 1864-66) ;—Admiral Sir Geoge Elliot, K.C.B. ;—General Sir Æneas Perkins, Colonel Commandant Royal Engineers, formerly of the old Bengal Engineers in 1851 (Mutiny campaign, Bhutan expedition 1864-65, Afghan war 1878-80, Kandahar 1880, Indian Public Works Department, etc.) ;—Major-General Edward Douglas Harvest, formerly of the 97th Foot (from 1872 to 1880 Commander of the Forces in Western Australia, and member of H.M. Executive Council) ;—Colonel Sir Henry Collett, a distinguished Indian officer (Eusufzai Frontier 1858, Oude campaign 1858-59, Cossyah and Jynteah Hills 1862-63, Abyssinian campaign 1868, Afghan war 1878-80, Burmese expedition 1886-88, Manipur Field Force 1891) ;—Major-General F. Hammersley (Crimea) ;—Major-General George Farquhar Kaye, late of the 21st Hussars (Mutiny campaign 1857-59) ;—Major-General H. P. Montgomery, formerly of the King's Royal Rifles (Kafir war 1851-53, China) ;—Major-General Frederick Hime, late of the Royal Engineers (North China campaign 1860) ;—Admiral Sir E. S. Sotheby, K.C.B. (Syria 1840, New Zealand 1846-47, Indian Mutiny campaign) ;—Major-General J. Godby, R.A., retired (Crimean campaign) ;—Admiral J. H. Selwyn (China, West Coast of Africa) ;—Colonel Sir William Ramsay-Fairfax (Crimea, India 1858-59) ;—Surgeon-General William Nash, M.D., Royal Army Medical Corps (African war 1878-80, Egypt 1882) ;—Lieutenant-General E. F. Bourchier, C.B. (Crimean campaign) ;—Commissary-General G. D. Lardner (Cape, New Zealand) ;—Major-General S. Stallard, late of the Bengal Artillery (North-West Frontier campaign 1852-53, Indian Mutiny) ;—General John Gray Touch, late Madras Staff Corps (second Burmese war 1852) ;—Admiral Charles Luxmore Hockin (Navarino, Syria 1840, West Coast of Africa 1844-46, Baltic) ;—Professor James Bradley Thayer, of the Harvard Law School, a leading American authority on constitutional law and law of evidence ;—Colonel A. W. J. Montgomerie, late of the 20th Hussars (Indian Mutiny campaign) ;—Captain W. Sotheboy Douglas Brodie Ketchen, 1st batt. 5th Gurkhas, accidentally killed at Kurram (Hazara expedition 1891, Waziri expedition 1894-95) ;—Major and Brevet Lieutenant-Colonel A. G. Cochran, R.M.L.I. (Egypt 1882) ;—Mr. Patrick Duncan, for twenty-seven years in the Indian Public Works Department, in connec-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000080

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



tion with State railways;—Mr. Edmund William Smith, M.R.A.S., archæological surveyor of the North-Western Provinces and Oude;—Mr. Robert Turnbull, C.I.E.;—Mr. William N. Pethick, for thirty years secretary and diplomatic adviser to Li Hung Chang, the late Chinese Viceroy;—Colonel Charles Halford Thompson, formerly of the Royal Bengal Artillery;—Mr. Charles L. Augustus de Niceville, State entomologist of India;—Major Francis Beaumaris Bulkeley, formerly of the 65th Regiment (New Zealand wars 1860-61 and 1863-65);—Captain Antonie Sloet Butler, C.B., formerly of the 7th Dragoon Guards (Kafir war 1846-47);—Veterinary-Major Walter Boulton Spooner, Army Veterinary Department (Afghan war 1879-80, Egyptian expedition 1882, Nile expedition 1884-85);—Mr. Thomas Dunbar Ingram, LL.D., formerly Professor of Jurisprudence and of Hindu and Muhammadan Law in the Presidency College, Calcutta;—Rear-Admiral Frederick William Hallowes (Crimea, China 1858 and 1865, Abyssinia expedition);—Mr. E. E. Morris, Professor of Literature in the University of Melbourne;—Commander E. Algar, R.N. (China 1841-42);—Lieutenant James Webber (Nile and Khartum expedition for relief of General Gordon);—Mr. Lewis Price Delves Broughton, late Administrator-General in Bengal;—Dr. Baurath von Schich, a well-known Palestine explorer;—Major T. Burnett Ramsay, Rifle Brigade, in South Africa (Burma 1886-88);—the Hon. J. W. Gwynne, Puisne Judge of the Supreme Court of Canada;—Major G. Albanus Williams, 1st South Staffordshire Regiment, in South Africa (Zulu campaign 1879, Nile expedition 1884-85, Ashanti);—The Nawab of Dacca, Sir Kwaja Asanullah;—Lieutenant-Colonel T. W. Bacon, late Army Pay Department (Crimean campaign, Zulu war 1879);—Dr. John Birrell, Professor of Hebrew and Oriental languages;—Lieutenant James Webber (Alexandria, Nile, and Khartum expeditions);—Brevet-Major J. M. Vallentin, Somersetshire Light Infantry, killed in South Africa (Burma expedition 1886-87);—Captain C. P. Down, I.S.C., Frontier Commission, Political Officer with Tochi Force (Miranzai expedition 1891, Bonar Field Force 1894-95);—Dr. Wordsworth Poole, M.B., C.M.G., Physician to the British Legation at Peking;—Lieutenant-Colonel G. L. Morley, formerly 79th Cameron Highlanders (Mauritius, India, Cape);—Lieutenant-Colonel C. Thackeray, formerly of the 28th Foot (Okamundel Field Force);—Chief Justice McCall, of the Supreme Court of British Columbia;—Colonel W. Stoddart, Madras Staff Corps, retired (Indian Mutiny campaign);—Mr. W. Griffiths, Bengal Education Department;—Captain Charles de St. Croix, late 2nd Queen's Royal Regiment (Crimean war);—Dr. Daniel Wright, Surgeon-Major, I.M.S.;—Mr. Lancelot Ricketts, of the Maisur State Service;—Hon. Pandit Suraj Kaul, C.I.E., Member of the Panjab Provincial Legislative Council;—Major Randolph Edward Whitehead, 1st Batt. Munster Fusiliers, in South Africa;—Captain Christie (Indian Mutiny);—Captain Angus Menzies, 1st Batt. Manchester Regiment, in South Africa (Miranzai expedition 1891, defence of Ladysmith);—Mr. John Frederic Lowder, formerly Consul in Japan, and latterly in the service of the Mikado;—The Right Rev. H. Brougham Bousfield, Bishop of Pretoria;—Colonel W. A. J. Wallace, C.I.E., late R.E.; he played a prominent part in the development

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000036

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of railways in India;—Commander Edgar Slade, R.N. (retired), one of the last survivors of Navarino;—Raja Sayyid Muhammad Bakeradi Khan Sahib Bahadur, C.I.E., Meer of Kotaha, and Raja of Pindrawal;—Sir Conrad Reeves, Chief Justice of Barbados;—Major the Earl of Munster, D.S.O., of the 3rd Militia Batt. Royal Scots, in South Africa (Afghan war 1879-80, Boer war 1881);—Major-General C. W. Barry, R.E.;—General George Palmer Whish (Afghanistan 1842, Panjab campaign 1848-49);—Major William Wood (Crimea, Indian Mutiny campaign);—Lieutenant-General Coote Synge-Hutchinson (Indian campaign 1858-59);—P. Ramchandra Pillay, a leader of the native community and lawyer of Secunderabad;—Colonel E. C. Knox, 18th Hussars, and lately commanding 2nd Cavalry Brigade in South Africa (Nile expedition 1884-85);—Colonel J. G. E. Griffith, late Bombay Staff Corps (Abyssinian war 1868, Afghanistan 1879, Suakim expedition 1885);—Right Rev. Dr. Victor Sinibaldi, Roman Catholic Bishop of Allahabad;—Swami Ramanand Bharati, a Bengali Sanyasi of some repute;—The Nawab Sultan Dulah, husband of the Begum of Bhopal;—The Hon. R. R. Dobell, member of the Privy Council of Canada;—M. Ballay, Governor-General of French West Africa;—Colonel R. J. Maxwell, late 80th Regiment (Indian Mutiny, Oude campaign 1858-59);—Mr. C. E. D. Pennycuick, C.M.G., formerly of the Ceylon Civil Service);—Captain W. Greenhill Silverlock, R.N. (Baltic 1855);—Lieutenant-Colonel H. W. Keays-Young (Persian campaign 1856-57, Mutiny);—Sir Griffith H. Pugh Evans, formerly Advocate of the Calcutta High Court, and member of the Viceroy's council:—Major H. W. Seymour, I.S.C. (Afghan war 1880);—General F. C. Anderson, late Bengal Staff Corps (Sutlej campaign 1845-46, Mutiny campaign 1857-58);—The Hon. Sir John Colton, a former Premier of South Australia;—Captain F. Pavy, formerly of the 74th Highlanders (Indian Mutiny);—Lalla Kishen Sahai Rai Bahadur, a well-known banker and zemindar of Meerut;—Mr. W. Taylor, agent to the Raja of Parla Kimedi;—Dr. Holub, an African explorer;—Paymaster-in-Chief F. L. M. Dyer, R.N. (Baltic 1855, China 1856-57);—Captain Francis Pavy, formerly 74th Highlanders (Indian Mutiny);—Lieutenant-Colonel T. J. Rawnesley, formerly Assistant-Commissary-General of Ordnance (Canton 1857);—Captain Hood, Central India Horse, killed in South Africa;—Mr. T. W. Brookes, formerly a member of the Bengal Legislative Council;—Colonel Boileau (Mutiny);—Mr. James Craik, deputy-chairman of the Southern Mahratta Railway;—Mr. John Henry Ozanne, C.M.G., Travelling Commissioner on the Gambia;—Major-General Mordaunt Martin Fitzgerald, a Bengal and R.A. officer (Miranzai and Upper Kurram expeditions, Buzdar Baluchi expedition 1857, Mutiny, etc.);—Major Francis John Fox, late R.A. (Kandahar 1880, Sudan campaign 1885);—Captain Alexander Nelson Hood, I.S.C., 1st Central India Horse, killed in South Africa;—Captain F. R. Coates, 1st Batt. Northumberland Fusiliers, killed in South Africa (Sudan campaign);—Major N. E. Young, R.F.A., in South Africa (Dongola expedition 1896);—Lieutenant Arthur Freshwater, Quartermaster of R.A.M.C. in South Africa (Bechuanaland expedition 1884);—The Venerable Archdeacon J. Palmer, B.D., acting head of the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Melanesian Mission (at Auckland);—Captain Gaetano Casati, a well-known African explorer;—Lieutenant-General J. Patrick Redmond, C.B. (Panjab campaign 1848-49, Eusufzai expedition, Kohat Pass 1850, Mutiny);—Colonel R. C. Germon, late I.S.C. (Panjab campaign 1848-49, Mutiny);—Sir Vikar-ul-Umra, late Prime Minister of Haidarabad;—Major-General Pewzoff, known for his explorations in Central Asia, Mongolia, and Tibet;—Major Richard John Gordon Creed, of the Reserve of officers, formerly Leicestershire Regiment (Afghan war 1878-79);—Surgeon-General Sir William Guyer-Hunter, K.C.M.G. (second Burmese war, Mutiny);—Lieutenant-Colonel F. A. Strickland Mannock, late of the 3rd Dragoon Guards and 18th Hussars (Abyssinia 1868);—Captain A. A. Fisher, late of the Prince of Wales's Own West Yorkshire Regiment, special service officer Rhodesian Field Force (Dongola 1896, Uganda 1898);—The Right Hon. Sir Richard Temple, G.C.S.I., etc. (India 1848-1880);—Major W. H. Beaumont, late of the Royal Dublin Fusiliers and Madras Fusiliers (Mutiny campaign, Abyssinia 1868;—Major-General H. B. A. Poulton, late of the Bengal Staff Corps (Sind 1843);—The Rev. George Small, a learned Oriental scholar, and former missionary in India of the Baptist Missionary Society;—Captain Alfred Eaton, R.N. (Crimea, China);—Colonel R. Coleman Eaton, Royal Army Medical Corps (Afghan war 1879-80);—Lieutenant-Colonel G. E. Herne, late of the 103rd Foot (Panjab campaign 1848-49);—Lieutenant and Quartermaster Stanley James Barton, 1st batt. Queen's Own Royal West Kent Regiment (Egyptian War 1882, Nile expedition 1884-85, North-West Frontier campaign 1897-98).

March 24, 1902.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

556

DARLINGTON'S HANDBOOKS.

"Sir Henry Ponsonby is commanded by the Queen to thank Mr. Darlington for a copy of his handbook."

"Nothing better could be wished for."—*British Weekly.*

"Far superior to ordinary guides."—*London Daily Ch.*

Edited by RALPH DARLINGTON, F.R.G.S. **1s.** each. Illustrated.
Maps by JOHN BARTHOLOMEW, F.R.G.S.

Bournemouth and New Forest.
Aberystwyth, Towyn, and Aberdovey.
Chester and the Vale of Llangollen.
Barmouth, Dolgelly, Criccieth, Pwllheli.
Bristol, Bath, Wells, and Weston-super-Mare.
Llandrindod, Wells, and the Spas of Mid-Wales.
The Isle of Wight.
The Channel Islands.
The Wye Valley.
The Severn Valley.
Llandudno, Trefriw, Bettws-y-Coed, Snowdonia.
Bangor, Llanfairfechan Penmaenmawr.
Rhyl, Colwyn Bay, Conway, Carnarvon.
Brighton, Eastbourne, Hastings, and St. Leonards.
Malvern, Hereford, Worcester, Gloucester, Cheltenham.
Norwich, Yarmouth, Lowestoft, and Norfolk Broads.

"A brilliant book."—*The Times.* "The best handbook to London ever issued."—*Liverpool Daily Post.*

Fouth Edition, revised, 5s. ; 60 Illustrations, 20 Maps and Plans.

LONDON and Environs. By E. C. COOK, and E. T. COOK, M.A.

LLANGOLLEN: DARLINGTON & CO. LONDON: SIMPKIN, MARSHALL & CO., LTD.
PARIS AND NEW YORK: BRENTANO'S. The Railway Bookstalls and all Booksellers.

PHOTOGRAPHS.—From Negatives by Ralph Darlington, F.R.G.S., of Scenery, Ruins, etc., in Norway, Sweden, Denmark, Russia, Italy, Greece, Asia Minor, Palestine, and Egypt, **1s., 1s. 6d., 2s. 6d.** List post free.

DARLINGTON & CO., LLANGOLLEN.

The Saturday Review

OF

POLITICS, LITERATURE, SCIENCE & ART.

Edited by HAROLD HODGE.

Price SIXPENCE weekly.

The SATURDAY REVIEW is the first of the Literary and Political Weeklies. It devotes special attention to Imperial matters, its articles and notes on India every week being the work of experts who have lived in the country.

NOTICES.

The terms of subscription to the SATURDAY REVIEW *are:*

	United Kingdom. £ s. d.	*Abroad.* £ s. d.
One Year	1 8 2	1 10 4
Half Year	0 14 1	0 15 2
Quarter Year	0 7 1	0 7 7

Cheques and Money Orders should be crossed and made payable to the Manager, SATURDAY REVIEW *Offices, 38 Southampton Street, Strand, London, W.C.*

A Special Edition on thin paper is prepared in time to catch the Indian Mail every Friday.

ASIATIC QUARTERLY REVIEW, *April*, 1902.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000087

مكتبة قطر الوطنية
Qatar National Library

PALESTINE EXPLORATION FUND.

The Quarterly Statement.

A Journal of Palestine Research and Discovery.

Illustrated. *Contents for April, 1902.* *Price 2s. 6d.*

Notes and News.—Obituary of Dr. Conrad Schick.—Reports by R. A. S. Macalister, M.A. : (1) The Newly-discovered Tomb North of Jerusalem, (2) Inscription from the Wâdy Samâr, (3) The Ancient Necropolis at Kerm-esh-Sheikh, (4) Further Jar handles with Rhodian Stamps, (5) The "Egyptian Tomb" at Silwân, (6) The Mosaic in the Church of Nôtre Dame de Spasme, Jerusalem, The Sculptured Cave at Saris el Edheniyeh (Jeremiah's Grotto).—Archæological and Epigraphic Notes on Palestine by Professor Clermont-Ganneau, M.I. : (13) Fresh Remarks on the Hebrew Mosaic of Kefr Kenna, (14) Baal-Bosor, or Baalkosor, (15) The Depository of Ancient Arrows in the Castle of David, (16) The Plasterer Sosibios of Gaza.—Golgotha and the Holy Sepulchre, by Major-General Sir Charles W. Wilson, K.C.B., F.R.S., R.E. —Observations of the Dead Sea Levels : Ain el-Feshkhah, el-Hajar, el-Asbah, and Kh. Kumrân, by Dr. E. W. G. Masterman.—The German Excavations at Baalbek, by F. J. Bliss, Ph.D.—Hebrew Weights and Measures, by Col. C. R. Conder, LL.D., R.E.—Remarks on the January, 1901, "Quarterly Statement" R.S.A.M.—Sennacherib's Catastrophe at Nob, by the Rev. W. F. Birch, M.A.—Notices of Foreign Publications.—Table of Transliteration of the Hebrew and Arabic Consonants.

Subscribers of Half a Guinea and upwards receive the "Quarterly Statement" post free.

Catalogue of Old and New Testament Maps, Plans of Jerusalem, Books, Photographs, Casts, and Lantern Slides, published by the Fund, on application to THE SECRETARY, 38, CONDUIT STREET, LONDON, W.

BIBLIA:

Devoted to Biblical, Classical, and Oriental Archæology.

Edited by CHAS. H. S. DAVIS, M.D., Ph.D.

THE AMERICAN ORGAN OF THE EGYPT & PALESTINE EXPLORATION FUNDS.

This publication, now in its fifth year, is read by over 3,000 persons every month, and is the only publication in the United States devoted to Egyptology and Oriental Research.

For sale at Messrs. LUZAC & Co.'s, 46, Great Russell Street, London. Published at Meriden, Conn., U.S.A.

MESSRS. LUZAC & CO.,

Oriental and Foreign Booksellers ; Publishers to the India Office, the University of Chicago, etc.; Agents for the sale of the Indian Government Publications, the Publications of the Asiatic Society of Bengal, the Publications of the Imperial Academy of Sciences, St. Petersburg, etc.

Messrs. LUZAC and CO. are able to supply, at the Shortest Notice and on most favourable terms, all English, Foreign, and Oriental Books and Periodicals. Monthly Lists Issued Regularly and Sent Gratis on Application.
Messrs. LUZAC and CO. have a Large Stock of New and Second-hand Oriental Works, of which they issue Regularly Lists and Catalogues, which are to be had on application.

LUZAC'S ORIENTAL LIST.

Containing Notes and News on, and a Bibliographical List of, all new Publications on Africa and the East. Published Monthly. Annual subscription, 3s.

Only one copy of Vols. I. to XII. (1890-1900) is still to be had (with Index, half-bound), at £5 5s. Vols. I. to IV. are out of print, and can only be sold in the set. Vols. V. to XII. are still to be had at 5s. each volume. (Vol. XIII. in progress.)

JUST PUBLISHED.—**ARABIC MANUAL.** By F. E. CROW. A Colloquial Handbook in the Syrian Dialect. For the Use of Visitors to Syria and Palestine, containing a Simplified Grammar, a Comprehensive English and Arabic Vocabulary and Dialogues. The whole in English characters, carefully transliterated, the pronunciation being fully indicated. Crown 8vo., cloth, pp. viii+334, 7s. 6d.

This is Vol. IV. of **Luzac's Oriental Grammar Series.** (Vol. I., Wynkoop's "Hebrew Syntax," 2s. 6d. Vol. II., Wynkoop's "Hebrew Grammar," 2s. 6d. Vol. III., Dr. Rosen's "Modern Persian Colloquial Grammar," 10s. 6d.)

JUST PUBLISHED.—**THE UDANA ; or, The Solemn Utterances of the Buddha.** Translated from the Pâli by Major-General D. M. STRONG, C.B. Royal 8vo., cloth, pp. viii+129. 6s. net.

NOW READY. VOLS. I. TO VIII. OF

LUZAC'S SEMITIC TEXT AND TRANSLATION SERIES.

Vol. IV.—**The History of the Virgin Mary, and the History of the Likeness of Christ.** Vol. I.—Syriac Texts. By E. A. WALLIS BUDGE. 12s. 6d.

Vol. V.—**The History of the Virgin Mary, and the History of the Likeness of Christ.** Vol. II.—English Translations. By E. A. WALLIS BUDGE. 10s. 6d.

Vol. VI.—**The Reports of the Magicians and Astrologers of Nineveh and Babylon.** Vol. I.—Cuneiform Texts. By R. C. THOMPSON. 12s. 6d.

Vol. VII.—**The Reports of the Magicians and Astrologers of Nineveh and Babylon.** Vol. II.—English Translation and Transliteration. By R. C. THOMPSON. 12s. 6d.

Vol. VIII.—**The Letters and Inscriptions of Hammurabi.** Vol. III.—English Translations, etc. By L. W. KING. 18s.

46, GREAT RUSSELL STREET (OPPOSITE THE BRITISH MUSEUM), LONDON, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000064

مكتبة قطر الوطنية
Qatar National Library

IN MEMORIAM.

THE CORONATION SERVICE OF HER LATE MAJESTY QUEEN VICTORIA,

WITH FRONTISPIECE OF

Her Majesty the Queen-Empress as "Kaisar-i-Hind,"

AND ILLUSTRATIONS: THE CORONATION CROWN, THE CHAIR, THE SCEPTRES, THE ORB THE RING, AND SWORDS OF STATE—JUSTICE, MERCY, AND SPIRITUALITY.
NOTES AND APPENDICES—THE KING'S DECLARATION AND OATH—SECTION OF THE BILL OF RIGHTS—PROTEST BY THE ROMAN CATHOLIC PEERS.

Collated by G. R. BADENOCH, LL.D.

PRICE ONE SHILLING.

LONDON: J. E. HAWKINS, 36, BAKER STREET, W., AND 15, PATERNOSTER ROW, E.C.; AND THE PUBLISHING DEPARTMENT OF THE ORIENTAL INSTITUTE, WOKING, SURREY.

BACK NUMBERS, AND A VERY FEW COMPLETE SETS OF

The Asiatic Quarterly Review

since its foundation in 1886, are still available at the ordinary rate of 5s. per number of 240 or more pages each. As a considerable proportion of the articles contained in them are contributions from specialists, statesmen, and other leading men, which have not appeared in any other form, they constitute a Thesaurus of invaluable information on subjects connected with Oriental Politics, Learning, Travels, etc., which are unobtainable elsewhere, and which throw light on many obscure questions now coming to the front. A list of the contents of the back numbers of the *Asiatic Quarterly Review* will be supplied on application to Manager, *Asiatic Quarterly Review*, Woking.

TO ANNUAL SUBSCRIBERS OF, AND REGULAR ADVERTISERS IN, "THE ASIATIC QUARTERLY REVIEW."

Annual subscribers on the list of ***The Asiatic Quarterly Review***, and regular advertisers in the same, are entitled to obtain the publications of the Oriental University Institute, a list of which will be found, as an inset, among the advertisements, at a reduction of 33 per cent. from the published price, as also to a discount of 25 per cent. on all books and printing work ordered through the undersigned. Literary and scientific advertisements of special interest to Orientalists and to residents in Eastern countries, that appear in this Review, will also be reprinted, if there be room, in ***The Journal of the East India Association***, or will be inserted as insets, in such publications of the Oriental University Institute, in which their appearance may be considered to be appropriate.

THE MANAGER OF THE
Publishing Department of the Oriental Institute,
WOKING.

THE
IMPERIAL & ASIATIC QUARTERLY REVIEW

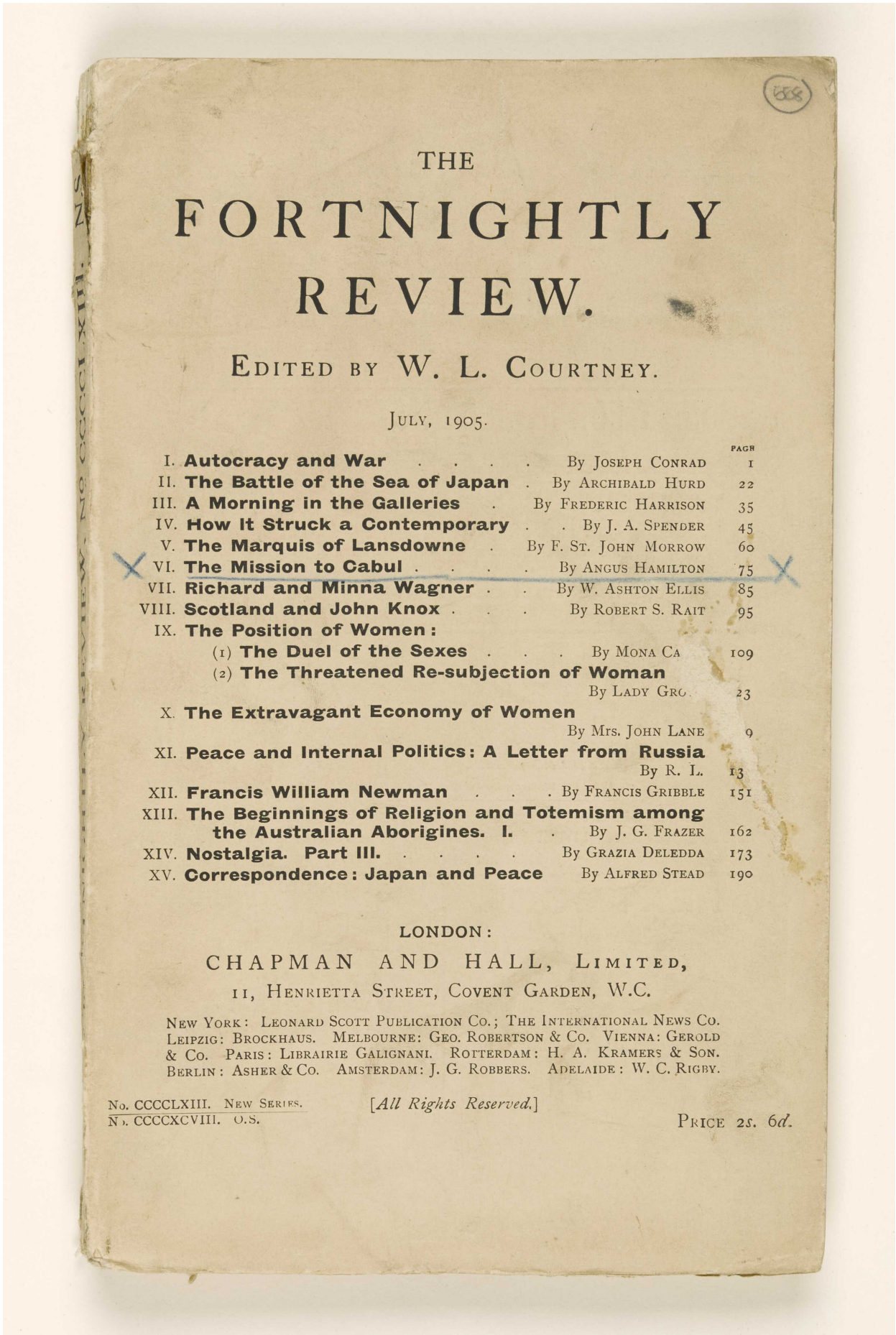
Can be obtained from the following AGENTS:

LONDON: Simpkin, Marshall, Hamilton, Kent, & Co., Ltd., E.C. (*for the Trade*). H. Sotheran & Co., 37, Piccadilly, W. Luzac & Co., Great Russell St., W.C.
FRANCE: PARIS and NICE: Galignani Library.
GERMANY: BERLIN: Friedlander & Son, 11, Carlstrasse. LEIPZIG: O. Harrassowitz, 14, Querstrasse; K. W. Hiersemann, 3, Konigsstrasse.
HOLLAND.—AMSTERDAM: Kirberger & Kesper.
ITALY: ROME: E. Loesche & Co., 307, Corso. FLORENCE: B. Seeber, 20, via Tornabuoni.
TURKEY—CONSTANTINOPLE: Otto Keil.
S. AFRICA.—CAPE TOWN: J. C. Juta & Co.
UNITED STATES & AMERICA: The Biblia Publishing Co. Meriden, Conn.
AUSTRALIA: SYDNEY: Turner & Henderson. MELBOURNE: Melville, Mullen & Slade; G. Robertson & Co.
INDIA: CALCUTTA: Thacker, Spink & Co. BOMBAY: Thacker & Co.; E. Seymour Hale. MADRAS: Higginbotham & Co.
CHINA.—SHANGHAI: Kelly & Walsh.
JAPAN.—KOBE: The *Hyogo News*.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00006b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



THE

FORTNIGHTLY REVIEW.

EDITED BY W. L. COURTNEY.

JULY, 1905.

			PAGE
I.	**Autocracy and War**	By JOSEPH CONRAD	1
II.	**The Battle of the Sea of Japan**	By ARCHIBALD HURD	22
III.	**A Morning in the Galleries**	By FREDERIC HARRISON	35
IV.	**How It Struck a Contemporary**	By J. A. SPENDER	45
V.	**The Marquis of Lansdowne**	By F. ST. JOHN MORROW	60
VI.	**The Mission to Cabul**	By ANGUS HAMILTON	75
VII.	**Richard and Minna Wagner**	By W. ASHTON ELLIS	85
VIII.	**Scotland and John Knox**	By ROBERT S. RAIT	95
IX.	**The Position of Women:**		
	(1) **The Duel of the Sexes**	By MONA CA	109
	(2) **The Threatened Re-subjection of Woman**	By LADY GRO	23
X.	**The Extravagant Economy of Women**	By Mrs. JOHN LANE	9
XI.	**Peace and Internal Politics: A Letter from Russia**	By R. L.	13
XII.	**Francis William Newman**	By FRANCIS GRIBBLE	151
XIII.	**The Beginnings of Religion and Totemism among the Australian Aborigines. I.**	By J. G. FRAZER	162
XIV.	**Nostalgia. Part III.**	By GRAZIA DELEDDA	173
XV.	**Correspondence: Japan and Peace**	By ALFRED STEAD	190

LONDON:

CHAPMAN AND HALL, LIMITED,

11, HENRIETTA STREET, COVENT GARDEN, W.C.

NEW YORK: LEONARD SCOTT PUBLICATION CO.; THE INTERNATIONAL NEWS CO.
LEIPZIG: BROCKHAUS. MELBOURNE: GEO. ROBERTSON & CO. VIENNA: GEROLD & CO. PARIS: LIBRAIRIE GALIGNANI. ROTTERDAM: H. A. KRAMERS & SON.
BERLIN: ASHER & CO. AMSTERDAM: J. G. ROBBERS. ADELAIDE: W. C. RIGBY.

No. CCCCLXIII. NEW SERIES.
No. CCCCXCVIII. O.S.

[*All Rights Reserved.*]

PRICE 2*s.* 6*d.*

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000066

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CALLARD & BOWSER'S

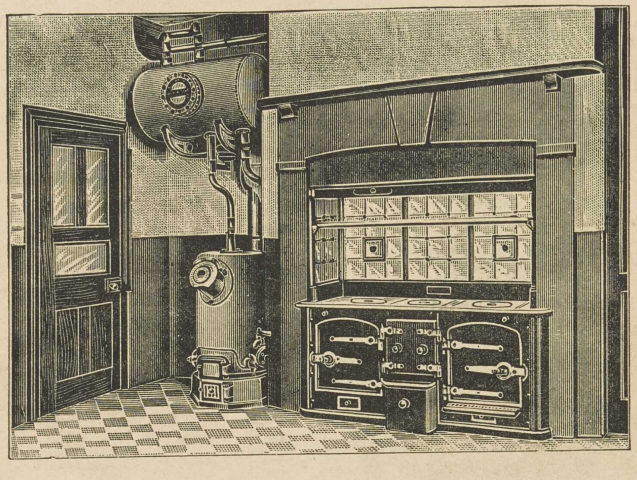
BUTTER-SCOTCH

(The Celebrated Sweet for Children).

"Really wholesome Confectionery" Lancet.

MANUFACTORY: LONDON, W.C.

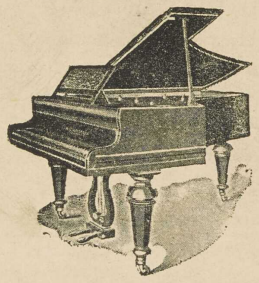
BENHAM & SONS, LTD.



BENHAM'S "WIGMORE" KITCHENER, with Roasting Fire; and independent Hot Water System, suitable for Country Houses. Hot Water may be obtained at any hour by this System to satisfy all requirements.

KITCHEN FITTINGS, COOKING UTENSILS.

66 WIGMORE STREET, LONDON, W.



CRAMER PIANOS.

NEW MODELS { PIANETTES ... ... 25 Gns.
FULL COTTAGE UPRIGHTS ... 36 ,,
UPRIGHT GRANDS ... 45 to 95 ,,

ON HIRE PURCHASE SYSTEM,

OR LIBERAL DISCOUNT FOR CASH.

J. B. CRAMER & CO., Ltd.
126 OXFORD STREET, W.; and 46 MOORGATE STREET, E.C.

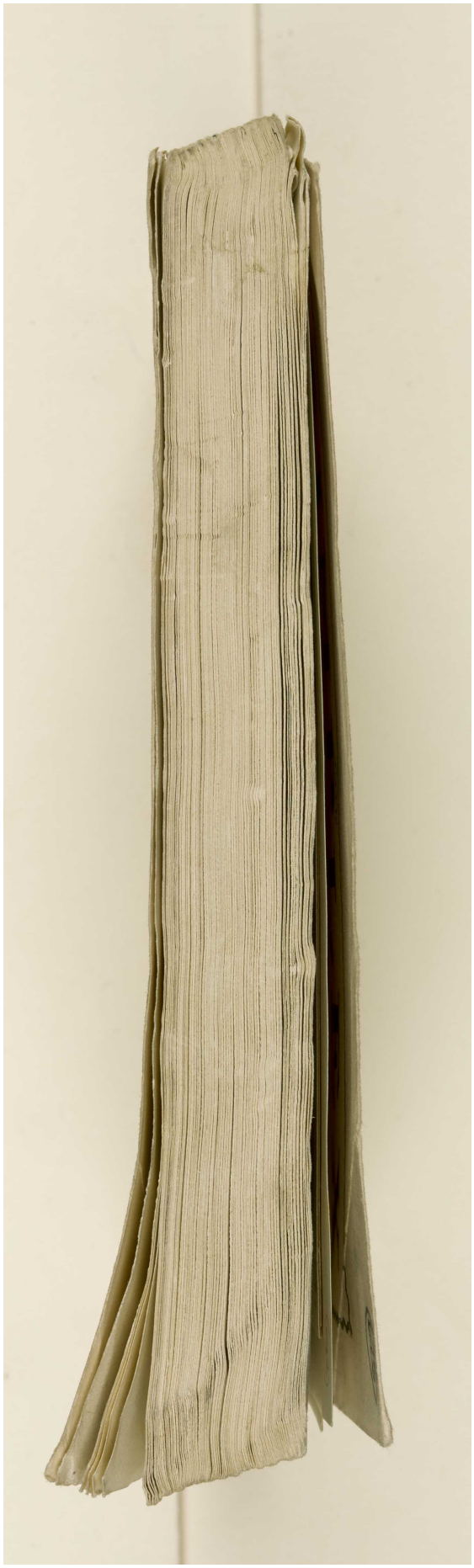
R. CLAY AND SONS, LTD., BREAD STREET HILL, E.C.] [AND BUNGAY, SUFFOLK.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000034

مكتبة قطر الوطنية
Qatar National Library

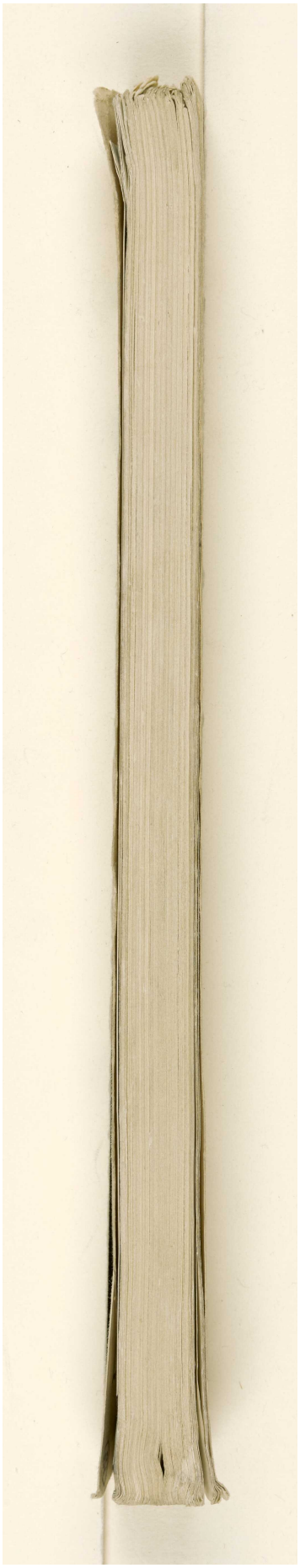
BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000072

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000007

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

HENRY SOTHERAN & CO.,

Booksellers, Bookbinders, and Publishers.

GENERAL AGENTS for PRIVATE BOOKBUYERS and PUBLIC INSTITUTIONS

IN INDIA, THE COLONIES, AMERICA, and ABROAD.

A MONTHLY CATALOGUE of SECOND-HAND BOOKS. Specimen Number post free.

LIBRARIES PURCHASED, VALUED FOR PROBATE, or CATALOGUED.

Telegraphic Address, BOOKMEN, LONDON. Codes, UNICODE and A B C. Telephone—Central 1515.

140, STRAND, W.C., and 37, PICCADILLY, W.

SOCIETY FOR RELIEF OF PERSECUTED JEWS

(SYRIAN COLONIZATION FUND).

President:—LORD AMHERST OF HACKNEY.

TORTURE and MASSACRE of JEWS has continued this year, and there have been many bad outbreaks. Jews, therefore, leave Russia, where there is no safety for their wives or children. Very few can be received here. **THIS SOCIETY ENDEAVOURS TO RELIEVE,** by food and work, the misery of some of the thousands who have found refuge at Jerusalem. Owing to the long and serious illness of the Secretary, the work at Abraham's Vineyard (where **70** Jews have been employed) was for a time suspended. **1,500 Families** of aged, sick, and blind are on our registry for relief.

WE ASK FOR FUNDS, as the winter has added to the chronic distress of these poor in their miserable homes. **WORK, FOOD,** and **FUEL** are **URGENTLY NEEDED.** There is much illness, Scarlet Fever, Measles, &c., among them.

DONATIONS THANKFULLY RECEIVED by :—

F. A. BEVAN, Esq., *Hon. Treasurer*, 54 Lombard Street, E.C., and by
E. A. FINN, *Secretary*, 41 Parliament Street, S.W.

ORME & SONS, LTD.

Billiard Table Builders to H.M. King Edward VII.

Established 1845.

OLD TABLES REMODELLED. *ESTIMATES FREE.*

Send for the illustrated catalogue "TABLES FULL SIZE 1905."

16 Soho Square, LONDON.
53 North John Street, LIVERPOOL.
69 West Nile Street, GLASGOW.
The Parsonage, MANCHESTER.
43 Arthur Street, BELFAST.

PEATMOOR
OLD SCOTCH
WHISKY

"SOFT, MELLOW, DELIGHTFUL.
Carries the Wild Rough Scent
of the Highland Breeze."

DELICIOUS COFFEE
RED WHITE & BLUE
FOR BREAKFAST AND AFTER DINNER.

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006d

مكتبة قطر الوطنية
Qatar National Library

NOTICE TO ADVERTISERS.—All questions relating to Advertisements in this Review must be addressed to the Sole Contractors, Messrs. R. ANDERSON & CO., 14, Cockspur Street, Charing Cross, S.W.

A SINGLE TRIAL of the . . .

"SWAN" Fountain Pen

will convince you that it has no equal. When once used it cannot be dispensed with. All pens are changeable within seven days if not suited to the hand.

Mr. ROBERT BARR, Editor of *Idler*, writes:—

"I have used a 'SWAN' Pen for many years, and although it is sometimes inaccurate in spelling, it writes perfectly."

TRY IT! BUY IT!



Improved Size 3 "Swan." Plain, 16/6; mounted, 21/-, post free.

Sold by Stationers and Jewellers, 10/6 to £20. *Write for Catalogue.*

MABIE, TODD & BARD, 79 and 80 High Holborn, London, W.C.; 93 Cheapside, E.C.; 95a Regent Street, W., London; 3 Exchange St., Manchester. And at Paris, New York, and Chicago.

KEITH'S PERFECT
"CADZOW"
(10 Year Old)
INCOMPARABLE **WHISKY**



The LANCET says, June 17, 1898: "Thoroughly matured. Its character, in regard especially to taste and aroma, is quite consistent with the statement that this Whisky is kept in bond from ten to thirteen years."

GRANVILLE H. SHARP says: "Possesses an especially fine aroma and flavour that is only obtainable by time."

44s. per doz. Case, Carriage Paid.
Sample Bottle, 4s. Carriage Paid.

Cash with Order or Reference.

JAMES KEITH, HAMILTON, N.B.

DRINK
KALSBECK-LITHIA

It will dissolve five times more Uric Acid than Pure Distilled Water, and is therefore an Ideal Table Water for GOUT, RHEUMATISM, ACIDITY, &c.

Purifies the Blood.

Makes Whisky Soft and Mellow.

Sold everywhere, or Carriage paid from the Sole Proprietors,

REID & DONALD, Perth, N.B.

CEREBOS TABLE SALT

One pinch of "CEREBOS" makes the whole Food strong.

GENERAL LIFE ASSURANCE COMPANY.

ESTABLISHED 1837.

Chief Office: 103, Cannon Street, London, E.C.

BOARD OF DIRECTORS.

ALFRED JAMES SHEPHEARD, Esq., Chairman.
Lord ARTHUR CECIL, Deputy-Chairman.
JOHN ROBERT FREEMAN, Esq.
Hon. R. C. GROSVENOR.
WILLIAM MULLER, Esq.
CHARLES PRICE, Esq.
HENRY WILLIAM RIPLEY, Esq.
ROBT. HENRY SCOTT, Esq., F.R.S., D.Sc.
THOMAS MCKINNON WOOD, Esq., LL.D.

CAPITAL, £1,000,000. FUNDS IN HAND, £2,000,000.

A PERMANENT REDUCTION of TEN per cent. made to Clergymen, and Ministers of all denominations.

Double advantage policies issued securing **two payments** of the amounts assured—one payment on the attainment of a specified age, and a second payment at death thereafter.

JOHN ROBERT FREEMAN, Manager and Secretary.

Burrow's Malvern Water



The Great PROTECTION against the Danger of TYPHOID from drinking Impure Water.

b

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008c

مكتبة قطر الوطنية
Qatar National Library

IMPORTANT BOOKS ON SPORT, NATURAL HISTORY, &c.

A SELECTED LIST of VALUABLE REMAINDERS (New as Published), Offered at GREATLY REDUCED PRICES, by

W. H. SMITH & SON,

186 STRAND, LONDON, W.C.

	Pub. at	Reduced to
	s. d.	*s. d.*

Sportsman's Library, The. Edited by the Right Hon. Sir HERBERT MAXWELL, Bart., M.P. Large-Paper Edition, limited to 200 copies, Two Guineas a Volume. Also obtainable in Sets only, in fine leather bindings. Prices on application. 7 vols. ... ... 294 0 — 105 0

Vol. I. SMITH, **The Life of a Fox, and the Diary of a Huntsman,** by THOMAS SMITH, Master of the Hambledon and Pytchley Hounds. With Illustrations by the Author, and Coloured Plates by G. H. JALLAND.

* Vol. II. THORNTON, **A Sporting Tour through the Northern Parts of England and Great Part of the Highlands of Scotland,** by Colonel T. THORNTON, of Thornville Royal in Yorkshire. With the Original Illustrations by GARRARD, and other Illustrations and Coloured Plates by G. E. LODGE.

* Vol. III. COSMOPOLITE, **The Sportsman in Ireland,** by A COSMOPOLITE. With Coloured Plates and Black and White Drawings by P. CHENEVIX TRENCH, and Reproductions of the Original Illustrations drawn by R. ALLEN, and engraved by W. WESTALL, A.R.A.

* Vol. IV. BERKELEY, **Reminiscences of a Huntsman,** by the Hon. GRANTLEY F. BERKELEY. With a Coloured Frontispiece and the Original Illustrations by JOHN LEECH, and several Coloured Plates and other Illustrations by G. H. JALLAND.

* Vol. V. SCROPE, **The Art of Deerstalking,** by WILLIAM SCROPE. With Frontispiece by EDWIN LANDSEER, and 9 Photogravure Plates of the Original Illustrations.

* Vol. VI. NIMROD, **The Chase, The Turf, and The Road,** by NIMROD. With a Photogravure Portrait of the Author by D. MACLISE, R.A., and with Coloured Photogravure and other Plates from the Original Illustrations by ALKEN, and several Reproductions of old Portraits.

* Vol. VII. SCROPE, **Days and Nights of Salmon Fishing,** by WILLIAM SCROPE. With Coloured Lithographic and Photogravure Reproductions of the Original Plates.

* These can be had separately, 42/- for 16/6

Bentinck, Lord George Cavendish, M.P., Racing Life and other Reminiscences, by JOHN KENT. Edited by Hon. FRANCIS LAWLEY. With Illustrations. 8vo. ... ... 15 0 — 10 6

Bewick, Thomas, Complete Works. The "Memorial" Library Edition, comprising History of British Birds, with the Woodcuts of the Supplement incorporated, 2 vols.; General History of Quadrupeds, 1 vol.; Æsop's Fables, 1 vol.; and Memoir of Bewick's Life, written by himself, edited by AUSTIN DOBSON, including also the Cuts of the Fishes, 1 vol.; 5 vols. in all. The whole illustrated with all the splendid Wood Engravings for which these works are famous; together, 5 vols., royal 8vo ... ... (*roxburgh, gilt top*) 250 0 — 63 0

Bewick, Thomas, his Life and Times, by ROBERT ROBINSON. With 200 beautiful Illustrations depicting the best Specimens of the Art of the Famous Wood Engraver. Royal 8vo ... ... 50 0 — 12 0

Queen's Hounds, The, and Stag-Hunting Recollections, by Lord RIBBLESDALE, Master of the Buckhounds, 1892—1895. With 24 Plates and 35 Illustrations in the Text, including Reproductions from Oil Paintings in the possession of Her Majesty the Queen, Original Drawings by G. D. GILES, and from Prints and Photographs. 8vo ... ... 25 0 — 8 6

Royal Ascot: its History and its Associations, by G. J. CAWTHORNE and R. S. HEROD. Revised and Enlarged. With numerous Plates and Illustrations in the Text. Royal 8vo ... ... 12 6 — 6 0

Yarrell's History of British Birds. (Fourth Edition.) Illustrated by 464 Wood Engravings, Vols. I. and II., Revised and Enlarged by A. NEWTON, M.A., F.R.S.; Vols. III. and IV., by H. SAUNDERS, F.L.S., F.S.A., &c. 4 vols. 8vo ... ... 80 0 — 60 0

Yarrell's History of British Fishes. Third and Last Edition, with Figures and Descriptions of the additional Species by Sir JOHN RICHARDSON, C.B., and a Memoir, Fine Portrait, and 522 exquisitely engraved Illustrations of all the Species. 2 vols. 8vo ... ... 63 0 — 30 0

Baronetage, A History of the, by FRANCIS W. PIXLEY, Registrar of the Honourable Society of the Baronetage. Crown 4to ... ... 10 0 — 5 0

——— (Large Paper Edition, on hand-made paper) ... ... 21 0 — 10 6

Survey Gazetteer, The, of the British Isles: Topographical, Statistical, and Commercial. Compiled from the last (1901) Census and the latest Official Returns. Edited by J. G. BARTHOLOMEW. With Maps and Plans ... ... (*net*) 17 6 — 10 6

or half morocco 12 6

MONTHLY CATALOGUE (150 pages) of VALUABLE SECONDHAND BOOKS and NEW REMAINDERS at CLEARANCE PRICES may be had on application. Orders received at the Head Office, 186 Strand, W.C., or at the Railway Bookstalls, to which the Books are forwarded Carriage Free.

W. H. SMITH & SONS' LIBRARY.

BRANCHES at all the Railway Bookstalls, to which Subscribers may be transferred.
BOOKS sent by Post or Rail, from the Head Office to all parts of the United Kingdom.
Terms and Particulars on Application.

Head Office: **186 STRAND, LONDON.** | Branches: **RAILWAY BOOKSTALLS.**

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

KEGAN PAUL, TRENCH, TRÜBNER & CO., LTD.

SOME DISTINGUISHED VICTIMS OF THE SCAFFOLD.
By HORACE BLEACKLEY, M.A. Oxon. With Twenty-one Illustrations in Collotype from Old Prints. Royal 8vo, cloth gilt, 10*s.* 6*d.* net.

"Throughout the work the style is vigorous and picturesque, and the author knows the period well, and every picture, terrible, pathetic, or fascinating, has its adequate setting. Moreover, the value of the book is enhanced by a series of rare illustrations admirably reproduced, and by notes on each case, which are both concise and historically valuable."—*Manchester Courier.*

THE QUEEN'S SHILLING. A Soldier's Story. By Major ARTHUR GRIFFITHS. Crown 8vo, 3*s.* 6*d.*

THE LIFE STORY OF CHARLOTTE DE LA TRÉMOILLE, COUNTESS OF DERBY. By MARY C. ROWSELL. Demy 8vo, with Frontispiece, 6*s.* net.

"The book is well worth reading, Miss Rowsell having both knowledge and literary ability. We approve of her lengthy account of the siege of Lathom House, during which the Countess, in the absence of her husband, kept at bay the Parliamentary forces. The book is eminently readable, and contains an excellent reproduced portrait of the brave and heroic Countess."
—*Publishers' Circular.*

THE ORIGIN OF THOUGHT AND SPEECH. By M. MONCALM. Translated from the French by G. A. WHITMARSH. Demy 8vo, 9*s.*

"M. Moncalm has studied his perplexing and mystifying subjects so profoundly that his book deserves the most respectful treatment."—*Westminster Gazette.*

SPECIES AND VARIETIES: their Origin by Mutation.
Lectures delivered at the University of California. By HUGO DE VRIES. Price 21*s.* net.

"The book is certainly a credit to author, editor, and publishers, being clearly and well printed, and it will especially appeal to the general reader owing to the simple and, as far as possible, untechnical language used throughout. The work is likely to prove a text-book for some time to come."—*Field.*

AMBIDEXTERITY; or, Two-handedness and Two-brained-ness; being an Argument for Rational Education. By JOHN JACKSON, F.E.I.S., Founder and Hon. Sec. of the Ambidextral Culture Society; Founder of the System of Upright Penmanship; Author of "The Theory and Practice of Handwriting," &c. With an Introduction by Major-General R. S. S. BADEN-POWELL, C.B. With Illustrations. Demy 8vo, 6*s.* net.

"The book, in a word, is a thorough and instructive treatise on its subject, indispensable to everyone who takes an active interest in promulgating the important educational idea which it subserves."—*Scotsman.*

THE DRYDEN LIBRARY.

Each volume 6 in. by 3¾ in. 1*s.* 6*d.* net in cloth, 2*s.* net in leather.

AUSTIN DOBSON. Selected Poems. With Frontispiece by GEORGE H. BOUGHTON, R.A.

THE BOOK OF PSALMS. Translated by Canon T. K. CHEYNE, D.D.

SHAKSPERE'S SONNETS. Edited by Prof. EDWARD DOWDEN. With Frontispiece.

CHAUCER'S CANTERBURY TALES. 2 vols. Edited by A. W. POLLARD.

BURNS' POEMS. Selected and Edited by ANDREW LANG.

A New Work by JAMES A. B. SCHERER, Ph.D., LL.D.

YOUNG JAPAN. The Story of the Japanese People, and especially of their Educational Development. Crown 8vo, price 6*s.* net.

KEGAN PAUL, TRENCH, TRÜBNER & CO., LIMITED,
DRYDEN HOUSE, 43 GERRARD STREET, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000045

مكتبة قطر الوطنية
Qatar National Library

CHATTO & WINDUS'S NEW BOOKS

Messrs. CHATTO & WINDUS have pleasure in announcing that they have commenced the issue of A COLLECTED EDITION of

MR. SWINBURNE'S TRAGEDIES

IN FIVE CROWN 8vo VOLUMES, price **6s.** net each Volume, or **30s.** net for the Five Volumes. Subscriptions can be accepted only for Complete Sets.

The First Volume, containing the Two Plays THE QUEEN-MOTHER and ROSAMOND, is now ready.

The Paper, Printing, and Binding of the Volumes will be uniform with those of the POETICAL WORKS.

The Contents of the Volumes will be as follows:—

Vol. 1. **The Queen-Mother. Rosamond.**
Vol. 2. **Chastelard. Bothwell,** Acts I. and II.
Vol. 3. **Bothwell,** Acts III., IV., and V.
Vol. 4. **Mary Stuart. Appendix:** Mary Queen of Scots.
Vol. 5. **Locrine. The Sisters. Marino Faliero. Rosamund, Queen of the Lombards.**

Messrs. CHATTO & WINDUS have also pleasure in announcing that they are publishing THREE NEW VOLUMES by

ROBERT LOUIS STEVENSON.

Crown 8vo, buckram, gilt top, **6s.** each.

Entitled respectively—

1. **ESSAYS OF TRAVEL.** [*Ready.*
2. **TALES AND FANTASIES.** [*July 6.*
3. **ESSAYS IN THE ART OF WRITING.** [*Sept.*

None of the contents of these three volumes have before been printed in book form, excepting in the EDINBURGH EDITION. The following is a List of the Essays and Stories included in the Volumes:—

Essays of Travel.—The Amateur Emigrant: From the Clyde to Sandy Hook. Cockermouth and Keswick. An Autumn Effect. A Winter's Walk in Carrick and Galloway. Forest Notes. A Mountain Town in France. Rosa quo Locorum. The Ideal House. Davos in Winter. Health and Mountains. Alpine Diversions. The Stimulation of the Alps. Roads. On the Enjoyment of Unpleasant Places.

Tales and Fantasies.—The Misadventures of John Nicholson. The Body-Snatcher. The Story of a Lie.

Essays in the Art of Writing.—On Some Technical Elements of Style in Literature. The Morality of the Profession of Letters. Books which have Influenced Me. A Note on Realism. My First Book: "Treasure Island." The Genesis of, and Preface to, "The Master of Ballantrae."

RECOLLECTIONS OF ROBERT LOUIS STEVENSON IN THE PACIFIC. By ARTHUR JOHNSTONE. With Portrait and Facsimile Letter. Crown 8vo, cloth, gilt top, 6*s.* net.

SOUTH SEA IDYLS: Summer Cruising in the South Seas. By C. WARREN STODDARD, Author of "The Island of Tranquil Delights." A NEW IMPRESSION. Post 8vo, cloth, 6*s.* net.

THE WILD MARQUIS: Life and Adventures of ARMAND GUERRY DE MAUBREUIL. By ERNEST A. VIZETELLY, Author of "With Zola in England." Crown 8vo, cloth, gilt top, 6*s.*

NEW SIX-SHILLING NOVELS.

STINGAREE. By E. W. HORNUNG, Author of "A Bride from the Bush," &c.
THE MISSING ELIZABETH. By ADELINE SERGEANT, Author of "The Story of a Penitent Soul."
DON TARQUINIO. By FR. ROLFE, Author of "Hadrian the Seventh."
BALIOL GARTH. By ALGERNON GISSING, Author of "A Secret of the North Sea."
THE PHANTOM TORPEDO-BOATS. By ALLEN UPWARD, Author of "The Prince of Balkistan."
THE ERROR OF HER WAYS. By FRANK BARRETT, Author of "Fettered for Life."
A SPOILER OF MEN. By RICHARD MARSH, Author of "The Beetle."
THE YOUNGEST MISS BROWN. By FLORENCE WARDEN, Author of "The House on the Marsh."
THE MILLIONAIRE BABY. By ANNA KATHARINE GREEN, Author of "The Leavenworth Case."

NEW THREE-AND-SIXPENNY STORIES.

CLOCLO. By GYP. Translated by NORA M. STATHAM.
THE POET AND THE PIERROT. By DOROTHEA DEAKIN, Author of "The Smile of Melinda."
WHEN A GIRL'S ENGAGED. By HOPE MERRICK.
A RAINY JUNE, and other Tales. By OUIDA.

LI TING OF LONDON. By GEORGE R. SIMS ("Dagonet"), Author of "Mary Jane's Memoirs." Fcap. 8vo, picture cover, 1*s.*; cloth, 1*s.* 6*d.*
TAKEN FROM THE ENEMY. By HENRY NEWBOLT, Author of "Admirals All." A NEW IMPRESSION. Fcap. 8vo, picture cover, 1*s.*
HANDLEY CROSS. By ROBERT SURTEES. Illustrated by JOHN LEECH. CHEAPER ISSUE. Post 8vo, picture cover, 1*s.*

THE ST. MARTIN'S LIBRARY.

NEW VOLUMES IN THE PRESS.

Printed in clear type on fine paper; full size of page, 6½ by 4⅛ inches. Pott 8vo, cloth, gilt top, 2*s.* net each; leather, gilt edges, 3*s.* net each.

MACAULAY'S History of England. In Five Volumes and [*Vol. V. just ready.*
JUSTIN McCARTHY'S The Reign of Queen Anne. In One Volume;
A History of the Four Georges and of William IV. In Two Volumes; and
A History of Our Own Times, from the Accession of Queen Victoria to 1897. In Three Volumes.
By Sir WALTER BESANT. **Sir Richard Whittington.**
Gaspard de Coligny.
By ROBERT LOUIS STEVENSON. **The Merry Men.**

NEW SIXPENNY COPYRIGHT NOVELS.

Dorothy Forster. By Sir WALTER BESANT.
Lost Sir Massingberd. By JAMES PAYN.
God and the Man. By ROBERT BUCHANAN.
Red Spider. By S. BARING GOULD.
Chandos. By OUIDA.
A Bird of Passage. By B. M. CROKER.
Paris. By ÉMILE ZOLA.
A Terrible Temptation. By CHARLES READE.
Lourdes. By ÉMILE ZOLA. [*Shortly.*

London: CHATTO & WINDUS, 111 St. Martin's Lane, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00000e

مكتبة قطر الوطنية
Qatar National Library

GEORGE NEWNES, LIMITED.

LATER PEEPS AT PARLIAMENT. By H. W. LUCY

("Toby, M.P.," of *Punch*), with over 300 illustrations by "F.C.G." (F. Carruthers Gould). Demy 8vo, **7s. 6d.** net.

Athenæum.—"We welcome Mr. Lucy's most entertaining volume, which also yields some of the most admirable of the caricatures of 'F. C. G.'"

Daily Chronicle.—"He (Mr. Lucy) has become a depository of Parliamentary stories gathered from men on all sides of the House, and he tells them in a manner which furnishes us with very pleasant reading."

NEWNES' ART LIBRARY.

Each volume contains about sixty-four full pages in monochrome and a Frontispiece in photogravure. These are in many cases made from works which have not previously been reproduced. Each Volume also contains a list of the principal works of the Artist. **3s. 6d.** net.

BOTTICELLI. By Richard Davey.
SIR JOSHUA REYNOLDS. By A. L. Baldry.
CONSTABLE'S SKETCHES. By Sir James D. Linton, R.I.
VELASQUEZ. By A. L. Baldry.
GOZZOLI. By Hugh Stokes.
RAPHAEL. By Edgcumbe Staley.
VAN DYCK. By Hugh Stokes.
G. F. WATTS. By Dr. R. Pantini.
TINTORETTO. By Mrs. Arthur Bell.
PAOLO VERONESE. By Mrs. Arthur Bell.
BURNE-JONES. By Malcolm Bell.
Early Works of TITIAN. By Malcolm Bell.
FILIPPINO LIPPI. By P. J. Konody.

Studio.—"Messrs. Newnes' now celebrated series devoted to the Great Masters . . . excellently reproduced, and apparently considerable trouble has been taken to secure reproductions of some of the less known and least accessible of the painters' chief works."

*** *Other Volumes in preparation.*

NEWNES' LIBRARY OF THE APPLIED ARTS.

A series of Volumes for those interested in the Applied Arts of the past, providing information of really practical value to collectors and students. Particular attention has been paid to the Illustrations, which are both numerous and of the highest quality, and include both Monochromes and Subjects in Colour. Crown 8vo, cloth, gilt top, **7s. 6d.** net.

DUTCH POTTERY AND PORCELAIN. By W. Pitcairn Knowles.
OLD ENGLISH FURNITURE. By Frederick Fenn.
ENGLISH EMBROIDERY. By A. F. Kendrick.
ENGLISH TABLE GLASS. By Percy Bate.

LIBER STUDIORUM OF J. M. W. TURNER.

With Introduction by C. F. Bell. *10s. 6d.* net. Contains reproductions of the entire series of seventy-one plates, each on a page measuring 11¾ in. by 8¾ in. Full justice has been done to the original plates in the method of reproduction, the tints being accurately copied, and every detail brought out in the clearest manner.

St. James's Gazette.—"Another excellent piece of work in the matter of reproduction . . . An entirely fascinating collection of plates."

IMPERIAL JAPAN: the Country and its People. By George William Knox.

With 22 full-page Illustrations. Large Crown 8vo, gilt top, **7s. 6d.** net.

Manchester Guardian.—"Deserves attention as a well-informed and serious essay. . . . A sane and balanced estimate enlivened by agreeable reminiscences."

Athenæum.—"A more critically honest and informed delineation of that most interesting folk has not come under our notice."

China Telegraph.—"Alike correct and sensible."

DRAWINGS BY GREAT MASTERS.

The Drawings in this new series are reproduced on a large scale on a page 11¾ in. by 8¾ in. The volumes each contain 48 reproductions, many of them printed in tints, and of these four or five are mounted on a coloured paper in harmony with the tint in which the illustration is printed. The volumes are bound in delicately tinted paper boards with vellum backs, with a beautiful design printed in three colours. 4to, **7s. 6d.** net each.

HOLBEIN. By A. Lys Baldry.
ALBRECHT DÜRER. By Dr Hans Singer.

Manchester Guardian.—"Is sure of a welcome. The reproductions are printed with unusual care."

MODERN MASTER DRAUGHTSMEN.

Uniform with "Drawings by Great Masters." **7s. 6d.** net each.

DRAWINGS OF BURNE-JONES. By T. Martin Wood.
DRAWINGS OF J. M. SWAN, R.A. By A. Lys Baldry.
DRAWINGS OF SIR E. J. POYNTER, P.R.A. By Malcolm Bell.

SHORTLY.

DRAWINGS OF DAVID COX. By A. J. Finberg.
DRAWINGS OF ROSSETTI. By T. Martin Wood.

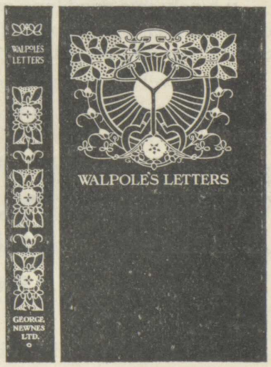
Daily Telegraph.—"The books are not too thick or heavy, but just large enough to give an appropriate rendering of detail and a fair reproduction to large compositions, and the plain grey bindings are excellently designed . . . the reproductions of these, some of them tinted, are especially fine."

NEWNES' THIN PAPER CLASSICS.

These charming and portable volumes are small enough for the pocket (6¾ in. by 4 in. and ¾ in. thick), yet large enough for the bookshelf. Printed in large type on thin but thoroughly opaque paper, with Photogravure Frontispiece and Title-page to each Volume printed on Japanese vellum, and in a dainty binding, they make an ideal present.

Cloth, **3s.**; limp lambskin, **3s. 6d.** net per volume.

Pepys' Diary.
Keats' Poems.
Poe's Tales.
Captain Cook's Voyages.
Marco Polo's Travels.
Rossetti's Early Italian Poets.
Autobiography of Benvenuto Cellini.
The Poems of Samuel Taylor Coleridge.
Homer's Iliads. Translated by George Chapman.
Homer's Odysseys and Shorter Poems. Translated by George Chapman.
Swift's Journal to Stella.
Ben Jonson's Plays and Poems.
Herrick's Poems.
Evelyn's Diary.
Lamb's Works.
The Vision of Dante.
Peacock's Novels.
Boswell's Life of Dr. Johnson. 2 vols.
Hawthorne's New England Romances.
Tennyson's Poems.
Poems of Wordsworth.
The Shorter Works of Walter Savage Landor.
Letters of Horace Walpole.
The Ingoldsby Legends.
Mrs. Browning's Poems. 2 vols.
Shakespeare. 3 vols.
Milton's Poems.
Burns' Poems.
Don Quixote.
Bacon's Works.
Shelley's Poems.



Pall Mall Gazette.—"The 'Thin Paper Classics' is keeping well ahead of everything else we know of in its own particular line. The selection of works for it has never yet descended in standard from the highest; and yet it is as various and comprehensive as any reasonable mind could wish."

GEORGE NEWNES, Limited, 3 to 12, Southampton Street, Strand, London, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000a

مكتبة قطر الوطنية
Qatar National Library

HAVE YOU SEEN

POVERTY BAY,

HARRY FURNISS'S REMARKABLE AND UNCONVENTIONAL NOVEL?

If not, READ WHAT THE PAPERS SAY ABOUT THE STORY.

Here are a few of the critics' epithets:

"Bizarre," "fantastical," "readable," "amusing."—DAILY TELEGRAPH.
"Graceful," "firm," "effective."—MANCHESTER COURIER.
"Humorous," "various," "versatile."—MORNING LEADER.
"Whimsical," "shrewd," "scathing."—DAILY EXPRESS.

READ, TOO, WHAT THEY SAY ABOUT THE PICTURES.

"Broad, critical caricature," "daintiness," "pathetic," "picturesque."
—PALL MALL GAZETTE.
"Graceful women and pretty scenes," "delightful."—EVENING STANDARD.
"Harry Furniss at his best."—DAILY EXPRESS.
"Easily first among his contemporaries of the pencil."—BYSTANDER.

POVERTY BAY.

A NONDESCRIPT NOVEL.

By HARRY FURNISS, Illustrated by the Author.

Square crown, 6/-

Miss Syrett's New Novel.

Crown 8vo, 6/-

THE DAY'S JOURNEY.

By NETTA SYRETT.

"Finely imagined, and written with sincere emotion. . . . If you like books which help you to understand your fellow creatures, you should certainly not miss 'The Day's Journey.'"—Mr. H. HAMILTON FYFE in the *Evening News*.

"A novel of singular maturity."—MORNING LEADER.

"The story moves, and there is clever handling both of dialogue and of the play of emotion."—TIMES.

"Miss Syrett has thought and she has felt."—THE OUTLOOK.

THE DAY'S JOURNEY.

By NETTA SYRETT.

LONDON: CHAPMAN AND HALL, LTD., 11 HENRIETTA ST., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

A MOST REMARKABLE ENTHUSIASM

Has greeted the Publication of

Mr. H. G. WELLS'S

Imaginative and Picturesque Sociological Study,

A MODERN UTOPIA

and the critics are unanimous in considering it
. his FINEST and MOST POPULAR WORK .

READ THEIR OPINIONS.

THE ATHENÆUM says:

"THERE HAS BEEN NO WORK OF THIS IMPORTANCE PUBLISHED FOR THE LAST THIRTY YEARS.

"IT IS AN AMAZINGLY ABLE CONSTITUTION, AND ONE WONDERS THAT IT SHOULD BE THE OUTCOME OF A SINGLE MIND.

"THIS ASTONISHING BOOK IS A PIECE OF WORK WHICH EMBODIES IMAGINATIVE SCIENCE AT ITS HIGHEST."

"'A Modern Utopia' ought to set people talking and discussing. Mr. Wells's ideas are always stimulating and crisply expressed. Domestic politics would become interesting again if Mr. Wells could convert a few statesmen to his way of thinking."—*Daily Telegraph.*

"The book has high value, and a significance that should not be overlooked, for it indicates both clearly and with some gaiety the course which civic and spiritual endeavours should follow if the world is not to revert to the type established in the Middle Ages."—*Morning Post.*

"Mr. Wells's book is interesting precisely because it challenges criticism and opposition. It is a book of great originality, the result of real thinking—a criticism of life by an acute and reflective observer who throws his work into a most attractive form."—*Westminster Gazette.*

"Broadly conceived and brilliantly written. . . . Full of profound thought, of brilliant imaginative effort, with a background of sociological and economical possibilities which will stimulate interest in many world-problems of to-day."—*Daily Chronicle.*

"The work is crowded with thought and suggestion, with all those characteristics of candour and sincerity which have made Mr. Wells the author perhaps best worth reading of modern English writers engaged in the function of prophecy."—Mr. C. F. G. MASTERMAN in the *Daily News.*

"Mr. Wells's is much the most scientific and sensible construction of a Future based on the Present that I have ever read."—Mr. H. HAMILTON FYFE in *Evening News.*

Mr. H. G. WELLS'S Finest Work:

A MODERN UTOPIA

Illustrated by EDMUND J. SULLIVAN.

Crown 8vo . . . 7s. 6d.

LONDON: CHAPMAN & HALL, LTD., 11 HENRIETTA STREET, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000061

مكتبة قطر الوطنية
Qatar National Library

"One of the most powerful and cogent indictments of the whole Russian System which has yet been published in English."
—THE WORLD.

RUSSIA IN REVOLUTION

By G. H. PERRIS,

Author of "Leo Tolstoy, the Grand Mujik," "The Further Memoirs of Marie Bashkirtseff," "The Eastern Crisis and British Policy," &c.

With Portraits and Illustrations. Demy 8vo, 10s. 6d. net.

"What is passing at present is not a simple riot, but a revolution."—Prince TROUBETSKOY, President of the Moscow Zemstvo, to Prince SVIATOPOLK-MIRSKY, December, 1904.

CONTENTS:

PART I.—A BLACK HERITAGE.

Mise-en-scène—The Oligarchy—The Land without Law—The Underworld: Mendel Rosenbaum's Story—The Old Bastille—Annals of Schlusselburg—Siberian Exile as it is—Russia's "Ile du Diable"—The Budget—Debt and Drink—The Tariff—A Sick Society—The Final Crime.

PART II.—PIONEERS OF REVOLUTION.

The Propagandists, 1870–74: Nicholas Tchaykovsky's Narrative—The Tsar's Vengeance: Madame Kovalsky's Narrative—Felix Volkhovsky—Sergius Stepniak and Terrorism—The New Generation: Dr. Soskice; Mark Broido—The Rise of the Labour Movement: Father Gapon.

PART III.—THE AWAKENING.

The End of Plehve—"Bloody Sunday" and after—Terrorists and Reformers—The Prospects of the Revolution.

FROM THE FIRST REVIEWS.

"One thinks of Ibsen's remark to a Russian exile, as one reads over Mr. Perris's new book—'What a splendid tyranny you have to fight against!' For the story of the revolution in Russia, if it is a chronicle of cruelty, stupidity, and unimagined misery, is also the splendid record of a heroism and a daring which one could parallel in no other country of modern Europe. Mr. Perris has seen much more than the pathos of his story, and he has seen it from the standpoint which the martyrs themselves would have chosen. Suffering on such a scale, wilfully courted, and gallantly endured, becomes something almost glorious and beautiful. . . . The best part of his book consists in the full and vivid sketches which he supplies, often in their own words, of the careers of the leaders of the revolution. It is a vivid and accurate piece of work, commendably free from exaggeration, and yet inspired by enthusiasm. It is much of it a first-hand narrative, and where it is based on documents these are invariably authoritative. The chapters on the Russian Government, on the lawlessness of the administration, on finance, and on the tariff are careful, reliable, and clear. Mr. Perris's aim was to explain the revolutionary movement to English readers, and this he has done with an admirable fulness and a wise sympathy. His book is at once a valuable political essay and an intensely moving human document."—H. N. BRAILSFORD in *The Morning Leader*.

"A book of blood and tears. The story begins at the beginning. The author shows how a despotic Government based originally on the need for self-defence has become an engine of exploitation and conquest, with which the newer economic forces are inevitably in direct conflict. The result has been the destruction of any true Government or Law. In industrial matters, the author brings the same indictment of arbitrary, and, in fact, stupid mismanagement against the Government. It is, in fact, their stupidity rather than their tyranny that he most strongly urges against them all through. Of the devoted groups of educated men and women who have organised the movements for the attainment of a measure of freedom and for the education of the masses to that end, Mr. Perris tells us much that is new and interesting. His acquaintance with many of these leaders of opinion has enabled him to give us a series of romantic yet terrible life-histories. The fortresses of Schlusselburg and St. Peter and Paul, with their soul-and-body desolating *régime*, the cruelties of Siberia, were known by bitter experience to all these men and women. One must read, in order to form any conception of them, the persecutions to which these people have been subjected. The author, it is clear enough between the lines, has but little hope of a peaceful solution. By blood and tears the tale has been told to its present chapter, and not without more blood and tears will the closing page be reached."
—*Evening Standard and St. James's Gazette.*

"Mr. Perris's vivid, well-ordered, and altogether fascinating book is a review of the past thirty-five years of Russian public life. It takes us back, that is to say, to the kindling days of the early seventies, the seed-time of the harvest of wrath. . . . The revolution is now once again in progress throughout the empire, in which, though laws be many, there is no law. . . . What in the end are the prospects of 'Russia in Revolution'? Mr. Perris, whose incisive style goes with a very temperate manner, is properly sanguine on this point."—*Daily Chronicle.*

"A very timely and informing book. It is very ably written, and constitutes one of the most powerful and cogent indictments of the whole Russian system which has yet been published in English. Mr. Perris writes coolly enough, on the whole, to make his arguments all the more acceptable. The savage measures of repression, of which he gives a blood-curdling account from the unimpassioned narratives of many who went through them, have had much the same effect as screwing down the safety-valve of a boiler. . . . Those who like to watch history in the making will do well to study Mr. Perris's able work."
—W. E. GARRETT FISHER in *The World.*

LONDON: CHAPMAN AND HALL, LTD., 11 Henrietta Street, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000040

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Book of the Summer Season.

LOVE IN JUNE.

A PASTORAL COMEDY.

By KEBLE HOWARD,

Author of "The God in the Garden," "Love and a Cottage," &c., &c.

With Illustrations by FRANK REYNOLDS, R.I.

Price 6/-

THE MORNING LEADER says: "It would be a great benefit to the human race at large if Mr. Keble Howard would write one novel a week, instead of one a year. He has the lightest touch in the world, the happiest wit, the most kindly humour."

THE DAILY MAIL says: "Full of sweetness and kindliness and human feeling. . . . We doubt whether even George Eliot wrote a more tenderly eloquent passage. . . . Altogether a delightful book for these summer days."

THE DAILY NEWS says: "There is humour in it and pathos, the humour and pathos of simple life as it carries on its quiet courses towards the end. It is essentially a holiday book for the summer, and as such deserves hearty commendation. So long as Mr. Keble Howard can write with such freshness of the fresh air and sunshine and open fields, he will never lack a multitude of readers."

THE EVENING STANDARD says: "It seems to have become Mr. Keble Howard's mission in life to provide books for summer reading. He has given us 'Love and a Cottage' and 'The God in the Garden' in past years, and now comes 'Love in June,' with the same little impish Cupid on the cover, the same freshness and sweetness inside. They are the sort of stories one can smile, perhaps now and then drop a sentimental tear, over, when the grass is green and the sun high in the heavens, when labour is folly and idling the only wisdom."

THE MANCHESTER COURIER says: "Mr. Keble Howard chooses his point of view and selects his material, both for his portraits and his landscapes, with all the daintiness of an artist in paint as well as in words, with the result that one lingers over his work in sweet content. . . . Altogether, this is *one of the most delicate and most beautiful pieces of fiction written for many a day.*"

Mr. HAMILTON FYFE in *THE EVENING NEWS* says: "It smells of summer flowers. It will make you laugh a little, and I think the old lady's death will make you cry. It made me. It is told with a really beautiful simplicity. It reveals the meaning and the power of a quiet faith in God, better than all the sermons Dr. Boanerges Torrey ever has preached, or ever will preach."

THE BIRMINGHAM POST says: "As a writer of charming love stories Mr. Howard has few equals, and in his latest idyll he has excelled all his previous efforts."

THE GLASGOW HERALD says: "We lay this novel down with the impulse to mount our bicycle and make straight for the English Midlands in search of such another village as Mr. Howard so exquisitely describes, redolent of roses, mignonette, and hay, and with a fine old inn, a charmingly sentimental host and hostess, and a Hebe not averse to flirtations in the moonlight."

LONDON: CHAPMAN AND HALL, LTD., 11 HENRIETTA ST., W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000047

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

LAST MONTH'S FORTNIGHTLY REVIEW.

CONTENTS OF THE JUNE NUMBER.

ALFONSO XIII. OF SPAIN. By L. HIGGIN.
GERMANY IN THE MEDITERRANEAN. By J. L. BASHFORD.
IN PRAISE OF ANTHONY TROLLOPE'S NOVELS. By F. G. BETTANY.
THE PRESENT STATE OF RUSSIA. By V. E. MARSDEN.
THE LITERARY ASSOCIATIONS OF THE AMERICAN EMBASSY. By F. S. A. LOWNDES.
THE BULGARIAN ARMY. By Captain VON HERBERT.
THE ETHICS OF DON JUAN. By MAURICE GEROTHWOHL.
"THE TIMES" HISTORY OF THE WAR IN SOUTH AFRICA. By MILITARIST.
THE CASE FOR THE ALIEN. By M. J. LANDA.
TIME'S ABSTRACT AND BRIEF CHRONICLE. V. By G. K. CHESTERTON.
A CENTURY OF EMPIRE. By Major-Gen. Sir THOMAS FRASER, K.C.B.
IMPERIAL RELATIONS: A POLICY. By W. PHILIP GROSER.
PARIS AND ŒNONE. By LAURENCE BINYON.
NOSTALGIA. II. By GRAZIA DELEDDA.

SOME PRESS OPINIONS OF THE JUNE "FORTNIGHTLY."

"The coming of the youngest king in Europe to visit King Edward VII. naturally excites much interest in London. Mr. L. Higgin contributes to the 'Fortnightly Review' for June an interesting sketch of the young monarch."—REVIEW OF REVIEWS.

"A great deal is done to define the personality of our royal guest, and some delightful stories are told about him in the June number of the 'Fortnightly Review.'"—DAILY MIRROR.

"The 'Fortnightly Review' is fortunate this month in having a character sketch of Alfonso XIII. by one who appears to have made a close study of the young monarch."—WESTERN MERCURY.

"The place of honour in the 'Fortnightly Review' is very properly given to an article of historical and biographical interest, suggested by the coming of the young King of Spain, who is to enjoy the hospitality of our Royal House. Of Alfonso's personality we get a good account. . . . Another personal up-to-date note is struck on the eve of the arrival of the new American Ambassador. It is a welcome to Mr. Whitelaw Reid and an appreciation of his literary work, at the same time suggesting associations of the American Embassy."—NEWCASTLE WEEKLY JOURNAL.

"Mr. Victor Marsden writes forcibly and picturesquely on 'The Present State of Russia.' . . . The most valuable contribution to this number for lovers of literature will be Mr. Laurence Binyon's poem, 'Paris and Œnone,' which in grace of diction and depth of feeling is far above the average poetry which appears in contemporary journals."—DAILY NEWS.

"There is an excellent article by Mr. M. J. Landa in the 'Fortnightly Review,' the unwritten moral of which is that, instead of bringing in a Bill to restrict alien immigration, the true interest of Great Britain, and especially of the British working-man, lies in introducing another Bill for the purpose of attracting more aliens of the Jewish race to this country. Mr. Landa, who writes from close practical acquaintance with the Jews of Whitechapel, proves that the Polish Jewish immigrant is, physically and morally, a better man than the English East-Ender."

—REVIEW OF REVIEWS.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000038

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

SOME PRESS OPINIONS OF THE JUNE "FORTNIGHTLY"—*Continued.*

"The 'Fortnightly Review' for June contains an admirable paper from the pen of Major-General Sir Thomas Fraser, K.C.B., entitled 'A Century of Empire.' The appearance of this able and very readable article during the week in which Empire-day has been celebrated is most apt, and both the writer and the 'Fortnightly Review' are to be congratulated upon a contribution of real Imperial interest."—STANDARD.

"An article that will be found of exceptional interest from a military point of view is one entitled 'The Bulgarian Army,' by Captain von Herbert."
—BROAD ARROW.

"Mr. Groser's article in the 'Fortnightly Review' on the relations that exist between Great Britain and her colonies is eminently worthy of serious thought. . . . Even if nothing practical comes out of Mr. Groser's proposal, he has done a good service in emphasising the fact that the time has come when something practical must be done by way of apportioning the cost of maintaining the Empire."—NORTHERN WHIG.

"A temperate but forcibly-written article from the pen of Mr. M. J. Landa appears in the June number of the 'Fortnightly Review,' under the title 'The Case for the Alien.' He asks for no more than to 'temper the exaggeration of the cry for restriction' in alien immigration, and he presents a case which is at least worthy of examination."—REFEREE.

"Mr. Victor Marsden's paper on 'The Present State of Russia' is melancholy reading, but it is just what is needed to correct misconceptions too readily formed as to the meaning and value of the Czar's promises of internal reform. Mr. Marsden writes evidently from considerable knowledge of things in Russia."—YORKSHIRE POST.

"Mr. F. S. A. Lowndes discourses pleasantly on the literary men who have at one time or another been connected with the American Embassy in London. Anthony Trollope forms the subject of an interesting article, Readers of Trollope will agree with Mr. Bettany that those who do not know Trollope miss much quiet enjoyment. Mr. Chesterton's comments on current affairs are as usual clever and amusing."—ABERDEEN FREE PRESS.

"The 'Fortnightly' for June has, in addition to the usual supply of political articles, several papers of very great interest to the lover of literature. Mr. Maurice Gerothwohl writes a very learned paper on the 'Ethics of Don Juan,' full of history."—COUNTRY LIFE.

"An interesting contribution in view of the centenary of Trafalgar is Major-General Sir Thomas Fraser's 'A Century of Empire,' in which the progress of the nation in the course of the past hundred years, from the point of view of Imperial and colonial development, is carefully surveyed, and compared with that of the rival world-Powers. This article is of special value as supplementing the recent speech of the Prime Minister on Imperial Defence. Mr. F. S. A. Lowndes does well to remind the country of the character of the men whom the United States send to represent her interests at foreign Courts generally and at the Court of St. James's in particular, and his article, 'Literary Associations of the American Embassy,' should be widely read. Literary, political, and international studies complete an altogether admirable issue."—SCOTSMAN.

LONDON: CHAPMAN AND HALL, LTD., 11 HENRIETTA STREET, W.C.

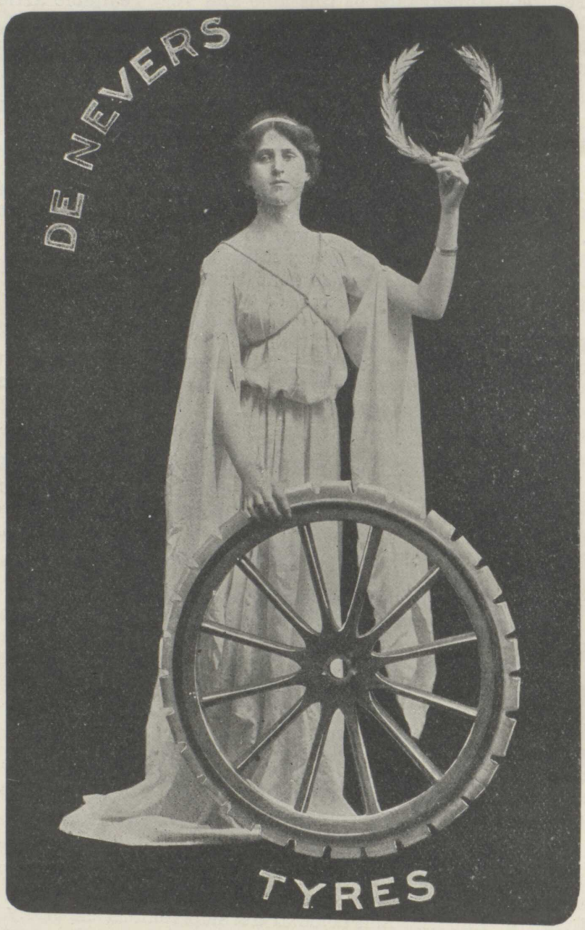
Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000090

مكتبة قطر الوطنية
Qatar National Library

DE NEVERS GROOVED SOLID TYRES,

AS COMFORTABLE AS PNEUMATICS AND NON-SKIDDING.

TYRES CAN BE SEEN AT 44 HAYMARKET, S.W.



TYRES CAN BE SEEN AT 44 HAYMARKET, S.W.

MARK WHAT USERS SAY:—"They prevent side slip."
"For easiness of running they give just as much satisfaction as Pneumatics."
"They do not throw up dust as much as Pneumatics."
"Your De Nevers Grooved Solid Tyre is truly excellent."

J. LIVERSIDGE & SON, LD 196, OLD ST., LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000038

مكتبة قطر الوطنية
Qatar National Library

"LACRE"
INDUSTRIAL CARS

VANS and LORRIES to carry loads from 15 cwt. to 2 tons.



For all Purposes of Utility.

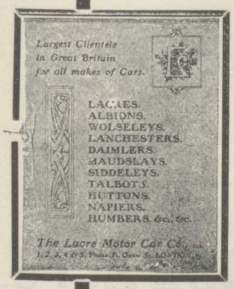
PRACTICAL DEMONSTRATIONS GIVEN TO INTENDING PURCHASERS.

Copy of letter received from Messrs. JAS. SHOOLBRED & Co.
Tottenham Court Road, W.

DEAR SIRS,

We have now used the Petrol Van supplied by you for six weeks, and during this time it has travelled over 1,500 miles, doing our ordinary deliveries, and giving the greatest satisfaction. The van has been out six days a week, and has replaced a van and four horses every day. There has not been a hitch of any kind, and we are very pleased with the results.

Yours faithfully,
(Signed) JAS. SHOOLBRED & Co.



Car Catalogue Post Free.

THE LACRE MOTOR CAR COMPANY LIMITED,
1, 2, 3, 4, & 5 POLAND ST., OXFORD ST., LONDON, W.

TELEPHONES: NAT. 1308 GERRARD. (3 lines.)

TELEGRAMS: "UNBAFFLED, LONDON."

Sole Concessionnaires in England and Wales for ALBION CARS.
The Official London Agents and Repairers for WOLSELEY CARS.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00006f

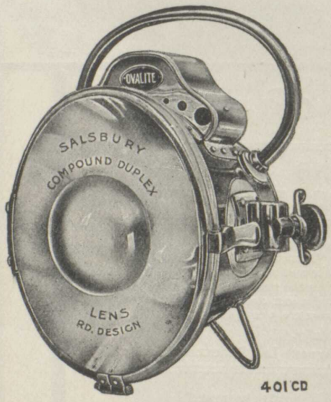
مكتبة قطر الوطنية
Qatar National Library

A SIGN OF THE TIMES.

SALSBURY  TRADE-MARK.

TRADE MARK

LOOK FOR IT ON OUR



FLARE,

OVALITE,

SEARCHLIGHT, &c.,

LAMPS.

SALSBURY & SON, Ltd. 124, Long Acre, W.C.

GREATEST SHOW of AUTOMOBILE LAMPS.

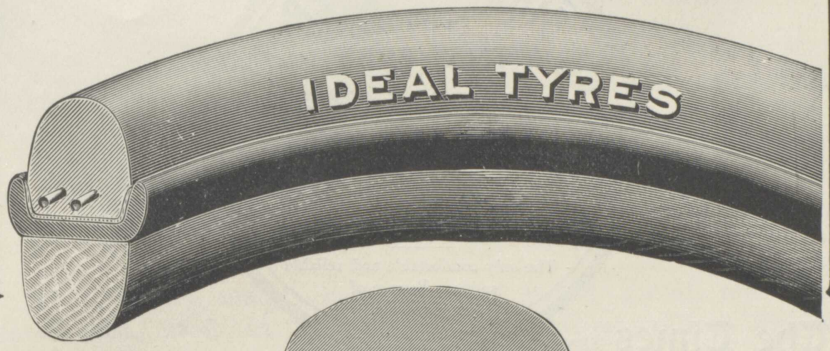
Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009f

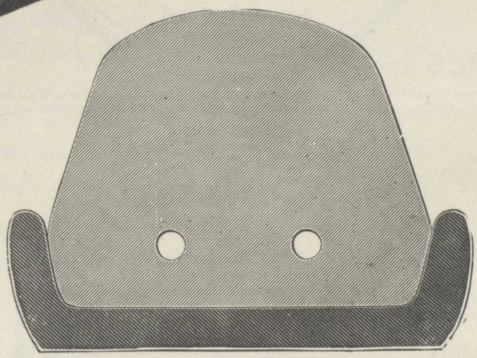
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

IDEAL RUBBER TYRES



THE BEST CARRIAGE TYRES IN THE MARKET.



USED ALL OVER THE WORLD.

Fitted to the Carriages of Their Majesties
The KING and QUEEN,
and the
CROWNED HEADS
OF EUROPE.

THOUSANDS in use throughout the KINGDOM
and
COLONIES.

Send for Booklet to

J. W. & T. CONNOLLY, Ltd., King's Cross, London, N.

And at GLASGOW, EDINBURGH, LEEDS, DUBLIN, BRISTOL, NEWPORT (Mon.).

Telegrams: "Smiddy, London." Telephone: 354 King's Cross.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000038

مكتبة قطر الوطنية
Qatar National Library

To His Majesty THE KING. Rubber Tyre Manufacturers. *By Special Appointment.*

ROYAL SIRDAR BUFFER TYRES

The Users say
THE BEST
SOLIDS EXCEL
PNEUMATICS.

Cost ⅛*d.* per mile, with freedom from risks and worries of punctures.

The only comfortable and reliable solids. Beware of experiments.

The Times says:

"Testimonials received by the Sirdar Rubber Company from the Straker Steam Vehicle Company after the 2000 miles trial of their petrol omnibus are of a very satisfactory character, and they have many others."

ROYAL SIRDAR PNEUMATICS

The Motor News says:

"Nipped tubes are a constant source of trouble, especially to a beginner. The Sirdar Air Tube gets over this difficulty. It is vulcanised in a U shape, so that when placed inside the cover it springs naturally into the crown of same, and so keeps clear of the edges of the cover or the tools used for fitting purposes. It is essential, however, that it should **not** be partially inflated when the cover is being replaced. These tubes are made if anything larger than the inside of the cover, and when inflated are compressed both laterally and longitudinally instead of being stretched as the ordinary air tube is. They consequently afford great resistance to puncturing material."

ALL KINDS OF RUBBER GOODS, RUGS, AND GARMENTS SUPPLIED OR MADE TO ORDER.

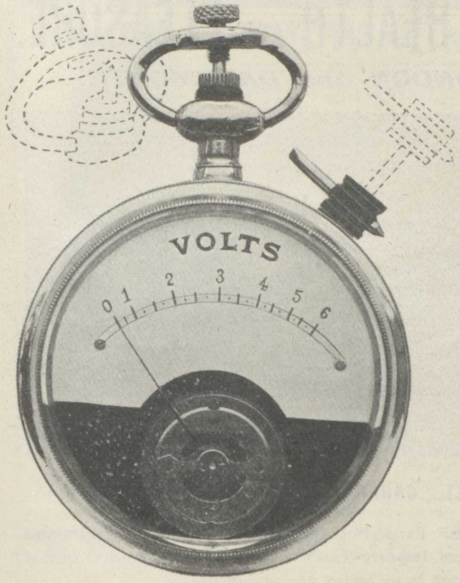
THE SIRDAR RUBBER COMPANY, LTD.

Offices and Works: SHIRLAND RD., PADDINGTON, LONDON, W. Showrooms: DOWN ST., PICCADILLY, W.
Depots: Moss Street, DUBLIN; 116 North Street, GLASGOW, Etc.
Telegrams: "Sirdar," London, Dublin, Glasgow, etc.
Telephone 1833 Paddington. 751 Dublin. National 163 Charing Cross, Glasgow, etc.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000043

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



85, Shaftesbury Avenue,
LONDON, W.

Dear Sir,

Herewith we have pleasure in handing you particulars of a new Voltmeter which we are about to place on the market.

For some time past we have given this subject very great attention, and have now no hesitation in saying that this Meter is the most reliable article yet placed upon the market.

The case is made throughout of white metal, and every metal part used in this Meter is anti-magnetic. Further, we have—what is a most unusual provision in meters, *i.e.* a pivot working in a jewelled hole. This practically does away with the variation commonly found through expansion and contraction of the metals during the changes in temperature.

The spool or coil is scientifically made of the very best wire and insulating material, and the two terminals for communicating to the poles of the accumulator are fastened in a very ingenious manner. The eye-ring contains a set screw, which protects the point and prevents it wearing holes in the pocket.

The other terminal is connected to the coil by the usual flexible wire, which is self-winding. The tension of the spring can be altered by a very ingenious arrangement.

We shall be glad to hear if we may send you one of these instruments, the price of which is 20/-.

Thanking you in anticipation,

We are, Dear Sir,

Yours faithfully,

LAMB BROS. & GARNETT.

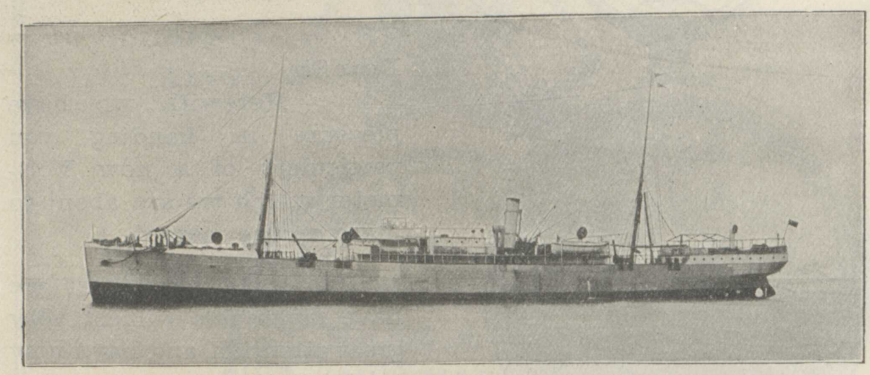
Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000075

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

SHORT SEA TRIPS FOR HEALTH AND PLEASURE.

Weekly Sailings from LONDON and DARTMOUTH.



To GIBRALTAR, the MOROCCO COAST, CANARY ISLANDS, and MADEIRA.

The **Round Voyage** usually occupies **25 days.** Fares, First-class (inclusive), **20–22 guineas.**
Steamers are fitted with Electric Light and all Modern Improvements. Doctor and Stewardess carried.

Illustrated Handbook Gratis from—

FORWOOD BROS. & CO., 46 St. Mary Axe, E.C.

MR. BENNET BURLEIGH'S NEW BOOK.

JAPAN & RUSSIA AT WAR.

6/- With many Illustrations and Maps. **6/-**

EMPIRE OF THE EAST. JAPAN & RUSSIA at WAR, 1904-5.

By BENNET BURLEIGH.

In this spirited and vividly-written volume, Mr. Bennet Burleigh, special war-correspondent to the *Daily Telegraph*, gives a full record of his experiences at the front in the Russo-Japanese War; a study of the combatants, illustrated by a host of anecdotes; and an estimate of the probable effects of the War upon the rest of the civilised world. Mr. Bennet Burleigh had especial opportunities for seeing behind the scenes, and his opinion is always based upon authoritative information, and expressed with singular force and directness. This will be *the* book upon its subject.

LONDON: CHAPMAN AND HALL, LTD., 11 HENRIETTA STREET, W.C.

THE HOUSING PROBLEM AND OLD AGE PENSIONS

Are recognised questions of individual as well as National importance. They are being solved in a practical way under the **SPECIAL PLANS OF HOUSE PURCHASE,** either with or without the benefits of Life Assurance, introduced by the

BRITISH HOMES ASSURANCE CORPORATION, LTD.,
6 PAUL STREET, FINSBURY, LONDON, E.C.

Over 1,600 Policy and Endowment Certificate Holders have been enabled to purchase their own Homes or Shop Premises.

The authorised capital of the Corporation is £100,000, subscribed £60,000, paid up £50,000. Annual Income exceeds £120,000. Funds exceed a **Quarter of a Million.**

Chairman - - - N. W. HUBBARD, J.P., L.C.C.
Consulting Actuary - F. G. P. NEISON, F.I.A., F.S.S.

Prospectuses and Press Opinions post free.

GOOD PROSPECTS FOR ACTIVE AGENTS.

Apply for terms to H. HORNE, Agency Manager.

M. GREGORY, Managing Director.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

568

SHEW Cameras

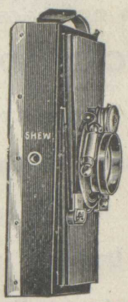
THE "PRESS" REFLECTOR

NEW MODEL, 1905. Time and Instantaneous.

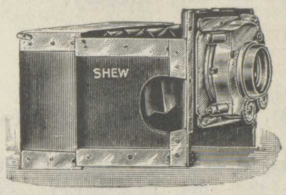
Goerz-Anschutz Shutter, new model, automatic speeds from 5 seconds to $\frac{1}{1000}$.



Pneumatic and Trigger release.



The XIT FOLDING PANORAM.
For Pictures 5¼ by 3¼ inches.
Dimensions closed, 7 by 3¼ by 1¾ inches.



The XIT CAMERAS. *The FOCAL PLANE XIT.*

THE TELE-XIT.—Light—Simple—Rigid as a Box. A Half-plate with focal range 5 to 14 inches. For convertible lenses. No complications. No weight. Dimensions closed, 8 by 5½ by 2 inches. Lists free of XIT CAMERAS from **21/-** to **£21** of—

J. F. SHEW & CO., Established 1849.

Manufacturers and Patentees of Specialities in Photographic Apparatus,

NEWMAN STREET, LONDON, W.

(Four Doors off OXFORD STREET.)

Le COURRIER de la PRESSE

BUREAU de COUPURES de JOURNAUX
21, Boulevard Montmartre. PARIS 2e
Fondé en 1889

DIRECTEUR : **A. GALLOIS**

Adresse Télégr.: COUPURES PARIS — TÉLÉPHONE 101.50

Lit, découpe, traduit et fournit les articles de Journaux et Revues du Monde entier, sur tous sujets et personnalités. Est le collaborateur indispensable des Artistes, Littérateurs, Compositeurs, Savants, Hommes politiques, Diplomates, Commerçants, Industriels, Financiers, Jurisconsultes, Erudits, Inventeurs, Gens du Monde, Entrepreneurs, Explorateurs, Sportsmen, etc., en les tenant au courant de ce qui paraît dans tous les Journaux et Revues, sur Eux-mêmes et sur tous les sujets qui les intéressent.

TARIF : 0 fr. 30 par Coupure

Tarif réduit, **paiement d'avance,** *sans période de temps limité.*	*Par*	100	*Coupures,*	25 *francs*
	»	250	»	55 »
	»	500	»	105 »
	»	1000	»	200 »

On traite à forfait pour 3 mois, 6 mois, un an

Tous les ordres sont valables jusqu'à avis contraire

CASIER PARLEMENTAIRE

Relevé des Scrutins de votes et Nomenclature des Travaux des Sénateurs, Députés, Conseillers Municipaux et Conseillers Généraux

Répertoire du Journal Officiel de la République française
PUBLICATION MENSUELLE : **12** FRANCS PAR AN

NOTICE TO ADVERTISERS.

Advertisements intended for the August Number should be forwarded to

Messrs. R. ANDERSON & CO.,
14 Cockspur Street, Charing Cross, S.W.,

NOT later than July 19.

THE

AUTOTYPE COMPANY,

74, New Oxford Street, London,

Invite Inquiries from those seeking

PERMANENT

Photographic Reproductions

Of the Highest Possible Excellence.

THE COMPANY'S PROCESSES—
Autotype Solar (Carbon).
Autotype Mechanical (Collotype).
Auto-Gravure (Copperplate Engraving).

ARE EMPLOYED BY—
The Trustees of the British Museum.
The Local Government Board.
Many Learned Societies, Leading Publishers, and Artists of Repute.

Examples of Work may be inspected and all information obtained at—

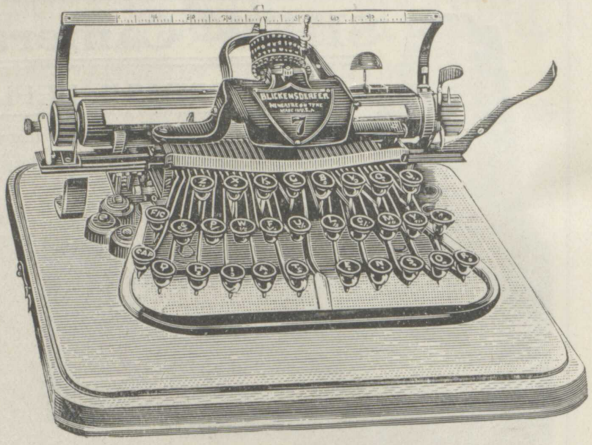
The AUTOTYPE FINE ART GALLERY,
74, NEW OXFORD STREET, LONDON, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

It is not because the
BLICKENSDERFER
is a cheap typewriter
(though it is cheap)
that its sale is so large,
but because it is the
best typewriter to be
had at any money.



PRICES

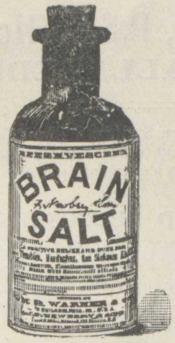
No. 5, F'cap. size, £9, takes paper any width up to 9¼ inches wide.
No. 7, F'cap. size, £11 11s., ditto, and gives tabulating facilities.
No. 7, Brief size, £13 13s., takes paper any width up to 13¼ inches wide.
No. 7, Policy size, £15 15s., takes paper any width up to 17 inches wide.
Subject to large cash discounts, or easy time payments.
Write for List 68, which tells all about it.
No canvassers kept.
References all over the Kingdom.
Users in every trade and profession.

BLICKENSDERFER Co., Limited,
Head Office: 7 Pilgrim Street, Newcastle-on-Tyne.
LONDON DEPOT: 9 CHEAPSIDE.
West-End Agency: T. Dixon, 195/6 Oxford Street, W.
MANCHESTER: 74 Market Street; BRISTOL: 1 Nelson Street;
LEEDS: Royal Exchange Chambers, Boar Lane;
BRADFORD: Bridge Street, Corner of Norfolk Street;
LIVERPOOL: 39c North John Street; and most large towns.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000072

مكتبة قطر الوطنية
Qatar National Library

"BRAIN SALT"



Is not put forward as an universal remedy, but it is what its name indicates—viz., an Effervescing Medicinal Salt, for the cure or relief of the effects of over-brainwork. Used as directed, it brightens and refreshes the exhausted sufferer, to whom even temporary relief may have seemed an impossibility.

Of Chemists, per bottle, 2s. 9d.

F. NEWBERY & SONS,
27 & 28, CHARTERHOUSE SQ., AND
44, CHARTERHOUSE ST., LONDON, E.C.
(ESTABLISHED A.D. 1746.)

DR DUNBAR'S ALKARAM CURES COLDS

ALKARAM CURES HAY FEVER.

ALKARAM, if inhaled on the first symptoms, will at once arrest them, and even when a cold has been neglected and become severe, it will give immediate relief, and generally cure in one day. It contains **no narcotic**, and never produces headache, or any other unpleasant effects.

SOLD BY ALL CHEMISTS, 2s. A BOTTLE.
Address—Dr. DUNBAR, care of F. Newbery & Sons,
27 & 28, CHARTERHOUSE SQ., & 44, CHARTERHOUSE ST., LONDON, E.C.

MEDOC.—VIN ORDINAIRE.

Pure BORDEAUX, an excellent light Dinner Wine. The quality of this wine will be found equal to wine usually sold at much higher prices.

Per Dozen Bots.	½-Bots
14/6	8/3

ST. ESTEPHE.

SUPERIOR DINNER WINE, old in bottle. On comparison it will be found very superior to wine usually sold at higher prices. The appreciation this wine meets with from the constantly increasing number of customers it procures us in London and the Provinces, gives us additional confidence in submitting it to those who like pure Bordeaux wine.

17/6	9/9

3 Dozen Bottles or 6 Dozen Pints Delivered Carriage Paid to any Railway Station, including Cases and Bottles.

All who know these Wines tell us there is no Claret sold in Great Britain to equal them in value.

JAMES SMITH & CO.,

WINE AND SPIRIT MERCHANTS, LIMITED,

LIVERPOOL: 37, North John St.

MANCHESTER: 26, Market Street.

Why Suffer Pain

INDIGESTION, and ILL-HEALTH, when Painless and Perfect Dentistry can relieve and compensate for Nature's failure?

The Pioneer of inexpensive Dentistry, **Dr. G. H. JONES**, has been personally awarded for his Perfect and Painless Dentistry—Gold Medals, London and Paris; Gold Medal, New Zealand Exhibition; Gold Medal, Calcutta; and the Highest Diploma of Merit and Award at Nice and Amsterdam; Awarded the Gold Medal of the Academie Nationale, Paris; and the Highest Award, Antwerp; also the Gold Medal, International Exhibition, London; Gold Medal, Liverpool; Gold Medal, Melbourne.

Her Majesty's Surgeon Dentist says:—

"My mastication is now perfect, and articulation quite distinct. Your teeth are the best, safest, and most life-like; and your system is the perfection of Painless Dentistry. In recognition of your valuable services rendered to me you are at liberty to use my name.
(Signed) "S. G. HUTCHINGS."

The following is one of the many testimonials received from grateful Patients:—

"I am pleased to tell you that, although I am ninety-two years of age, I enjoy excellent health, and I have to thank you for the splendid set of teeth you made for me twenty-six years ago. I can masticate anything, and my digestion is first-rate. The teeth now are as good as when you put them in, and they have not cost me one penny for repairs all that time; in fact, I cannot speak too highly of your work."

Consultations and every information given **FREE** daily, hours 10 to 5.

Please observe only Address: Telephone: 6753 Gerrard.

GREAT RUSSELL MANSIONS, GREAT RUSSELL ST., LONDON.

(DIRECTLY OPPOSITE BRITISH MUSEUM.)

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000053

مكتبة قطر الوطنية
Qatar National Library

Lt.-Col. W. H. JAMES, P.S.C. (Honours), late R.E.
BUSHMEAD HALL, BEDFORD.

Lieut.-Col. JAMES is the Author of "Modern Strategy" (the official text-book for the Indian Promotion Examinations) and many other works, and is the Editor and Founder of the "Wolseley Series." He has had twenty years' experience in teaching, and has obtained over

TWO THOUSAND SUCCESSES.

In the subjects of MILITARY HISTORY, TACTICS, and STRATEGY his Pupils have habitually taken the HIGHEST PLACES. Col. JAMES resides at BUSHMEAD HALL, and personally supervises the work of each Pupil.

Specialities:

INDIVIDUAL ATTENTION. NO LARGE CLASSES.

RECENT SUCCESSES (since September, 1903):

STAFF COLLEGE—Four Officers passed, including FIRST on whole list, FIRST on Artillery List, and four others qualified. The AVERAGE MARKS obtained by all was OVER 4,000.

PROMOTION—Thirty-two Officers passed, including the only SPECIAL CERTIFICATE given in May.

MILITIA COMPETITIVE—H. M. Imbert-Terry (2nd on Artillery List), G. V. C. Irwin, N. F. Stewart, E. S. Vicary, N. Hudson, W. F. Panton, W. M. Richardson, O. C. Downes. All these read with Col. JAMES at the time they passed.

MILITIA LITERARY—G. V. C. Irwin, A. St. J. Wright, M. C. Coote, R. Lechmere.

WOOLWICH—A. G. Bannatyne, 14th; O. E. Fane, 37th.

SANDHURST—C. G. Porter, 19th; R. B. Wodehouse, 67th.

INDIAN POLICE—E. L. Skinner, 12th (the Only Candidate).

Some of the places taken by the above Candidates in various subjects include Mathematics, 5th (twice), 6th; Mathematics III., Woolwich, 2nd; French, 1st (twice); German, 1st; Latin, 2nd and 4th; Greek, 2nd; Geology, 5th (twice); 1st Geometrical Drawing. **Telegrams: "Colonel, Bedford." Telephone: 64 Bedford.**

MOORE, SCANTLEBURY, & COOTE,
TAILORS.



Inventors of the Registered "MOREESE" Jacket, the most adaptable garment ever designed in every possible position.

Do not fail to call and see it before you place your order.

M. S. & C. will have great pleasure in showing its many points.

47, CONDUIT STREET, LONDON, W.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE FORTNIGHTLY REVIEW.

JULY, 1905.

Contents.

	PAGE
Autocracy and War. By Joseph Conrad	1
The Battle of the Sea of Japan. By Archibald Hurd	22
A Morning in the Galleries. By Frederic Harrison	35
How It Struck a Contemporary. By J. A. Spender	45
The Marquis of Lansdowne. By F. St. John Morrow	60
The Mission to Cabul. By Angus Hamilton	75
Richard and Minna Wagner. By W. Ashton Ellis	85
Scotland and John Knox. By Robert S. Rait	95
The Position of Women:	
(1) The Duel of the Sexes. By Mona Caird	109
(2) The Threatened Re-subjection of Woman. By Lady Grove	123
The Extravagant Economy of Women. By Mrs. John Lane	129
Peace and Internal Politics: A Letter from Russia. By R. L.	136
Francis William Newman. By Francis Gribble	151
The Beginnings of Religion and Totemism among the Australian Aborigines. I. By J. G. Frazer	162
Nostalgia. Part III. By Grazia Deledda	173
Correspondence: Japan and Peace. By Alfred Stead	190

LONDON: CHAPMAN AND HALL, Limited.



Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000088

مكتبة قطر الوطنية
Qatar National Library

For Week-end Cottages, Bungalows, Flats, &c.

HAMPTONS

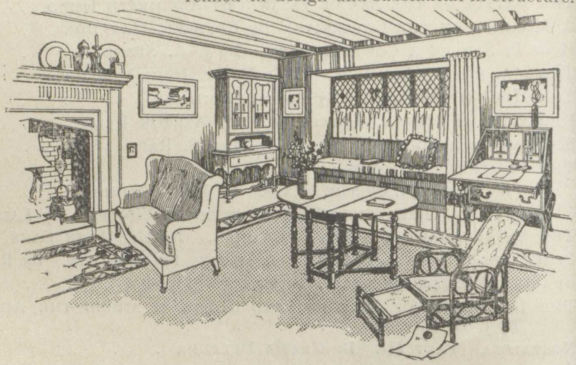
Are now making a display of specially interesting examples of

Modern Furniture

which, although inexpensive, are notably refined in design and substantial in structure.

To anyone who contemplates Decorating and Furnishing, Hampton & Sons will be pleased to send their entire series of catalogues illustrating the latest productions and best current values in Artistic Furniture, Carpets, Curtains, Fabrics, Linens, Ironmongery, China and Glass, Fine Arts, &c.

HAMPTONS deliver by their own Motor Box Vans to any address within 30 miles of Charing Cross, and pay carriage to any Railway Station in Great Britain.



View of the Hall Sitting-room in a Week-end Cottage recently furnished throughout by Hamptons for £100. For full details see Booklet T590, sent free.

PALL MALL EAST, TRAFALGAR SQUARE, LONDON, S.W.

PURE ITALIAN WINES.

Grown and Exported by E. Strachan Morgan, Fiesole.
Awarded a GOLD MEDAL, London, 1904.

"A very good dinner wine."—STRATHMORE (EARL OF).
"An excellent red wine, contains practically no sugar, is free from volatile acidity—a genuine pleasing wine."—*Lancet.*
"Very soft, does *not* give me the lowest touch of gout."—F. G. R. D.
"A generous full-flavoured wine with the characteristic bouquet of Burgundy."—FRANCIS P. H., M.D., &c. &c.

MONTE FIANO CASTELLO.—An Italian Burgundy with good body and bouquet, **20/-** per doz. Bottles.
MONTE FIANO.—An Ideal Light Dinner Wine, **17/6** per doz. Bottles.
These Wines can also be had in Tuscan flasks.

For Samples (1/-) and Illustrated Catalogues, apply to the Agents—

MESSRS. MORISON, POLLEXFEN, & BLAIR, Ltd., 34 LEADENHALL ST., E.C.

Hamilton's Irish Homespuns.

Every Fibre is pure wool—best pure wool, as poor material cannot withstand the process of hand spinning and hand weaving. Better material for outdoor and general wear it is impossible to procure; and, as to its smartness and fashionableness, see lists of our patrons on pages 29 and 31 in "The White House Budget." Please write for a copy, also patterns.

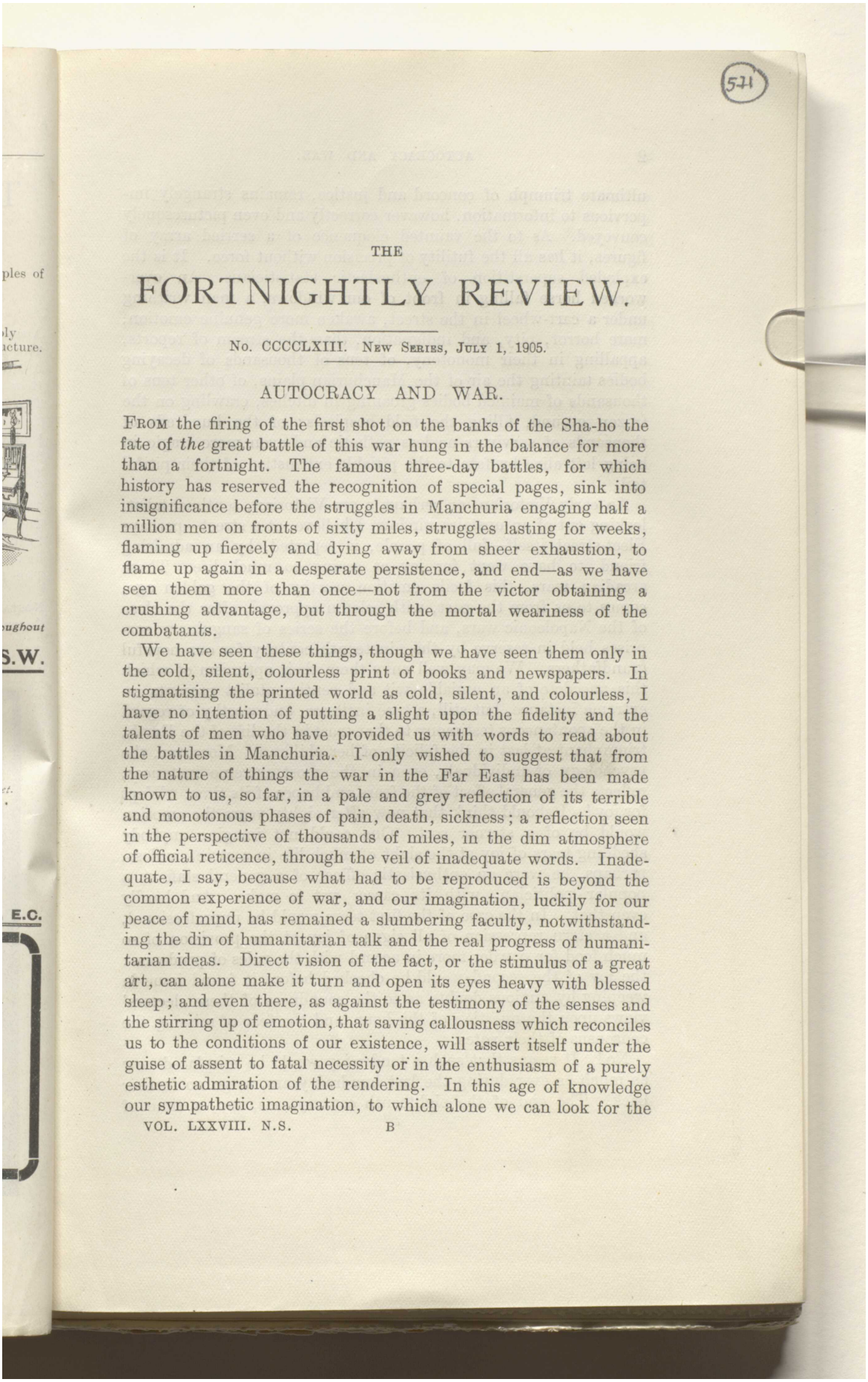
1/9 per yard. Sold by the yard, or in costumes and suits, made to measure and tailor-made. Absolute satisfaction guaranteed, or money refunded. Address:

THE WHITE HOUSE, DESK 63, DEPOT FOR IRISH PEASANT INDUSTRIES, PORTRUSH, IRELAND.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



571

THE

FORTNIGHTLY REVIEW.

No. CCCCLXIII. New Series, July 1, 1905.

AUTOCRACY AND WAR.

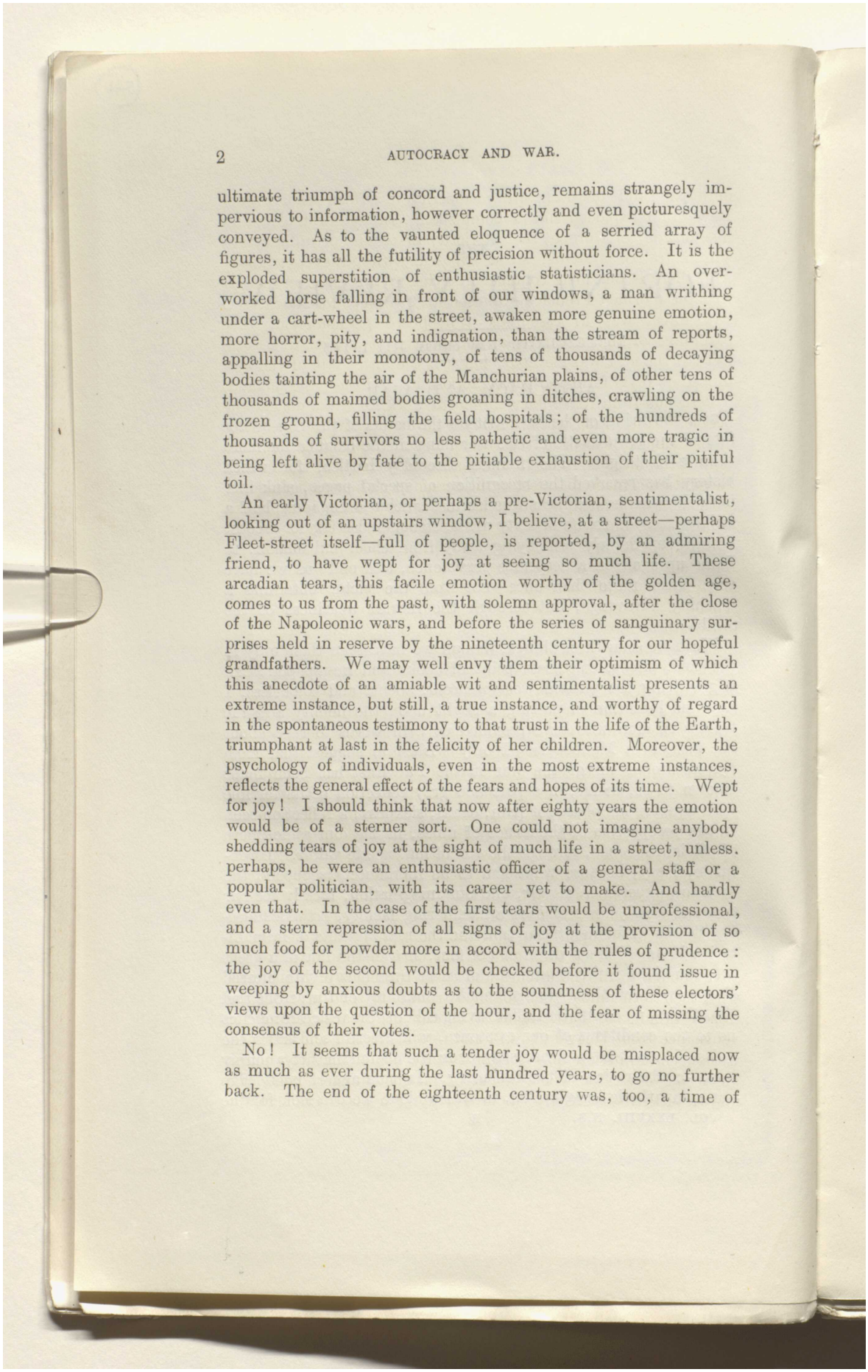
From the firing of the first shot on the banks of the Sha-ho the fate of *the* great battle of this war hung in the balance for more than a fortnight. The famous three-day battles, for which history has reserved the recognition of special pages, sink into insignificance before the struggles in Manchuria engaging half a million men on fronts of sixty miles, struggles lasting for weeks, flaming up fiercely and dying away from sheer exhaustion, to flame up again in a desperate persistence, and end—as we have seen them more than once—not from the victor obtaining a crushing advantage, but through the mortal weariness of the combatants.

We have seen these things, though we have seen them only in the cold, silent, colourless print of books and newspapers. In stigmatising the printed world as cold, silent, and colourless, I have no intention of putting a slight upon the fidelity and the talents of men who have provided us with words to read about the battles in Manchuria. I only wished to suggest that from the nature of things the war in the Far East has been made known to us, so far, in a pale and grey reflection of its terrible and monotonous phases of pain, death, sickness; a reflection seen in the perspective of thousands of miles, in the dim atmosphere of official reticence, through the veil of inadequate words. Inadequate, I say, because what had to be reproduced is beyond the common experience of war, and our imagination, luckily for our peace of mind, has remained a slumbering faculty, notwithstanding the din of humanitarian talk and the real progress of humanitarian ideas. Direct vision of the fact, or the stimulus of a great art, can alone make it turn and open its eyes heavy with blessed sleep; and even there, as against the testimony of the senses and the stirring up of emotion, that saving callousness which reconciles us to the conditions of our existence, will assert itself under the guise of assent to fatal necessity or in the enthusiasm of a purely esthetic admiration of the rendering. In this age of knowledge our sympathetic imagination, to which alone we can look for the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



ultimate triumph of concord and justice, remains strangely impervious to information, however correctly and even picturesquely conveyed. As to the vaunted eloquence of a serried array of figures, it has all the futility of precision without force. It is the exploded superstition of enthusiastic statisticians. An overworked horse falling in front of our windows, a man writhing under a cart-wheel in the street, awaken more genuine emotion, more horror, pity, and indignation, than the stream of reports, appalling in their monotony, of tens of thousands of decaying bodies tainting the air of the Manchurian plains, of other tens of thousands of maimed bodies groaning in ditches, crawling on the frozen ground, filling the field hospitals; of the hundreds of thousands of survivors no less pathetic and even more tragic in being left alive by fate to the pitiable exhaustion of their pitiful toil.

An early Victorian, or perhaps a pre-Victorian, sentimentalist, looking out of an upstairs window, I believe, at a street—perhaps Fleet-street itself—full of people, is reported, by an admiring friend, to have wept for joy at seeing so much life. These arcadian tears, this facile emotion worthy of the golden age, comes to us from the past, with solemn approval, after the close of the Napoleonic wars, and before the series of sanguinary surprises held in reserve by the nineteenth century for our hopeful grandfathers. We may well envy them their optimism of which this anecdote of an amiable wit and sentimentalist presents an extreme instance, but still, a true instance, and worthy of regard in the spontaneous testimony to that trust in the life of the Earth, triumphant at last in the felicity of her children. Moreover, the psychology of individuals, even in the most extreme instances, reflects the general effect of the fears and hopes of its time. Wept for joy! I should think that now after eighty years the emotion would be of a sterner sort. One could not imagine anybody shedding tears of joy at the sight of much life in a street, unless, perhaps, he were an enthusiastic officer of a general staff or a popular politician, with its career yet to make. And hardly even that. In the case of the first tears would be unprofessional, and a stern repression of all signs of joy at the provision of so much food for powder more in accord with the rules of prudence: the joy of the second would be checked before it found issue in weeping by anxious doubts as to the soundness of these electors' views upon the question of the hour, and the fear of missing the consensus of their votes.

No! It seems that such a tender joy would be misplaced now as much as ever during the last hundred years, to go no further back. The end of the eighteenth century was, too, a time of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000038

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

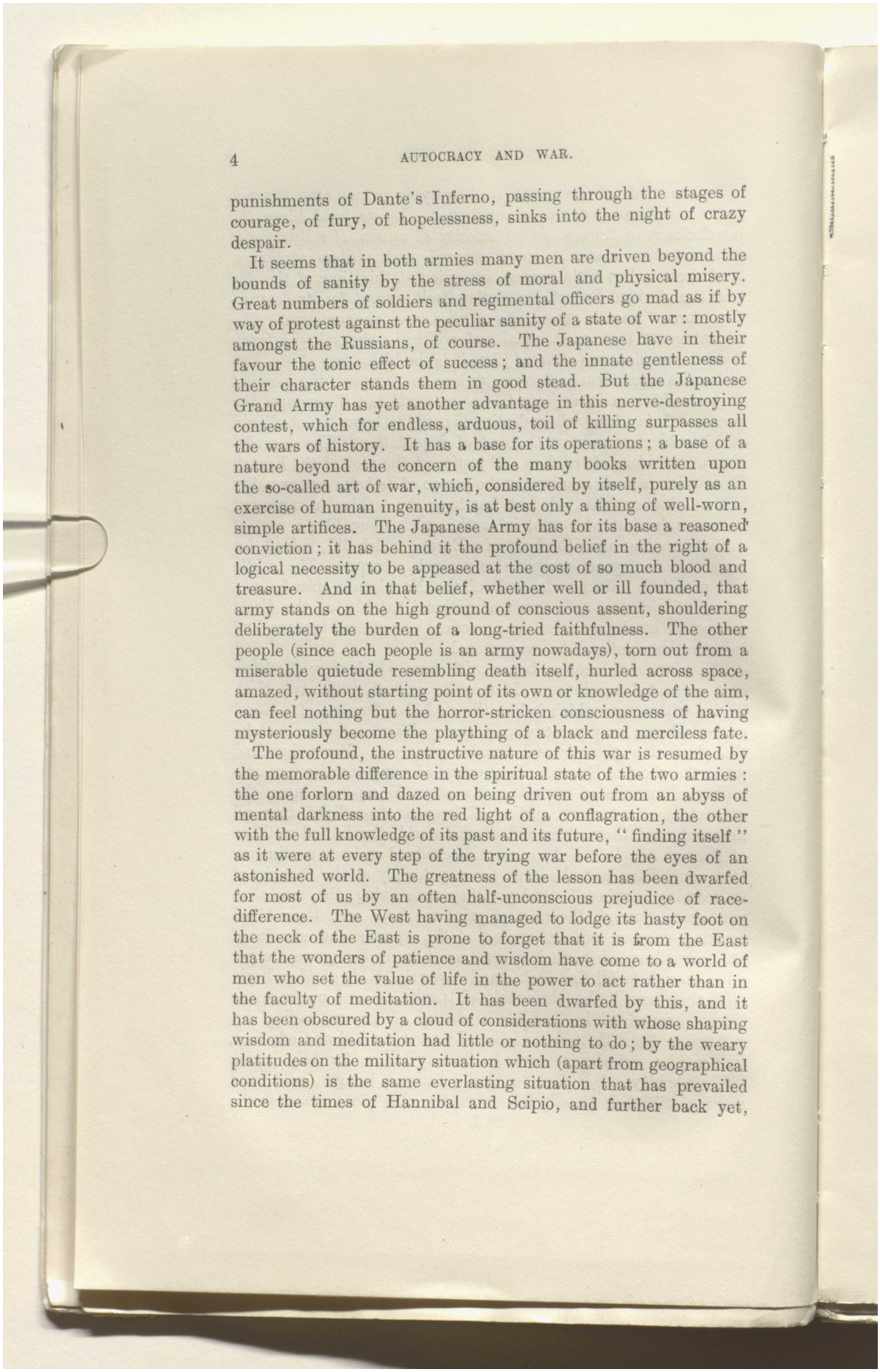
optimism and of desperate mediocrity in which the French Revolution exploded like a bomb-shell. In its lurid blaze the insufficiency of Europe, the inferiority of minds, of military and administrative systems, stood exposed with pitiless vividness. And there is but little courage in saying at this time of the day that the glorified French Revolution itself, except for its destructive force, was in essentials a mediocre phenomenon. The parentage of that great social and political upheaval was intellectual, the idea was elevated : but it is the bitter fate of the idea to lose its royal form and power, to lose its " virtue " the moment it descends from its solitary throne to work its will amongst the people. It is a king whose destiny is never to know the obedience of his subjects except at the cost of degradation. The degradation of the ideas of freedom and justice at the root of the French Revolution is made manifest in the person of its heir ; a personality without law or faith, whom it has been the fashion to represent as an eagle, but who was, in truth, much more like a sort of vulture preying upon the body of a Europe which did, indeed, for some dozen of years resemble very much a corpse. The subtle and manifold influence for evil of the Napoleonic episode as a school of violence, as a sower of national hatreds, as the direct provocator of obscurantism and reaction, of political tyranny and injustice, can not well be exaggerated.

The nineteenth century began with wars which were the issue of a corrupted revolution. It may be said that the twentieth begins with a war which is like the explosive ferment of a moral grave, whence may yet emerge a new political organism to take the place of a gigantic and dreaded phantom. For a hundred years the ghost of Russian might overshadowing with its fantastic bulk the councils of central and western Europe sat upon the gravestone of autocracy, cutting off from air, from light, from all knowledge of themselves and of the world, the buried millions of Russian people. Not the most determined cockney sentimentalist could have had the heart to weep for joy at the thought of its teeming numbers! And yet they were living, they are alive yet, since through the mist of print we have seen their blood freezing crimson upon the snow of the squares and streets of St. Petersburg, since their generations born in the grave are yet alive enough to fill the ditches and cover the fields of Manchuria with their torn limbs, their maimed trunks, to send up from the frozen ground of battle-fields a chorus of groans calling for vengeance from Heaven, to kill and retreat, or kill and advance, without intermission or rest, for twenty hours, for fifty hours, for whole days, for whole weeks of fatigue, hunger, cold, and murder—till their ghastly labour worthy of a place amongst the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000032

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



punishments of Dante's Inferno, passing through the stages of courage, of fury, of hopelessness, sinks into the night of crazy despair.

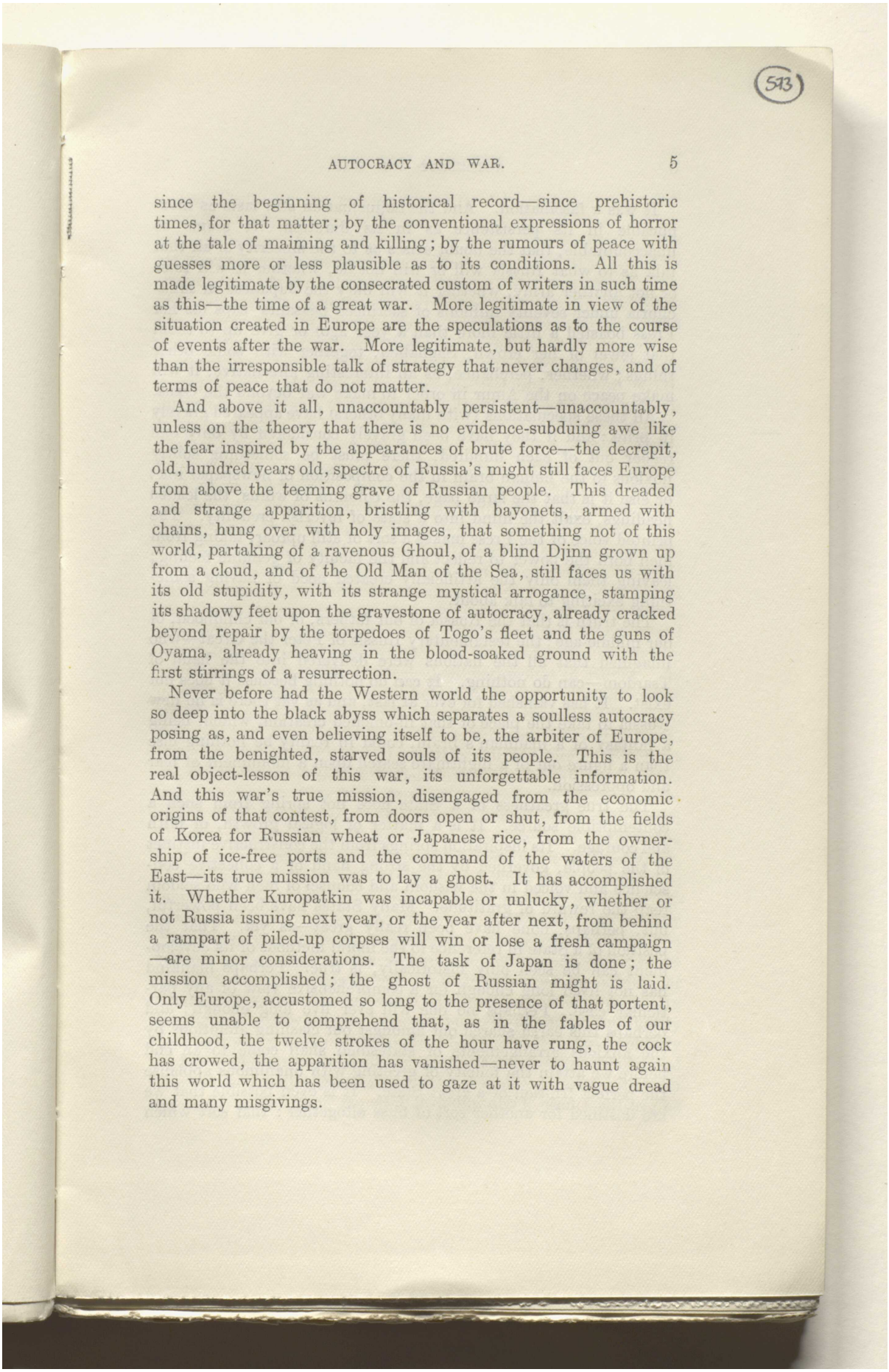
It seems that in both armies many men are driven beyond the bounds of sanity by the stress of moral and physical misery. Great numbers of soldiers and regimental officers go mad as if by way of protest against the peculiar sanity of a state of war: mostly amongst the Russians, of course. The Japanese have in their favour the tonic effect of success; and the innate gentleness of their character stands them in good stead. But the Japanese Grand Army has yet another advantage in this nerve-destroying contest, which for endless, arduous, toil of killing surpasses all the wars of history. It has a base for its operations; a base of a nature beyond the concern of the many books written upon the so-called art of war, which, considered by itself, purely as an exercise of human ingenuity, is at best only a thing of well-worn, simple artifices. The Japanese Army has for its base a reasoned conviction; it has behind it the profound belief in the right of a logical necessity to be appeased at the cost of so much blood and treasure. And in that belief, whether well or ill founded, that army stands on the high ground of conscious assent, shouldering deliberately the burden of a long-tried faithfulness. The other people (since each people is an army nowadays), torn out from a miserable quietude resembling death itself, hurled across space, amazed, without starting point of its own or knowledge of the aim, can feel nothing but the horror-stricken consciousness of having mysteriously become the plaything of a black and merciless fate.

The profound, the instructive nature of this war is resumed by the memorable difference in the spiritual state of the two armies: the one forlorn and dazed on being driven out from an abyss of mental darkness into the red light of a conflagration, the other with the full knowledge of its past and its future, "finding itself" as it were at every step of the trying war before the eyes of an astonished world. The greatness of the lesson has been dwarfed for most of us by an often half-unconscious prejudice of race-difference. The West having managed to lodge its hasty foot on the neck of the East is prone to forget that it is from the East that the wonders of patience and wisdom have come to a world of men who set the value of life in the power to act rather than in the faculty of meditation. It has been dwarfed by this, and it has been obscured by a cloud of considerations with whose shaping wisdom and meditation had little or nothing to do; by the weary platitudes on the military situation which (apart from geographical conditions) is the same everlasting situation that has prevailed since the times of Hannibal and Scipio, and further back yet,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



since the beginning of historical record—since prehistoric times, for that matter; by the conventional expressions of horror at the tale of maiming and killing; by the rumours of peace with guesses more or less plausible as to its conditions. All this is made legitimate by the consecrated custom of writers in such time as this—the time of a great war. More legitimate in view of the situation created in Europe are the speculations as to the course of events after the war. More legitimate, but hardly more wise than the irresponsible talk of strategy that never changes, and of terms of peace that do not matter.

And above it all, unaccountably persistent—unaccountably, unless on the theory that there is no evidence-subduing awe like the fear inspired by the appearances of brute force—the decrepit, old, hundred years old, spectre of Russia's might still faces Europe from above the teeming grave of Russian people. This dreaded and strange apparition, bristling with bayonets, armed with chains, hung over with holy images, that something not of this world, partaking of a ravenous Ghoul, of a blind Djinn grown up from a cloud, and of the Old Man of the Sea, still faces us with its old stupidity, with its strange mystical arrogance, stamping its shadowy feet upon the gravestone of autocracy, already cracked beyond repair by the torpedoes of Togo's fleet and the guns of Oyama, already heaving in the blood-soaked ground with the first stirrings of a resurrection.

Never before had the Western world the opportunity to look so deep into the black abyss which separates a soulless autocracy posing as, and even believing itself to be, the arbiter of Europe, from the benighted, starved souls of its people. This is the real object-lesson of this war, its unforgettable information. And this war's true mission, disengaged from the economic origins of that contest, from doors open or shut, from the fields of Korea for Russian wheat or Japanese rice, from the ownership of ice-free ports and the command of the waters of the East—its true mission was to lay a ghost. It has accomplished it. Whether Kuropatkin was incapable or unlucky, whether or not Russia issuing next year, or the year after next, from behind a rampart of piled-up corpses will win or lose a fresh campaign—are minor considerations. The task of Japan is done; the mission accomplished; the ghost of Russian might is laid. Only Europe, accustomed so long to the presence of that portent, seems unable to comprehend that, as in the fables of our childhood, the twelve strokes of the hour have rung, the cock has crowed, the apparition has vanished—never to haunt again this world which has been used to gaze at it with vague dread and many misgivings.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

It was a fascination. And the hallucination still lasts as inexplicable in its persistence as in its duration. It seems so unaccountable, that the doubt arises as to the sincerity of all that talk as to what Russia will or will not do, whether it will raise or not another army, whether it will bury the Japanese in Manchuria under seventy millions of sacrificed peasants' caps (as her Press boasted a little more than a year ago) or give up to them that jewel of her crown, Saghalien, together with some other things; whether, perchance, as an interesting alternative, it will make peace on the Amur in order to make war beyond the Oxus.

All these speculations (with many others) have appeared gravely in print; and if they have been gravely considered by only one reader out of each hundred, there must be something subtly noxious to the human brain in the composition of newspaper ink; or else it is that the large page, the columns of words, the leaded headings, exalt the mind into a state of feverish credulity. The printed voice of the Press makes a sort of still uproar, taking from men both the power to reflect and the faculty of genuine feeling; leaving them only the artificially created need of having something exciting to talk about.

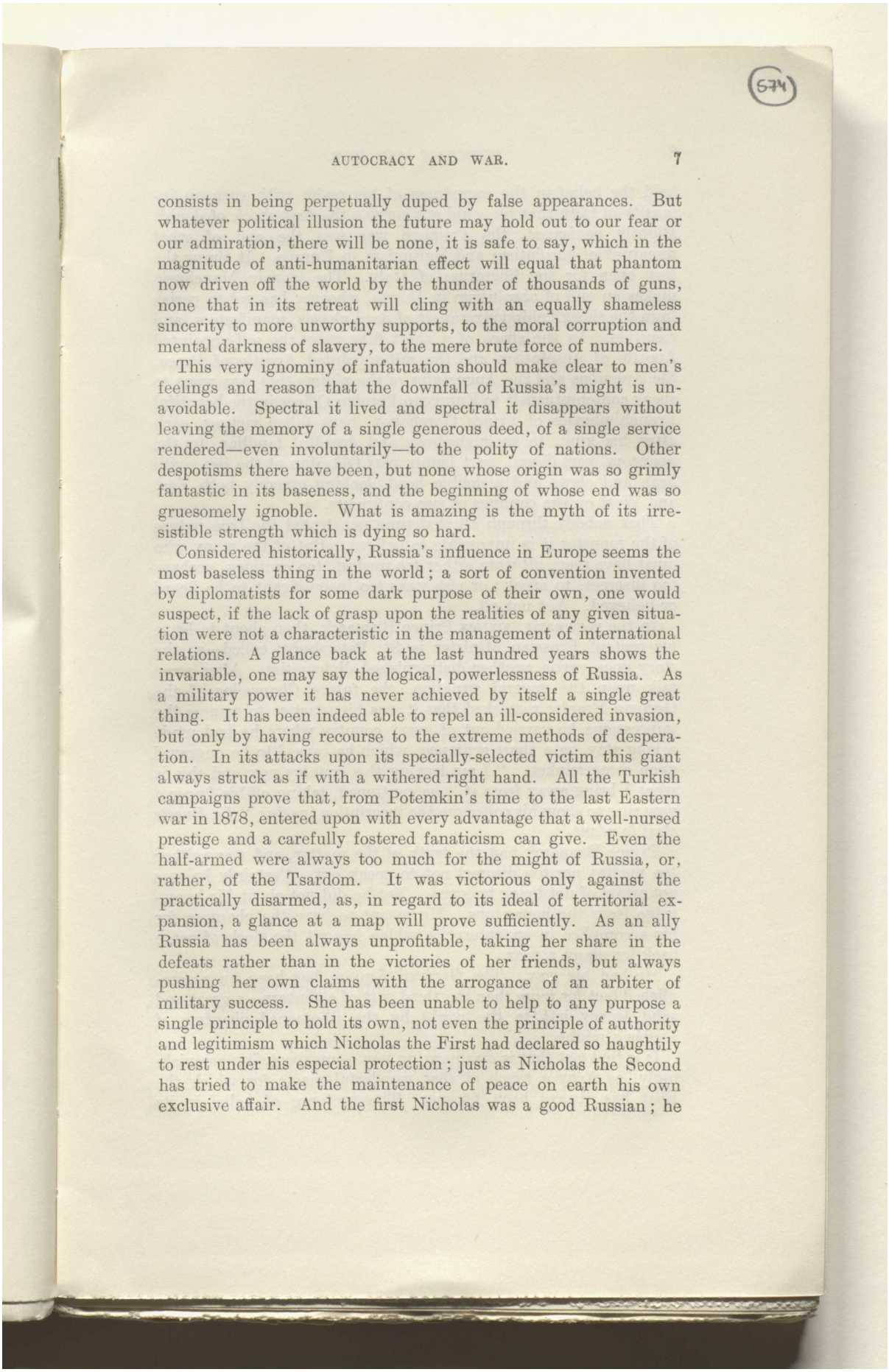
The truth is that the Russia of our fathers, of our childhood, of our middle-age; the testamentary Russia of Peter the Great—who imagined that all the nations were delivered into the hand of Tsardom—can do nothing. It can do nothing because it does not exist. It has vanished for ever at last, and as yet there is no new Russia to take the place of that ill-omened creation, which, being a fantasy of a madman's brain, could in reality be nothing else than a figure out of a nightmare seated upon a monument of fear and oppression.

The true greatness of a State does not spring from such a contemptible source. It is a matter of logical growth, of faith and courage. Its inspiration springs from the constructive instinct of the people, governed by the strong hand of a collective conscience and voiced in the wisdom and counsel of men who seldom reap the reward of gratitude. Many States have been powerful, but, perhaps, none have been really great—as yet. That the position of a State in reference to the moral methods of its development can be seen only historically, is true. Perhaps mankind has not lived long enough for a comprehensive view of any particular case. Perhaps no one will ever live long enough; and perhaps this earth shared out amongst our clashing ambitions by the anxious arrangements of statesmen shall come to an end before we attain the felicity of greeting with unanimous applause the perfect fruition of a great State. It is even possible that we are destined for another sort of bliss altogether: that sort which

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00002f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



consists in being perpetually duped by false appearances. But whatever political illusion the future may hold out to our fear or our admiration, there will be none, it is safe to say, which in the magnitude of anti-humanitarian effect will equal that phantom now driven off the world by the thunder of thousands of guns, none that in its retreat will cling with an equally shameless sincerity to more unworthy supports, to the moral corruption and mental darkness of slavery, to the mere brute force of numbers.

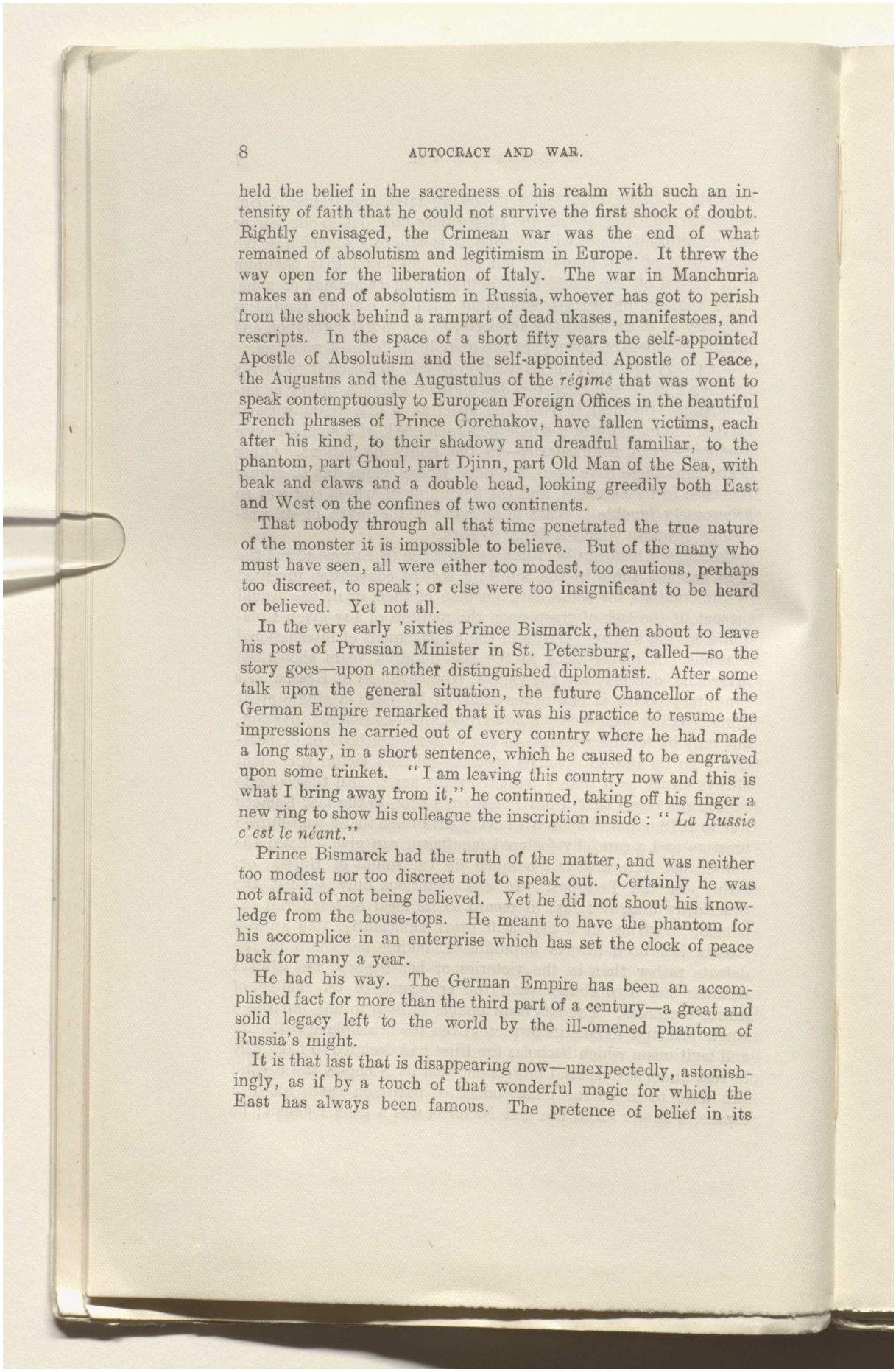
This very ignominy of infatuation should make clear to men's feelings and reason that the downfall of Russia's might is unavoidable. Spectral it lived and spectral it disappears without leaving the memory of a single generous deed, of a single service rendered—even involuntarily—to the polity of nations. Other despotisms there have been, but none whose origin was so grimly fantastic in its baseness, and the beginning of whose end was so gruesomely ignoble. What is amazing is the myth of its irresistible strength which is dying so hard.

Considered historically, Russia's influence in Europe seems the most baseless thing in the world; a sort of convention invented by diplomatists for some dark purpose of their own, one would suspect, if the lack of grasp upon the realities of any given situation were not a characteristic in the management of international relations. A glance back at the last hundred years shows the invariable, one may say the logical, powerlessness of Russia. As a military power it has never achieved by itself a single great thing. It has been indeed able to repel an ill-considered invasion, but only by having recourse to the extreme methods of desperation. In its attacks upon its specially-selected victim this giant always struck as if with a withered right hand. All the Turkish campaigns prove that, from Potemkin's time to the last Eastern war in 1878, entered upon with every advantage that a well-nursed prestige and a carefully fostered fanaticism can give. Even the half-armed were always too much for the might of Russia, or, rather, of the Tsardom. It was victorious only against the practically disarmed, as, in regard to its ideal of territorial expansion, a glance at a map will prove sufficiently. As an ally Russia has been always unprofitable, taking her share in the defeats rather than in the victories of her friends, but always pushing her own claims with the arrogance of an arbiter of military success. She has been unable to help to any purpose a single principle to hold its own, not even the principle of authority and legitimism which Nicholas the First had declared so haughtily to rest under his especial protection; just as Nicholas the Second has tried to make the maintenance of peace on earth his own exclusive affair. And the first Nicholas was a good Russian; he

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



held the belief in the sacredness of his realm with such an intensity of faith that he could not survive the first shock of doubt. Rightly envisaged, the Crimean war was the end of what remained of absolutism and legitimism in Europe. It threw the way open for the liberation of Italy. The war in Manchuria makes an end of absolutism in Russia, whoever has got to perish from the shock behind a rampart of dead ukases, manifestoes, and rescripts. In the space of a short fifty years the self-appointed Apostle of Absolutism and the self-appointed Apostle of Peace, the Augustus and the Augustulus of the *régime* that was wont to speak contemptuously to European Foreign Offices in the beautiful French phrases of Prince Gorchakov, have fallen victims, each after his kind, to their shadowy and dreadful familiar, to the phantom, part Ghoul, part Djinn, part Old Man of the Sea, with beak and claws and a double head, looking greedily both East and West on the confines of two continents.

That nobody through all that time penetrated the true nature of the monster it is impossible to believe. But of the many who must have seen, all were either too modest, too cautious, perhaps too discreet, to speak; or else were too insignificant to be heard or believed. Yet not all.

In the very early 'sixties Prince Bismarck, then about to leave his post of Prussian Minister in St. Petersburg, called—so the story goes—upon another distinguished diplomatist. After some talk upon the general situation, the future Chancellor of the German Empire remarked that it was his practice to resume the impressions he carried out of every country where he had made a long stay, in a short sentence, which he caused to be engraved upon some trinket. "I am leaving this country now and this is what I bring away from it," he continued, taking off his finger a new ring to show his colleague the inscription inside: "*La Russie c'est le néant.*"

Prince Bismarck had the truth of the matter, and was neither too modest nor too discreet not to speak out. Certainly he was not afraid of not being believed. Yet he did not shout his knowledge from the house-tops. He meant to have the phantom for his accomplice in an enterprise which has set the clock of peace back for many a year.

He had his way. The German Empire has been an accomplished fact for more than the third part of a century—a great and solid legacy left to the world by the ill-omened phantom of Russia's might.

It is that last that is disappearing now—unexpectedly, astonishingly, as if by a touch of that wonderful magic for which the East has always been famous. The pretence of belief in its

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000075

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

existence will no longer answer anybody's purposes (now Prince Bismarck is dead) unless the purposes of the writers of sensational paragraphs as to this *Néant* making an armed descent upon the plains of India. That sort of folly would be beneath notice if it did not distract attention from the real problem created for Europe by the war in the Far East.

For good or evil in the working-out of her destiny, Russia is bound to remain a *Néant* for many long years, in a more even than the Bismarckian sense. The very fear of this spectre being gone it behoves us to consider its legacy—the fact (no phantom that) accomplished in Central Europe by its help and connivance.

The German Empire may feel at bottom the loss of an old accomplice always amenable to confidential whispers of a bargain; but in the first instance it cannot but rejoice at the fundamental weakening of a possible obstacle to its instincts of territorial expansion. There is a removal of that latent feeling of restraint which the presence of a powerful neighbour, however implicated with you in a sense of common guilt, is bound to inspire. The common guilt of the two Empires is defined precisely by their frontier line running through the Polish provinces. Without indulging in excessive feelings of indignation at that country's partition, or going so far as to believe—with a late French politician—in the "immanent justice of things," it is clear that a material situation, based upon an essentially immoral transaction, contains the germ of fatal differences in the temperament of the two partners in iniquity—whatever it is. Germany has been the evil counsellor of Russia on all the questions of her Polish problem. Always urging the adoption of the most repressive measures with a perfectly logical duplicity, Prince Bismarck's Empire has taken care to couple the neighbourly offers of military assistance with its merciless advice. The thought of the Polish provinces accepting a frank reconciliation with a humanised Russia and bringing the weight of homogeneous loyalty to within a few score of miles of Berlin has been always intensely distasteful to the arrogant Germanising tendencies of the other partner in iniquity. And, besides, the way to the Baltic provinces leads over the Niemen and over the Vistula.

And now, when there is a possibility of serious internal disturbances destroying the sort of order autocracy has kept in Russia, the road over these rivers is seen wearing a more inviting aspect. At any moment the pretext of armed intervention may be found in a revolutionary outbreak provoked by socialists, perhaps—but at any rate by the political immaturity of the enlightened classes and by the political barbarism of the Russian people. The throes of Russian resurrection will be long and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000071

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

painful. This is not the place to speculate upon the nature of these convulsions; but there must be some violent break-up of the lamentable tradition, a shattering of the social, of the administrative—perhaps of the territorial—unity.

Voices have been heard saying that the time for reforms in Russia is already past. This is the superficial view of a more profound truth that for Russia there has never been such a time within the memory of mankind. It is impossible to initiate any sort of reform upon a phase of blind absolutism, and in Russia there has never been anything else to which the faintest tradition could, after ages of error, go back as to a parting of the ways.

In Europe the monarchical principle stands justified in its struggle with the growth of political liberty by the evolution of the idea of nationality as we see it concreted at the present time, by the inception of that wider solidarity grouping together around the standard of absolute power these larger agglomerations of mankind. This service of unification, creating close-knit communities possessing the ability, the will, and the power to pursue a common ideal, has prepared the ground for the advent of a still larger understanding: for the solidarity of Europeanism, which must be the next step towards the advent of Concord and Justice; an advent that, however delayed by the cowardly worship of force and the evil passions of national selfishness, has been, and remains, the only possible goal of our progress.

The conceptions of legality, of larger patriotism, of national duties and aspirations have grown under the shadow of the unlimited monarchies of Europe, which were the creations of historical necessity. There were seeds of wisdom in their very violences and abuses. They had a past and a future; they were human. But under the shadow of Russian autocracy nothing could grow. Russian autocracy succeeded to nothing; it had no historical past, and it cannot hope for a historical future. It can only end. By no industry of investigation, by no fantastic stretch of benevolence, can it be presented as a phase of development through which a society, a State, must pass on the way to the full consciousness of its destiny. It lies outside the stream of progress. This despotism has been utterly un-European. And neither has it been Asiatic in its nature. Oriental despotisms belong to the history of mankind; they have left their trace on our minds and our imagination by their splendour, by their culture, by their art, by the exploits of great conquerors. The record of their rise and decay has an intellectual value; they are in their origins and their course the manifestations of human needs, the instruments of racial temperament, of conquering force, of faith and fanaticism. The Russian autocracy as we see it now is a thing apart. It is im-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

possible to assign to it any rational origin in the vices, the misfortunes, the necessities, or the passions of mankind. This despotism has neither an European nor an Oriental parentage; more, it seems to have no root either in the institutions or the follies of this earth. What strikes one with a sort of awe is just this something inhuman in its character. It is like a visitation, like a curse from Heaven falling in the darkness of ages upon the immense plains of forest and steppe lying dumbly on the confines of two continents: a true desert harbouring no spirit either of the East or of the West.

This pitiful fate of a country held by an evil spell, suffering from an awful visitation for which the responsibility cannot be traced either to her sins or her follies, has made Russia as a nation so difficult to understand by Europe. From the very first ghastly dawn of her existence as a State she had to breathe the atmosphere of despotism; she found nothing but the arbitrary will of an obscure autocrat at the beginning and end of her organisation. Hence arises her impenetrability to whatever is true in Western thought. Western thought, when it crosses her frontier, falls under the spell of her autocracy and becomes a noxious parody of itself. Hence the contradictions, the riddles of her national life, which are looked upon with such curiosity by the rest of the world. The curse had entered her very soul; autocracy, and nothing else in the world, has moulded her institutions, and with the poison of slavery drugged the national temperament into the apathy of a hopeless fatalism. It seems to have gone into the blood, tainting every mental activity in its source by a half-mystical, insensate, fascinating assertion of purity and holiness. The Government of Holy Russia, arrogating to itself the supreme power to torment and slaughter the bodies of its subjects like a God-sent scourge, has been most cruel to those whom it allowed to live under the shadow of its dispensation. The worst crime against humanity of that system we behold now crouching at bay behind vast heaps of mangled corpses is the ruthless destruction of innumerable minds. The greatest horror of the world—madness—walked faithfully in its train. Some of the best intellects of Russia, after struggling in vain against the spell, ended by throwing themselves at the feet of that hopeless despotism as a giddy man leaps into an abyss. An attentive survey of Russia's literature, of her church, of her administration, and the cross-currents of her thought, must end in the verdict that the Russia of to-day has not the right to give her voice on a single question touching the future of humanity, because from the very inception of her being the brutal destruction of dignity, of truth, of rectitude, of all that is fruitful in human nature has been made the imperative condition of her existence. The great governmental secret of that imperium which Prince Bismarck had the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000065

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

insight and the courage to call *Le Néant*, has been the extirpation of every intellectual hope. To pronounce in the face of such a past the word Evolution, which is precisely the expression of the highest intellectual hope, is a gruesome pleasantry. There can be no evolution out of a grave. Another word of less scientific sound has been very much pronounced of late in connection with Russia's future, a word of more vague import, a word of dread as much as of hope—Revolution.

In the face of the events of the last four months, this word has sprung instinctively, as it were, on grave lips, and has been heard with solemn forebodings. More or less consciously Europe is preparing herself for a spectacle of much violence and perhaps of an inspiring nobility of greatness. And there will be nothing of what she expects. She will see neither the anticipated character of the violence nor yet any signs of generous greatness. Her expectations, more or less vaguely expressed, give the measure of her ignorance of that *Néant* which for so many years had remained hidden behind the phantom of invincible armies.

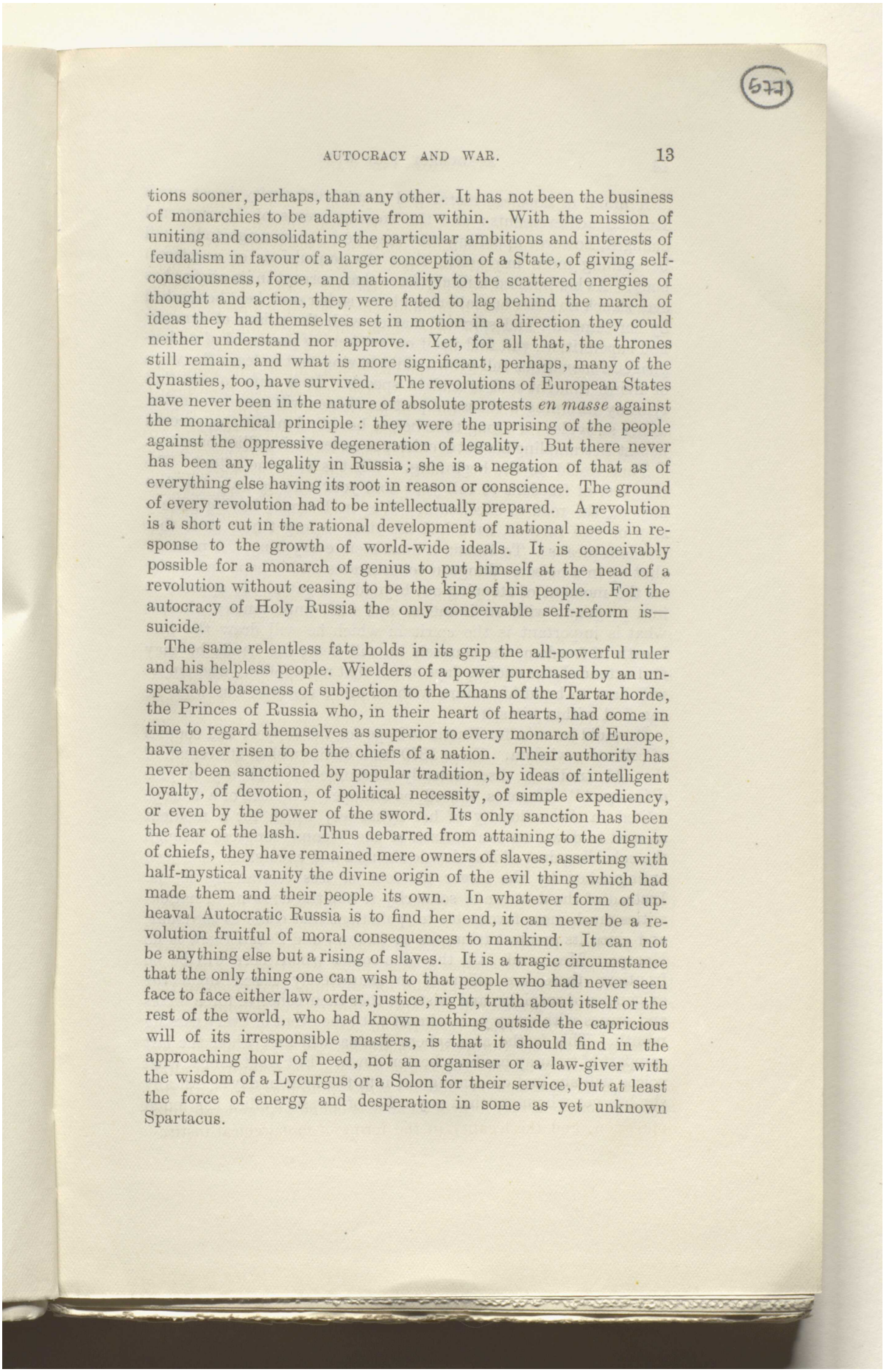
Néant! In a way, yes! And yet perhaps Prince Bismarck has let himself be led away by the seduction of a good phrase into the use of an inexact term. The form of his judgment had to be pithy, striking, engraved within a ring. If he erred, then, no doubt, he erred deliberately. The saying was near enough the truth to serve, and perhaps he did not want to destroy utterly by a more severe definition the prestige of the sham that could not deceive his genius. Prince Bismarck has been really complimentary to the useful phantom of the autocratic might. There is an awe-inspiring idea of infinity conveyed in the word *Néant*—and in Russia there is no idea. She is not a *Néant;* she is and has been simply the negation of everything worth living for. She is not an empty void, she is a yawning chasm open between East and West; a bottomless abyss that has swallowed up every hope of mercy, every aspiration towards personal dignity, towards freedom, towards knowledge; every ennobling desire of the heart, every redeeming whisper of conscience. Those that have peered into that abyss, where the dreams of Panslavism, of universal conquest, mingled with the hate and contempt for Western ideas, drifted impotently like shapes of mist, know well that it is bottomless; that there is in it no ground for anything that could in the remotest degree serve even the lowest interests of mankind—and certainly no ground ready for a revolution.

The sin of the old European Monarchies was not the absolutism inherent in every form of government; it was the inability to alter the forms of their legality, grown narrow and oppressive with the march of time. Every form of legality is bound to degenerate into oppression, and the legality in the forms of monarchical institu-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



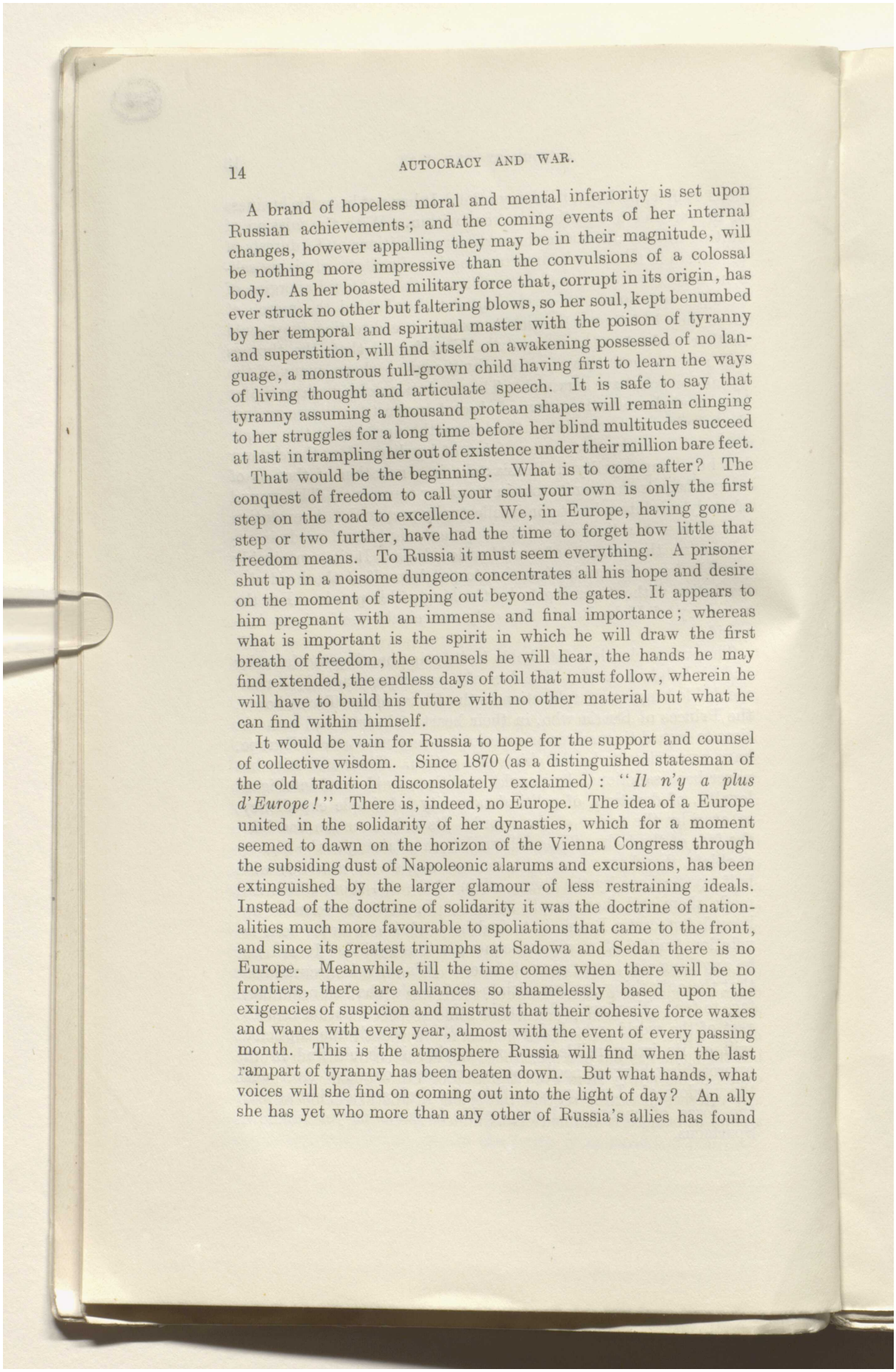
tions sooner, perhaps, than any other. It has not been the business of monarchies to be adaptive from within. With the mission of uniting and consolidating the particular ambitions and interests of feudalism in favour of a larger conception of a State, of giving self-consciousness, force, and nationality to the scattered energies of thought and action, they were fated to lag behind the march of ideas they had themselves set in motion in a direction they could neither understand nor approve. Yet, for all that, the thrones still remain, and what is more significant, perhaps, many of the dynasties, too, have survived. The revolutions of European States have never been in the nature of absolute protests *en masse* against the monarchical principle: they were the uprising of the people against the oppressive degeneration of legality. But there never has been any legality in Russia; she is a negation of that as of everything else having its root in reason or conscience. The ground of every revolution had to be intellectually prepared. A revolution is a short cut in the rational development of national needs in response to the growth of world-wide ideals. It is conceivably possible for a monarch of genius to put himself at the head of a revolution without ceasing to be the king of his people. For the autocracy of Holy Russia the only conceivable self-reform is—suicide.

The same relentless fate holds in its grip the all-powerful ruler and his helpless people. Wielders of a power purchased by an unspeakable baseness of subjection to the Khans of the Tartar horde, the Princes of Russia who, in their heart of hearts, had come in time to regard themselves as superior to every monarch of Europe, have never risen to be the chiefs of a nation. Their authority has never been sanctioned by popular tradition, by ideas of intelligent loyalty, of devotion, of political necessity, of simple expediency, or even by the power of the sword. Its only sanction has been the fear of the lash. Thus debarred from attaining to the dignity of chiefs, they have remained mere owners of slaves, asserting with half-mystical vanity the divine origin of the evil thing which had made them and their people its own. In whatever form of upheaval Autocratic Russia is to find her end, it can never be a revolution fruitful of moral consequences to mankind. It can not be anything else but a rising of slaves. It is a tragic circumstance that the only thing one can wish to that people who had never seen face to face either law, order, justice, right, truth about itself or the rest of the world, who had known nothing outside the capricious will of its irresponsible masters, is that it should find in the approaching hour of need, not an organiser or a law-giver with the wisdom of a Lycurgus or a Solon for their service, but at least the force of energy and desperation in some as yet unknown Spartacus.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000079

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



A brand of hopeless moral and mental inferiority is set upon Russian achievements; and the coming events of her internal changes, however appalling they may be in their magnitude, will be nothing more impressive than the convulsions of a colossal body. As her boasted military force that, corrupt in its origin, has ever struck no other but faltering blows, so her soul, kept benumbed by her temporal and spiritual master with the poison of tyranny and superstition, will find itself on awakening possessed of no language, a monstrous full-grown child having first to learn the ways of living thought and articulate speech. It is safe to say that tyranny assuming a thousand protean shapes will remain clinging to her struggles for a long time before her blind multitudes succeed at last in trampling her out of existence under their million bare feet.

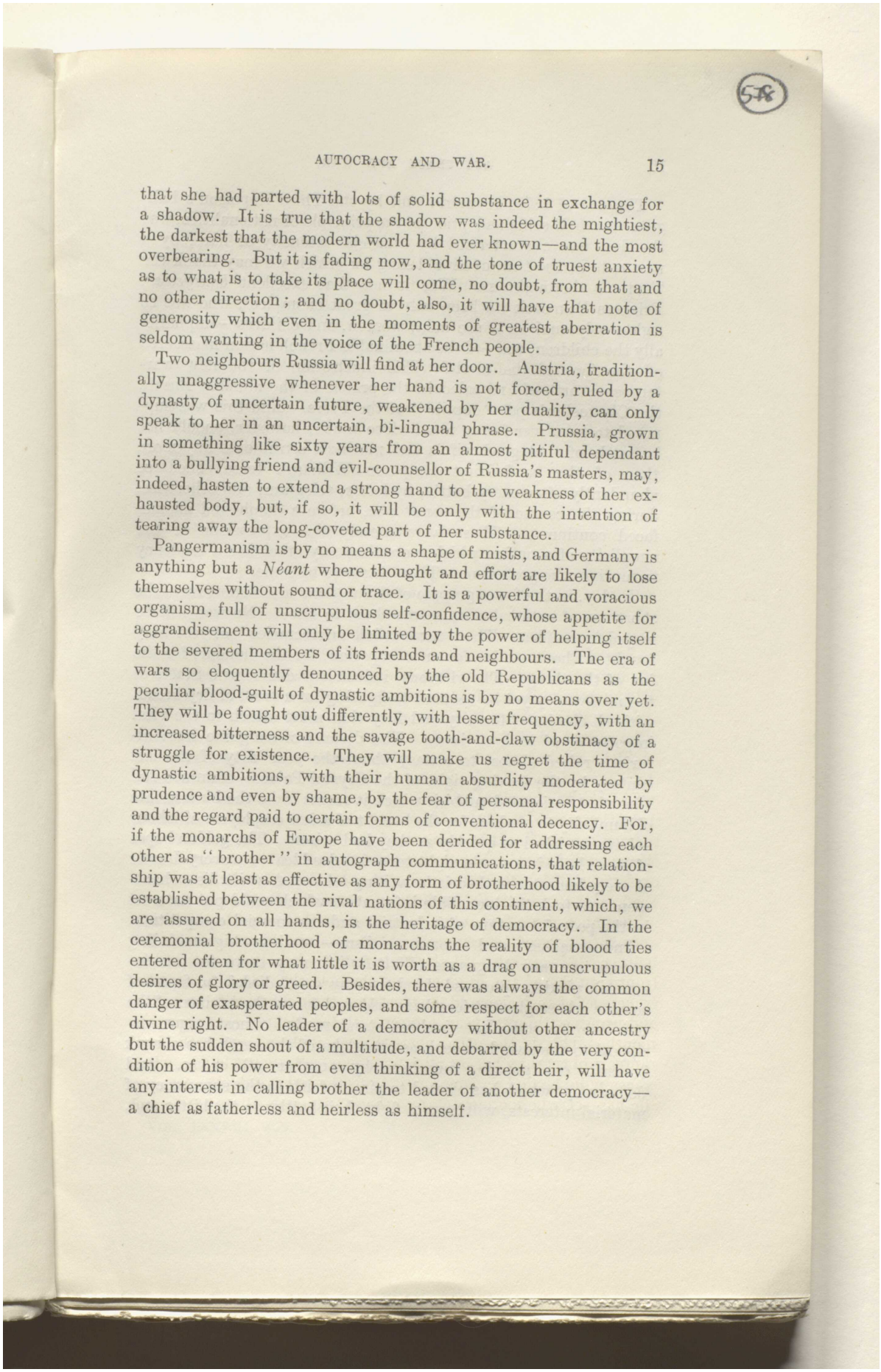
That would be the beginning. What is to come after? The conquest of freedom to call your soul your own is only the first step on the road to excellence. We, in Europe, having gone a step or two further, have had the time to forget how little that freedom means. To Russia it must seem everything. A prisoner shut up in a noisome dungeon concentrates all his hope and desire on the moment of stepping out beyond the gates. It appears to him pregnant with an immense and final importance; whereas what is important is the spirit in which he will draw the first breath of freedom, the counsels he will hear, the hands he may find extended, the endless days of toil that must follow, wherein he will have to build his future with no other material but what he can find within himself.

It would be vain for Russia to hope for the support and counsel of collective wisdom. Since 1870 (as a distinguished statesman of the old tradition disconsolately exclaimed): "*Il n'y a plus d'Europe!*" There is, indeed, no Europe. The idea of a Europe united in the solidarity of her dynasties, which for a moment seemed to dawn on the horizon of the Vienna Congress through the subsiding dust of Napoleonic alarums and excursions, has been extinguished by the larger glamour of less restraining ideals. Instead of the doctrine of solidarity it was the doctrine of nationalities much more favourable to spoliations that came to the front, and since its greatest triumphs at Sadowa and Sedan there is no Europe. Meanwhile, till the time comes when there will be no frontiers, there are alliances so shamelessly based upon the exigencies of suspicion and mistrust that their cohesive force waxes and wanes with every year, almost with the event of every passing month. This is the atmosphere Russia will find when the last rampart of tyranny has been beaten down. But what hands, what voices will she find on coming out into the light of day? An ally she has yet who more than any other of Russia's allies has found

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



that she had parted with lots of solid substance in exchange for a shadow. It is true that the shadow was indeed the mightiest, the darkest that the modern world had ever known—and the most overbearing. But it is fading now, and the tone of truest anxiety as to what is to take its place will come, no doubt, from that and no other direction; and no doubt, also, it will have that note of generosity which even in the moments of greatest aberration is seldom wanting in the voice of the French people.

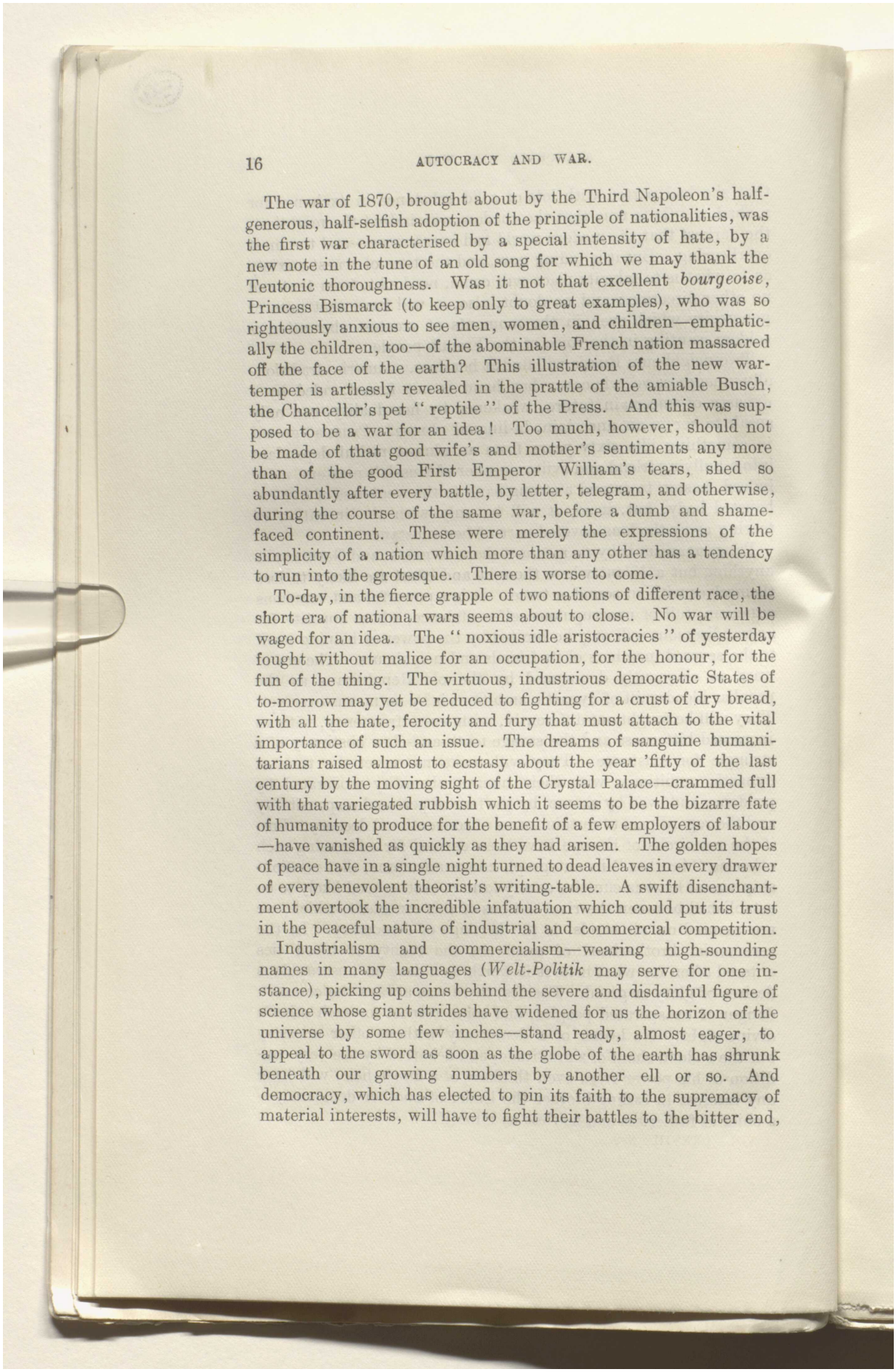
Two neighbours Russia will find at her door. Austria, traditionally unaggressive whenever her hand is not forced, ruled by a dynasty of uncertain future, weakened by her duality, can only speak to her in an uncertain, bi-lingual phrase. Prussia, grown in something like sixty years from an almost pitiful dependant into a bullying friend and evil-counsellor of Russia's masters, may, indeed, hasten to extend a strong hand to the weakness of her exhausted body, but, if so, it will be only with the intention of tearing away the long-coveted part of her substance.

Pangermanism is by no means a shape of mists, and Germany is anything but a *Néant* where thought and effort are likely to lose themselves without sound or trace. It is a powerful and voracious organism, full of unscrupulous self-confidence, whose appetite for aggrandisement will only be limited by the power of helping itself to the severed members of its friends and neighbours. The era of wars so eloquently denounced by the old Republicans as the peculiar blood-guilt of dynastic ambitions is by no means over yet. They will be fought out differently, with lesser frequency, with an increased bitterness and the savage tooth-and-claw obstinacy of a struggle for existence. They will make us regret the time of dynastic ambitions, with their human absurdity moderated by prudence and even by shame, by the fear of personal responsibility and the regard paid to certain forms of conventional decency. For, if the monarchs of Europe have been derided for addressing each other as "brother" in autograph communications, that relationship was at least as effective as any form of brotherhood likely to be established between the rival nations of this continent, which, we are assured on all hands, is the heritage of democracy. In the ceremonial brotherhood of monarchs the reality of blood ties entered often for what little it is worth as a drag on unscrupulous desires of glory or greed. Besides, there was always the common danger of exasperated peoples, and some respect for each other's divine right. No leader of a democracy without other ancestry but the sudden shout of a multitude, and debarred by the very condition of his power from even thinking of a direct heir, will have any interest in calling brother the leader of another democracy—a chief as fatherless and heirless as himself.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000be

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



The war of 1870, brought about by the Third Napoleon's half-generous, half-selfish adoption of the principle of nationalities, was the first war characterised by a special intensity of hate, by a new note in the tune of an old song for which we may thank the Teutonic thoroughness. Was it not that excellent *bourgeoise*, Princess Bismarck (to keep only to great examples), who was so righteously anxious to see men, women, and children—emphatically the children, too—of the abominable French nation massacred off the face of the earth? This illustration of the new war-temper is artlessly revealed in the prattle of the amiable Busch, the Chancellor's pet "reptile" of the Press. And this was supposed to be a war for an idea! Too much, however, should not be made of that good wife's and mother's sentiments any more than of the good First Emperor William's tears, shed so abundantly after every battle, by letter, telegram, and otherwise, during the course of the same war, before a dumb and shame-faced continent. These were merely the expressions of the simplicity of a nation which more than any other has a tendency to run into the grotesque. There is worse to come.

To-day, in the fierce grapple of two nations of different race, the short era of national wars seems about to close. No war will be waged for an idea. The "noxious idle aristocracies" of yesterday fought without malice for an occupation, for the honour, for the fun of the thing. The virtuous, industrious democratic States of to-morrow may yet be reduced to fighting for a crust of dry bread, with all the hate, ferocity and fury that must attach to the vital importance of such an issue. The dreams of sanguine humanitarians raised almost to ecstasy about the year 'fifty of the last century by the moving sight of the Crystal Palace—crammed full with that variegated rubbish which it seems to be the bizarre fate of humanity to produce for the benefit of a few employers of labour—have vanished as quickly as they had arisen. The golden hopes of peace have in a single night turned to dead leaves in every drawer of every benevolent theorist's writing-table. A swift disenchantment overtook the incredible infatuation which could put its trust in the peaceful nature of industrial and commercial competition.

Industrialism and commercialism—wearing high-sounding names in many languages (*Welt-Politik* may serve for one instance), picking up coins behind the severe and disdainful figure of science whose giant strides have widened for us the horizon of the universe by some few inches—stand ready, almost eager, to appeal to the sword as soon as the globe of the earth has shrunk beneath our growing numbers by another ell or so. And democracy, which has elected to pin its faith to the supremacy of material interests, will have to fight their battles to the bitter end,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

on a mere pittance—unless, indeed, some statesman of exceptional ability and overwhelming prestige succeeds in carrying through an international understanding for the delimitation of spheres of trade all over the earth, on the model of the territorial spheres of influence marked in Africa to keep the competitors for the privilege of improving the nigger (as a buying machine) from flying prematurely at each other's throats.

This seems the only expedient at hand for the temporary maintenance of European peace, with its alliances based on mutual distrust, the preparedness for war as its ideal, and the fear of wounds, luckily stronger, so far, than the pinch of hunger, for its only guarantee. The true peace of the world will be a place of refuge much less like a beleaguered fortress and more, let us hope, in the nature of an inviolable temple. It will be built on less perishable foundations than those of material interests. But it must be confessed that the architectural aspect of the universal city remains as yet inconceivable—that the very ground of its erection has not been cleared of the jungle.

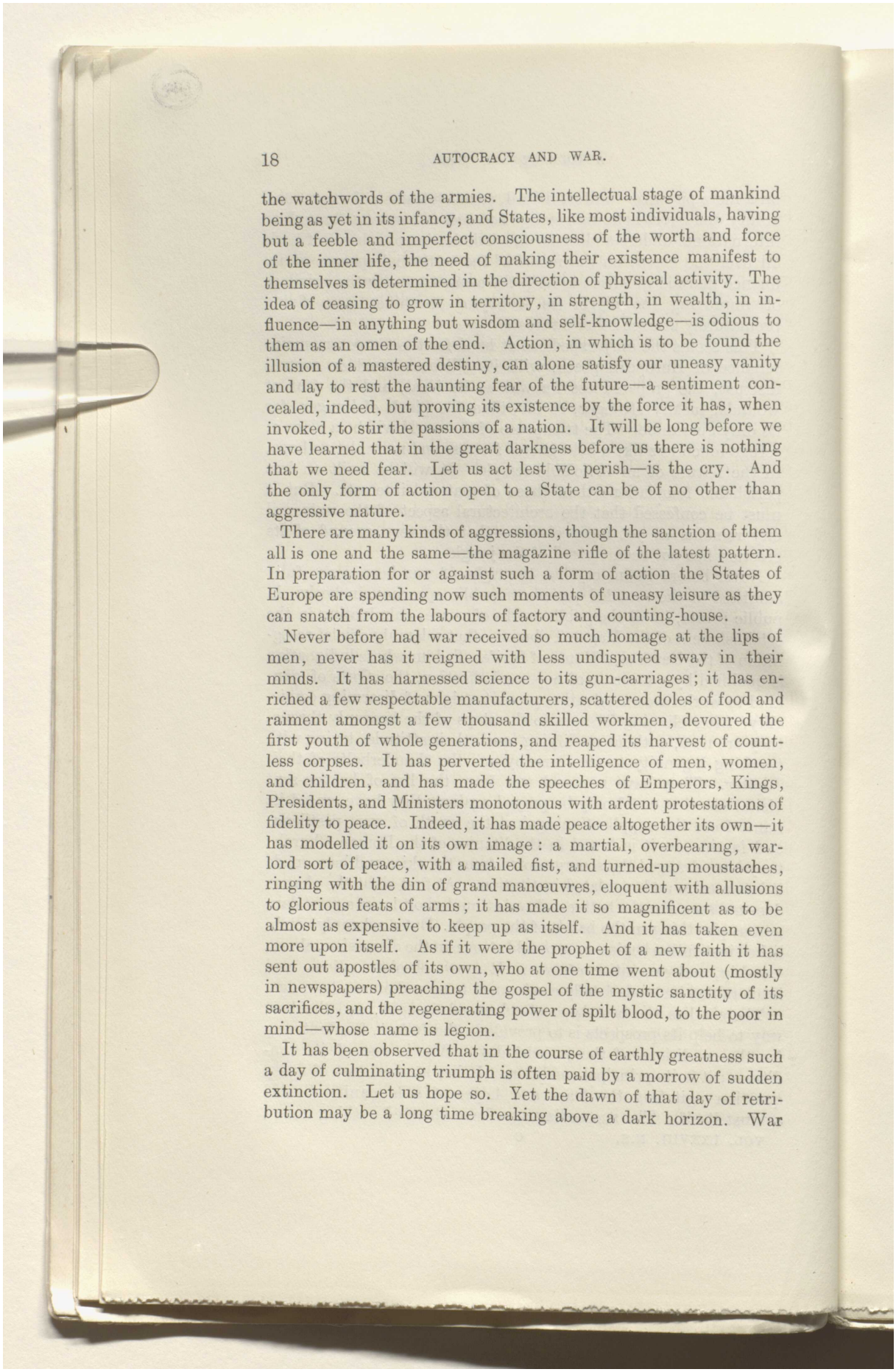
Never before in history has the right of war been more fully admitted in the rounded periods of public speeches, in books, in public prints, in all the public works of peace, culminating in the establishment of the Hague Tribunal—that solemnly official recognition of the Earth as a House of Strife. To him whose indignation is qualified by a measure of hope and affection, the efforts of mankind to work its own salvation present a sight of disarming comicality. After clinging for ages to the steps of the heavenly throne, they are now, without modifying much their attitude, trying with touching ingenuity to steal one by one the thunderbolts of their Jupiter. They have removed war from the list of heaven-sent visitations that could only be prayed against; they have erased its name from the supplication against the wrath of war, pestilence and famine, as it is found in the litanies of the Roman Church; they have dragged the scourge down from the skies and have made it into a calm and regulated institution. At first sight the change does not seem for the better. Jove's thunderbolt looks a most dangerous plaything in the hands of the people. But a solemnly established institution begins to grow old at once in the discussion, abuse, worship, and execration of men. It grows obsolete, odious, and intolerable; it stands fatally condemned to an unhonoured old age.

Therein lies the best hope of advanced thought, and the best way to help its prospects is to provide in the fullest, frankest way for the conditions of the present day. War is one of its conditions; it is its principal condition. It lies at the heart of every question agitating the fears and hopes of a humanity divided against itself. The succeeding ages have changed nothing except

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the watchwords of the armies. The intellectual stage of mankind being as yet in its infancy, and States, like most individuals, having but a feeble and imperfect consciousness of the worth and force of the inner life, the need of making their existence manifest to themselves is determined in the direction of physical activity. The idea of ceasing to grow in territory, in strength, in wealth, in influence—in anything but wisdom and self-knowledge—is odious to them as an omen of the end. Action, in which is to be found the illusion of a mastered destiny, can alone satisfy our uneasy vanity and lay to rest the haunting fear of the future—a sentiment concealed, indeed, but proving its existence by the force it has, when invoked, to stir the passions of a nation. It will be long before we have learned that in the great darkness before us there is nothing that we need fear. Let us act lest we perish—is the cry. And the only form of action open to a State can be of no other than aggressive nature.

There are many kinds of aggressions, though the sanction of them all is one and the same—the magazine rifle of the latest pattern. In preparation for or against such a form of action the States of Europe are spending now such moments of uneasy leisure as they can snatch from the labours of factory and counting-house.

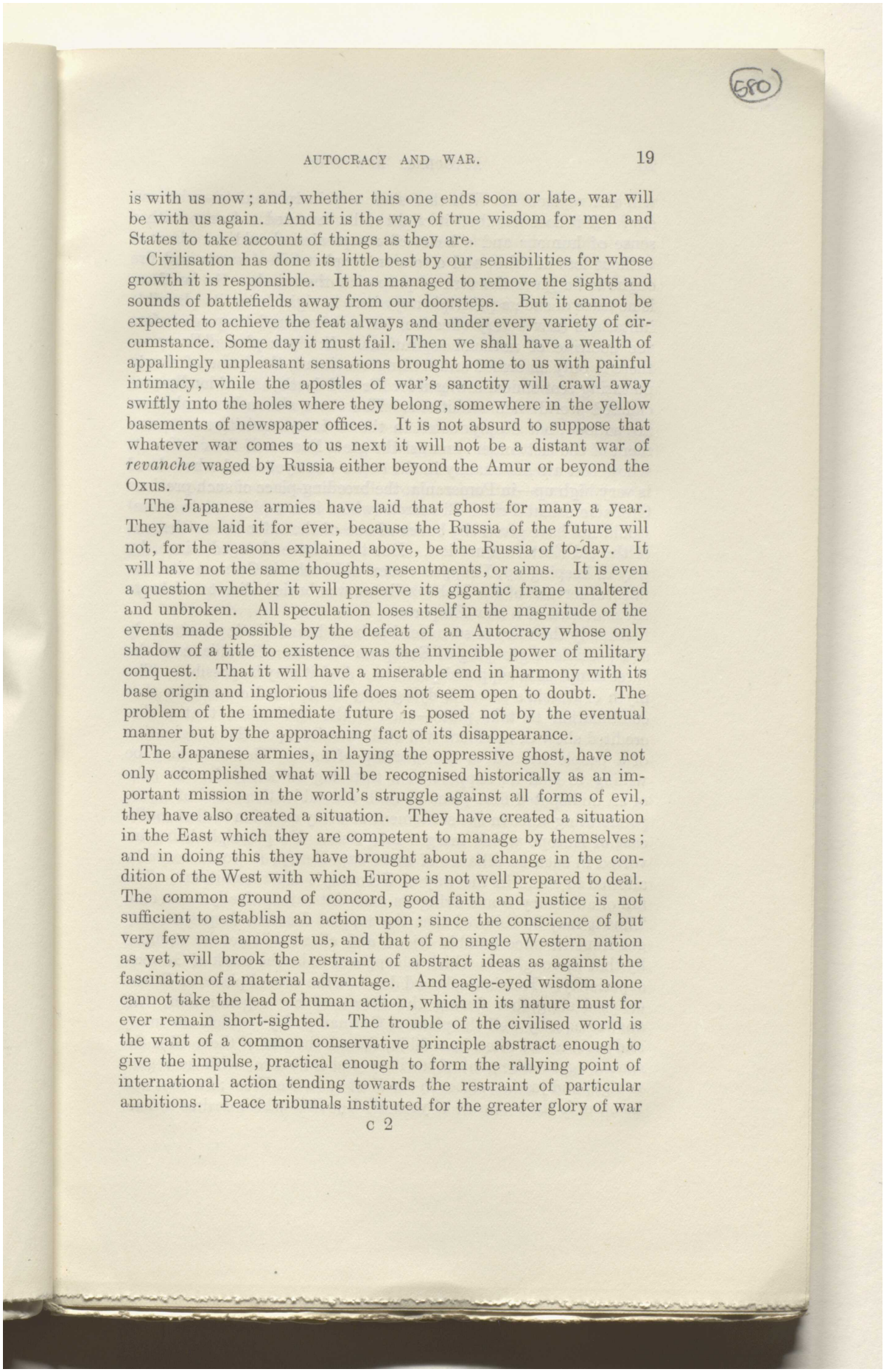
Never before had war received so much homage at the lips of men, never has it reigned with less undisputed sway in their minds. It has harnessed science to its gun-carriages; it has enriched a few respectable manufacturers, scattered doles of food and raiment amongst a few thousand skilled workmen, devoured the first youth of whole generations, and reaped its harvest of countless corpses. It has perverted the intelligence of men, women, and children, and has made the speeches of Emperors, Kings, Presidents, and Ministers monotonous with ardent protestations of fidelity to peace. Indeed, it has made peace altogether its own—it has modelled it on its own image: a martial, overbearing, warlord sort of peace, with a mailed fist, and turned-up moustaches, ringing with the din of grand manœuvres, eloquent with allusions to glorious feats of arms; it has made it so magnificent as to be almost as expensive to keep up as itself. And it has taken even more upon itself. As if it were the prophet of a new faith it has sent out apostles of its own, who at one time went about (mostly in newspapers) preaching the gospel of the mystic sanctity of its sacrifices, and the regenerating power of spilt blood, to the poor in mind—whose name is legion.

It has been observed that in the course of earthly greatness such a day of culminating triumph is often paid by a morrow of sudden extinction. Let us hope so. Yet the dawn of that day of retribution may be a long time breaking above a dark horizon. War

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



is with us now; and, whether this one ends soon or late, war will be with us again. And it is the way of true wisdom for men and States to take account of things as they are.

Civilisation has done its little best by our sensibilities for whose growth it is responsible. It has managed to remove the sights and sounds of battlefields away from our doorsteps. But it cannot be expected to achieve the feat always and under every variety of circumstance. Some day it must fail. Then we shall have a wealth of appallingly unpleasant sensations brought home to us with painful intimacy, while the apostles of war's sanctity will crawl away swiftly into the holes where they belong, somewhere in the yellow basements of newspaper offices. It is not absurd to suppose that whatever war comes to us next it will not be a distant war of *revanche* waged by Russia either beyond the Amur or beyond the Oxus.

The Japanese armies have laid that ghost for many a year. They have laid it for ever, because the Russia of the future will not, for the reasons explained above, be the Russia of to-day. It will have not the same thoughts, resentments, or aims. It is even a question whether it will preserve its gigantic frame unaltered and unbroken. All speculation loses itself in the magnitude of the events made possible by the defeat of an Autocracy whose only shadow of a title to existence was the invincible power of military conquest. That it will have a miserable end in harmony with its base origin and inglorious life does not seem open to doubt. The problem of the immediate future is posed not by the eventual manner but by the approaching fact of its disappearance.

The Japanese armies, in laying the oppressive ghost, have not only accomplished what will be recognised historically as an important mission in the world's struggle against all forms of evil, they have also created a situation. They have created a situation in the East which they are competent to manage by themselves; and in doing this they have brought about a change in the condition of the West with which Europe is not well prepared to deal. The common ground of concord, good faith and justice is not sufficient to establish an action upon; since the conscience of but very few men amongst us, and that of no single Western nation as yet, will brook the restraint of abstract ideas as against the fascination of a material advantage. And eagle-eyed wisdom alone cannot take the lead of human action, which in its nature must for ever remain short-sighted. The trouble of the civilised world is the want of a common conservative principle abstract enough to give the impulse, practical enough to form the rallying point of international action tending towards the restraint of particular ambitions. Peace tribunals instituted for the greater glory of war

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

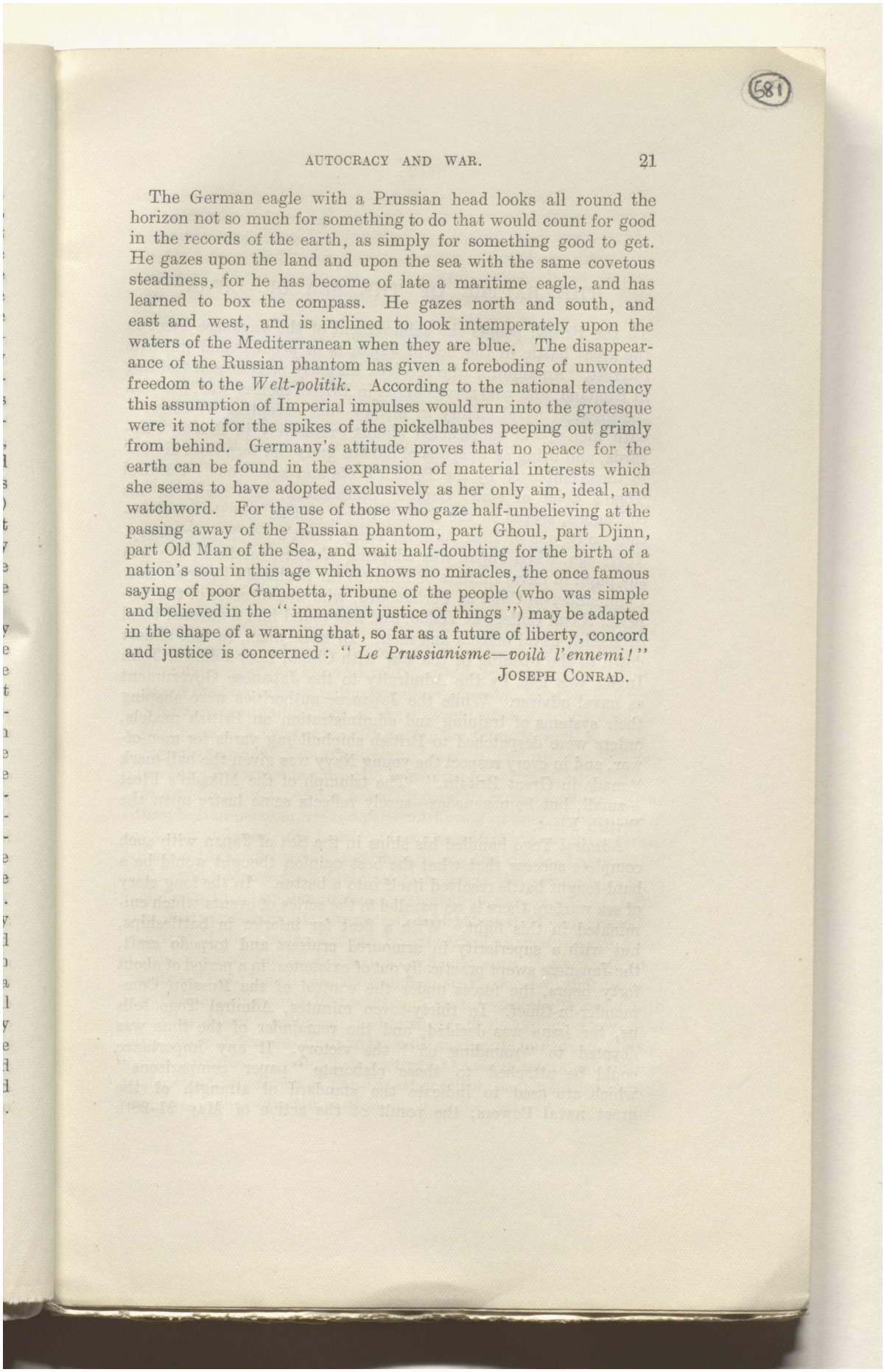
will not replace it. Whether such a principle exists—who can say? If it does not then it ought to be invented. A sage with a sense of humour and a heart of compassion should set about it without loss of time, and a solemn prophet full of words and fire ought to be given the task of preparing the minds. So far there is no trace of such a principle anywhere in sight; even its plausible imitations (never very effective) have disappeared long ago before the doctrine of national aspirations. *Il n'y a plus d'Europe*—there is only an armed and trading continent, the home of slowly maturing economical contests for life and death, and of loudly-proclaimed world-wide ambitions. There are also other ambitions not so loud, but deeply rooted in the envious acquisitive temperament of the last comer amongst the great Powers of the continent, whose feet are not exactly in the ocean—not yet—and whose head is very high up—in Pomerania, the breeding-place of such precious Grenadiers that Prince Bismarck (whom it is a pleasure to quote) would not have given the bones of one of them for the settlement of the old Eastern Question. But times have changed, since, by way of keeping up, I suppose, some old barbaric German rite, the faithful servant of the Hohenzollerns was buried alive to celebrate the accession of a new Emperor.

Already the voice of surmises has been heard hinting tentatively at a possible re-grouping of European Powers. The alliance of the three Empires is supposed possible. And it may be possible. The myth of Russia's power is dying very hard—hard enough for that combination to take place—such is the fascination that a discredited show of numbers will still exercise upon the imagination of a people trained to the worship of force. Germany may be willing to lend its support to a tottering autocracy for the sake of an undisputed first place in such a combination—and of a preponderating voice in the settlement of every question in that south-east of Europe which merges into Asia. No principle being involved in such an alliance of mere expediency, it would never be allowed to stand in the way of Germany's other ambitions. The fall of autocracy would bring its restraint automatically to an end. Thus it may be believed that the support Russian despotism may get from its once humble friend and client will not be stamped by that thoroughness which is supposed to be the mark of German superiority. Russia weakened down to the second place, or Russia eclipsed altogether during the throes of her regeneration, will answer equally well the plans of German policy—which are many and various and often incredible, though the aim of them all is the same: aggrandisement of territory and influence, with no regard to right and justice, either in the East or in the West; for that and no other is the true note of your *Welt-politik* which desires to live.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



The German eagle with a Prussian head looks all round the horizon not so much for something to do that would count for good in the records of the earth, as simply for something good to get. He gazes upon the land and upon the sea with the same covetous steadiness, for he has become of late a maritime eagle, and has learned to box the compass. He gazes north and south, and east and west, and is inclined to look intemperately upon the waters of the Mediterranean when they are blue. The disappearance of the Russian phantom has given a foreboding of unwonted freedom to the *Welt-politik*. According to the national tendency this assumption of Imperial impulses would run into the grotesque were it not for the spikes of the pickelhaubes peeping out grimly from behind. Germany's attitude proves that no peace for the earth can be found in the expansion of material interests which she seems to have adopted exclusively as her only aim, ideal, and watchword. For the use of those who gaze half-unbelieving at the passing away of the Russian phantom, part Ghoul, part Djinn, part Old Man of the Sea, and wait half-doubting for the birth of a nation's soul in this age which knows no miracles, the once famous saying of poor Gambetta, tribune of the people (who was simple and believed in the "immanent justice of things") may be adapted in the shape of a warning that, so far as a future of liberty, concord and justice is concerned: "*Le Prussianisme—voilà l'ennemi!*"

JOSEPH CONRAD.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000083

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE BATTLE OF THE SEA OF JAPAN.

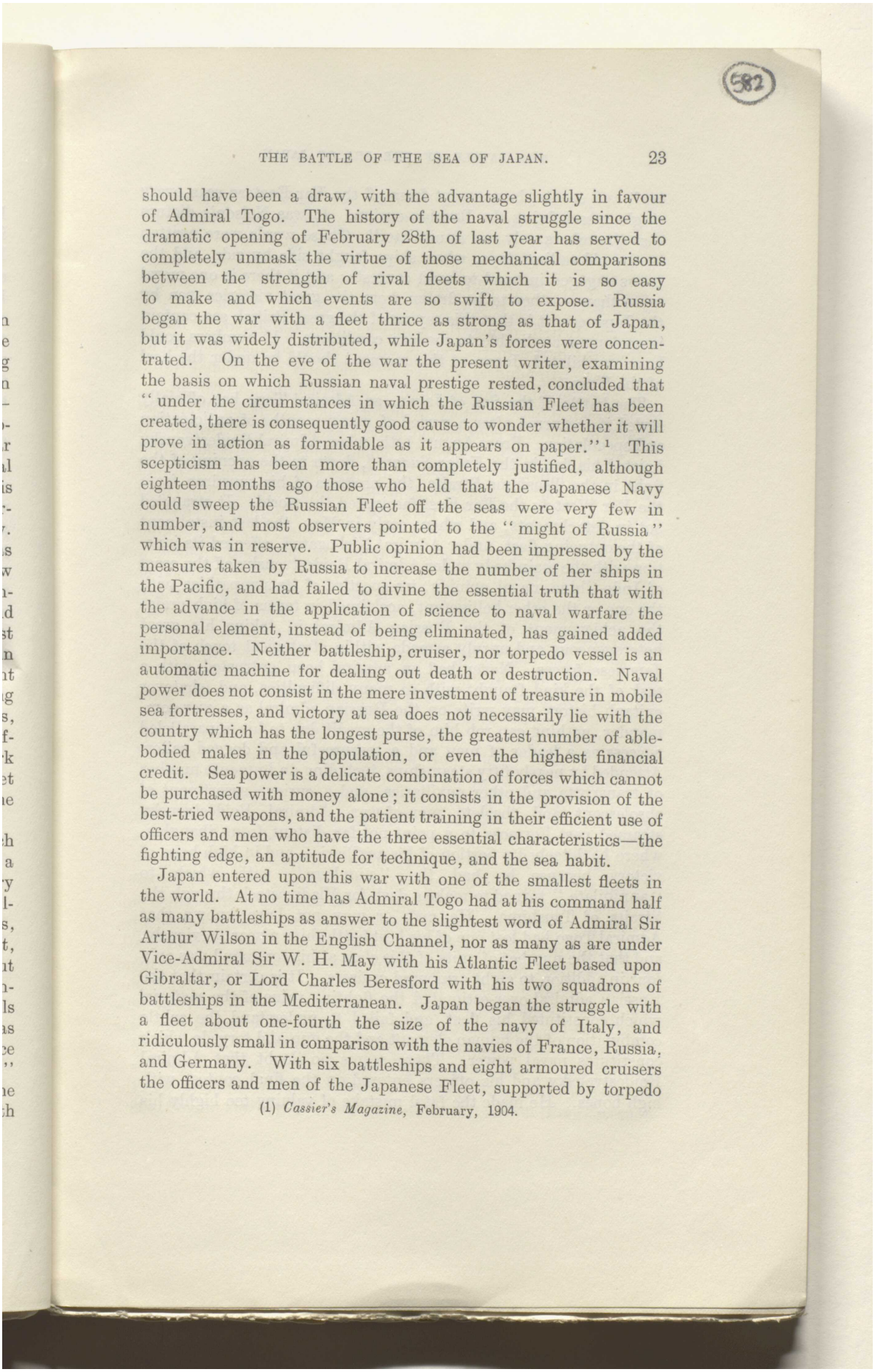
To the British people the achievement of the Japanese Fleet in the great battle in the Sea of Japan is of peculiar and intimate interest. An admiral who received his early professional training in England, and who served afloat in British men-of-war, has won the greatest naval victory in history—not excepting Trafalgar—with men-of-war constructed almost exclusively in British shipyards, and using as weapons of offence guns and torpedoes similar to those employed by the British fleets and squadrons. Admiral Togo's chief of staff, Captain Shimamura, like many of his colleagues, served in the British Fleet, and he had the good fortune to be one of Rear-Admiral Percy Scott's pupils in gunnery. Years ago, when Japan was adopting Western methods, she was the pupil in naval matters of Admiral Sir Archibald Douglas, now Commander-in-Chief at Portsmouth, who was director of the Imperial Naval College at Yeddo, and had round him a devoted band of British naval officers and men. In later years, in fact almost down to the opening of the war with China, Rear-Admiral John Ingles was lent by the Admiralty to the Japanese Government as naval adviser. While the Japanese authorities were shaping their systems of training and administration on British models, orders were despatched to British shipbuilding yards for men-of-war, and in every respect the young Navy was given the hall-mark "made in Great Britain." The triumph of the Mikado's Fleet —small, but homogeneous—surely reflects some lustre upon the British Fleet.

Admiral Togo handled his ships in the Sea of Japan with such complete success that what the best opinion thought would be a hard-fought battle resolved itself into a battue. In the long story of sea warfare there is no parallel to the series of events which culminated in this fight. With a fleet far inferior in battleships, but with a superiority in armoured cruisers and torpedo craft, the Japanese swept practically out of existence, in a period of about forty hours, the forces under the control of the Russian Commander-in-Chief. In thirty-seven minutes, Admiral Togo tells us, the issue was decided, and the remainder of the time was devoted to "rounding off" the victory. If any importance could be attached to those elaborate "paper comparisons" which are used to indicate the standard of strength of the great naval Powers, the result of the action of May 27–28th

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000063

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



should have been a draw, with the advantage slightly in favour of Admiral Togo. The history of the naval struggle since the dramatic opening of February 28th of last year has served to completely unmask the virtue of those mechanical comparisons between the strength of rival fleets which it is so easy to make and which events are so swift to expose. Russia began the war with a fleet thrice as strong as that of Japan, but it was widely distributed, while Japan's forces were concentrated. On the eve of the war the present writer, examining the basis on which Russian naval prestige rested, concluded that "under the circumstances in which the Russian Fleet has been created, there is consequently good cause to wonder whether it will prove in action as formidable as it appears on paper."[1] This scepticism has been more than completely justified, although eighteen months ago those who held that the Japanese Navy could sweep the Russian Fleet off the seas were very few in number, and most observers pointed to the "might of Russia" which was in reserve. Public opinion had been impressed by the measures taken by Russia to increase the number of her ships in the Pacific, and had failed to divine the essential truth that with the advance in the application of science to naval warfare the personal element, instead of being eliminated, has gained added importance. Neither battleship, cruiser, nor torpedo vessel is an automatic machine for dealing out death or destruction. Naval power does not consist in the mere investment of treasure in mobile sea fortresses, and victory at sea does not necessarily lie with the country which has the longest purse, the greatest number of able-bodied males in the population, or even the highest financial credit. Sea power is a delicate combination of forces which cannot be purchased with money alone; it consists in the provision of the best-tried weapons, and the patient training in their efficient use of officers and men who have the three essential characteristics—the fighting edge, an aptitude for technique, and the sea habit.

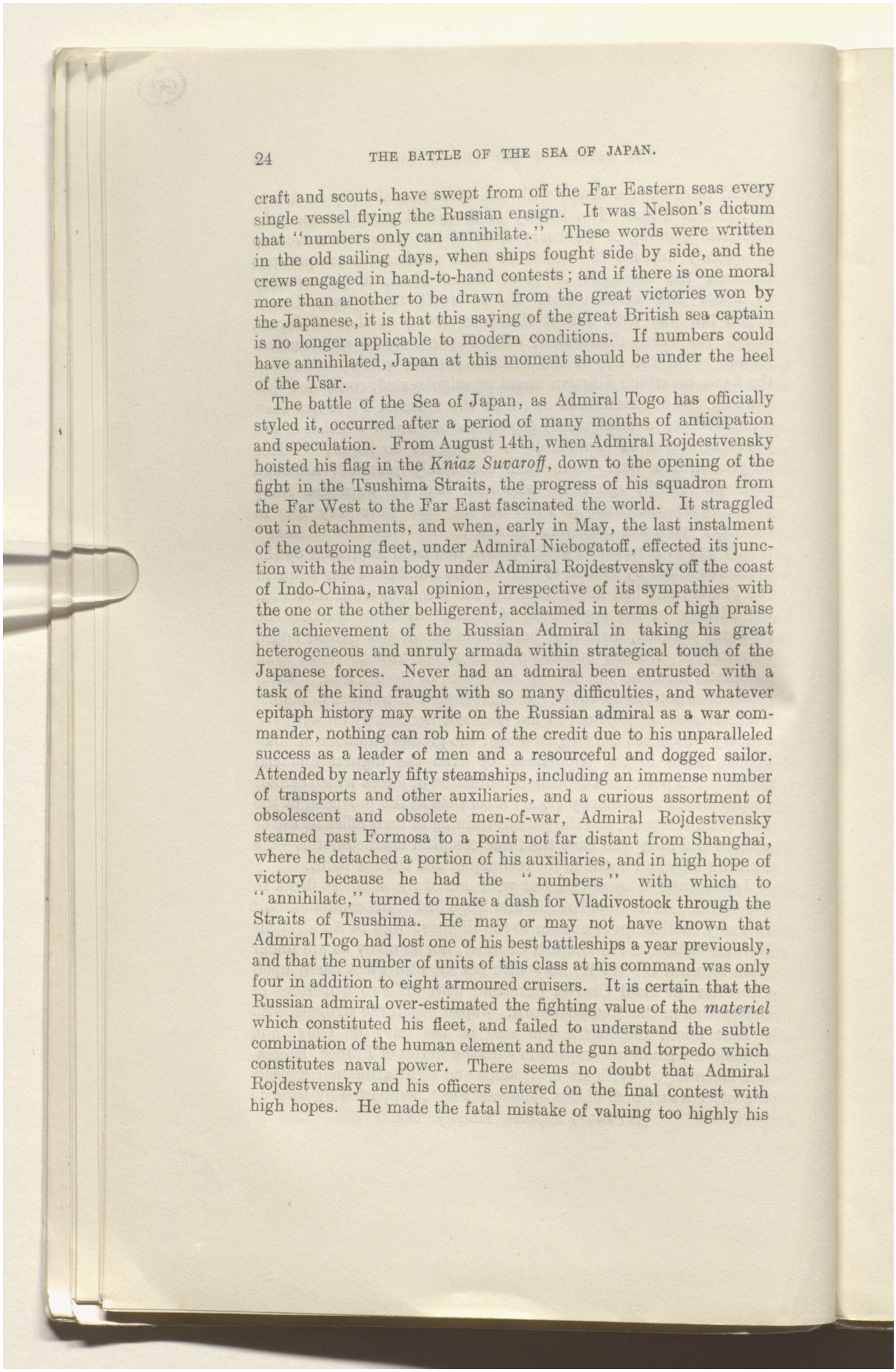
Japan entered upon this war with one of the smallest fleets in the world. At no time has Admiral Togo had at his command half as many battleships as answer to the slightest word of Admiral Sir Arthur Wilson in the English Channel, nor as many as are under Vice-Admiral Sir W. H. May with his Atlantic Fleet based upon Gibraltar, or Lord Charles Beresford with his two squadrons of battleships in the Mediterranean. Japan began the struggle with a fleet about one-fourth the size of the navy of Italy, and ridiculously small in comparison with the navies of France, Russia, and Germany. With six battleships and eight armoured cruisers the officers and men of the Japanese Fleet, supported by torpedo

(1) *Cassier's Magazine*, February, 1904.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



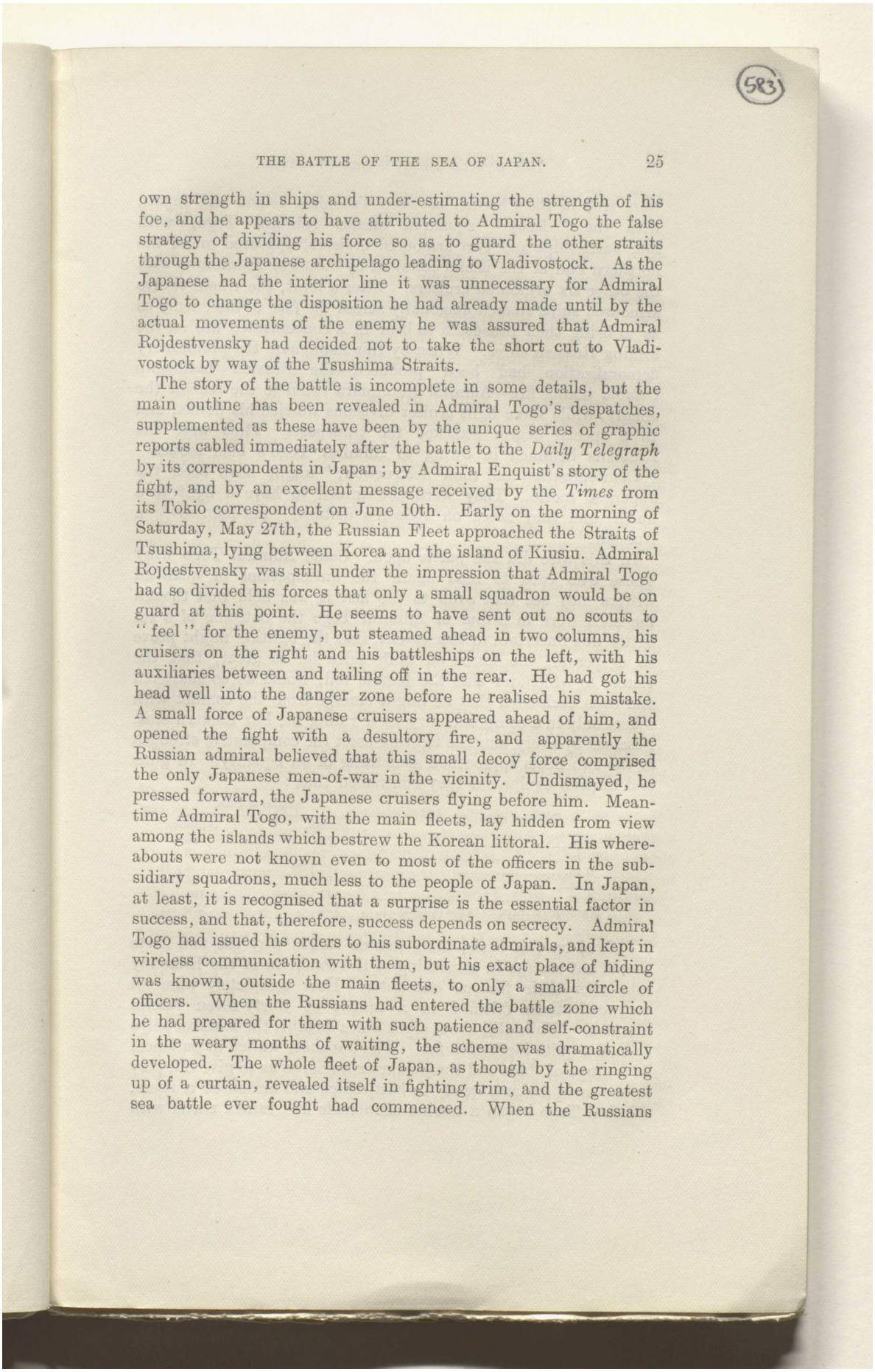
craft and scouts, have swept from off the Far Eastern seas every single vessel flying the Russian ensign. It was Nelson's dictum that "numbers only can annihilate." These words were written in the old sailing days, when ships fought side by side, and the crews engaged in hand-to-hand contests; and if there is one moral more than another to be drawn from the great victories won by the Japanese, it is that this saying of the great British sea captain is no longer applicable to modern conditions. If numbers could have annihilated, Japan at this moment should be under the heel of the Tsar.

The battle of the Sea of Japan, as Admiral Togo has officially styled it, occurred after a period of many months of anticipation and speculation. From August 14th, when Admiral Rojdestvensky hoisted his flag in the *Kniaz Suvaroff*, down to the opening of the fight in the Tsushima Straits, the progress of his squadron from the Far West to the Far East fascinated the world. It straggled out in detachments, and when, early in May, the last instalment of the outgoing fleet, under Admiral Niebogatoff, effected its junction with the main body under Admiral Rojdestvensky off the coast of Indo-China, naval opinion, irrespective of its sympathies with the one or the other belligerent, acclaimed in terms of high praise the achievement of the Russian Admiral in taking his great heterogeneous and unruly armada within strategical touch of the Japanese forces. Never had an admiral been entrusted with a task of the kind fraught with so many difficulties, and whatever epitaph history may write on the Russian admiral as a war commander, nothing can rob him of the credit due to his unparalleled success as a leader of men and a resourceful and dogged sailor. Attended by nearly fifty steamships, including an immense number of transports and other auxiliaries, and a curious assortment of obsolescent and obsolete men-of-war, Admiral Rojdestvensky steamed past Formosa to a point not far distant from Shanghai, where he detached a portion of his auxiliaries, and in high hope of victory because he had the "numbers" with which to "annihilate," turned to make a dash for Vladivostock through the Straits of Tsushima. He may or may not have known that Admiral Togo had lost one of his best battleships a year previously, and that the number of units of this class at his command was only four in addition to eight armoured cruisers. It is certain that the Russian admiral over-estimated the fighting value of the *materiel* which constituted his fleet, and failed to understand the subtle combination of the human element and the gun and torpedo which constitutes naval power. There seems no doubt that Admiral Rojdestvensky and his officers entered on the final contest with high hopes. He made the fatal mistake of valuing too highly his

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



own strength in ships and under-estimating the strength of his foe, and he appears to have attributed to Admiral Togo the false strategy of dividing his force so as to guard the other straits through the Japanese archipelago leading to Vladivostock. As the Japanese had the interior line it was unnecessary for Admiral Togo to change the disposition he had already made until by the actual movements of the enemy he was assured that Admiral Rojdestvensky had decided not to take the short cut to Vladivostock by way of the Tsushima Straits.

The story of the battle is incomplete in some details, but the main outline has been revealed in Admiral Togo's despatches, supplemented as these have been by the unique series of graphic reports cabled immediately after the battle to the *Daily Telegraph* by its correspondents in Japan; by Admiral Enquist's story of the fight, and by an excellent message received by the *Times* from its Tokio correspondent on June 10th. Early on the morning of Saturday, May 27th, the Russian Fleet approached the Straits of Tsushima, lying between Korea and the island of Kiusiu. Admiral Rojdestvensky was still under the impression that Admiral Togo had so divided his forces that only a small squadron would be on guard at this point. He seems to have sent out no scouts to "feel" for the enemy, but steamed ahead in two columns, his cruisers on the right and his battleships on the left, with his auxiliaries between and tailing off in the rear. He had got his head well into the danger zone before he realised his mistake. A small force of Japanese cruisers appeared ahead of him, and opened the fight with a desultory fire, and apparently the Russian admiral believed that this small decoy force comprised the only Japanese men-of-war in the vicinity. Undismayed, he pressed forward, the Japanese cruisers flying before him. Meantime Admiral Togo, with the main fleets, lay hidden from view among the islands which bestrew the Korean littoral. His whereabouts were not known even to most of the officers in the subsidiary squadrons, much less to the people of Japan. In Japan, at least, it is recognised that a surprise is the essential factor in success, and that, therefore, success depends on secrecy. Admiral Togo had issued his orders to his subordinate admirals, and kept in wireless communication with them, but his exact place of hiding was known, outside the main fleets, to only a small circle of officers. When the Russians had entered the battle zone which he had prepared for them with such patience and self-constraint in the weary months of waiting, the scheme was dramatically developed. The whole fleet of Japan, as though by the ringing up of a curtain, revealed itself in fighting trim, and the greatest sea battle ever fought had commenced. When the Russians

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

were well in the Channel between Tsushima Island and Japan, with the "decoy" squadron ahead, Admiral Togo, with four battleships and two armoured cruisers, appeared round the northern end of the island followed by Admiral Kamimura with the other six armoured cruisers. After a feint, the whole twelve armoured ships steered diagonally across the face of the enemy so as to bring their broadside to bear in a concentrated fire on the leading Russian ships. When by this manœuvre the preliminary demoralisation had been produced—the Russian battleship *Oslabia* taking fire—Admiral Kamimura raced to the rear of the enemy, while three light cruiser divisions worried his flanks, and in a special degree attacked the transports. Thus were the Russians hemmed in owing to Admiral Togo's bold tactics—"Demoralisation and then destruction," might have been the Japanese motto. They were determined to have a fight to a finish, and they acted on Nelson's dictum, "out-manœuvre a Russian."

In this wise did the battle open. Could Admiral Togo win? Those who care to read again the anticipations of qualified writers may see that even to the last it was held that though the odds were in favour of Admiral Togo the outcome of a set battle was uncertain to this extent, that the fighting might prove so desperate, the losses on both sides be so great, that the victor, to whichever side the laurels fell, would be so shattered and even decimated that he might emerge from the conflict with a fleet only in a complimentary sense ruling the Far Eastern seas. Assessed by every tangible fighting asset the comparative strength of the two fleets approached something of an equality. In guns and torpedo equipment they contrasted thus:—

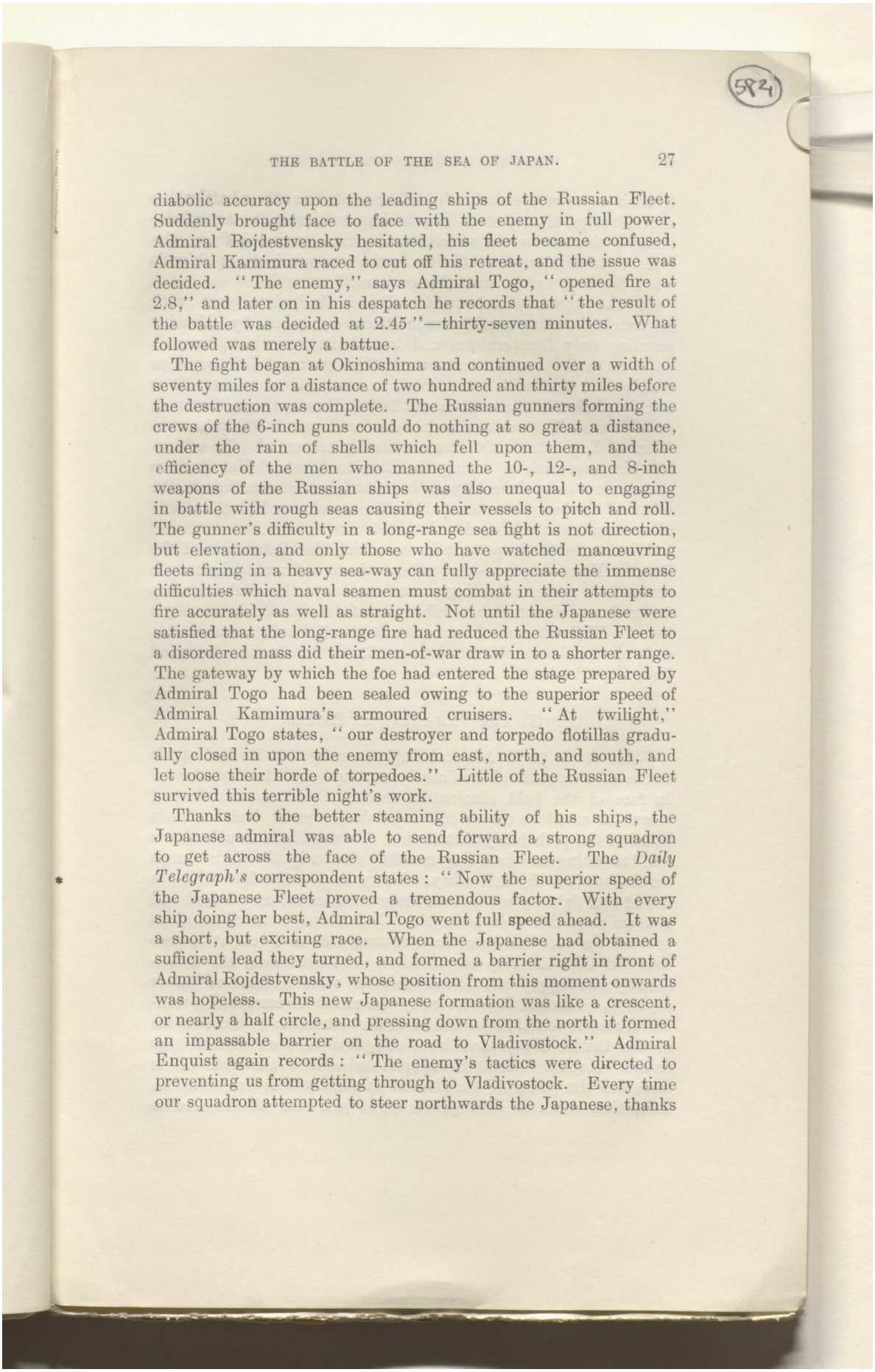
Calibre of guns.	Number of guns. Russian.		Japanese.	
12 in.	26		23	
10 in.	7		3	
9 in.	12	32	4	41
8 in.	13		34	
6 in.	147		196	
Number of torpedo tubes (about)	124		200	

Judged on this basis, there was no reason why the two fleets should not emerge in something of the condition of the Kilkenny cats after their famous encounter. How completely were all prognostications falsified in a matter of thirty-seven fateful minutes. While still about eight miles distant, the Russian ships opened a quite ineffective fire. The Japanese waited in patience. At a range of three and three-quarter miles, so as to give full play to the main armaments of his battleships and armoured cruisers, Admiral Togo began a terrific cannonade and rained shells with

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



diabolic accuracy upon the leading ships of the Russian Fleet. Suddenly brought face to face with the enemy in full power, Admiral Rojdestvensky hesitated, his fleet became confused, Admiral Kamimura raced to cut off his retreat, and the issue was decided. "The enemy," says Admiral Togo, "opened fire at 2.8," and later on in his despatch he records that "the result of the battle was decided at 2.45"—thirty-seven minutes. What followed was merely a battue.

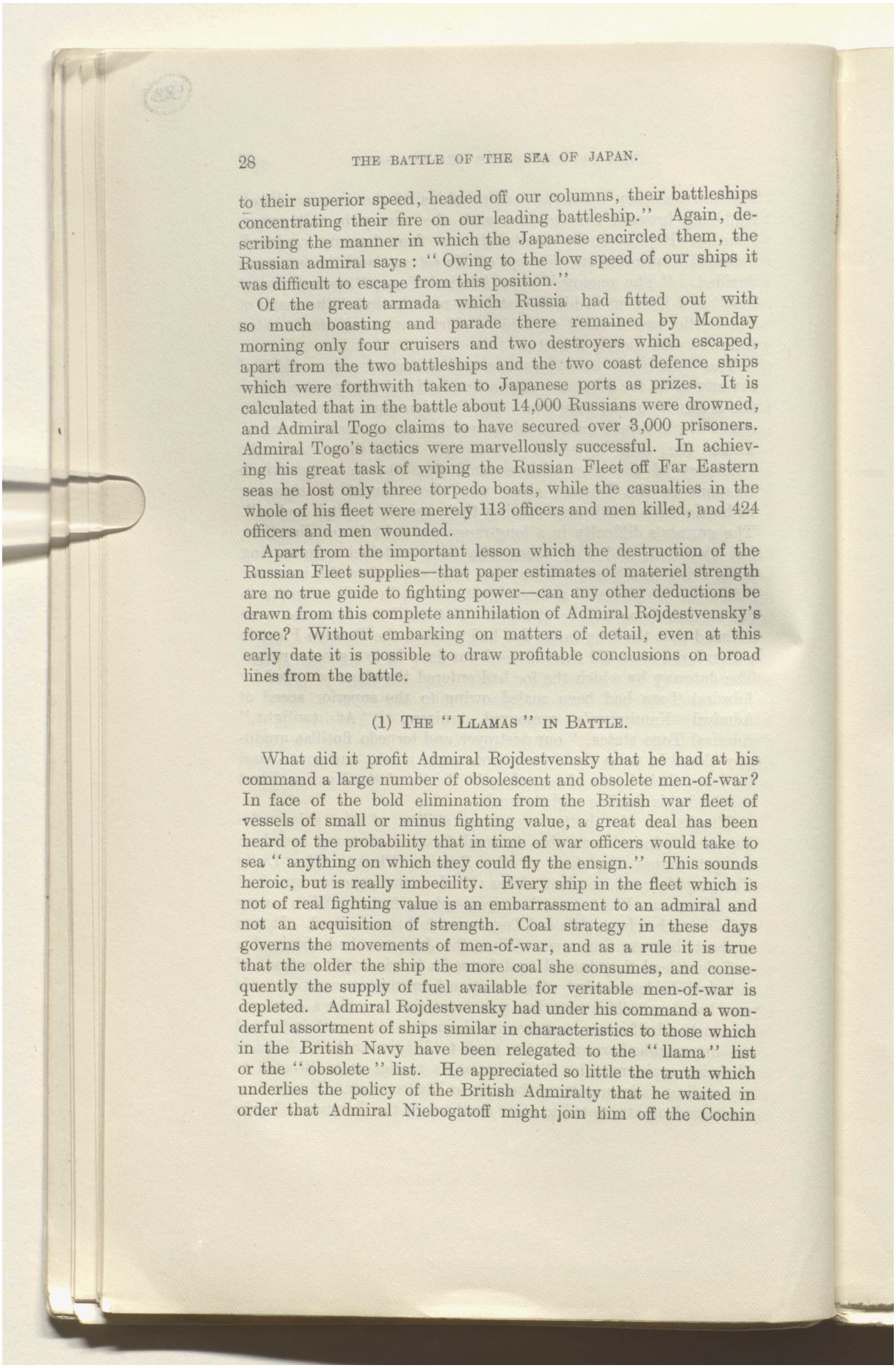
The fight began at Okinoshima and continued over a width of seventy miles for a distance of two hundred and thirty miles before the destruction was complete. The Russian gunners forming the crews of the 6-inch guns could do nothing at so great a distance, under the rain of shells which fell upon them, and the efficiency of the men who manned the 10-, 12-, and 8-inch weapons of the Russian ships was also unequal to engaging in battle with rough seas causing their vessels to pitch and roll. The gunner's difficulty in a long-range sea fight is not direction, but elevation, and only those who have watched manœuvring fleets firing in a heavy sea-way can fully appreciate the immense difficulties which naval seamen must combat in their attempts to fire accurately as well as straight. Not until the Japanese were satisfied that the long-range fire had reduced the Russian Fleet to a disordered mass did their men-of-war draw in to a shorter range. The gateway by which the foe had entered the stage prepared by Admiral Togo had been sealed owing to the superior speed of Admiral Kamimura's armoured cruisers. "At twilight," Admiral Togo states, "our destroyer and torpedo flotillas gradually closed in upon the enemy from east, north, and south, and let loose their horde of torpedoes." Little of the Russian Fleet survived this terrible night's work.

Thanks to the better steaming ability of his ships, the Japanese admiral was able to send forward a strong squadron to get across the face of the Russian Fleet. The *Daily Telegraph's* correspondent states: "Now the superior speed of the Japanese Fleet proved a tremendous factor. With every ship doing her best, Admiral Togo went full speed ahead. It was a short, but exciting race. When the Japanese had obtained a sufficient lead they turned, and formed a barrier right in front of Admiral Rojdestvensky, whose position from this moment onwards was hopeless. This new Japanese formation was like a crescent, or nearly a half circle, and pressing down from the north it formed an impassable barrier on the road to Vladivostock." Admiral Enquist again records: "The enemy's tactics were directed to preventing us from getting through to Vladivostock. Every time our squadron attempted to steer northwards the Japanese, thanks

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000073

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



to their superior speed, headed off our columns, their battleships concentrating their fire on our leading battleship." Again, describing the manner in which the Japanese encircled them, the Russian admiral says: "Owing to the low speed of our ships it was difficult to escape from this position."

Of the great armada which Russia had fitted out with so much boasting and parade there remained by Monday morning only four cruisers and two destroyers which escaped, apart from the two battleships and the two coast defence ships which were forthwith taken to Japanese ports as prizes. It is calculated that in the battle about 14,000 Russians were drowned, and Admiral Togo claims to have secured over 3,000 prisoners. Admiral Togo's tactics were marvellously successful. In achieving his great task of wiping the Russian Fleet off Far Eastern seas he lost only three torpedo boats, while the casualties in the whole of his fleet were merely 113 officers and men killed, and 424 officers and men wounded.

Apart from the important lesson which the destruction of the Russian Fleet supplies—that paper estimates of materiel strength are no true guide to fighting power—can any other deductions be drawn from this complete annihilation of Admiral Rojdestvensky's force? Without embarking on matters of detail, even at this early date it is possible to draw profitable conclusions on broad lines from the battle.

(1) The "Llamas" in Battle.

What did it profit Admiral Rojdestvensky that he had at his command a large number of obsolescent and obsolete men-of-war? In face of the bold elimination from the British war fleet of vessels of small or minus fighting value, a great deal has been heard of the probability that in time of war officers would take to sea "anything on which they could fly the ensign." This sounds heroic, but is really imbecility. Every ship in the fleet which is not of real fighting value is an embarrassment to an admiral and not an acquisition of strength. Coal strategy in these days governs the movements of men-of-war, and as a rule it is true that the older the ship the more coal she consumes, and consequently the supply of fuel available for veritable men-of-war is depleted. Admiral Rojdestvensky had under his command a wonderful assortment of ships similar in characteristics to those which in the British Navy have been relegated to the "llama" list or the "obsolete" list. He appreciated so little the truth which underlies the policy of the British Admiralty that he waited in order that Admiral Niebogatoff might join him off the Cochin

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000077

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

China coast. This officer had with him the second-class battleship *Nicholas I.*, an old armoured cruiser, the *Vladimir Monomach*, and the three coast defence ships *Admiral Seniavin*, *Admiral Oushakoff*, and *Admiral Apraxine*. These last four vessels were so old, so unsuited to the battle line in all respects, that in the great struggle they could neither fight effectively nor run away; two of them were sunk and the other two, with the *Nicholas I.*, surrendered. When we get the full story of the battle it will probably be found that these vessels, owing to their poverty in fighting power and in mobility, not only added nothing to the strength of the Russian Fleet, but contributed materially to the disorder and demoralisation. He will be indeed a courageous critic of Admiralty policy who will now join Sir William White in defence of the obsolete and inefficient, or express agreement with the anonymous writer in *Blackwood* in the claim "that the work (of the Fleet) will be so multifarious that place will always be found for every ship which carries a gun." In judging the efficiency of this mythical and typical ship we should want to know something of the "gun" and its power, of the engines and boilers, and the quality of the armour, if it has any. The British men-of-war which have been struck off the "war list" have been weighed in this way, one by one, and condemned, and the lesson which Admiral Rojdestvensky's debacle conveys is that in this policy the Admiralty have been right. We cannot afford to send British officers and men, highly trained at great expense, and therefore valuable national assets, to sea in a ship the only justification for which is that it "carries a gun." Such action would be inhuman, apart from its imbecility.

(2) The Value of Speed.

What advantage did Japan gain from the possession of superior speed? Admiral Sir Cyprian Bridge and Rear-Admiral Sir R. N. Custance have no belief in speed. In the *Naval Annual* for the present year, the former Commander-in-Chief of the British China Squadron condemns the big armoured cruiser, holding that "a true conception of cruiser tactics indicates that multiplicity rather than a small number of powerful individual ships would be needed." Again, "that no great value as a factor in tactics could be assigned to speed superiority had long been suspected by officers who had made a close study of tactical questions." And Sir Cyprian even minimises the strategical importance of high speed; he holds that "speed is of small tactical or strategical value." No one can read the story of the battle of the Sea of Japan and fail to recognise how completely Sir Cyprian Bridge's conclusions

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

have been belied by events. When the Japanese set themselves to create a navy they attached the greatest importance to speed, far greater than was attributed to it by any of the great Powers. This conclusion led them to the creation of a navy which in its main fighting units was swifter than that of any other nation. They built six battleships ranging in speed from eighteen to nineteen knots, and a similar number of armoured cruisers able to steam at from twenty to twenty-three knots. No other navy contained at that time anything approaching this proportion of armoured cruisers to battleships, for, in agreement with Sir Cyprian Bridge, the naval authorities of the world believed in "multiplicity" of weak ships. At a time when the British Admiralty was still building slow ships without armoured belts, Japan led the way in the construction of big cruisers with thick belts, a heavy armament of guns, and great speed —in fact, vessels such as are now being added to the British Fleet by the present Board, which, we are told, is a "retrograde Admiralty." So far as the result of gun fire was concerned in the late action the victory lay with the Japanese because they possessed these swift ships of great offensive power, and Admiral Togo was able to pursue the successful tactics already revealed in broad outline because he had under his command a fleet immensely superior to that of Russia in speed. Owing to their superior speed the Japanese, to use a colloquialism, were able to make rings round the Russians, and almost completely to cut off the avenues of escape. If the Russians had had the advantage of speed, the action would have been indecisive, and they might have got through with a considerable portion of the armada.

(3) The Rôle of the Torpedo.

What part in the battle did the torpedo take? The most casual observer of the trend of naval policy in Great Britain must have observed that increased importance has been given to the torpedo as an offensive and defensive arm. According to Admiral Sir Cyprian Bridge, again writing on the naval actions of the war, "perhaps nothing stands out more clearly in the campaign than the insignificance of the results effected by the locomotive torpedo. . . . The conclusion should be that it is a weapon of limited efficiency to be depended upon only in special circumstances of infrequent occurrence." The facts prior to the last battle do not support Admiral Bridge's conclusion as to the inefficiency of the torpedo. It was owing to the effective use of this weapon and not to the gun that the Japanese first crippled the Russians off Port Arthur in February, 1904. Admiral Togo was acting

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000065

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

under exceptional limitations in that he was not permitted to risk any of his big ships. He relied in the initial attacks upon the Russian Fleet almost entirely upon torpedo craft supported by cruisers. His first operations were so completely successful that from the date of his first attack by torpedoes the Russian Fleet was demoralised, and so seriously crippled that it was practically useless. Far from the torpedo having proved inefficient, three of the main ships of the Russian squadron were seriously damaged even while anchored under the shore guns at Port Arthur, and would probably have been completely destroyed but for the protection afforded by the land defences and the close proximity of the harbour of Port Arthur, into which they were able to limp for repairs. So long as the Port Arthur squadron was a fleet in being, it was the torpedo, adequately supported by the gun, which rendered it ineffective. That the Russian ships injured by torpedo attack were patched up, thanks to the resourcefulness of a Scotsman, and were able subsequently to put to sea was merely due to the good fortune which enabled them to creep into the neighbouring port. The Russian squadron in Port Arthur, however, never recovered in *moral* the effects of the torpedo attacks. The battle of the Sea of Japan supplies even more conclusive evidence as to the falseness of the conclusion that the torpedo is ineffective. The battle was opened by long-range firing by the Japanese which seems to have completely unnerved the Russian sailors. Then as darkness fell the torpedo craft, again supported by the gun-ships, well in the rear, swarmed round the disordered fleet, and practically completed its destruction. How many ships were actually sunk by the action of the torpedo we do not know, but the inference to be drawn from Admiral Togo's despatches and other information is that this weapon was responsible for the sinkng of several of the battleships and cruisers. One morai to be drawn from the battle is that the policy of the Admiralty in regarding the gun and torpedo as complementary weapons, each having its place in the battle tactics of a fleet, is well founded. If the Japanese had accepted Admiral Bridge's conclusion that the torpedo is a weapon of limited usefulness and only to be infrequently employed, they would not have provided themselves with one hundred torpedo craft, and the battle of the Sea of Japan would have had quite another ending.

(4) The Importance of Gunnery.

A feature of the fight which stands out in the most striking manner is the accuracy with which the Japanese gunners must have shot. A man-of-war is not a yacht, and the Japanese, while

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c8

مكتبة قطر الوطنية
Qatar National Library

attaching due importance to cleanliness and order on board ship, have never made paint and polish their idol. The Japanese ships were built to fight, and the main preoccupation of officers and men has been persistent training in the use of the gun as well as the torpedo. The manner in which both these weapons were employed points to long and persistent training in which officers and men profited by all the assistance to be obtained from the mechanical contrivances of Rear-Admiral Percy Scott; they adopted the "spotter," the loading-tray, and other appliances before even the British Admiralty had done so. They have their reward in the most complete naval victory recorded in history. This unique success was achieved by the use of instruments made in England on the same principles as those mounted in the British Fleet, and, in view of the recent "scare" as to British guns, the battle of the Sea of Japan must be consolatory to the British public. The Japanese by their triumph have given a testimonial to the heavy guns of the British Fleet which should set at rest any fears which may have been aroused.

(5) The Personal Element.

The completeness of the Japanese victory may be traced in large measure to the different characters of the crews of the two fleets. If we read between the lines of the story of the battle it will be realised that the Russians were demoralised almost from the first brush with the enemy. Brave though they are in close contests, they seem to have lost all ability to defend themselves when fired at by a determined foe three or four miles away, and to have been reduced to human pulp—without power of thought, initiative, or action. Only on this assumption can the extraordinary absence of Japanese casualties be explained, for Russian sailors, however deficient their war training, have never lacked courage—a courage without intelligence, such as a bull shows when he is at bay in the ring after the matador has driven him to frenzy. Courage of this character in the hand-to-hand fighting of the old sailing days was an asset of immense value as ships lay broadside to broadside, and the men swarmed over the bulwarks and fought hand-to-hand. But to-day the fight is between weapons which operate at a distance, and the destruction which they can effect depends not on brute courage, but on a clear eye, steady hand, and cool head trained to act in mechanical unison. The modern sailor who loses his nerve is a danger to his country, because "jumpiness" spreads like an infection. The Russian sailors had the guns, but we cannot doubt that they lost the coolness requisite to their use even had they been adequately trained. Indeed, the armament of the "lost fleet" was in no way incomparable to that mounted in the Japanese ships, because at least half a dozen of the Russian vessels

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000097

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

carried guns of the very latest types, while most of the Japanese weapons were of older design. The essential difference between the fleets did not lie in the gun or torpedo equipment, nor in any numerical deficiencies to be discovered by "paper" contrasts, but it lay mainly in the crews—in the training which the Japanese had undergone under fair and foul weather conditions, and in the absence of training in the poor fellows who were sent, willy-nilly, to the Russian ships; many of them were dragged from the plough in inland provinces and ordered to become naval gunners and torpedo men. Even an autocrat cannot work miracles, and the Tsar and his advisers failed.

The Japanese Navy after the War.

Japan entered upon this war as the smallest of the seven naval Powers of the world, and she will emerge with a naval force which will be well able to dictate peace in Far Eastern waters. Her navy on the day when peace is signed will in any event be nearly twice as powerful as that with which she began the struggle. Never did any nation in modern warfare acquire such valuable prizes as have fallen to Admiral Togo and his colleagues. In the course of the fifteen months he has lost two battleships—though efforts to raise the *Yashima* are being made, it is said—and two effective cruisers, besides a few torpedo craft and many merchant ships. This is one side of the account, and on the other we have a long list of trophies, even if we exclude for the moment the Russian vessels which have been interned. The credit side of the Japanese war ledger, showing the Russian men-of-war which she has actually obtained already, reads as follows:—

Battleships.

	Displacement. Tons.	Port.	Remarks.
Orel	13,560	Taken to Maisuru	Captured on May 28.
Nicolas I.	9,700	Taken to Sasebo..	Captured on May 28.
Peresviet	12,674	Port Arthur	Both these ships, which were sunk in shallow water, are being raised.
Poltava	10,950		
Retvizan	12,700	Port Arthur	These two vessels, it is feared, cannot be salved; they are, at least, doubtful.
Pobieda	12,674		

Coast Defence Ships.

Gen. Adm. Apraxine, Adm. Seniavin	4,126	Taken to Sasebo..	Captured on May 28.

Cruisers.

Bayan (armoured)	7,800	Port Arthur	Sunk in shallow water, and will be salved.
Variag	6,500	Chemulpo	Will be, it is reported, raised and repaired.
Pallada	6,630	Port Arthur	This swift ship is being salved.

Destroyer.

Bedovy	300	Sasebo	Captured on May 29.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000062

مكتبة قطر الوطنية
Qatar National Library

Japan, consequently, has every prospect, even if we eliminate such doubtful ships as the *Retvizan* and *Pobieda*, which were very badly damaged, of repairing and adding to her fighting fleet four battleships, two coast defence ships, and three cruisers.

Then there are the interned ships of the Russian Fleet. They are under the shelter of neutral flags, and when the war closes will, in ordinary circumstances, be handed back to the Tsar's Government, but under the treaty of peace the Japanese may insist on these men-of-war being ceded to them, since they escaped Admiral Togo's meshes only by flying within the sanctuary of neutral waters. These vessels, therefore, may possibly be added to the Mikado's Fleet. They include the following men-of-war :—

Type.	Name.	Displacement.	Port of internment.
Battleship	Tzarevitch	13,100	Kiao-chau.
Cruiser	Askold	6,500	Shanghai.
,, ...	Diana	6,630	Saigon.
,, ...	Aurora	6,630	Manila.
,, ...	Oleg	6,675	,,
,, ...	Jemchug	3,100	,,
Gunboat	Mandjour.....	1,416	Shanghai.
Destroyers	Smely, Boiki, Bespochtchadni, Beschumni, Bestrachtni	240 to 300	Kiao-chau.
,, ...	Grosovoi	—	Shanghai.
,, ...	Skory, Stratni, Serdity, Vlastni...	—	Chefoo.

But the story of Japan's Fleet as it will exist after peace is declared is not fully revealed. While war has been in progress she has been busy fortifying herself to protect all she may gain by the strength of her arms. Apart from a large number of torpedo craft, which have been built in native yards since the war commenced, she has under construction, and approaching completion, the following powerful ships :—

	Displacement in tons.		Where building.
Battleship Kashima	16,400	.....	Elswick.
,, Katori	15,940	.....	Barrow.
Two armoured cruisers...	13,500	.....	Kuré (Japan).

Both the armoured cruisers building in Japan have been launched, and on one the armour belt has been placed. Russia emerges from the war practically without a fleet, while, deducting the *Hatsuse* and *Yashima*, lost at sea, but including the interned ships and those now building, Japan will be stronger by five battleships, two coast defence ships, three armoured cruisers (including the *Bayan*), seven protected cruisers, a gunboat, and eleven destroyers. Such a triumph is the most extraordinary in the world's history.

ARCHIBALD S. HURD.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

A MORNING IN THE GALLERIES.

In Dialogue.

Now that I have retired to a quiet life in a beautiful country I am occupied with Nature more than with Art; and it is only with a wrench that I can leave the roses, rhododendrons, and lilacs for the smoke of town. But, as I do not wish to fall quite out of the modern movement, I take a look in now and then at the May shows, and had asked my friend Van Dyke, one of the young lions of the New Gallery, to point out what was best to be seen. He took me straight up to the *Lycidas*, the great sensation of the year. "There," said he, eagerly, "there is true Art. What a noble form! What a grand pose! What subtle grace in those curves of the leg! What dignity in those uplifted arms! It might be the young athlete who sat to Phidias for the Parthenon metopes. And those old Philistines at Burlington House made a 'record' in stupidity when they rejected—actually rejected—one of the purest masterpieces of our time!"

"But is it beautiful?" I asked in my innocence.

"Beautiful?" he said quite warmly, "we don't go in for beauty nowadays. We want truth, not beauty. Art has nothing to do with beauty. The aim of Art is to be real. If you want to see a real spinal column, an honest iliac muscle, a genuine biceps, and all ten tendons of the extensor frankly displayed, there you have them."

"Well!" I said, humbly, "I am no anatomist, and I daresay this is all as it looks on the dissecting table. But what puzzles me are those ten fingers all held up in a row. What does it mean? Is *Lycidas* a Neapolitan lazzarone playing at *mora*? What is the story?"

"Oh!" said he, "a great piece of truth in Art does not need any story. It is its own meaning. Perhaps *Lycidas* is what the Boers call a *Hands-upper*; he seems to be saying 'Don't shoot, I give in.' He looks rather down on his luck, as if he has had enough. But see how truly Greek is the vitality of those limbs! How daring is the realism of those tendons! How defiant of conventions is the frankness of the pose!"

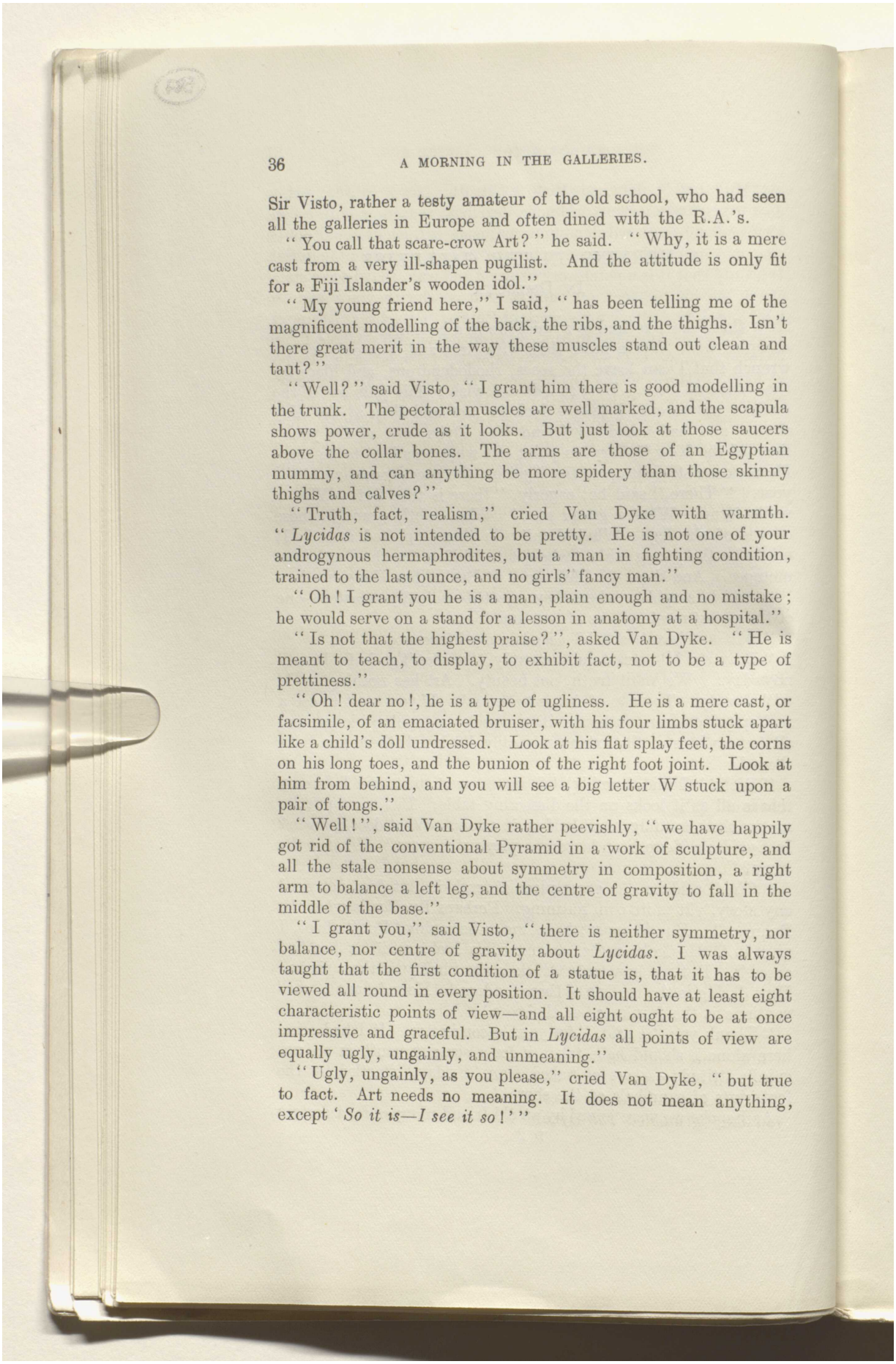
"Thank you," I said, "for your lesson in Art. If I had come here alone I should have taken it for a scraggy youth in an ungainly attitude—a sort of naked man 'Friday,' startled by the footprints of cannibals on the shore."

As I spoke we were joined by an old friend of my own, a certain

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Sir Visto, rather a testy amateur of the old school, who had seen all the galleries in Europe and often dined with the R.A.'s.

"You call that scare-crow Art?" he said. "Why, it is a mere cast from a very ill-shapen pugilist. And the attitude is only fit for a Fiji Islander's wooden idol."

"My young friend here," I said, "has been telling me of the magnificent modelling of the back, the ribs, and the thighs. Isn't there great merit in the way these muscles stand out clean and taut?"

"Well?" said Visto, "I grant him there is good modelling in the trunk. The pectoral muscles are well marked, and the scapula shows power, crude as it looks. But just look at those saucers above the collar bones. The arms are those of an Egyptian mummy, and can anything be more spidery than those skinny thighs and calves?"

"Truth, fact, realism," cried Van Dyke with warmth. "*Lycidas* is not intended to be pretty. He is not one of your androgynous hermaphrodites, but a man in fighting condition, trained to the last ounce, and no girls' fancy man."

"Oh! I grant you he is a man, plain enough and no mistake; he would serve on a stand for a lesson in anatomy at a hospital."

"Is not that the highest praise?", asked Van Dyke. "He is meant to teach, to display, to exhibit fact, not to be a type of prettiness."

"Oh! dear no!, he is a type of ugliness. He is a mere cast, or facsimile, of an emaciated bruiser, with his four limbs stuck apart like a child's doll undressed. Look at his flat splay feet, the corns on his long toes, and the bunion of the right foot joint. Look at him from behind, and you will see a big letter W stuck upon a pair of tongs."

"Well!", said Van Dyke rather peevishly, "we have happily got rid of the conventional Pyramid in a work of sculpture, and all the stale nonsense about symmetry in composition, a right arm to balance a left leg, and the centre of gravity to fall in the middle of the base."

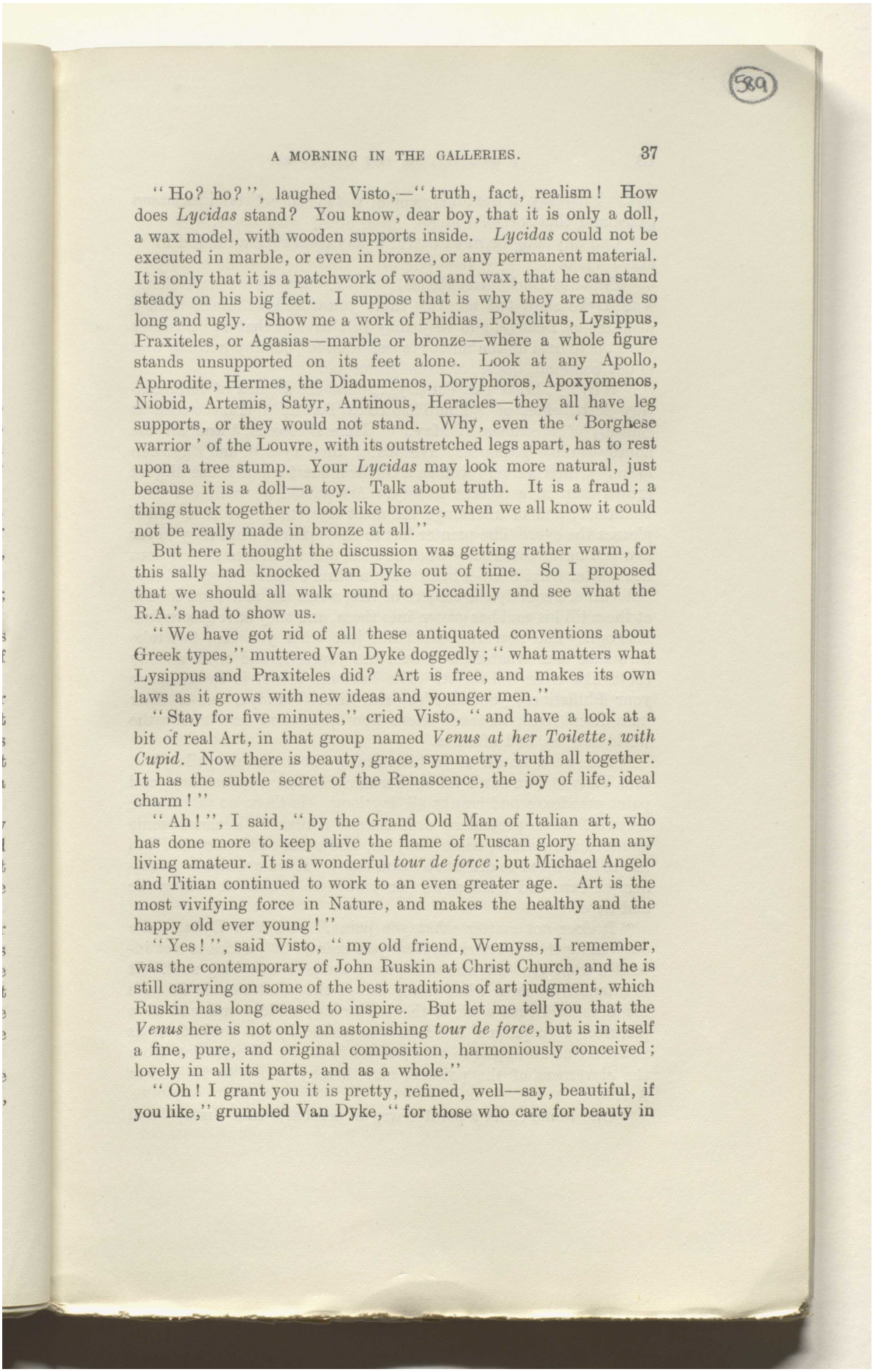
"I grant you," said Visto, "there is neither symmetry, nor balance, nor centre of gravity about *Lycidas*. I was always taught that the first condition of a statue is, that it has to be viewed all round in every position. It should have at least eight characteristic points of view—and all eight ought to be at once impressive and graceful. But in *Lycidas* all points of view are equally ugly, ungainly, and unmeaning."

"Ugly, ungainly, as you please," cried Van Dyke, "but true to fact. Art needs no meaning. It does not mean anything, except '*So it is—I see it so!*'"

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000048

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"Ho? ho?", laughed Visto,—"truth, fact, realism! How does *Lycidas* stand? You know, dear boy, that it is only a doll, a wax model, with wooden supports inside. *Lycidas* could not be executed in marble, or even in bronze, or any permanent material. It is only that it is a patchwork of wood and wax, that he can stand steady on his big feet. I suppose that is why they are made so long and ugly. Show me a work of Phidias, Polyclitus, Lysippus, Praxiteles, or Agasias—marble or bronze—where a whole figure stands unsupported on its feet alone. Look at any Apollo, Aphrodite, Hermes, the Diadumenos, Doryphoros, Apoxyomenos, Niobid, Artemis, Satyr, Antinous, Heracles—they all have leg supports, or they would not stand. Why, even the 'Borghese warrior' of the Louvre, with its outstretched legs apart, has to rest upon a tree stump. Your *Lycidas* may look more natural, just because it is a doll—a toy. Talk about truth. It is a fraud; a thing stuck together to look like bronze, when we all know it could not be really made in bronze at all."

But here I thought the discussion was getting rather warm, for this sally had knocked Van Dyke out of time. So I proposed that we should all walk round to Piccadilly and see what the R.A.'s had to show us.

"We have got rid of all these antiquated conventions about Greek types," muttered Van Dyke doggedly; "what matters what Lysippus and Praxiteles did? Art is free, and makes its own laws as it grows with new ideas and younger men."

"Stay for five minutes," cried Visto, "and have a look at a bit of real Art, in that group named *Venus at her Toilette, with Cupid*. Now there is beauty, grace, symmetry, truth all together. It has the subtle secret of the Renascence, the joy of life, ideal charm!"

"Ah!", I said, "by the Grand Old Man of Italian art, who has done more to keep alive the flame of Tuscan glory than any living amateur. It is a wonderful *tour de force*; but Michael Angelo and Titian continued to work to an even greater age. Art is the most vivifying force in Nature, and makes the healthy and the happy old ever young!"

"Yes!", said Visto, "my old friend, Wemyss, I remember, was the contemporary of John Ruskin at Christ Church, and he is still carrying on some of the best traditions of art judgment, which Ruskin has long ceased to inspire. But let me tell you that the *Venus* here is not only an astonishing *tour de force*, but is in itself a fine, pure, and original composition, harmoniously conceived; lovely in all its parts, and as a whole."

"Oh! I grant you it is pretty, refined, well—say, beautiful, if you like," grumbled Van Dyke, "for those who care for beauty in

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000053

مكتبة قطر الوطنية
Qatar National Library

Art. I daresay it reminds people of the old artists' idea about grace and that sort of thing."

"Can anything be more useful to-day than such a reminder?", asked Visto.

"Come to Burlington House," said I, "and as we walk along, Van Dyke shall tell us why these young fellows make such a dead set at Beauty, and why they will have it that the business of Art is to hold up the mirror to ugliness, to pourtray nothing that is not common, queer, or even grotesque."

"Why!", broke out Van Dyke, "we are all sick of these tea-tray prettinesses of "The Thames at Dawn," "Pine woods at Sunset," "Meadows in May," "June Blossoms," and all the namby-pamby goddesses, nymphs, "blue eyes," and "golden locks," which are very well on a bon-bon box for a girl, but disgust grown men in a picture gallery. Art should be real, not conventional; and of all things the most fatal to Art is that which pleases the eye. The painter has to show people what they never saw and never could see—what he sees, and as he sees it. It does not matter what it is—a brick wall, a blind beggar, a hog, a dung-hill—all are equally the subject of Art, when the artist has looked at them till his soul has grown into them, and they have grown into his soul. The new rule is—Paint just what you see, but take care that it is what nobody sees but yourself, and what nobody could like if he did see it. The business of Art is to shake up your Philistines, your Bottles, and Mrs. Grundys, out of their hum-drum lives, to teach them how queer and how nasty the world can be, and often is."

"You want us all to go 'slumming' in a picture gallery?", said Visto, "you can't all be Bernard Shaws, my dear boy, and paint paradoxes and cranks all day long. Is there no alternative between weak prettiness and coarse realism? Because some painters are finikin, some babyish, and some academic, is High Art to be limited to ditchwater and rags? If we are sick of strawberry cream and truffles, we don't want to be stuffed with garlic and tripe."

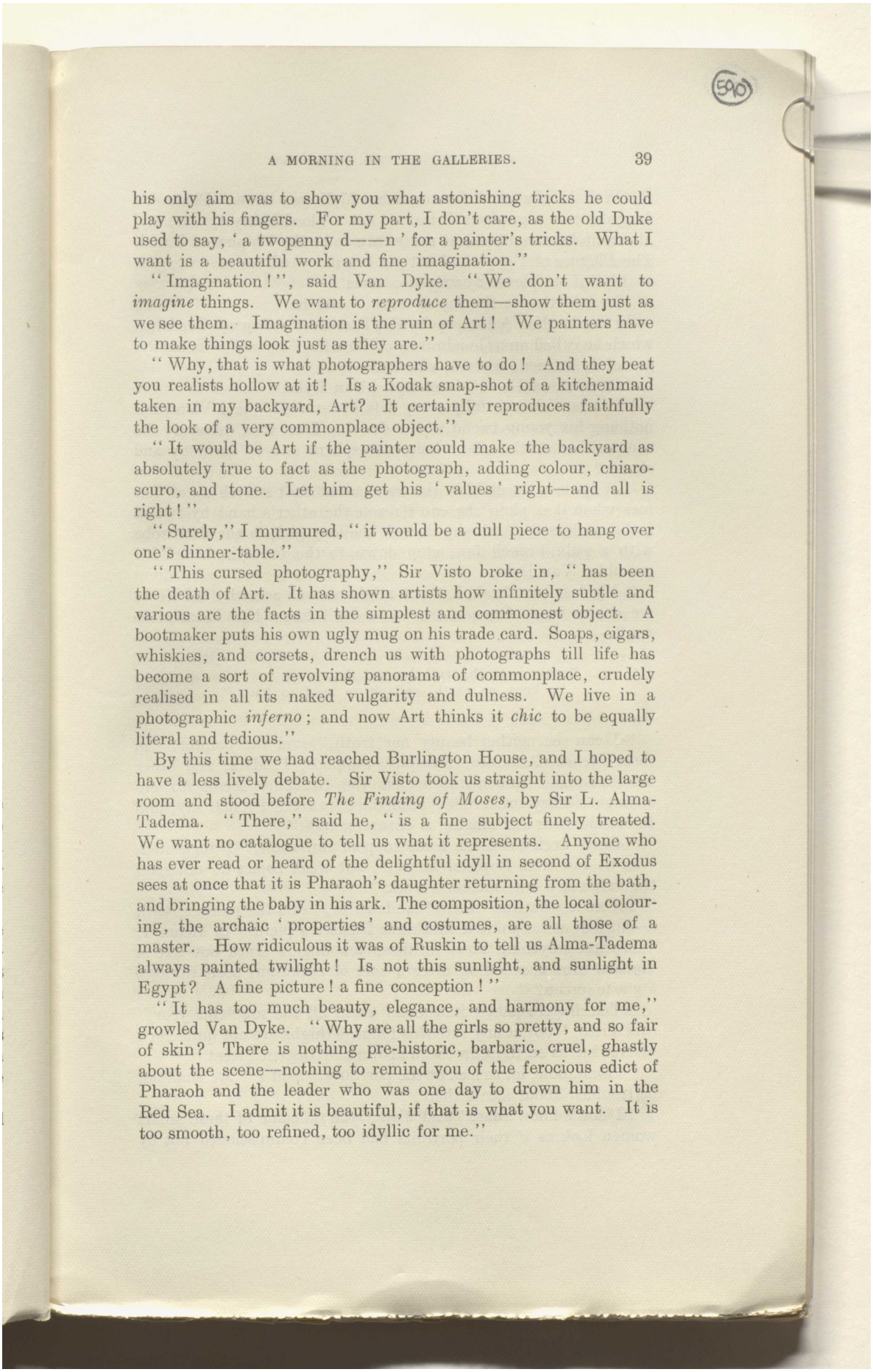
"It does not matter *what* you paint," said Van Dyke, "the only thing that matters is, *how* you paint. A picture is not intended to *please*—ought not to *please* the person looking at it. It is intended to show what clever things the painter could do with his brush. Brush-work is the beginning, middle and end of a picture. If a picture interests the public by its subject, or is beautiful as an object to view, so far it draws off attention from the cleverness of the painter, and thereby ceases to be sincere Art."

"One would think a painter was an acrobat," said Visto, "and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000059

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



his only aim was to show you what astonishing tricks he could play with his fingers. For my part, I don't care, as the old Duke used to say, 'a twopenny d——n' for a painter's tricks. What I want is a beautiful work and fine imagination."

"Imagination!", said Van Dyke. "We don't want to *imagine* things. We want to *reproduce* them—show them just as we see them. Imagination is the ruin of Art! We painters have to make things look just as they are."

"Why, that is what photographers have to do! And they beat you realists hollow at it! Is a Kodak snap-shot of a kitchenmaid taken in my backyard, Art? It certainly reproduces faithfully the look of a very commonplace object."

"It would be Art if the painter could make the backyard as absolutely true to fact as the photograph, adding colour, chiaro-scuro, and tone. Let him get his 'values' right—and all is right!"

"Surely," I murmured, "it would be a dull piece to hang over one's dinner-table."

"This cursed photography," Sir Visto broke in, "has been the death of Art. It has shown artists how infinitely subtle and various are the facts in the simplest and commonest object. A bootmaker puts his own ugly mug on his trade card. Soaps, cigars, whiskies, and corsets, drench us with photographs till life has become a sort of revolving panorama of commonplace, crudely realised in all its naked vulgarity and dulness. We live in a photographic *inferno*; and now Art thinks it *chic* to be equally literal and tedious."

By this time we had reached Burlington House, and I hoped to have a less lively debate. Sir Visto took us straight into the large room and stood before *The Finding of Moses*, by Sir L. Alma-Tadema. "There," said he, "is a fine subject finely treated. We want no catalogue to tell us what it represents. Anyone who has ever read or heard of the delightful idyll in second of Exodus sees at once that it is Pharaoh's daughter returning from the bath, and bringing the baby in his ark. The composition, the local colouring, the archaic 'properties' and costumes, are all those of a master. How ridiculous it was of Ruskin to tell us Alma-Tadema always painted twilight! Is not this sunlight, and sunlight in Egypt? A fine picture! a fine conception!"

"It has too much beauty, elegance, and harmony for me," growled Van Dyke. "Why are all the girls so pretty, and so fair of skin? There is nothing pre-historic, barbaric, cruel, ghastly about the scene—nothing to remind you of the ferocious edict of Pharaoh and the leader who was one day to drown him in the Red Sea. I admit it is beautiful, if that is what you want. It is too smooth, too refined, too idyllic for me."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

"Well!", I said, "the story is an Idyll, you know. Pharaoh's daughter was a gracious Princess, not a bloodthirsty tyrant, and Moses at four months had not grown to be the Prophet of Israel. The Plagues of Egypt had not yet begun. And we may imagine an Idyll if we please by way of contrast."

"Imagination is the foe of truth," said he.

Sir Visto then led us up to the President's *Cup of Tantalus*, which he called on us to admire. "Poynter," he said, "is always graceful, learned, correct, classical—— "

"Conventional—— " interrupted Van Dyke.

"See how thoughtfully every detail is studied," said Visto, not noticing his young friend, "the drawing firm, true, natural; the composition subtle; the whole atmosphere one of harmony and charm?"

"Why does the child in the transparent shift stretch up on her toes when it is plain she can't reach the other's hand by twelve inches at least? And why doesn't the long girl, in the dark robe with a palm-branch fan, step down to the fountain herself?" grumbled Van Dyke.

"My dear boy," said I, "you might as well ask why did Keats see charm in a 'Grecian urn,' you don't forget how it ends, do you?—

> Beauty is truth, truth beauty, that is all
> Ye know on earth, and all ye need to know."

"I can see neither beauty nor truth," said the painter, "in these Hebes, Ariadnes, Nymphs, Sapphos, Pindars, and other machine-made Hellenisms which the Academy seems to encourage. They are crude 'academies,' as the French say, and the local colour and staging is cheap enough."

"Good work too often leads to poor imitation," I suggested, "as we saw with Raphael himself; but weak copies do not spoil the value of a true master's work."

"This is what the 'Ideal' lands us in," said the painter, with a chuckle, as he pointed to Frank Dicksee's picture in Room I. "Is there anything ideal in those ten fingers stuck out like a *Lycidas* No. 2, reaching after a sort of ballet-girl seen through a gauze screen?"

"Ten fingers poked in the air seem all the rage this year," said Visto, "but at any rate this fellow's thighs are not quite such starved sticks as those in the wax-work in Regent Street."

"Come, now, let us look at the portraits," said I, "we shall not be troubled about ideals there."

"I don't know that," said Van Dyke; "some of these smart women look as if their portraits had been commissioned not by

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

their husbands, but by their dressmakers as trade advertisements to puff their 'creations.'"

"There is a portrait, indeed," cried Sir Visto with enthusiasm, taking us to Sargent's *Signior Garcia*, "power, truth, character, in every line. That is a portrait which Velasquez might have owned."

"Agreed, agreed, we shan't quarrel over that," said Van Dyke; "Sargent is the one man to-day who dominates both Academy and New Gallery at once, the man who unites mastery of his brush to originality of conception—for sheer skill of hand he is matchless and unerring."

"A really great painter," said Visto, "when he chooses, and does not play tricks, or is not poking fun at his sitters."

"When does he not choose?", asked the painter.

"When he dashes off a satin gown in an hour, and flings in a lace furbelow with three dabs of his brush."

"And if he does," retorted the painter, "who could do it as well in a week's work? Besides, the gown and the furbelow have to be looked at at least fifty feet away."

"That is scene-painting, not portraiture," said Visto; "I quite agree that he has a marvellous gift of *technique*, but why does he dab his shadows in with vermilion, and why are his women rouged on the lips? Hung on a gallery wall twenty yards off, the effect is brilliant, but I call it a trick, when you look close into the handling."

"You don't mean to say that he makes game of his own sitter?", I asked quite simply.

"Well!", said Visto, "you remember the old dealer with the thick red lips and the dog putting out his tongue to mimic his master. And see how he bedizens his other multi-millionaire sitters as if he said with his tongue in his cheek—what figures of fun they are! But just come across to the grand Blenheim group."

"Surely," I said, "that is a superb piece for a great historic palace. It reminds me of the Vandykes at Genoa. What a grandiose group! The mighty Marlbrook, with the conquered banners of lilies and his descendants to the tenth generation. What life in the two boys, in the spaniels, what *bravura* in the whole composition!"

"Oh! *bravura* indeed," said Van Dyke, "perhaps a trifle over-done, rather too pompously majestic."

"Why do you say making game of his sitters?", I asked simply.

"Well," said Sir Visto, "you see that, by the artifice of placing the Duchess on the step and the Duke below it, the impression is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00007f

مكتبة قطر الوطنية
Qatar National Library

produced that she is about ten inches taller than her husband. I have not the honour of their acquaintance, but I doubt if the difference is as much as that. The Duke seems rather embarrassed by the weight of his robes, and the beautiful head of her Grace is stuck upon an elongated neck which reminds one of the new saurian, *Diplodocus Carnegii*."

"Yes!", said Van Dyke, "he has the defects of his qualities. He can't resist a sensation; and the millionaires with their big prices are leading him to scamp it. But when he tries his best, as in his *Mrs. Raphael*, he is as serious as Rembrandt himself."

"It's a fatal snare to a painter to become the rage in the smart world," said I, "especially when the smart world is vulgar and tasteless. Even Vandyke and Reynolds had too many sitters, though their sitters had beauty, manners, and refinement."

"The worst of it is," said Visto, "that Sargent, like every man of original genius and splendid success, is teaching two or three other good men to imitate his *bravura* and his scene-painting legerdemain. Sargent can make a satin gown dazzling bright with fifteen sweeps of a thick brush. But when other men try to do it, they seem to be using a mop or a broom."

"He is the greatest master of portrait we have had since Millais stormed the town," said Van Dyke, "and has an even subtler eye for character."

"Yes!", said Visto, "but the genius he has for characteristic points is so keen that it betrays him now and then to make an actual caricature—I daresay quite unconsciously. He sees a trait in a sitter's face or figure, and in his eagerness to catch it he makes it almost ridiculous."

"Come and look at the *Burghers of Landsberg*," said I; "there is a solid piece of work indeed. Look at it across the Central Hall, and you might fancy at a first glance the R.A.'s were sitting in council. One feels that there are the very Bavarian citizens, simple, serious, thoughtful men of business—full of character, and composed with skill and truth. It is no bad revival of the old Dutch Corporation groups to be seen at Haarlem, the Hague, and Amsterdam. It is a real success in a difficult subject."

"Not much of the ideal, not quite high art," said the Connoisseur.

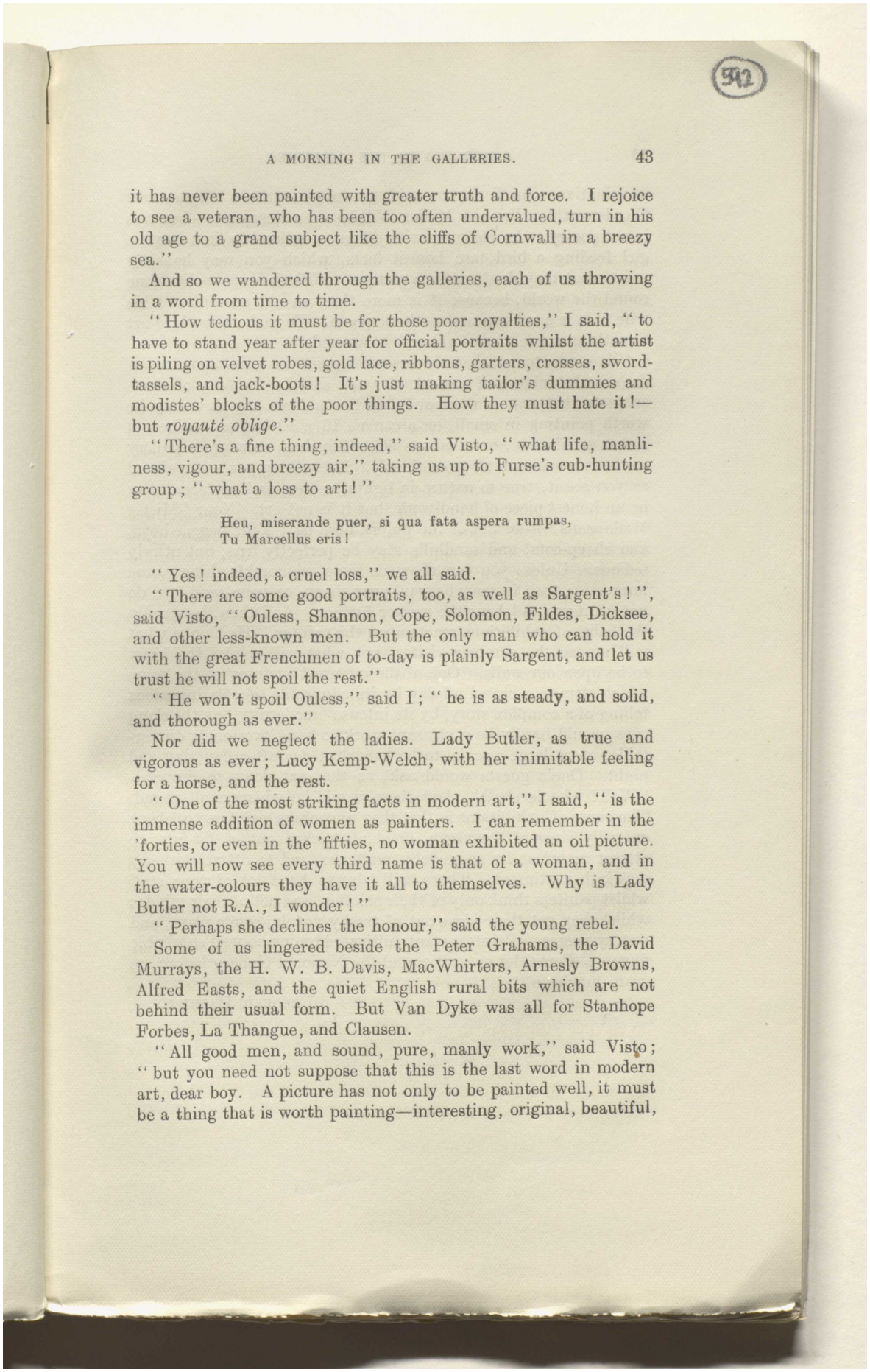
"The ideal be d——d," laughed the painter; "the Von has scored this time. All his portraits are first-rate. A good many of the old gang seem to have been waked up. Why, old Leader has broken out in a new place; and, after fifty years of Surrey pinewoods and commons, silvery Thames, and such serenities, he has found his way to the coast and the crags of the Cornish bays."

"A very good way it is," I added, "I know the cove well; and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000085

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



it has never been painted with greater truth and force. I rejoice to see a veteran, who has been too often undervalued, turn in his old age to a grand subject like the cliffs of Cornwall in a breezy sea."

And so we wandered through the galleries, each of us throwing in a word from time to time.

"How tedious it must be for those poor royalties," I said, "to have to stand year after year for official portraits whilst the artist is piling on velvet robes, gold lace, ribbons, garters, crosses, sword-tassels, and jack-boots! It's just making tailor's dummies and modistes' blocks of the poor things. How they must hate it!—but *royauté oblige*."

"There's a fine thing, indeed," said Visto, "what life, manliness, vigour, and breezy air," taking us up to Furse's cub-hunting group; "what a loss to art!"

> Heu, miserande puer, si qua fata aspera rumpas,
> Tu Marcellus eris!

"Yes! indeed, a cruel loss," we all said.

"There are some good portraits, too, as well as Sargent's!", said Visto, "Ouless, Shannon, Cope, Solomon, Fildes, Dicksee, and other less-known men. But the only man who can hold it with the great Frenchmen of to-day is plainly Sargent, and let us trust he will not spoil the rest."

"He won't spoil Ouless," said I; "he is as steady, and solid, and thorough as ever."

Nor did we neglect the ladies. Lady Butler, as true and vigorous as ever; Lucy Kemp-Welch, with her inimitable feeling for a horse, and the rest.

"One of the most striking facts in modern art," I said, "is the immense addition of women as painters. I can remember in the 'forties, or even in the 'fifties, no woman exhibited an oil picture. You will now see every third name is that of a woman, and in the water-colours they have it all to themselves. Why is Lady Butler not R.A., I wonder!"

"Perhaps she declines the honour," said the young rebel.

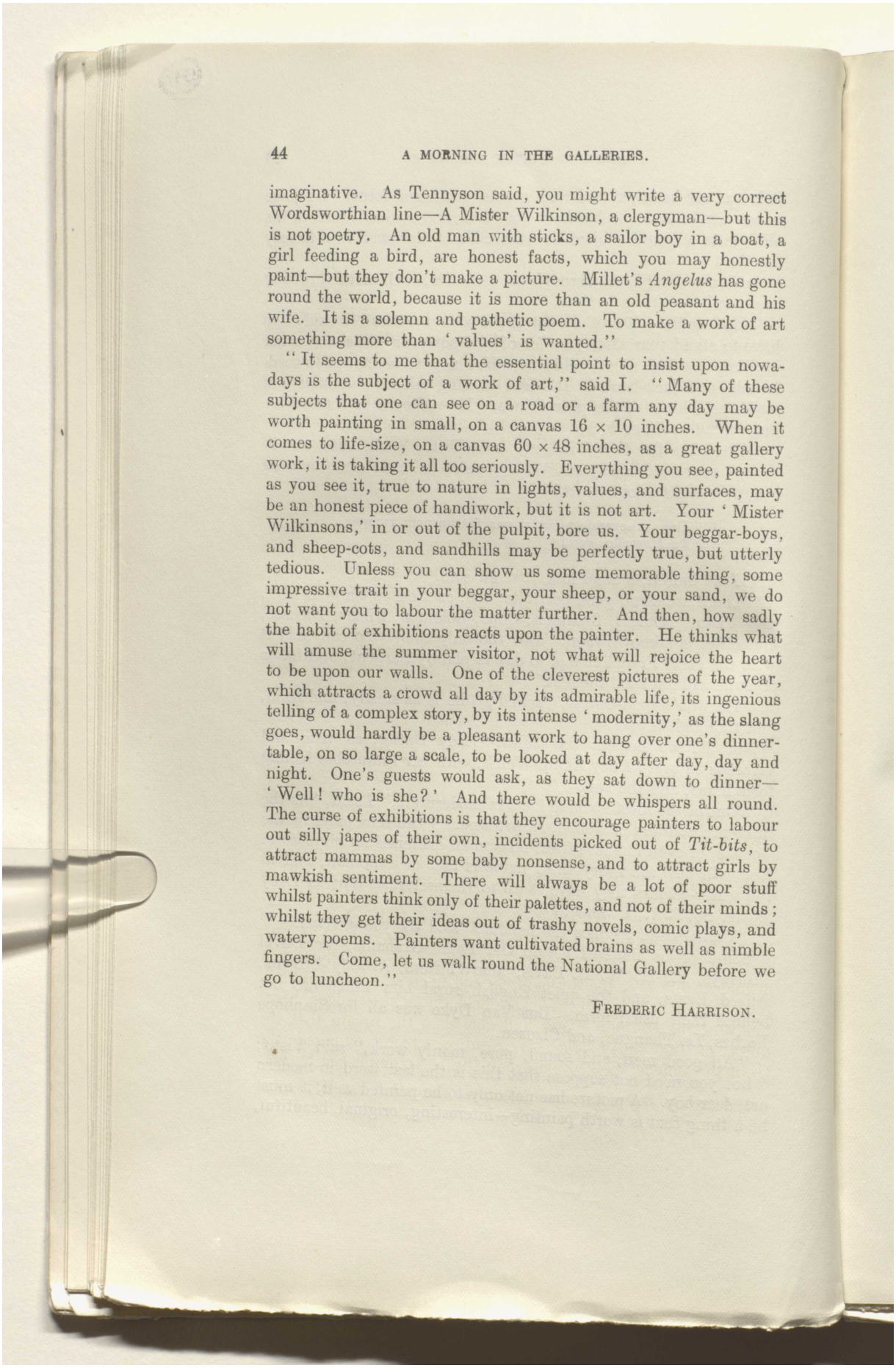
Some of us lingered beside the Peter Grahams, the David Murrays, the H. W. B. Davis, MacWhirters, Arnesly Browns, Alfred Easts, and the quiet English rural bits which are not behind their usual form. But Van Dyke was all for Stanhope Forbes, La Thangue, and Clausen.

"All good men, and sound, pure, manly work," said Visto; "but you need not suppose that this is the last word in modern art, dear boy. A picture has not only to be painted well, it must be a thing that is worth painting—interesting, original, beautiful,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000017

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



imaginative. As Tennyson said, you might write a very correct Wordsworthian line—A Mister Wilkinson, a clergyman—but this is not poetry. An old man with sticks, a sailor boy in a boat, a girl feeding a bird, are honest facts, which you may honestly paint—but they don't make a picture. Millet's *Angelus* has gone round the world, because it is more than an old peasant and his wife. It is a solemn and pathetic poem. To make a work of art something more than 'values' is wanted."

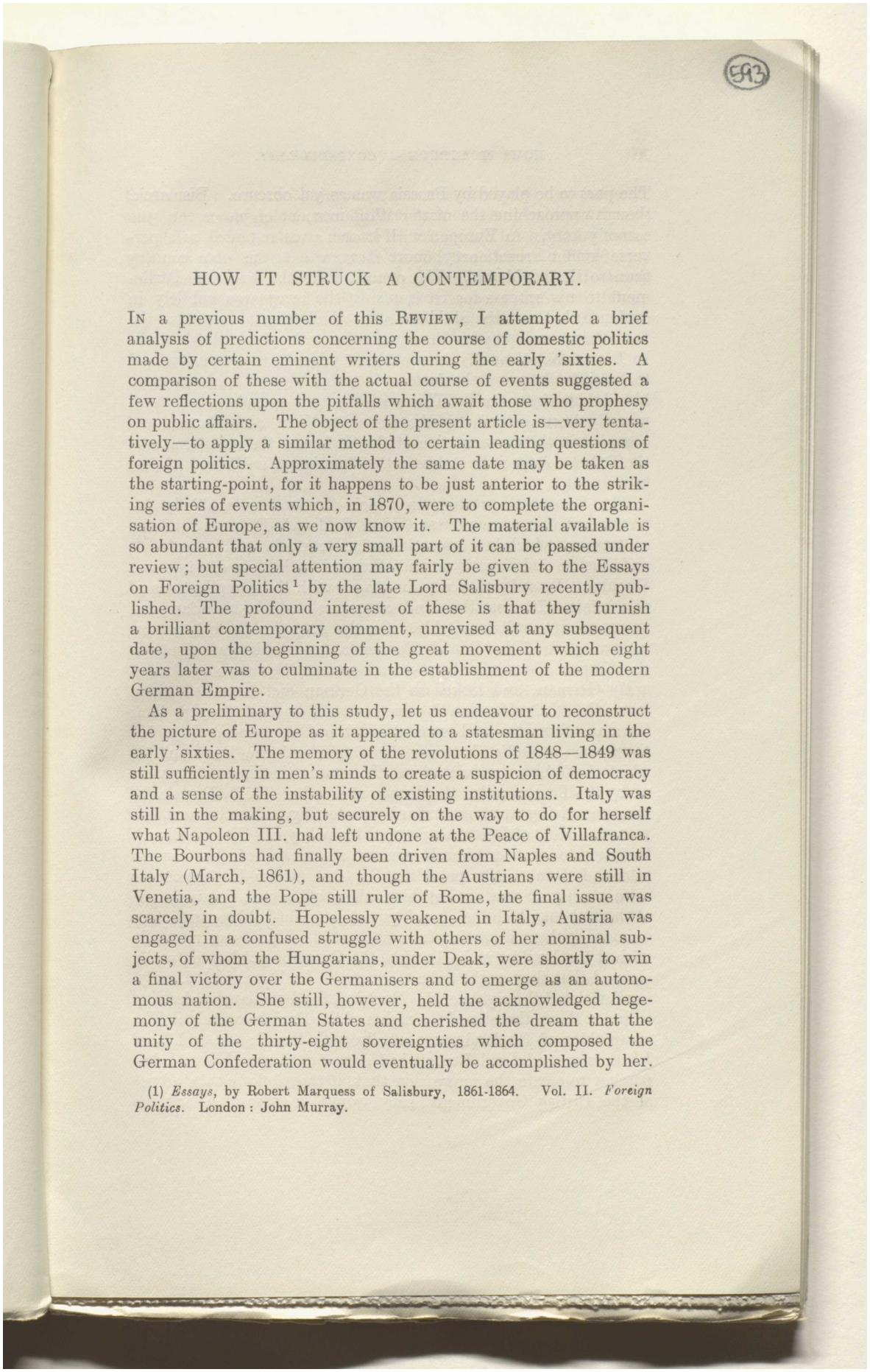
"It seems to me that the essential point to insist upon nowadays is the subject of a work of art," said I. "Many of these subjects that one can see on a road or a farm any day may be worth painting in small, on a canvas 16 × 10 inches. When it comes to life-size, on a canvas 60 × 48 inches, as a great gallery work, it is taking it all too seriously. Everything you see, painted as you see it, true to nature in lights, values, and surfaces, may be an honest piece of handiwork, but it is not art. Your 'Mister Wilkinsons,' in or out of the pulpit, bore us. Your beggar-boys, and sheep-cots, and sandhills may be perfectly true, but utterly tedious. Unless you can show us some memorable thing, some impressive trait in your beggar, your sheep, or your sand, we do not want you to labour the matter further. And then, how sadly the habit of exhibitions reacts upon the painter. He thinks what will amuse the summer visitor, not what will rejoice the heart to be upon our walls. One of the cleverest pictures of the year, which attracts a crowd all day by its admirable life, its ingenious telling of a complex story, by its intense 'modernity,' as the slang goes, would hardly be a pleasant work to hang over one's dinner-table, on so large a scale, to be looked at day after day, day and night. One's guests would ask, as they sat down to dinner—'Well! who is she?' And there would be whispers all round. The curse of exhibitions is that they encourage painters to labour out silly japes of their own, incidents picked out of *Tit-bits*, to attract mammas by some baby nonsense, and to attract girls by mawkish sentiment. There will always be a lot of poor stuff whilst painters think only of their palettes, and not of their minds; whilst they get their ideas out of trashy novels, comic plays, and watery poems. Painters want cultivated brains as well as nimble fingers. Come, let us walk round the National Gallery before we go to luncheon."

FREDERIC HARRISON.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00003f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



593

HOW IT STRUCK A CONTEMPORARY.

In a previous number of this Review, I attempted a brief analysis of predictions concerning the course of domestic politics made by certain eminent writers during the early 'sixties. A comparison of these with the actual course of events suggested a few reflections upon the pitfalls which await those who prophesy on public affairs. The object of the present article is—very tentatively—to apply a similar method to certain leading questions of foreign politics. Approximately the same date may be taken as the starting-point, for it happens to be just anterior to the striking series of events which, in 1870, were to complete the organisation of Europe, as we now know it. The material available is so abundant that only a very small part of it can be passed under review; but special attention may fairly be given to the Essays on Foreign Politics[1] by the late Lord Salisbury recently published. The profound interest of these is that they furnish a brilliant contemporary comment, unrevised at any subsequent date, upon the beginning of the great movement which eight years later was to culminate in the establishment of the modern German Empire.

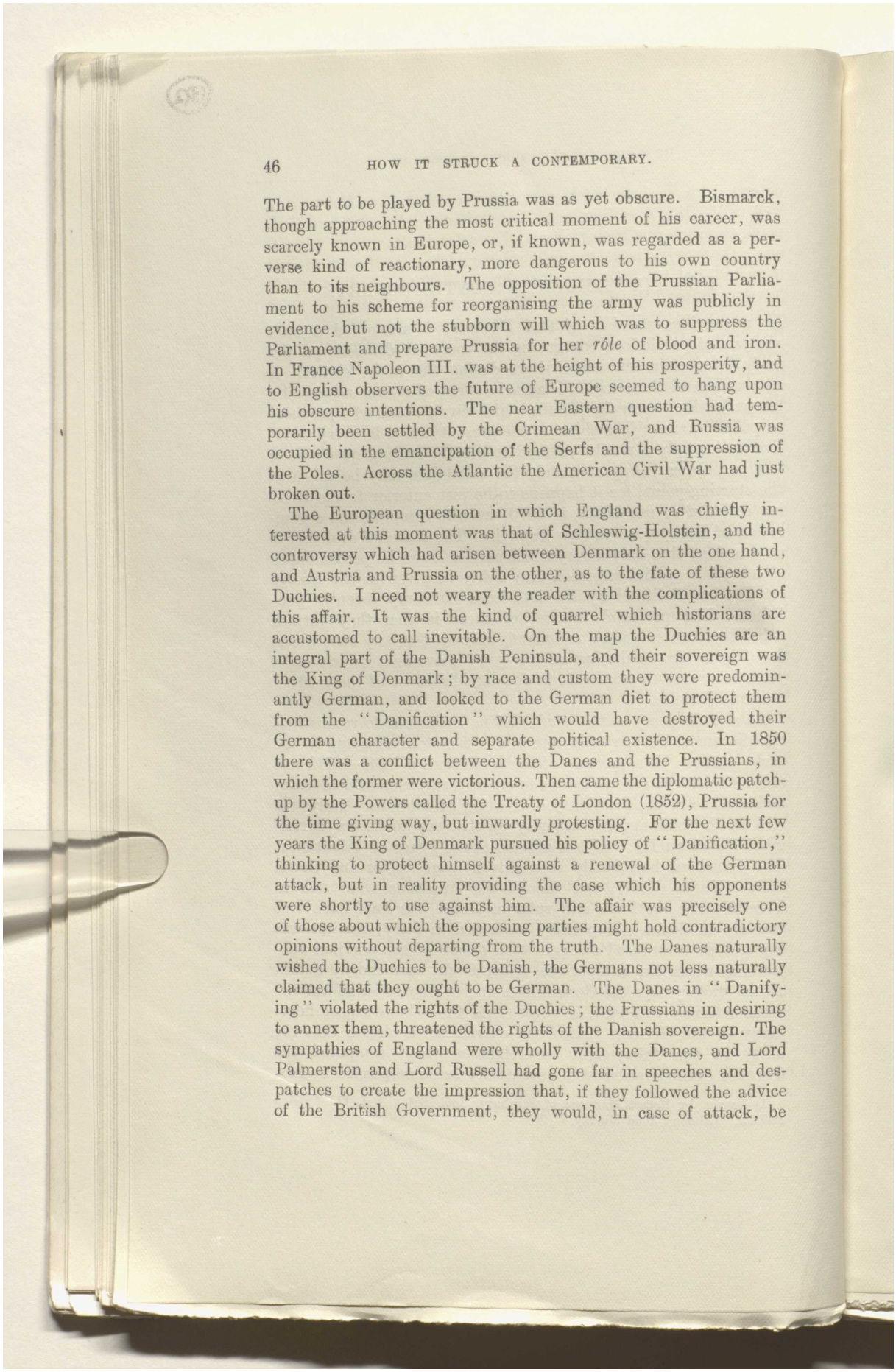
As a preliminary to this study, let us endeavour to reconstruct the picture of Europe as it appeared to a statesman living in the early 'sixties. The memory of the revolutions of 1848—1849 was still sufficiently in men's minds to create a suspicion of democracy and a sense of the instability of existing institutions. Italy was still in the making, but securely on the way to do for herself what Napoleon III. had left undone at the Peace of Villafranca. The Bourbons had finally been driven from Naples and South Italy (March, 1861), and though the Austrians were still in Venetia, and the Pope still ruler of Rome, the final issue was scarcely in doubt. Hopelessly weakened in Italy, Austria was engaged in a confused struggle with others of her nominal subjects, of whom the Hungarians, under Deak, were shortly to win a final victory over the Germanisers and to emerge as an autonomous nation. She still, however, held the acknowledged hegemony of the German States and cherished the dream that the unity of the thirty-eight sovereignties which composed the German Confederation would eventually be accomplished by her.

(1) *Essays*, by Robert Marquess of Salisbury, 1861-1864. Vol. II. *Foreign Politics*. London: John Murray.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000012

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



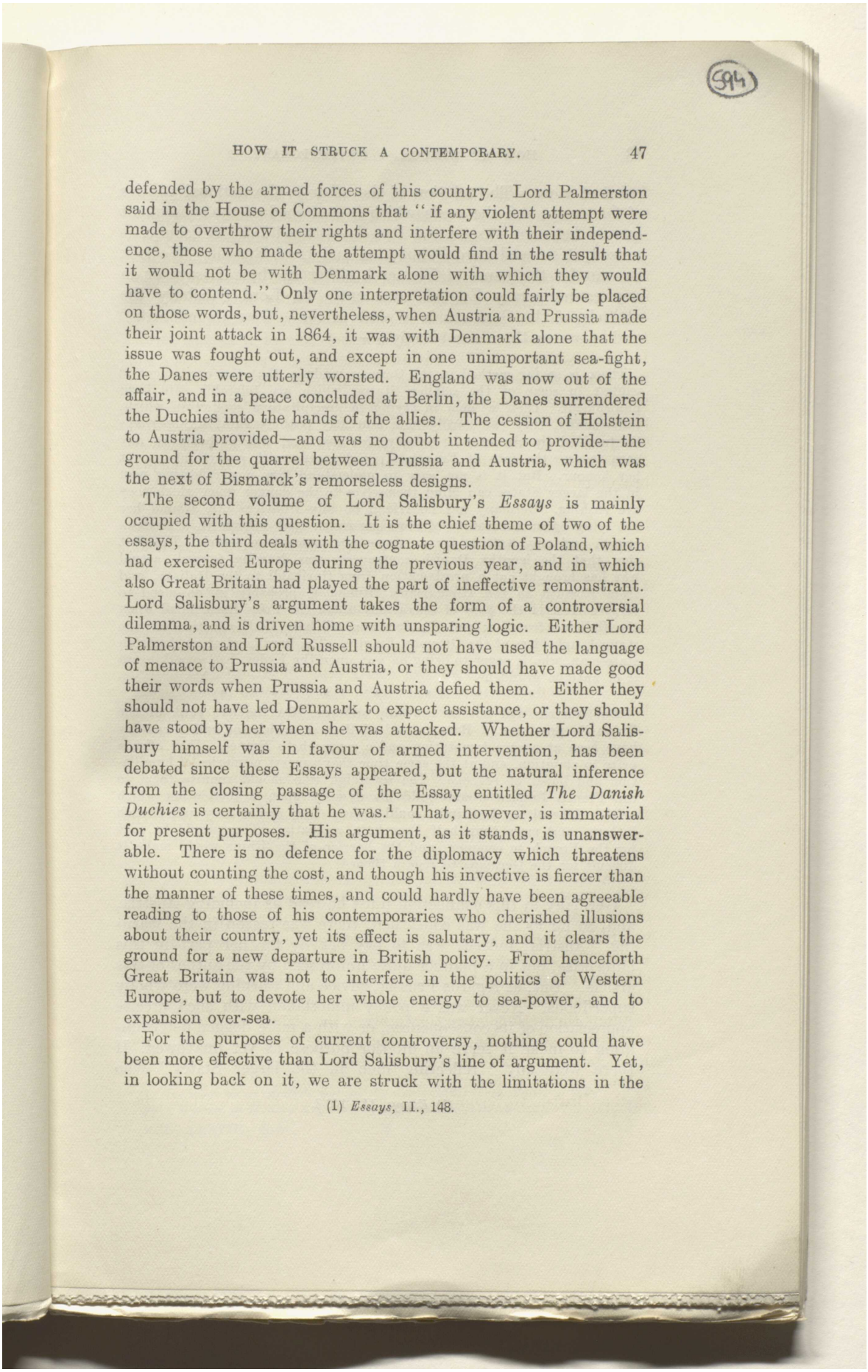
The part to be played by Prussia was as yet obscure. Bismarck, though approaching the most critical moment of his career, was scarcely known in Europe, or, if known, was regarded as a perverse kind of reactionary, more dangerous to his own country than to its neighbours. The opposition of the Prussian Parliament to his scheme for reorganising the army was publicly in evidence, but not the stubborn will which was to suppress the Parliament and prepare Prussia for her *rôle* of blood and iron. In France Napoleon III. was at the height of his prosperity, and to English observers the future of Europe seemed to hang upon his obscure intentions. The near Eastern question had temporarily been settled by the Crimean War, and Russia was occupied in the emancipation of the Serfs and the suppression of the Poles. Across the Atlantic the American Civil War had just broken out.

The European question in which England was chiefly interested at this moment was that of Schleswig-Holstein, and the controversy which had arisen between Denmark on the one hand, and Austria and Prussia on the other, as to the fate of these two Duchies. I need not weary the reader with the complications of this affair. It was the kind of quarrel which historians are accustomed to call inevitable. On the map the Duchies are an integral part of the Danish Peninsula, and their sovereign was the King of Denmark; by race and custom they were predominantly German, and looked to the German diet to protect them from the "Danification" which would have destroyed their German character and separate political existence. In 1850 there was a conflict between the Danes and the Prussians, in which the former were victorious. Then came the diplomatic patch-up by the Powers called the Treaty of London (1852), Prussia for the time giving way, but inwardly protesting. For the next few years the King of Denmark pursued his policy of "Danification," thinking to protect himself against a renewal of the German attack, but in reality providing the case which his opponents were shortly to use against him. The affair was precisely one of those about which the opposing parties might hold contradictory opinions without departing from the truth. The Danes naturally wished the Duchies to be Danish, the Germans not less naturally claimed that they ought to be German. The Danes in "Danifying" violated the rights of the Duchies; the Prussians in desiring to annex them, threatened the rights of the Danish sovereign. The sympathies of England were wholly with the Danes, and Lord Palmerston and Lord Russell had gone far in speeches and despatches to create the impression that, if they followed the advice of the British Government, they would, in case of attack, be

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



defended by the armed forces of this country. Lord Palmerston said in the House of Commons that "if any violent attempt were made to overthrow their rights and interfere with their independence, those who made the attempt would find in the result that it would not be with Denmark alone with which they would have to contend." Only one interpretation could fairly be placed on those words, but, nevertheless, when Austria and Prussia made their joint attack in 1864, it was with Denmark alone that the issue was fought out, and except in one unimportant sea-fight, the Danes were utterly worsted. England was now out of the affair, and in a peace concluded at Berlin, the Danes surrendered the Duchies into the hands of the allies. The cession of Holstein to Austria provided—and was no doubt intended to provide—the ground for the quarrel between Prussia and Austria, which was the next of Bismarck's remorseless designs.

The second volume of Lord Salisbury's *Essays* is mainly occupied with this question. It is the chief theme of two of the essays, the third deals with the cognate question of Poland, which had exercised Europe during the previous year, and in which also Great Britain had played the part of ineffective remonstrant. Lord Salisbury's argument takes the form of a controversial dilemma, and is driven home with unsparing logic. Either Lord Palmerston and Lord Russell should not have used the language of menace to Prussia and Austria, or they should have made good their words when Prussia and Austria defied them. Either they should not have led Denmark to expect assistance, or they should have stood by her when she was attacked. Whether Lord Salisbury himself was in favour of armed intervention, has been debated since these Essays appeared, but the natural inference from the closing passage of the Essay entitled *The Danish Duchies* is certainly that he was.[1] That, however, is immaterial for present purposes. His argument, as it stands, is unanswerable. There is no defence for the diplomacy which threatens without counting the cost, and though his invective is fiercer than the manner of these times, and could hardly have been agreeable reading to those of his contemporaries who cherished illusions about their country, yet its effect is salutary, and it clears the ground for a new departure in British policy. From henceforth Great Britain was not to interfere in the politics of Western Europe, but to devote her whole energy to sea-power, and to expansion over-sea.

For the purposes of current controversy, nothing could have been more effective than Lord Salisbury's line of argument. Yet, in looking back on it, we are struck with the limitations in the

(1) *Essays*, II., 148.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000064

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

point of view. The relation of the affair to the national politics of Germany, and the seeds which it contained of the subsequent quarrel between Austria and Prussia, escaped Lord Salisbury, as indeed, it escaped Lord Palmerston and Lord Russell. We look in vain for the name of Bismarck either in these Essays or in any contemporary English comment. To Lord Salisbury the attitude of the Germans is a piece of the "German madness" and he warns them accordingly :—

> There is so far method in the German madness that the excitement is wildest in some of the smaller States, which are tolerably safe from punishment. Their wisdom in trying to precipitate a conflict in which, individually, they can hardly lose, and may possibly gain, may perhaps be justified by the event. Saxony, for instance, will probably in any case reverse the fate of Francis I., and escape with everything except her honour. But it is not easy to understand how any reflecting men in the larger States can blind themselves to the danger upon which they are rushing. Germany has no friend on any frontier. All around her are lying enemies covetous of some possession that belongs to a German crown, and only waiting for an opportune moment to attack. The first sign that the lengthy Danish controversy was drawing towards actual war has brought out a proclamation from Garibaldi to the Italians, and from Kossuth to the Hungarians. Russia is probably in no mood to forgive Austria the base of operations which the Poles have found upon the Galician frontier; and the Servians will have little affection for the staunch upholders of the Ottoman Empire. The hardihood of an Austrian statesman, who is eager to bring on war upon the Eyder, has something in it of antique grandeur.
>
> * * * * * * *
>
> But Austria will not be the only sufferer. On the left bank of the Rhine lie provinces of Bavaria and of Prussia, which for half a century have been at once a temptation and a reproach to France. They offer a prize to ambition, and at the same time they suggest memories of humiliation and hopes of revenge. The sovereign who should reunite them to the French Empire would build his dynasty upon a foundation which neither Liberal nor Legitimist could shake. They are already half French in laws, and more than half French in sympathy. They would be easy for the French to conquer; and the barrier of the Rhine would make it difficult for the Germans to regain them.[1]

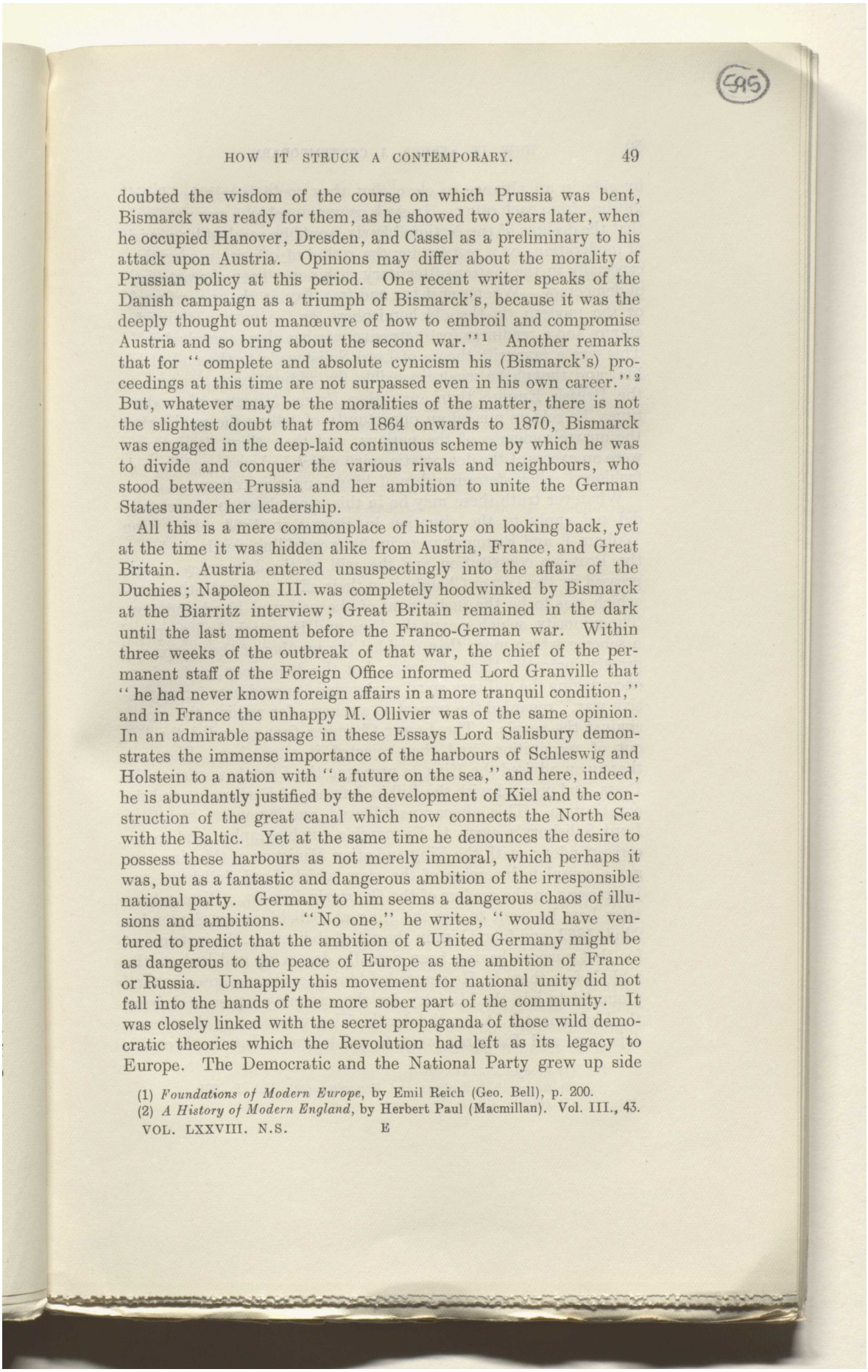
Germany in this connection must be read as including Austria, and, so far as she was concerned, there was reason in the warning. Austria, indeed, was to pay heavily for her part in this enterprise, but in a manner quite unforeseen by the author of this article. But, as regards Prussia, advice and warning were wholly superfluous. Never was a policy undertaken with such precise appreciation of its consequences, or with a more dogged determination to make it serve an ulterior purpose as yet unavowed. If there were any "reflecting men in the larger States" who

(1) *Essays*, II., 140-2.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



doubted the wisdom of the course on which Prussia was bent, Bismarck was ready for them, as he showed two years later, when he occupied Hanover, Dresden, and Cassel as a preliminary to his attack upon Austria. Opinions may differ about the morality of Prussian policy at this period. One recent writer speaks of the Danish campaign as a triumph of Bismarck's, because it was the deeply thought out manœuvre of how to embroil and compromise Austria and so bring about the second war."[1] Another remarks that for "complete and absolute cynicism his (Bismarck's) proceedings at this time are not surpassed even in his own career."[2] But, whatever may be the moralities of the matter, there is not the slightest doubt that from 1864 onwards to 1870, Bismarck was engaged in the deep-laid continuous scheme by which he was to divide and conquer the various rivals and neighbours, who stood between Prussia and her ambition to unite the German States under her leadership.

All this is a mere commonplace of history on looking back, yet at the time it was hidden alike from Austria, France, and Great Britain. Austria entered unsuspectingly into the affair of the Duchies; Napoleon III. was completely hoodwinked by Bismarck at the Biarritz interview; Great Britain remained in the dark until the last moment before the Franco-German war. Within three weeks of the outbreak of that war, the chief of the permanent staff of the Foreign Office informed Lord Granville that "he had never known foreign affairs in a more tranquil condition," and in France the unhappy M. Ollivier was of the same opinion. In an admirable passage in these Essays Lord Salisbury demonstrates the immense importance of the harbours of Schleswig and Holstein to a nation with "a future on the sea," and here, indeed, he is abundantly justified by the development of Kiel and the construction of the great canal which now connects the North Sea with the Baltic. Yet at the same time he denounces the desire to possess these harbours as not merely immoral, which perhaps it was, but as a fantastic and dangerous ambition of the irresponsible national party. Germany to him seems a dangerous chaos of illusions and ambitions. "No one," he writes, "would have ventured to predict that the ambition of a United Germany might be as dangerous to the peace of Europe as the ambition of France or Russia. Unhappily this movement for national unity did not fall into the hands of the more sober part of the community. It was closely linked with the secret propaganda of those wild democratic theories which the Revolution had left as its legacy to Europe. The Democratic and the National Party grew up side

(1) *Foundations of Modern Europe*, by Emil Reich (Geo. Bell), p. 200.
(2) *A History of Modern England*, by Herbert Paul (Macmillan). Vol. III., 43.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

by side in an alliance so close that they could barely be distinguished from each other. In such companionship it was not likely that the designs of the National Party would be marked by a spirit of moderation, or a respect for the rights of others; moderation, especially in the matter of territory, has never been characteristic of democracy. Whenever it has had free play, in the ancient world or the modern, in the old hemisphere or the new, a thirst for empire and a readiness for aggressive war has always marked it."[1] This was a favourite theme of Lord Salisbury's to the end of his life, and though he was responsible for adding more territory to the British Empire than any other Prime Minister of modern times, he seldom missed an opportunity of telling the public that the quarrelsomeness of the nations, and their thirst for empire, were an excess of the democratic spirit which had swamped the old-fashioned sober statesmanship of kings and chancellors.

Whatever truth there may be in this generalisation it certainly did not apply to the situation in Prussia in 1863. For King William I. and Bismarck were in that year riding rough-shod over the Prussian constitution and the will of the democracy as expressed by the Lower Chamber, in their effort to create the army which was to be the instrument of the policy of blood and iron. The minority, which meant the King and Bismarck, had proposed a scheme which more than doubled the number of the troops and greatly increased their efficiency, but the democracy, so far from encouraging the military spirit or showing "a readiness for aggressive war," regarded the project as a scheme for arming the crown against the people. The Lower Chamber first amended the Bill out of recognition, and then rejected it altogether. Bismarck thereupon advised the King to prorogue the Chamber, silence the Press, and proceed with the Bill in defiance of Parliament and the constitution. This advice was followed, and if now we turn from Lord Salisbury's essay to Bismarck's autobiography, and to his correspondence with the King and other Ministers at this time, we get a complete inversion of the view which Lord Salisbury was impressing on the readers of the *Quarterly Review*. Bismarck relates how he went to see the King at Babelsberg on September 22nd, 1862, and found him in the act of abdicating, the instrument for that purpose having been actually drawn up and laid on the table before them.[2] He persuaded him to continue, however, and promised to join the Ministry for the express purpose of defying the Parliament.[3] A month later the King was again in the deepest dejection, and Bismarck went to meet him at Juterbogk on his

(1) *Essays*, Vol. II., 68.
(2) *Bismarck Reflections and Reminiscences*. Vol. I., 291.
(3) *Ibidem*, 310-13.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

return from Baden-Baden, and they talked in the railway carriage on the way to Berlin. "I can perfectly well see where all this will end," said the King; "over there in front of the Opera House, under my windows they will cut off your head, and mine a little while afterwards." "*Et après*, Sire," answered Bismarck. "*Après?* indeed we shall be dead," replied the King. "Yes," continued Bismarck, "we shall be dead; but we must all die sooner or later, and can we perish more honourably?" Bismarck goes on to tell us how the King recovered himself as the talk proceeded, and "assumed the part of an officer fighting for kingdom and fatherland," an officer "who has orders to hold a certain position to the death, no matter whether he perishes in the task or not." And thus, when they arrived at Berlin he received the ministers and officials who awaited him with a "joyous and combative" disposition.[1] In the correspondence we have the frankest avowal of the aims of these autocratic personages. "Therefore, my noble bear-hunter," writes von Roon, in January, 1869, "be coolly calm and keep the aim—preservation from democratic anarchy—in view; away with fretful agitation!"[2] The Crown Prince vehemently took the other view and got himself into a sad scrape in consequence. "I will tell you," he writes to Bismarck on June 30th, 1863, "what results of your policy I foresee: You will tamper with the constitution until it loses its value in the people's eyes, and in this way you will incite anarchist endeavours which go beyond the constitution. You will also be driven, whether you wish it or not, from one venturesome interpretation to another, until finally the naked, undisguised breach of the constitution is recommended."[3] The Prince accurately reflected the views of German Liberals and Democrats, who regarded the military movement as hostile to German unity, and many of whom actively opposed the invasion of the Duchies in the belief that Bismarck's intention was to expel Prince Frederick of Augustenburg, and to hand back Schleswig to Christian IX. of Denmark.

There could scarcely be a more instructive study of opinion than is furnished by a comparison of Lord Salisbury's Essays with the Bismarck letters and reminiscences of this period. The first give us the contemporary European view; the second show the real design and intention as it was actually carried out. To Lord Salisbury German politics seemed hopelessly chaotic. "It is, of course, not possible," he writes, in 1863, "to forecast the political form into which the seething mass of German populations will ultimately crystallise. But one of two alternatives may safely be

(1) *Bismarck Reflections and Reminiscences.* Vol. I., 310-13.
(2) *The Correspondence of William I. and Bismarck.* Vol. II., 112.
(3) *Ibid.*, 107.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000063

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

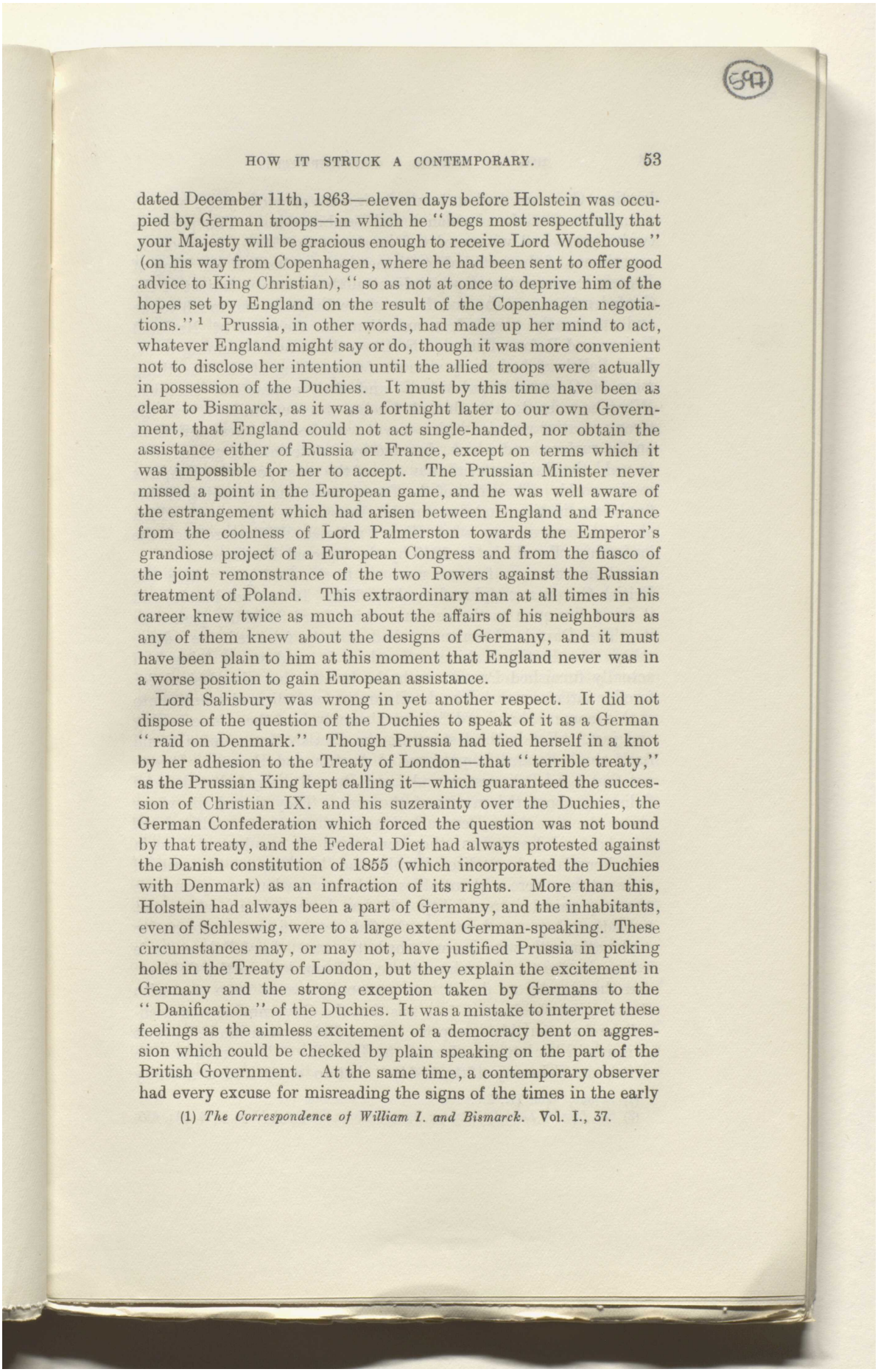
predicted of the destiny of Germany as a European Power. Either the present subdivision which neutralises her natural resources will cease and she will become one of the most powerful Empires in the world; or else—a far likelier issue—the present enthusiasm will exhaust the energies of a people so unpractical, without leading to any definite result, and Germany will fall back into her old condition, more divided, more stagnant, more impotent than before, and more helplessly the slave of Russia."[1] "I had indicated plainly enough the direction in which I was going," says Bismarck of his action in 1862. "Prussia—such was the point of my speech (to the Budget Commission on September 30th, 1862)—as a glance at the map will show, could no longer wear unaided on its long, narrow figure the panoply which Germany required for its security; that must be equally distributed over all German peoples. We should get no nearer the goal by speeches, associations, decisions of majorities; we should be unable to avoid a serious contest, a contest which could only be settled by blood and iron. In order to secure our success in this, the deputies must place the greatest possible weight of blood and iron in the hands of the King of Prussia, in order that, according to his judgment, he might throw it into one scale or the other."[2] And in another passage he speaks of the King being "helped across the bridge of the Danish question to the point of view of 1866, *i.e.*, from speaking to doing, from phrase to action." The "far likelier issue," as Lord Salisbury calls it, "that Germany would fall back into her old condition," had at that very moment become the least probable, and the "seething mass of German populations" were from henceforth in the grip of the most masterful statesman of the nineteenth century. And the wars which followed, so far from being the random outbreaks of democratic passion, were each in turn engineered by one man, who with consummate skill and foresight imposed his master-plan upon King and people. "The zeal for German nationality," writes Lord Salisbury, "if it appears to us hot, is at least invariably safe. Once convince them that the raid on Denmark is not safe, and the excitement will subside with a marvellous rapidity. . . . Let Germany see distinctly that war with Denmark means war with England, and the Governments that are now weakly yielding will draw courage to free their subjects from the imminence of a greater danger." That, it must be said, with all respect, is a disastrous passage. We are uncomfortably struck in reading the Bismarck letters to find how little weight was attached at Berlin to the threat from England. There is a curious letter from Bismarck to the King,

(1) *Essays*, II., 143.
(2) *Bismarck Reflections and Reminiscences.* Vol. I., 309. *Ibid.*, Vol. I., 308.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



dated December 11th, 1863—eleven days before Holstein was occupied by German troops—in which he "begs most respectfully that your Majesty will be gracious enough to receive Lord Wodehouse" (on his way from Copenhagen, where he had been sent to offer good advice to King Christian), "so as not at once to deprive him of the hopes set by England on the result of the Copenhagen negotiations."[1] Prussia, in other words, had made up her mind to act, whatever England might say or do, though it was more convenient not to disclose her intention until the allied troops were actually in possession of the Duchies. It must by this time have been as clear to Bismarck, as it was a fortnight later to our own Government, that England could not act single-handed, nor obtain the assistance either of Russia or France, except on terms which it was impossible for her to accept. The Prussian Minister never missed a point in the European game, and he was well aware of the estrangement which had arisen between England and France from the coolness of Lord Palmerston towards the Emperor's grandiose project of a European Congress and from the fiasco of the joint remonstrance of the two Powers against the Russian treatment of Poland. This extraordinary man at all times in his career knew twice as much about the affairs of his neighbours as any of them knew about the designs of Germany, and it must have been plain to him at this moment that England never was in a worse position to gain European assistance.

Lord Salisbury was wrong in yet another respect. It did not dispose of the question of the Duchies to speak of it as a German "raid on Denmark." Though Prussia had tied herself in a knot by her adhesion to the Treaty of London—that "terrible treaty," as the Prussian King kept calling it—which guaranteed the succession of Christian IX. and his suzerainty over the Duchies, the German Confederation which forced the question was not bound by that treaty, and the Federal Diet had always protested against the Danish constitution of 1855 (which incorporated the Duchies with Denmark) as an infraction of its rights. More than this, Holstein had always been a part of Germany, and the inhabitants, even of Schleswig, were to a large extent German-speaking. These circumstances may, or may not, have justified Prussia in picking holes in the Treaty of London, but they explain the excitement in Germany and the strong exception taken by Germans to the "Danification" of the Duchies. It was a mistake to interpret these feelings as the aimless excitement of a democracy bent on aggression which could be checked by plain speaking on the part of the British Government. At the same time, a contemporary observer had every excuse for misreading the signs of the times in the early

(1) *The Correspondence of William I. and Bismarck.* Vol. I., 37.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00003d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

'sixties. Germany had certainly during the previous years been in a ferment of confused policies and combinations. The previous twelve years had witnessed the revolutions of 1848, the abortive experiment of the national Parliament, the refusal of the King of Prussia to accept the imperial dignity, the re-establishment of the Confederation, and the overthrow of the Liberals, and much vague and apparently purposeless agitation on the part of National Unions and Reform Unions. So far as the outward seeming went, Lord Salisbury had every warrant for speaking of the "seething mass of German populations," and their unpractical energies. What he missed, and what all foreign observers missed, was the strong creative impulse which was at work beneath these agitations on the surface, and which, directed by a statesman of genius, was to weld the fluid material into one of the most powerful Empires in the world. The affair of the Duchies was the beginning of this final consolidation, and it restored to Prussia the opportunity which she had thrown away when King Frederick William refused the leadership offered him in 1849 by the national Parliament.

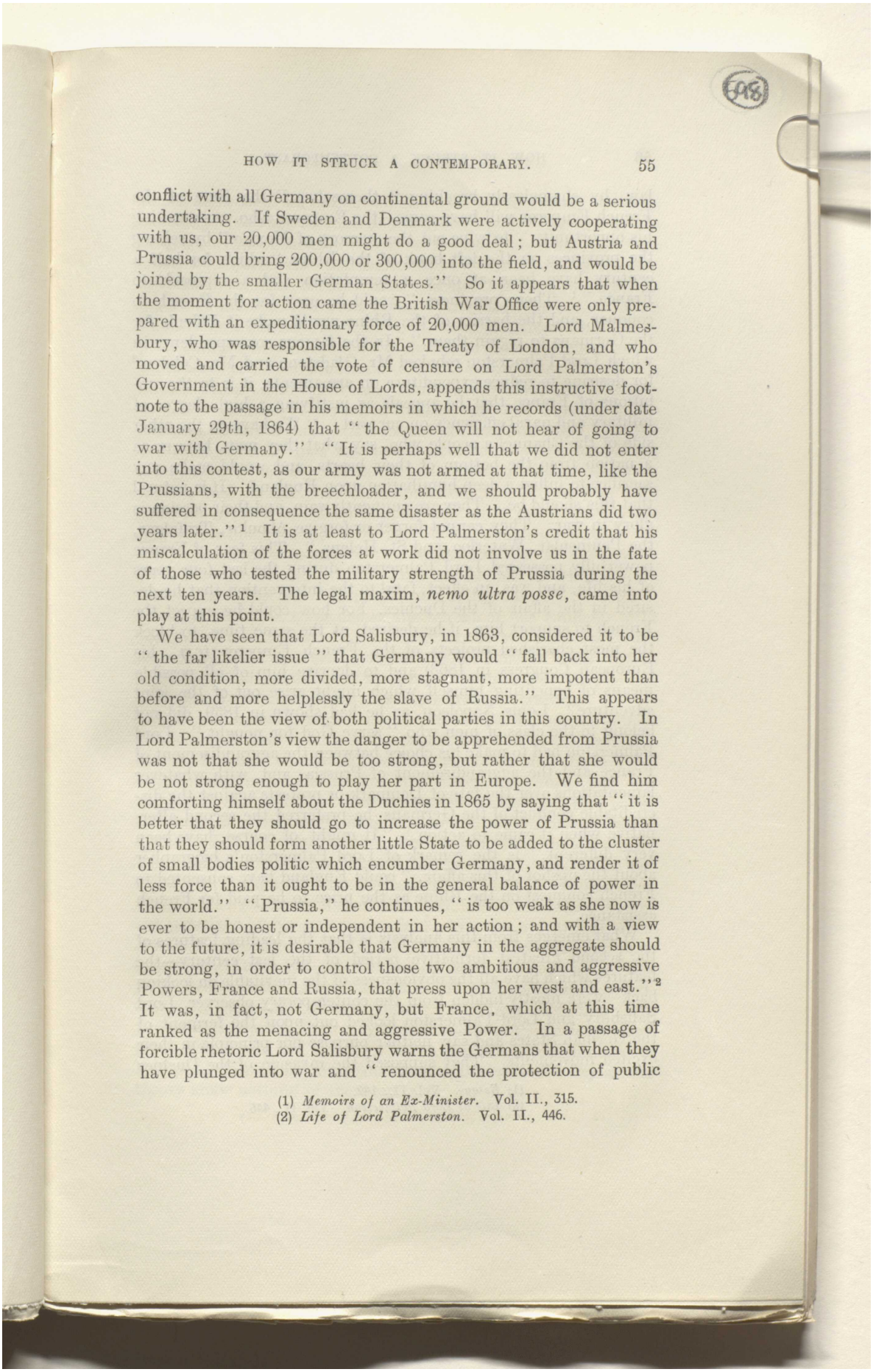
Let us turn now for one moment to the final part which the British Government played in this affair. It was not heroic, and it fairly lies open to the censure which Lord Salisbury passes on it. The Danish Government had strictly followed the advice which the British Cabinet offered to it, and in so doing had actually furnished Prussia with the handle that she desired for forcible interference. The details are too complicated to enter into at this moment, but Lord Salisbury's analysis of them is searching and just.[1] Yet in the last resort the Danish Government found itself single-handed in presence of Austria and Prussia. It was not that Lord Palmerston and Lord Russell disagreed with Lord Salisbury about the merits of the case. They shared his views about the "raid on Denmark," as is shown in a multitude of speeches and despatches; they considered the conduct of Austria and Prussia to be "discreditably bad."[2] But at the critical moment they were without allies, and intervention to any purpose was a physical impossibility. It has been said in subsequent times that they were beaten in the Cabinet, and—as an alternative explanation—that the Queen forbade the war. Lord Palmerston's letters do, indeed, furnish evidence of dissensions in the Cabinet, and the Queen, no doubt, was personally averse from war with Prussia, but the decisive fact was that the Government was without the force for this enterprise. Lord Palmerston himself avows as much in his letters to Lord John Russell. "The truth is," he writes on February 13th, 1864, "that to enter into a military

(1) *Essays*. Vol. II., 213.
(2) See *Life of Lord Palmerston*, by the Hon. Evelyn Ashley. Vol. II., 430.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000013

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



conflict with all Germany on continental ground would be a serious undertaking. If Sweden and Denmark were actively cooperating with us, our 20,000 men might do a good deal; but Austria and Prussia could bring 200,000 or 300,000 into the field, and would be joined by the smaller German States." So it appears that when the moment for action came the British War Office were only prepared with an expeditionary force of 20,000 men. Lord Malmesbury, who was responsible for the Treaty of London, and who moved and carried the vote of censure on Lord Palmerston's Government in the House of Lords, appends this instructive footnote to the passage in his memoirs in which he records (under date January 29th, 1864) that "the Queen will not hear of going to war with Germany." "It is perhaps well that we did not enter into this contest, as our army was not armed at that time, like the Prussians, with the breechloader, and we should probably have suffered in consequence the same disaster as the Austrians did two years later."[1] It is at least to Lord Palmerston's credit that his miscalculation of the forces at work did not involve us in the fate of those who tested the military strength of Prussia during the next ten years. The legal maxim, *nemo ultra posse*, came into play at this point.

We have seen that Lord Salisbury, in 1863, considered it to be "the far likelier issue" that Germany would "fall back into her old condition, more divided, more stagnant, more impotent than before and more helplessly the slave of Russia." This appears to have been the view of both political parties in this country. In Lord Palmerston's view the danger to be apprehended from Prussia was not that she would be too strong, but rather that she would be not strong enough to play her part in Europe. We find him comforting himself about the Duchies in 1865 by saying that "it is better that they should go to increase the power of Prussia than that they should form another little State to be added to the cluster of small bodies politic which encumber Germany, and render it of less force than it ought to be in the general balance of power in the world." "Prussia," he continues, "is too weak as she now is ever to be honest or independent in her action; and with a view to the future, it is desirable that Germany in the aggregate should be strong, in order to control those two ambitious and aggressive Powers, France and Russia, that press upon her west and east."[2] It was, in fact, not Germany, but France, which at this time ranked as the menacing and aggressive Power. In a passage of forcible rhetoric Lord Salisbury warns the Germans that when they have plunged into war and "renounced the protection of public

(1) *Memoirs of an Ex-Minister.* Vol. II., 315.
(2) *Life of Lord Palmerston.* Vol. II., 446.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000027

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

law, by shamelessly breaking it themselves," the time of the French Emperor will have come—the Emperor who was awaiting his opportunity "to wipe out the memory of Mexico" by seizing the provinces on the left bank of the Rhine "which for half a century have been at once a temptation and a reproach to France."[1] These provinces "would be easy for the French to conquer, and the barrier of the Rhine would make it difficult for the Germans to regain them." In the famous correspondence in which Lord Palmerston rebuked Mr. Gladstone and Mr. Cobden[2] for desiring to reduce expenditure on armaments, it is to the ambitions of France that he appeals as justifying a high degree of military and naval efficiency on our part. "We have on the other side of the Channel a people who, say what they may, hate us as a nation from the bottom of their hearts, and would make any sacrifice to inflict a deep humiliation upon England. It is natural that this should be. They are eminently vain, and their passion is glory in war. They cannot forget or forgive Aboukir, Trafalgar, the Peninsular, Waterloo, and St. Helena." This fear of France powerfully possessed Lord Palmerston during the last four years of his life, and was, in effect, fatal to the intervention that he desired in the affair of the Duchies. For how could he expect the French to support him, if he desired, at the same time, to block the most cherished projects of the French Emperor (*e.g.*, his European Congress in 1863) and to deprive him of all possible means of benefiting himself which might arise out of the joint adventure? Louis Napoleon, as he had shown in 1859, did not belong to the class of men who "serve God for nought." Lord Palmerston had to make his choice between the aggrandisement of France and the aggrandisement of Prussia, and, with whatever lamentations over the fate of Denmark or protests against the discreditable conduct of the Germans, he preferred the second alternative when it came to action. "It might, of course, have been very different," is the remark of Lord Palmerston's biographer about the upshot of this affair, "could England have consented to French conquest on the Rhine as the price to be paid for French assistance."

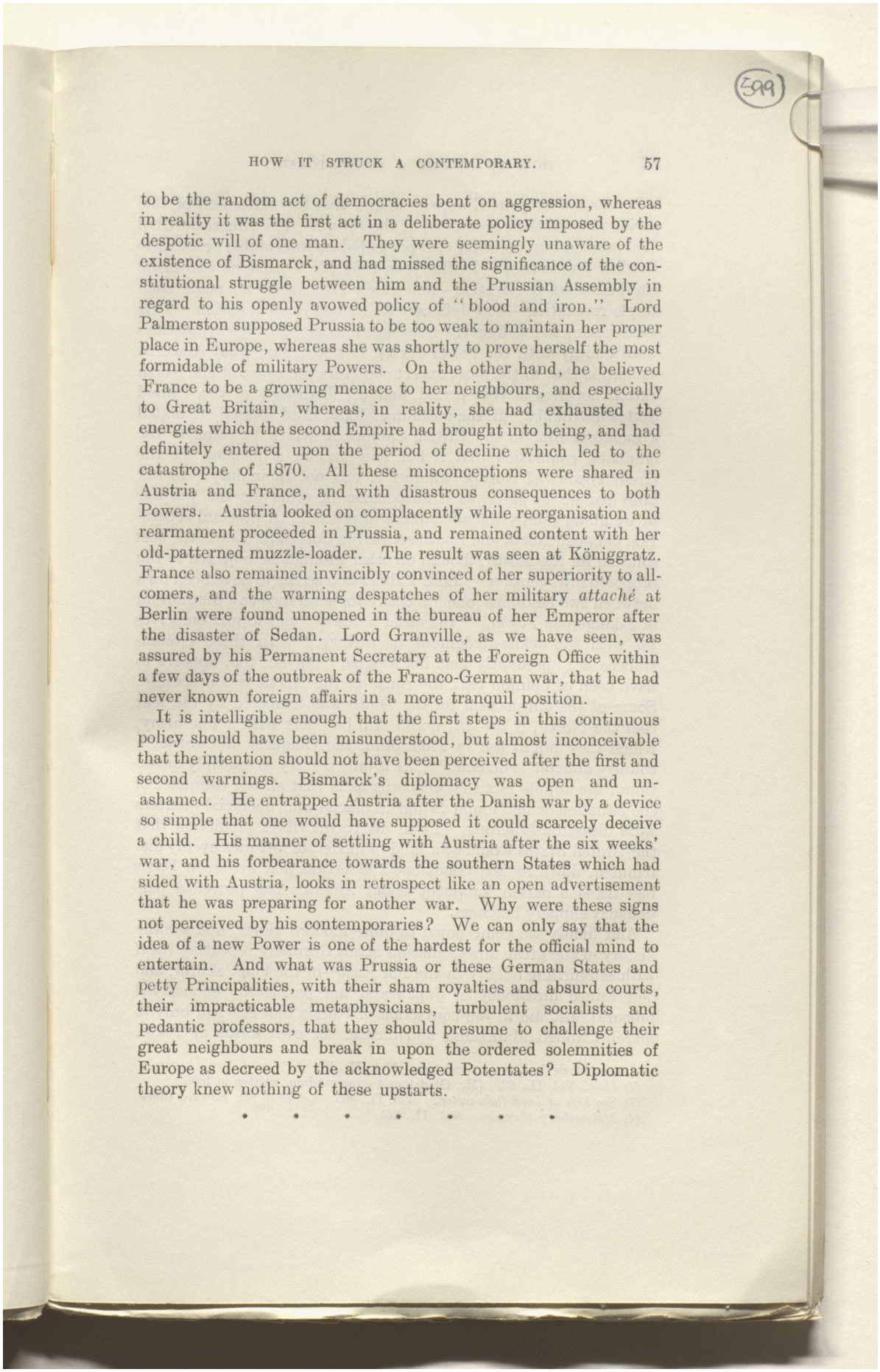
What emerges from this analysis is that the leading features of the second greatest formative period of the last century—the features which have all the obviousness of the inevitable on looking back—were mostly hidden from the contemporary observer. Lord Salisbury and Lord Palmerston looked out upon the ferment of the German States and saw neither purpose nor principle in their excited movements. They supposed the invasion of the Duchies

(1) *Essays*. Vol. II., 142.
(2) *Life of Lord Palmerston*. Vol. II., 446.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



to be the random act of democracies bent on aggression, whereas in reality it was the first act in a deliberate policy imposed by the despotic will of one man. They were seemingly unaware of the existence of Bismarck, and had missed the significance of the constitutional struggle between him and the Prussian Assembly in regard to his openly avowed policy of "blood and iron." Lord Palmerston supposed Prussia to be too weak to maintain her proper place in Europe, whereas she was shortly to prove herself the most formidable of military Powers. On the other hand, he believed France to be a growing menace to her neighbours, and especially to Great Britain, whereas, in reality, she had exhausted the energies which the second Empire had brought into being, and had definitely entered upon the period of decline which led to the catastrophe of 1870. All these misconceptions were shared in Austria and France, and with disastrous consequences to both Powers. Austria looked on complacently while reorganisation and rearmament proceeded in Prussia, and remained content with her old-patterned muzzle-loader. The result was seen at Königgratz. France also remained invincibly convinced of her superiority to all-comers, and the warning despatches of her military *attaché* at Berlin were found unopened in the bureau of her Emperor after the disaster of Sedan. Lord Granville, as we have seen, was assured by his Permanent Secretary at the Foreign Office within a few days of the outbreak of the Franco-German war, that he had never known foreign affairs in a more tranquil position.

It is intelligible enough that the first steps in this continuous policy should have been misunderstood, but almost inconceivable that the intention should not have been perceived after the first and second warnings. Bismarck's diplomacy was open and unashamed. He entrapped Austria after the Danish war by a device so simple that one would have supposed it could scarcely deceive a child. His manner of settling with Austria after the six weeks' war, and his forbearance towards the southern States which had sided with Austria, looks in retrospect like an open advertisement that he was preparing for another war. Why were these signs not perceived by his contemporaries? We can only say that the idea of a new Power is one of the hardest for the official mind to entertain. And what was Prussia or these German States and petty Principalities, with their sham royalties and absurd courts, their impracticable metaphysicians, turbulent socialists and pedantic professors, that they should presume to challenge their great neighbours and break in upon the ordered solemnities of Europe as decreed by the acknowledged Potentates? Diplomatic theory knew nothing of these upstarts.

* * * * * * *

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

It was not only in European affairs that the statesmen of this period showed their ignorance of the future. The American Civil War was raging, and that also presented an inscrutable problem to English public men. In the year 1862 Mr. Gladstone had made his disastrous declaration—for which afterwards he made such ample reparation—that Jefferson Davis had made a nation. It is unnecessary to dwell on the notorious fact that English sympathies were mainly with the South during this struggle; what concerns us here is that to the most expert observers the cause of the North looked hopeless at this period, and the disruption of the United States inevitable. In the autumn of 1862, Lord Russell circulated a memorandum to the British Cabinet in which he came to the emphatic conclusion that it had now become a question for the Great Powers of Europe whether it was not their duty "to ask both parties to agree to a suspension of arms for the purpose of weighing calmly the advantages of peace." A peaceful separation between North and South seemed to Cornewall Lewis the best solution for the North, though on other grounds he objected to the proposed intervention.[1] Lord Palmerston seems to have been torn between two emotions, one "a desire for severance as a diminution of a dangerous Power,"[2] the other a desire "not to mix ourselves up with the acknowledgment of slavery."[3] In those circumstances he "prudently held his tongue," but he, too, appears to have been of opinion that the cause of the North was desperate. Some of the enthusiasm for the South was tempered by the fear that the North, if beaten, would still be "left with a fine army, which they might use in attempting the conquest of Canada, a country difficult to defend."[4] It is unnecessary to multiply quotations; the simple fact that concerns us is that all the estimates of the situation which found favour in official and unofficial quarters were disastrously wrong. From de Tocqueville's prediction that the United States would be a land of moderate fortunes evenly distributed, down to Mr. Gladstone's assertion that Jefferson Davis had made a nation, prophecy about America had proved a particularly slippery business.

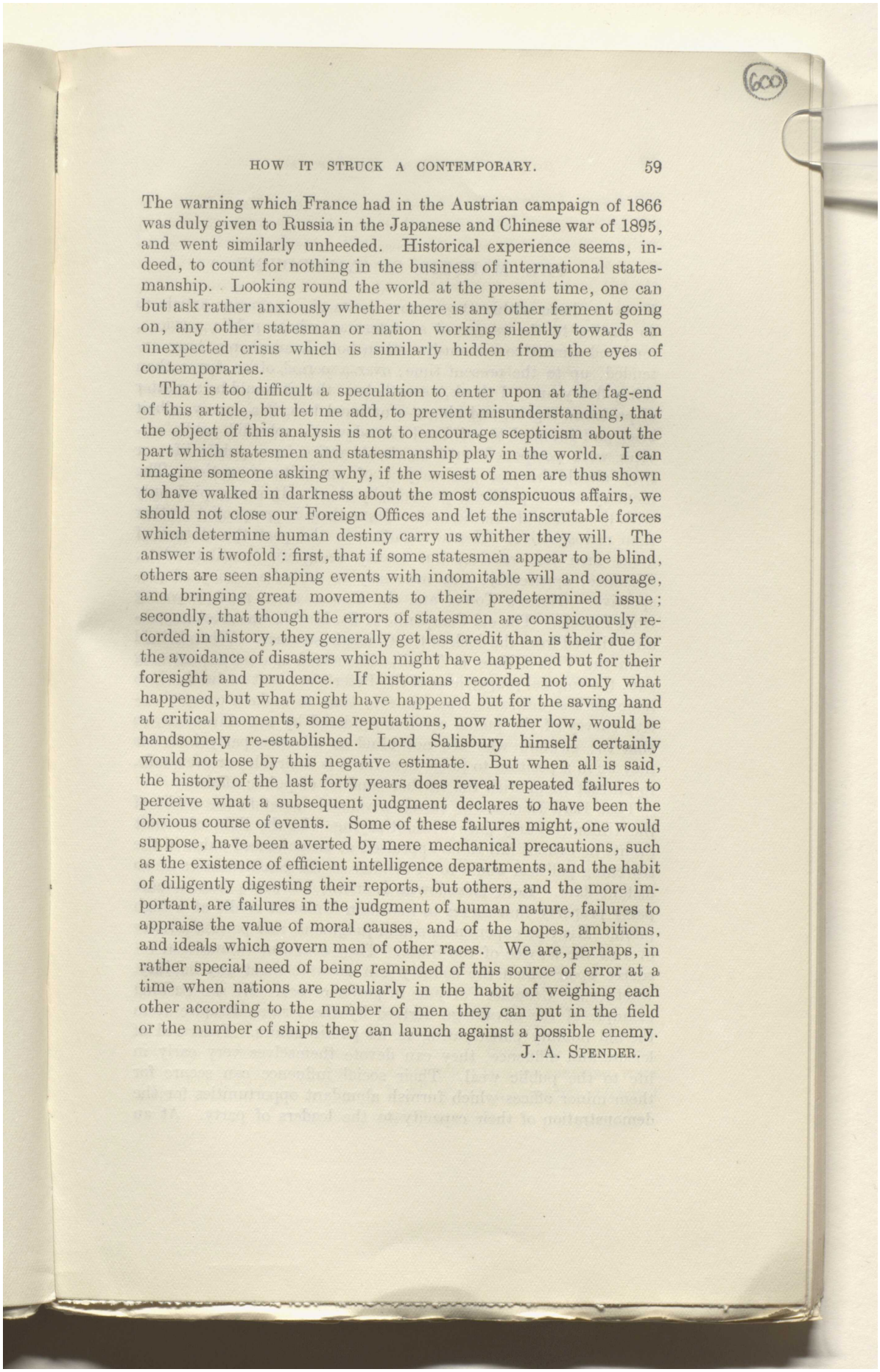
And finally we come down to quite modern times, and see the history of the great miscalculation about Germany repeating itself with astonishing fidelity in the Far East—in the long, skilful, and determined diplomacy of Japan and her persistent, unobserved preparations, and in the conviction of Russia that she had only to march through Manchuria and dictate her own terms at Tokio.

(1) See Morley's *Life of Gladstone*. Vol. II., 84.
(2) *Ibid.*, Vol. II., 82. (Mr. Gladstone's memorandum, written in 1896.)
(3) See *Life of Lord Palmerston*. Vol. II., 405. Letter to Mr. Edward Ellice.
(4) *Malmesbury Memoirs*. Vol. II., 261.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



The warning which France had in the Austrian campaign of 1866 was duly given to Russia in the Japanese and Chinese war of 1895, and went similarly unheeded. Historical experience seems, indeed, to count for nothing in the business of international statesmanship. Looking round the world at the present time, one can but ask rather anxiously whether there is any other ferment going on, any other statesman or nation working silently towards an unexpected crisis which is similarly hidden from the eyes of contemporaries.

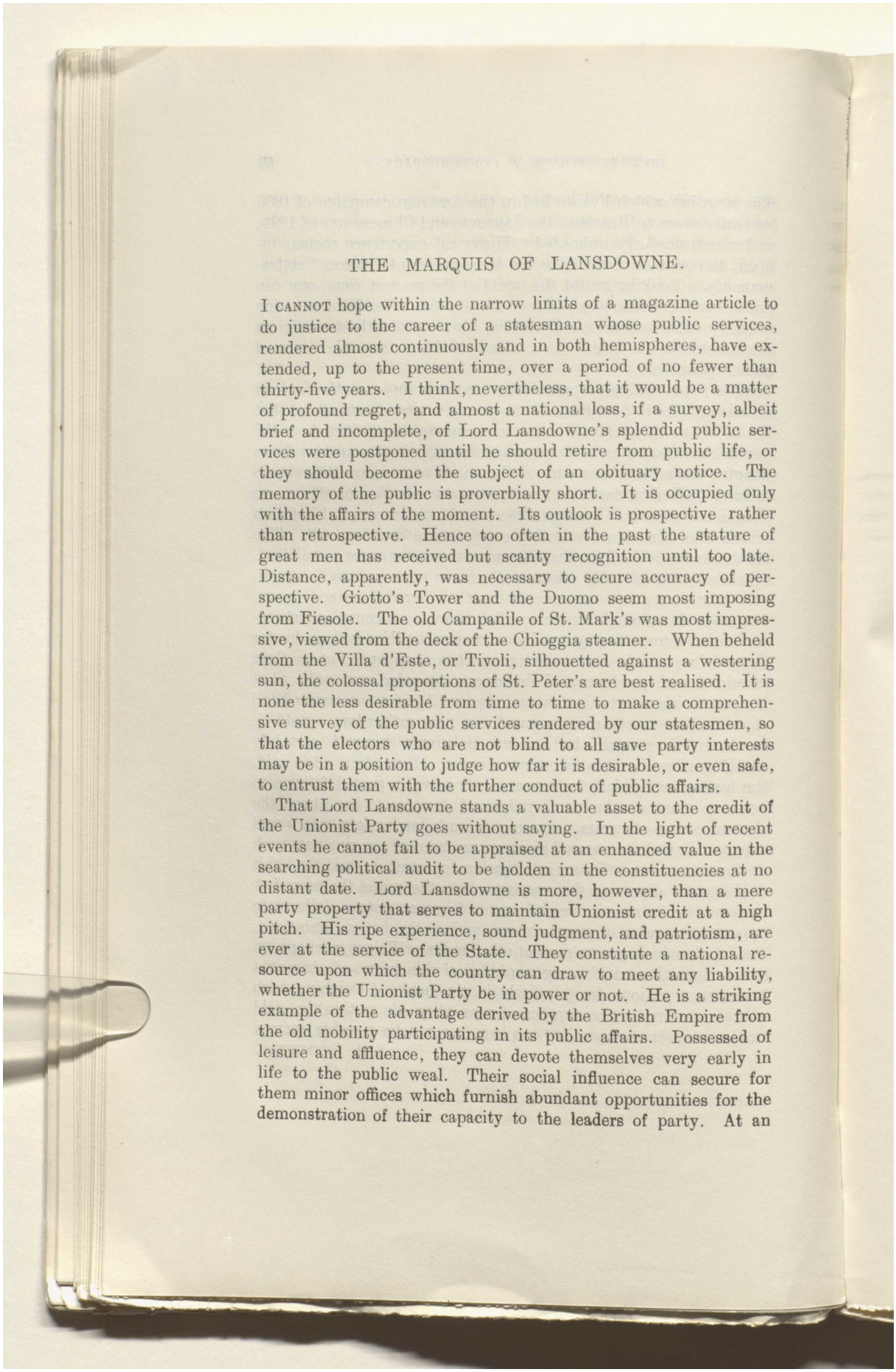
That is too difficult a speculation to enter upon at the fag-end of this article, but let me add, to prevent misunderstanding, that the object of this analysis is not to encourage scepticism about the part which statesmen and statesmanship play in the world. I can imagine someone asking why, if the wisest of men are thus shown to have walked in darkness about the most conspicuous affairs, we should not close our Foreign Offices and let the inscrutable forces which determine human destiny carry us whither they will. The answer is twofold: first, that if some statesmen appear to be blind, others are seen shaping events with indomitable will and courage, and bringing great movements to their predetermined issue; secondly, that though the errors of statesmen are conspicuously recorded in history, they generally get less credit than is their due for the avoidance of disasters which might have happened but for their foresight and prudence. If historians recorded not only what happened, but what might have happened but for the saving hand at critical moments, some reputations, now rather low, would be handsomely re-established. Lord Salisbury himself certainly would not lose by this negative estimate. But when all is said, the history of the last forty years does reveal repeated failures to perceive what a subsequent judgment declares to have been the obvious course of events. Some of these failures might, one would suppose, have been averted by mere mechanical precautions, such as the existence of efficient intelligence departments, and the habit of diligently digesting their reports, but others, and the more important, are failures in the judgment of human nature, failures to appraise the value of moral causes, and of the hopes, ambitions, and ideals which govern men of other races. We are, perhaps, in rather special need of being reminded of this source of error at a time when nations are peculiarly in the habit of weighing each other according to the number of men they can put in the field or the number of ships they can launch against a possible enemy.

J. A. Spender.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000099

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



THE MARQUIS OF LANSDOWNE.

I CANNOT hope within the narrow limits of a magazine article to do justice to the career of a statesman whose public services, rendered almost continuously and in both hemispheres, have extended, up to the present time, over a period of no fewer than thirty-five years. I think, nevertheless, that it would be a matter of profound regret, and almost a national loss, if a survey, albeit brief and incomplete, of Lord Lansdowne's splendid public services were postponed until he should retire from public life, or they should become the subject of an obituary notice. The memory of the public is proverbially short. It is occupied only with the affairs of the moment. Its outlook is prospective rather than retrospective. Hence too often in the past the stature of great men has received but scanty recognition until too late. Distance, apparently, was necessary to secure accuracy of perspective. Giotto's Tower and the Duomo seem most imposing from Fiesole. The old Campanile of St. Mark's was most impressive, viewed from the deck of the Chioggia steamer. When beheld from the Villa d'Este, or Tivoli, silhouetted against a westering sun, the colossal proportions of St. Peter's are best realised. It is none the less desirable from time to time to make a comprehensive survey of the public services rendered by our statesmen, so that the electors who are not blind to all save party interests may be in a position to judge how far it is desirable, or even safe, to entrust them with the further conduct of public affairs.

That Lord Lansdowne stands a valuable asset to the credit of the Unionist Party goes without saying. In the light of recent events he cannot fail to be appraised at an enhanced value in the searching political audit to be holden in the constituencies at no distant date. Lord Lansdowne is more, however, than a mere party property that serves to maintain Unionist credit at a high pitch. His ripe experience, sound judgment, and patriotism, are ever at the service of the State. They constitute a national resource upon which the country can draw to meet any liability, whether the Unionist Party be in power or not. He is a striking example of the advantage derived by the British Empire from the old nobility participating in its public affairs. Possessed of leisure and affluence, they can devote themselves very early in life to the public weal. Their social influence can secure for them minor offices which furnish abundant opportunities for the demonstration of their capacity to the leaders of party. At an

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

age when the successful lawyer, *savant*, or merchant, enters the political nursery, they are found fully equipped to administer the highest offices of State. Furthermore, their presence in politics is disinterested. If one excludes the laudable ambition to serve one's country by becoming a great statesman, a scion of the old nobility has nothing to gain by adopting a political career. Least of all Lord Lansdowne. Called to the House of Lords on the attainment of his majority he succeeded to an ancient title and great wealth, his Irish property alone totalling to more than one hundred and twenty thousand acres with a rent-roll of £32,000 per annum. In his twenty-fourth year he was appointed a Lord of the Treasury in Mr. Gladstone's second administration. His speech introducing his first measure, the Newspapers, &c., Bill, a complicated scheme of reform, gave an earnest of his remarkable sagacity. Having served an apprenticeship of three years in the National Counting House, representing it in the Upper Chamber during that period, he was appointed Under-Secretary for War, and he assisted Mr. Cardwell to administer the Army until the Liberal *débâcle* of 1874. For the next six years he was a spectator rather than a combatant in the political arena; but when Mr. Gladstone returned to office in 1880 Lord Lansdowne accepted the Under-Secretaryship for India under the Marquis of Hartington. An Under-Secretary is at best a subordinate official. Though his advice and assistance may have been invaluable, it is his official chief who gains the *kudos* of every departmental success. The services of a capable Under-Secretary, however, are rarely forgotten. In due season promotion comes to the meritorious.

It came to Lord Lansdowne in 1883 when he accepted the Governor-Generalship of Canada. In appointing him Mr. Gladstone did a generous act, for it must not be forgotten Lord Lansdowne had denounced the proposed precipitate abandonment of Candahar. In 1881 he and the late Duke of Argyll furnished instances of patriotism triumphing over party when they seceded from the Liberal Government, rather than be parties to the Irish Land Bill proposed by their chief.

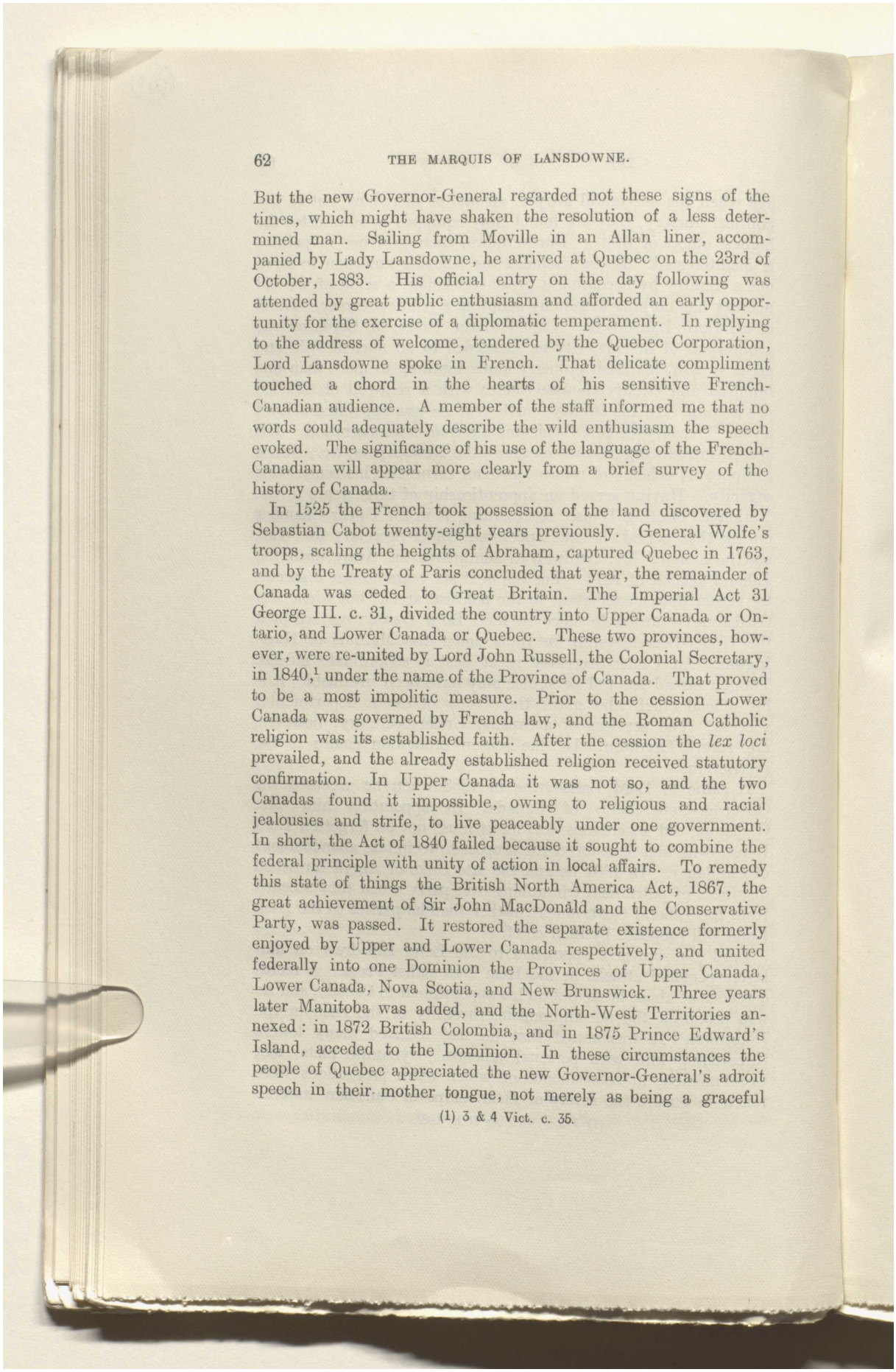
Lord Lansdowne's opposition to the Land Bill drew on him bitter personal attacks in the Irish Nationalist Press. A recrudescence of abuse broke out on his appointment to Canada, and he was promised the uncompromising hostility of the Irish in the Dominion. It was stated that he had received many letters threatening him with personal violence. Dynamite plots, too, were mooted, in consequence of which extra precautions were taken to ensure the safety of H.M. ships in Canadian waters.[1]

(1) *Times*, October 26th, 1883.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c5

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



But the new Governor-General regarded not these signs of the times, which might have shaken the resolution of a less determined man. Sailing from Moville in an Allan liner, accompanied by Lady Lansdowne, he arrived at Quebec on the 23rd of October, 1883. His official entry on the day following was attended by great public enthusiasm and afforded an early opportunity for the exercise of a diplomatic temperament. In replying to the address of welcome, tendered by the Quebec Corporation, Lord Lansdowne spoke in French. That delicate compliment touched a chord in the hearts of his sensitive French-Canadian audience. A member of the staff informed me that no words could adequately describe the wild enthusiasm the speech evoked. The significance of his use of the language of the French-Canadian will appear more clearly from a brief survey of the history of Canada.

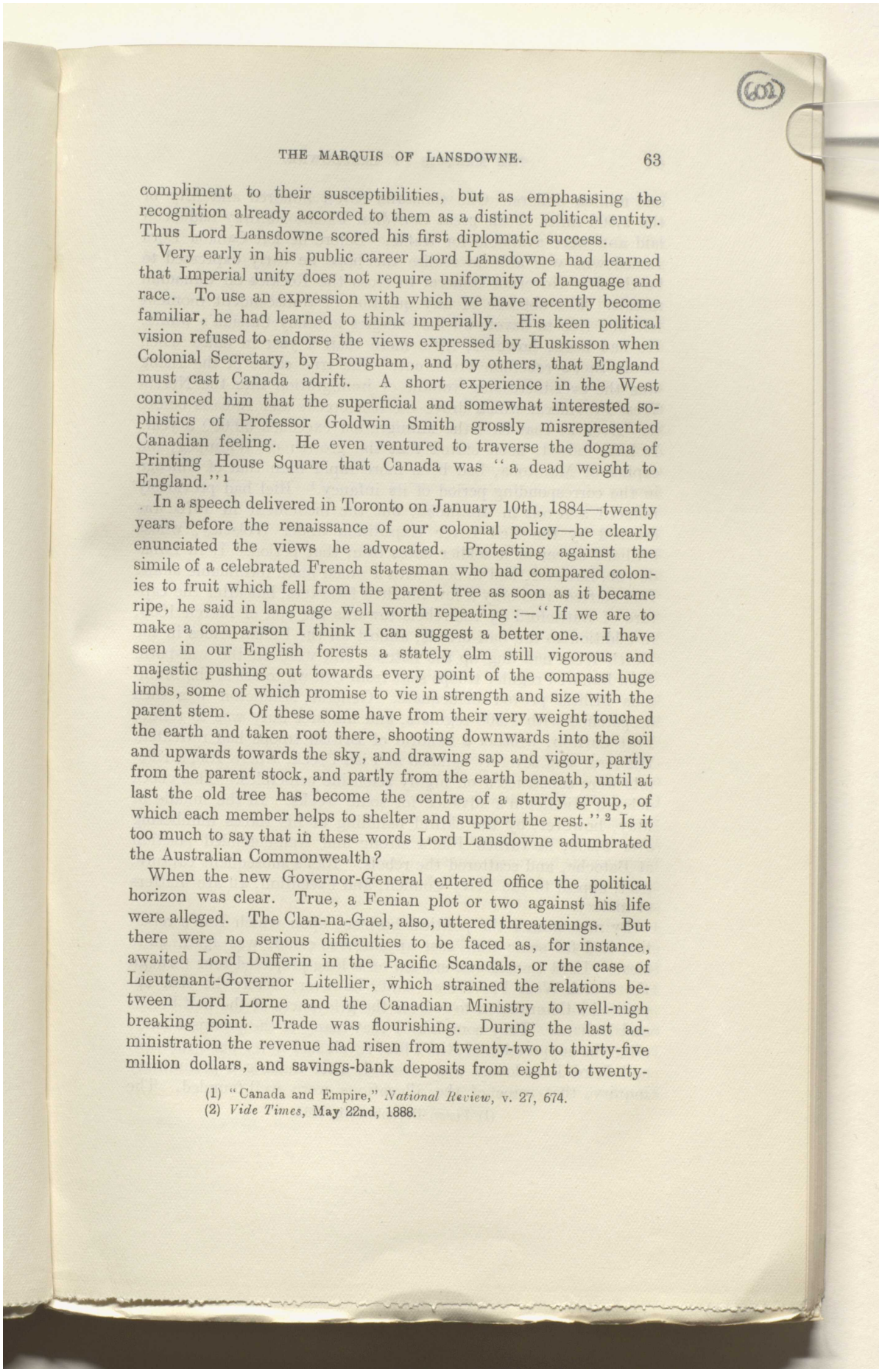
In 1525 the French took possession of the land discovered by Sebastian Cabot twenty-eight years previously. General Wolfe's troops, scaling the heights of Abraham, captured Quebec in 1763, and by the Treaty of Paris concluded that year, the remainder of Canada was ceded to Great Britain. The Imperial Act 31 George III. c. 31, divided the country into Upper Canada or Ontario, and Lower Canada or Quebec. These two provinces, however, were re-united by Lord John Russell, the Colonial Secretary, in 1840,[1] under the name of the Province of Canada. That proved to be a most impolitic measure. Prior to the cession Lower Canada was governed by French law, and the Roman Catholic religion was its established faith. After the cession the *lex loci* prevailed, and the already established religion received statutory confirmation. In Upper Canada it was not so, and the two Canadas found it impossible, owing to religious and racial jealousies and strife, to live peaceably under one government. In short, the Act of 1840 failed because it sought to combine the federal principle with unity of action in local affairs. To remedy this state of things the British North America Act, 1867, the great achievement of Sir John MacDonald and the Conservative Party, was passed. It restored the separate existence formerly enjoyed by Upper and Lower Canada respectively, and united federally into one Dominion the Provinces of Upper Canada, Lower Canada, Nova Scotia, and New Brunswick. Three years later Manitoba was added, and the North-West Territories annexed: in 1872 British Colombia, and in 1875 Prince Edward's Island, acceded to the Dominion. In these circumstances the people of Quebec appreciated the new Governor-General's adroit speech in their mother tongue, not merely as being a graceful

(1) 3 & 4 Vict. c. 35.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00009b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



compliment to their susceptibilities, but as emphasising the recognition already accorded to them as a distinct political entity. Thus Lord Lansdowne scored his first diplomatic success.

Very early in his public career Lord Lansdowne had learned that Imperial unity does not require uniformity of language and race. To use an expression with which we have recently become familiar, he had learned to think imperially. His keen political vision refused to endorse the views expressed by Huskisson when Colonial Secretary, by Brougham, and by others, that England must cast Canada adrift. A short experience in the West convinced him that the superficial and somewhat interested sophistics of Professor Goldwin Smith grossly misrepresented Canadian feeling. He even ventured to traverse the dogma of Printing House Square that Canada was "a dead weight to England."[1]

In a speech delivered in Toronto on January 10th, 1884—twenty years before the renaissance of our colonial policy—he clearly enunciated the views he advocated. Protesting against the simile of a celebrated French statesman who had compared colonies to fruit which fell from the parent tree as soon as it became ripe, he said in language well worth repeating:—"If we are to make a comparison I think I can suggest a better one. I have seen in our English forests a stately elm still vigorous and majestic pushing out towards every point of the compass huge limbs, some of which promise to vie in strength and size with the parent stem. Of these some have from their very weight touched the earth and taken root there, shooting downwards into the soil and upwards towards the sky, and drawing sap and vigour, partly from the parent stock, and partly from the earth beneath, until at last the old tree has become the centre of a sturdy group, of which each member helps to shelter and support the rest."[2] Is it too much to say that in these words Lord Lansdowne adumbrated the Australian Commonwealth?

When the new Governor-General entered office the political horizon was clear. True, a Fenian plot or two against his life were alleged. The Clan-na-Gael, also, uttered threatenings. But there were no serious difficulties to be faced as, for instance, awaited Lord Dufferin in the Pacific Scandals, or the case of Lieutenant-Governor Litellier, which strained the relations between Lord Lorne and the Canadian Ministry to well-nigh breaking point. Trade was flourishing. During the last administration the revenue had risen from twenty-two to thirty-five million dollars, and savings-bank deposits from eight to twenty-

(1) "Canada and Empire," *National Review*, v. 27, 674.
(2) *Vide Times*, May 22nd, 1888.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

one million dollars. One thousand seven hundred and fifty of the 2,500 miles of the great Canadian Pacific Railway had been laid and were available for traffic. Before he left Canada Lord Lansdowne was able to realise the hope he early expressed to be the first Governor-General to cross the Rockies on Canadian metals. The absence of any question of transcendent moment left him free to devote all his energies to study Canada's wants. He had been, however, little more than a year in office when Louis Riel's rebellion broke out. The true cause of the rising was the ever-increasing volume of immigration into the North-West Provinces, which drove the half-breeds and Indians before it. Even at that date the immigration exceeded 50,000 a year. It has, indeed, been stated that the growth of Winnipeg, the capital of Manitoba, had been more rapid than that of Chicago in the corresponding period of its infancy.[1] Riel had previously induced a revolt in Manitoba, but the movement in 1870 was crushed by the Red River Expedition under Wolseley, whose brilliant career as a soldier dates from that period. Lord Lansdowne, however, had to deal with a much more formidable affair. Riel started with only a few hundred followers, but after the capture of Battleford by the rebels towards the end of March 1885, in addition to the half-breeds, almost all the Indian tribes in the North-West had dug up the hatchet and were on the war-path. Four hundred regular troops sent from Ottawa to assist the Manitoba Militia proved inadequate. General Middleton was then despatched with 1,500 regulars, and his first duty was to relieve Fort Carlton, whither a handful of British troops had retreated. His force was severely handled at Fish Creek, where Riel's rifle-pits were constructed on highly scientific principles. This check delayed Middleton's advance for some weeks. In the middle of May, however, by the skilful handling of his forces numbering over 5,000, he turned Riel's strong and well-defended position at Batoche, and scattered the rebels. Riel's subsequent capture, trial, appeal to the Privy Council, and execution, all are matters of history.

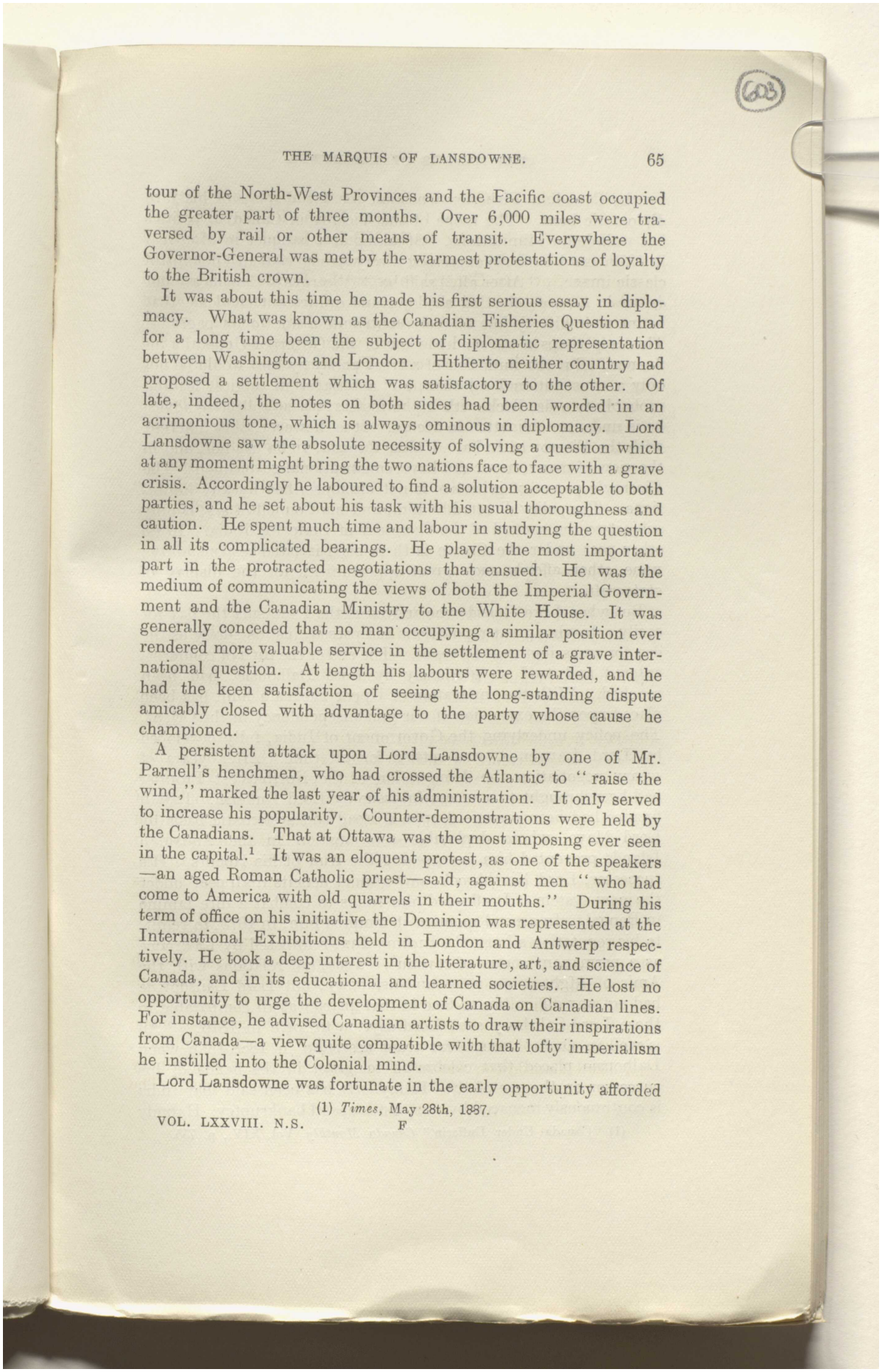
By midsummer the political horizon, upon which Riel's rebellion had for some time cast an ominous cloud, was again quite clear. Lord Lansdowne started on a long-projected tour through the North-West Provinces. Not, however, before he had appointed a Commission to redress the grievances of the half-breeds and Indians. They complained that many of the promises made after the suppression of Riel's first revolt had never been fulfilled, and Lord Lansdowne was satisfied, after making a preliminary inquiry, that some of the allegations were well-founded. The

(1) *Times*, December 5th, 1883.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



tour of the North-West Provinces and the Pacific coast occupied the greater part of three months. Over 6,000 miles were traversed by rail or other means of transit. Everywhere the Governor-General was met by the warmest protestations of loyalty to the British crown.

It was about this time he made his first serious essay in diplomacy. What was known as the Canadian Fisheries Question had for a long time been the subject of diplomatic representation between Washington and London. Hitherto neither country had proposed a settlement which was satisfactory to the other. Of late, indeed, the notes on both sides had been worded in an acrimonious tone, which is always ominous in diplomacy. Lord Lansdowne saw the absolute necessity of solving a question which at any moment might bring the two nations face to face with a grave crisis. Accordingly he laboured to find a solution acceptable to both parties, and he set about his task with his usual thoroughness and caution. He spent much time and labour in studying the question in all its complicated bearings. He played the most important part in the protracted negotiations that ensued. He was the medium of communicating the views of both the Imperial Government and the Canadian Ministry to the White House. It was generally conceded that no man occupying a similar position ever rendered more valuable service in the settlement of a grave international question. At length his labours were rewarded, and he had the keen satisfaction of seeing the long-standing dispute amicably closed with advantage to the party whose cause he championed.

A persistent attack upon Lord Lansdowne by one of Mr. Parnell's henchmen, who had crossed the Atlantic to "raise the wind," marked the last year of his administration. It only served to increase his popularity. Counter-demonstrations were held by the Canadians. That at Ottawa was the most imposing ever seen in the capital.[1] It was an eloquent protest, as one of the speakers —an aged Roman Catholic priest—said, against men "who had come to America with old quarrels in their mouths." During his term of office on his initiative the Dominion was represented at the International Exhibitions held in London and Antwerp respectively. He took a deep interest in the literature, art, and science of Canada, and in its educational and learned societies. He lost no opportunity to urge the development of Canada on Canadian lines. For instance, he advised Canadian artists to draw their inspirations from Canada—a view quite compatible with that lofty imperialism he instilled into the Colonial mind.

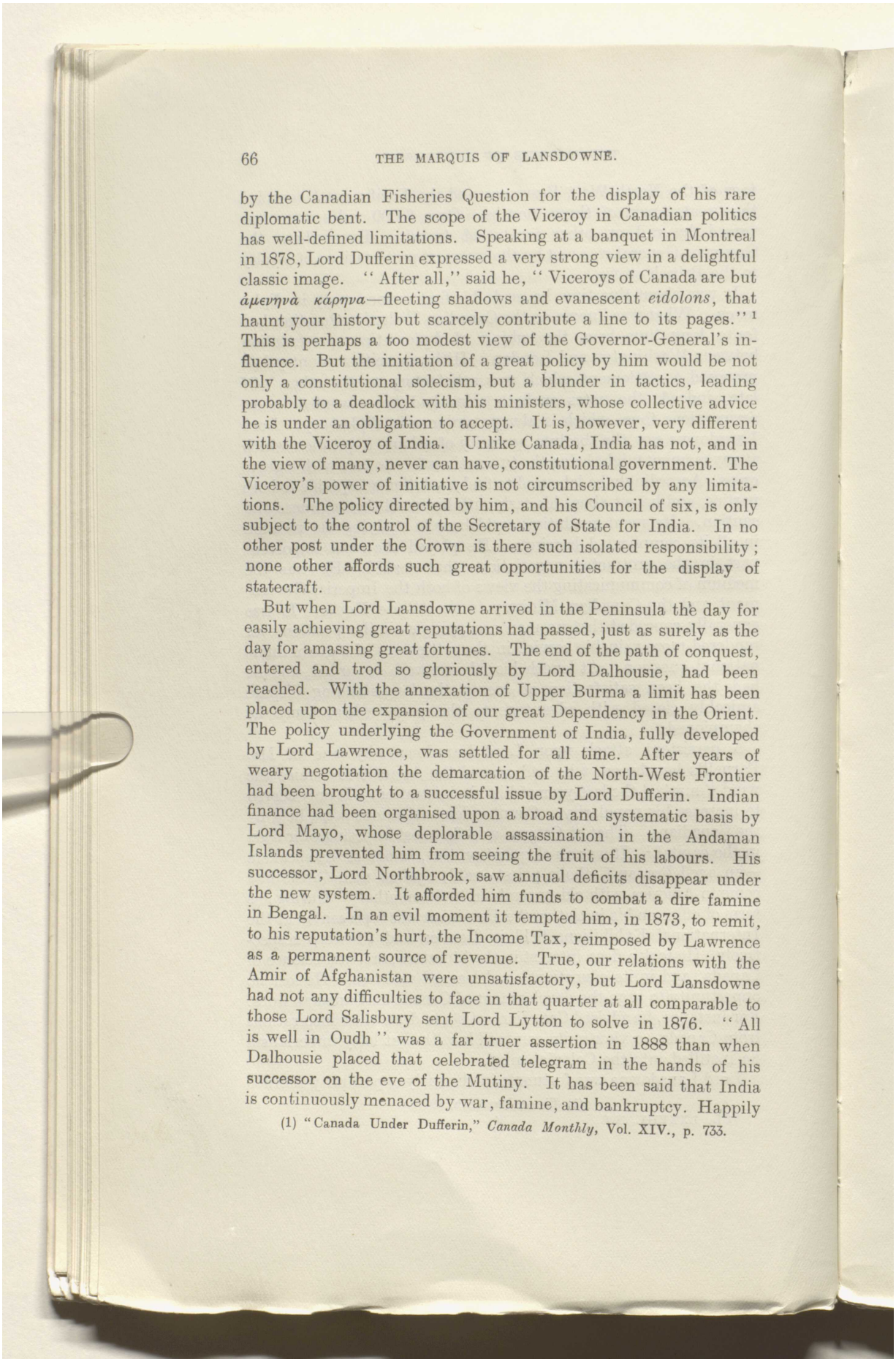
Lord Lansdowne was fortunate in the early opportunity afforded

(1) *Times*, May 28th, 1887.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000042

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



by the Canadian Fisheries Question for the display of his rare diplomatic bent. The scope of the Viceroy in Canadian politics has well-defined limitations. Speaking at a banquet in Montreal in 1878, Lord Dufferin expressed a very strong view in a delightful classic image. "After all," said he, "Viceroys of Canada are but *ἀμενηνὰ κάρηνα*—fleeting shadows and evanescent *eidolons*, that haunt your history but scarcely contribute a line to its pages."[1] This is perhaps a too modest view of the Governor-General's influence. But the initiation of a great policy by him would be not only a constitutional solecism, but a blunder in tactics, leading probably to a deadlock with his ministers, whose collective advice he is under an obligation to accept. It is, however, very different with the Viceroy of India. Unlike Canada, India has not, and in the view of many, never can have, constitutional government. The Viceroy's power of initiative is not circumscribed by any limitations. The policy directed by him, and his Council of six, is only subject to the control of the Secretary of State for India. In no other post under the Crown is there such isolated responsibility; none other affords such great opportunities for the display of statecraft.

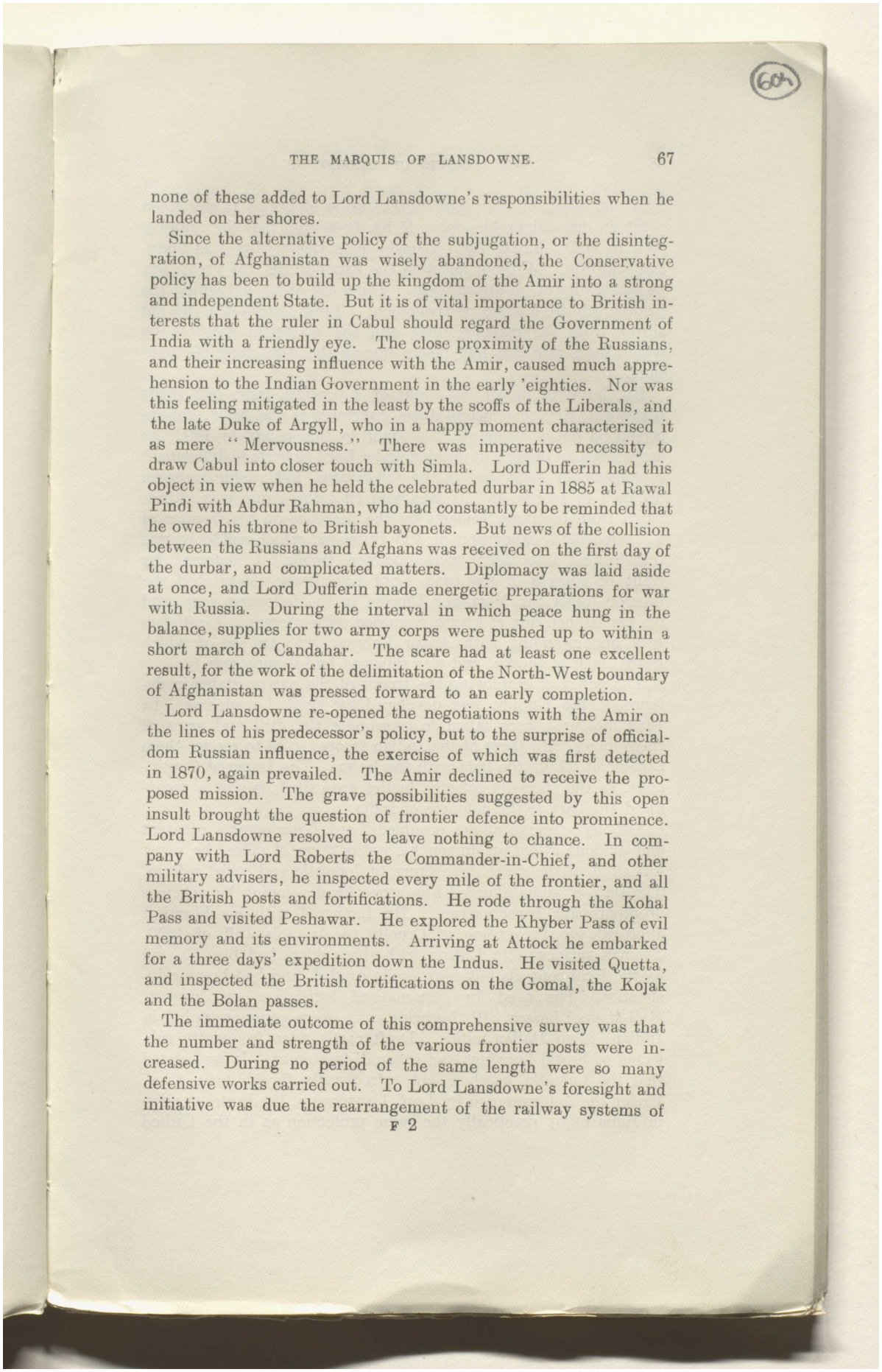
But when Lord Lansdowne arrived in the Peninsula the day for easily achieving great reputations had passed, just as surely as the day for amassing great fortunes. The end of the path of conquest, entered and trod so gloriously by Lord Dalhousie, had been reached. With the annexation of Upper Burma a limit has been placed upon the expansion of our great Dependency in the Orient. The policy underlying the Government of India, fully developed by Lord Lawrence, was settled for all time. After years of weary negotiation the demarcation of the North-West Frontier had been brought to a successful issue by Lord Dufferin. Indian finance had been organised upon a broad and systematic basis by Lord Mayo, whose deplorable assassination in the Andaman Islands prevented him from seeing the fruit of his labours. His successor, Lord Northbrook, saw annual deficits disappear under the new system. It afforded him funds to combat a dire famine in Bengal. In an evil moment it tempted him, in 1873, to remit, to his reputation's hurt, the Income Tax, reimposed by Lawrence as a permanent source of revenue. True, our relations with the Amir of Afghanistan were unsatisfactory, but Lord Lansdowne had not any difficulties to face in that quarter at all comparable to those Lord Salisbury sent Lord Lytton to solve in 1876. "All is well in Oudh" was a far truer assertion in 1888 than when Dalhousie placed that celebrated telegram in the hands of his successor on the eve of the Mutiny. It has been said that India is continuously menaced by war, famine, and bankruptcy. Happily

(1) "Canada Under Dufferin," *Canada Monthly*, Vol. XIV., p. 733.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000047

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



none of these added to Lord Lansdowne's responsibilities when he landed on her shores.

Since the alternative policy of the subjugation, or the disintegration, of Afghanistan was wisely abandoned, the Conservative policy has been to build up the kingdom of the Amir into a strong and independent State. But it is of vital importance to British interests that the ruler in Cabul should regard the Government of India with a friendly eye. The close proximity of the Russians, and their increasing influence with the Amir, caused much apprehension to the Indian Government in the early 'eighties. Nor was this feeling mitigated in the least by the scoffs of the Liberals, and the late Duke of Argyll, who in a happy moment characterised it as mere "Mervousness." There was imperative necessity to draw Cabul into closer touch with Simla. Lord Dufferin had this object in view when he held the celebrated durbar in 1885 at Rawal Pindi with Abdur Rahman, who had constantly to be reminded that he owed his throne to British bayonets. But news of the collision between the Russians and Afghans was received on the first day of the durbar, and complicated matters. Diplomacy was laid aside at once, and Lord Dufferin made energetic preparations for war with Russia. During the interval in which peace hung in the balance, supplies for two army corps were pushed up to within a short march of Candahar. The scare had at least one excellent result, for the work of the delimitation of the North-West boundary of Afghanistan was pressed forward to an early completion.

Lord Lansdowne re-opened the negotiations with the Amir on the lines of his predecessor's policy, but to the surprise of officialdom Russian influence, the exercise of which was first detected in 1870, again prevailed. The Amir declined to receive the proposed mission. The grave possibilities suggested by this open insult brought the question of frontier defence into prominence. Lord Lansdowne resolved to leave nothing to chance. In company with Lord Roberts the Commander-in-Chief, and other military advisers, he inspected every mile of the frontier, and all the British posts and fortifications. He rode through the Kohal Pass and visited Peshawar. He explored the Khyber Pass of evil memory and its environments. Arriving at Attock he embarked for a three days' expedition down the Indus. He visited Quetta, and inspected the British fortifications on the Gomal, the Kojak and the Bolan passes.

The immediate outcome of this comprehensive survey was that the number and strength of the various frontier posts were increased. During no period of the same length were so many defensive works carried out. To Lord Lansdowne's foresight and initiative was due the rearrangement of the railway systems of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000042

مكتبة قطر الوطنية
Qatar National Library

India, to admit of the rapid concentration of troops at any given point on our vulnerable side. It has been said that the military pace in India during Lord Lansdowne's vice-royalty was financially killing. Without question the expenditure was great, but he was guilty of no imprudence. The work of strengthening the frontier admitted of no postponement. Lord Lansdowne did not shrink from the responsibility, and the masterful resource by which the strain was met places him in the front rank of financiers.

He, however, never lost sight of a peaceful issue and made persistent, though unostentatious, overtures to the Amir, but received no encouragement. Pursuant to this policy in 1892, he despatched an important mission under Lord Roberts to Jellalabad, diplomatically suggested as the *rendezvous*, but Abdur Rahman declined to receive it. It was said that the Amir was intimidated from receiving Roberts by the presence on his frontier of a "scientific" expedition of 400 Russians, which suddenly was transformed into 2,000 well-appointed troops. Undeterred by want of success in the past, Lord Lansdowne despatched the mission under Sir Mortimer Durand in the following year, and his persistence was at length rewarded with success. A satisfactory understanding with Abdur Rahman was arrived at which lasted until his death, and was renewed by his successor.

The policy of employing the troops of the native States in defence of the Empire was developed by Lord Lansdowne. In 1889 measures were taken to coordinate the drill and arms of these forces with those of the Indian troops, so as to render them capable of taking the field with the latter. The Imperial Contingent, as the specially selected bodies are called, is now a recognised auxiliary to the defences of India.

Although foreign affairs occupied Lord Lansdowne's constant and anxious attention during his entire term of office, he never lost sight of the great importance of domestic and social reform. The state of India afforded him scope for developing his schemes of progressive conservatism. He furthered with his heartiest approval the Prevention of Cruelty to Animals Bill of 1890. Twenty various Acts dealing with this subject had been passed by the local councils but were easily evaded, and had become ineffective. The need for systematised legislation was urgent. Half-starved horses with festering sores were common sights in Indian, as in Italian, cities. Draft cattle were frequently subjected to brutal floggings and other ill-treatment. It was stated that the Calcutta butchers not infrequently flayed goats alive. Under the Act promoted by Lord Lansdowne, the brute creation in India enjoy practically the same protection as in the United

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00000f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Kingdom. He also was most anxious to see Sir Raymond West's Bill to suppress gambling become law; especially pernicious was the practice of betting upon the rainfall prevalent amongst the Marwari merchants of the Western Presidency. But the East was not yet awake. Lord Lansdowne laboured also to improve the lot of the industrial toilers. Lord Shaftesbury first brought the discreditable state of the Indian Factories before Parliament in 1879. Two years later the Indian Factory Act, 1881, was added to the statute-book. It provided for the appointment of inspectors and certifying medical officers, the fencing of machinery, and prohibited the employment of any child under seven years of age, and children under twelve for more than nine hours a day: each should have one hour's interval daily for rest, and four days' holiday in each month. This excellent measure had, however, serious defects:—no protection was afforded to women, or to young persons over twelve years of age. The period, too, of working the mills was unrestricted: in many instances they were kept going for fifteen hours a day. Notwithstanding tremendous opposition by the Calcutta, Bombay, and other mill-owners, Lord Lansdowne's amending Bill became law, and he saw its satisfactory working before he left India.

For many years the cruelty of Indian child-marriages had shocked the mind and conscience of all right-thinking Anglo-Indians. Criminal records showed that child-wives were frequently done to death by the exercise of marital rights. Anglo-Indians, however, could never hope unaided to effect a change in practices sanctioned by religion and custom for centuries. Reform in this direction could only be effected from within.

> Within yourselves deliverance must be sought
> Each man his prison makes.

It was not until Mr. Malabari, a rich Parsee, publicly inveighed against child-marriages that reform came within the region of practical politics. The outcome was the passing of the Viceroy's age of Consent Bill of 1890, which fixed the minimum age of consent at twelve years.

His attitude towards the Indian Congress was that of a shrewd statesman. Representative government in India is not in sight. The land of the Moguls will not be fit probably for centuries for the slowly developed constitution of England, which is the envy of the civilised world. But Lord Lansdowne did not share Lord Dufferin's contempt for the "microscopic minority" who advocated the Congress. Of late years it appears to have been both large and representative. As early as 1891 it contained 965 Hindus, 221 Mohammedans, 22 native and 15 European Chris-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

tians, 11 Jains, 7 Parsis, and 6 Sikhs: it included 6 princes, 4 Rajahs, 17 Nawabs, 3 Sirdars, 54 members of Indian noble families, and 455 lawyers. Early in his administration Lord Lansdowne pronounced it a perfectly legitimate movement. True, it called forth a counter-demonstration. Educated Indians know well that the introduction of representative institutions in existing circumstances in India is absolutely impossible. The Indian serpent is still potential to wound the European heel. But the Congress affords a certain section of British subjects a legal safety-valve for ventilating real or fancied grievances, and thus supplies a want felt some time or another in every civilised community. Lord Lansdowne extended the representative system in order to induce the better classes in India to take a more active part in public affairs. In the Indian Councils Act, 1892, he was careful to proceed with caution, but under it educated Indians can play a more important part in public life than formerly.

The many-sided new departures during Lord Lansdowne's administration involved considerable expenditure. The burden of meeting it was not felt until the last year or so of his viceroyalty, when the financial strain felt was chiefly attributable to the depreciation of the rupee. With a view to enhance the exchange, on the advice of his Council he sanctioned the closing of the Indian mints for the free coinage of silver. But if this measure failed to accomplish the end in view, Lord Lansdowne proved in his speech in the House of Lords in June 1894, on the Indian currency question, that it was not only amply justified in existing circumstances, but economically sound.

During Lord Lansdowne's term of office there were the usual number of punitive expeditions, but the policy of expansion was sternly discountenanced. He refused to annex the State of Manipur after the massacre of Messrs. Quinton and Grimwood had been avenged, and re-established native rule there. Firmness was a distinct feature of his *régime*. He never failed to impress upon the native Rulers that misgovernment would surely be punished, but that if they governed well their thrones and fortunes would be secure. He did not hesitate to depose the Khan of Khelat for cruelty, and set his son on the throne. He made a journey to Kashmir, where no Viceroy had previously visited, and restored to the Maharajah his administrative independence, which, for misgovernment, had been previously curtailed. He refused to ratify an unconstitutional guarantee, given to the corrupt Mamlutdars by Lord Reay, whose immediate resignation did not move him. His emphatic declaration after the sanguinary riots in 1893 in Bombay, that British arms would protect the meanest

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

subject in the exercise of his religion, did more to stop the cow-killing agitation, and mitigate the jealousies of rival creeds, than any repressive measure taken. The Senaputty would not have paid the extreme penalty for his abominable treachery had a less firm ruler been in office. In prosecuting the *Bungobasi*, the most influential vernacular journal, he taught the Yellow Press of India that there are limits to British endurance.

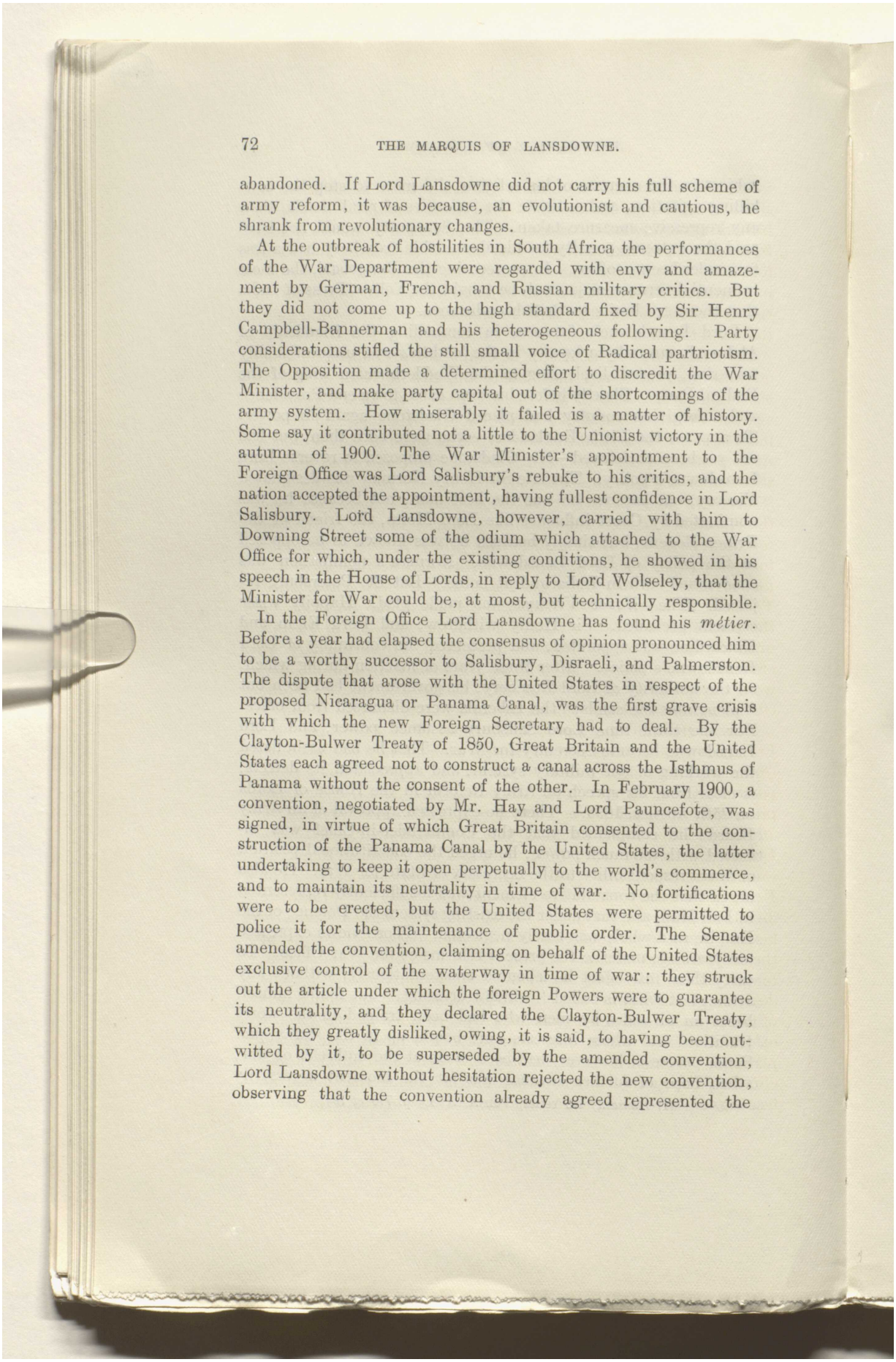
Lord Lansdowne's firmness in compelling the friendship of Abdurrahman, whose loyalty in the 'eighties was unquestionably wavering, proved displeasing to the Wedderburnian wing of the Radical Party. Shortly before his term came to an end Providence and a forgiving country had placed Gladstone again in power. To appease the Little Englanders—who were born then, but had not yet been christened—Mr. Gladstone proposed to reverse Lord Lansdowne's policy. The late Sir Henry Norman was designated Viceroy, not because he was the best man, not because he was nominated by Court influence like Lord Moira, the friend of the Prince Regent, but simply because he was known to be opposed to the policy of Lord Lansdowne. Norman's nomination was condemned both in India and at home. But St. Petersburg rejoiced. The *Novöe Vremya* was made glad. Happily wiser councils prevailed. Sir Henry withdrew, and Lord Elgin and Kincardine was appointed, and preserved the continuity of Lord Lansdowne's policy. After three years of inaction during which, on the authority of Lord Rosebery, his government had been but "ploughing the sands," the Liberals were dismissed from office. For the third time Lord Salisbury assumed power, and Lord Lansdowne became Secretary for War. That he had assimilated the working of our military system, and appreciated its defects, is clear from his speech on Army Reform in the House of Lords on 25th August, 1895.[1] There he expressed approval of an Army Board; he complained that the Commander-in-Chief was invested with too much power; he urged the constitutional position of direct responsibility to the Secretary of State for War. He also urged that the consultative element was insufficiently represented in Pall Mall, and that under the existing system the Defence of the Empire as a whole was sorely neglected. Those views expressed ten years ago underlie the present reforms at the War Office. To carry them into effect he laboured unostentatiously, without any attempt at what is called "window-dressing," but found himself beset on all sides by men who had been trained in the worst tradition, and whose interests were bound up in the *status quo*. Some progress, however, had been made at the outbreak of war, when hope of further advance was for the moment necessarily

(1) *Hansard*, 4th series, Vol. XXXVI., p. 770 *et seq.*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000058

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



abandoned. If Lord Lansdowne did not carry his full scheme of army reform, it was because, an evolutionist and cautious, he shrank from revolutionary changes.

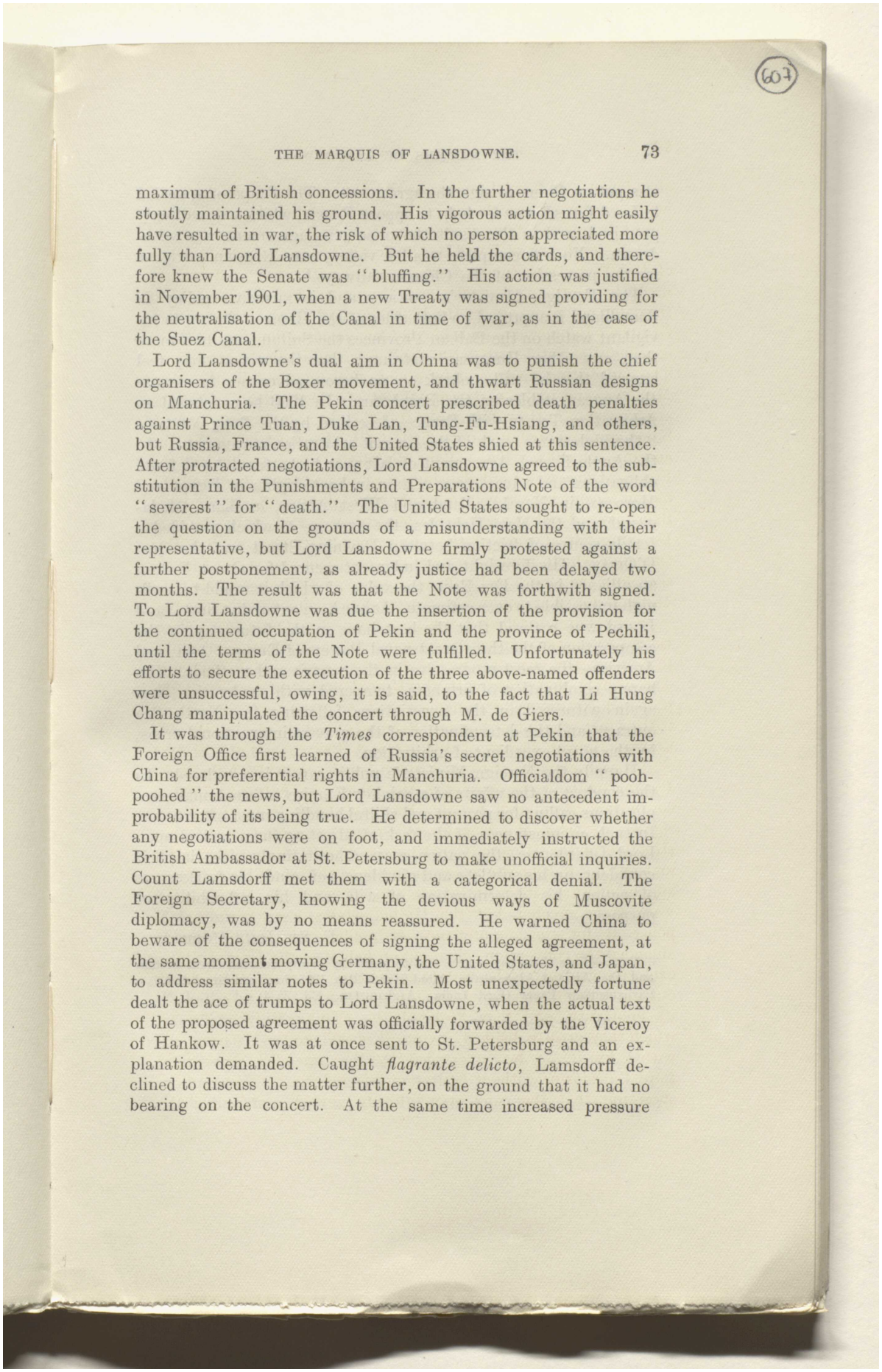
At the outbreak of hostilities in South Africa the performances of the War Department were regarded with envy and amazement by German, French, and Russian military critics. But they did not come up to the high standard fixed by Sir Henry Campbell-Bannerman and his heterogeneous following. Party considerations stifled the still small voice of Radical partriotism. The Opposition made a determined effort to discredit the War Minister, and make party capital out of the shortcomings of the army system. How miserably it failed is a matter of history. Some say it contributed not a little to the Unionist victory in the autumn of 1900. The War Minister's appointment to the Foreign Office was Lord Salisbury's rebuke to his critics, and the nation accepted the appointment, having fullest confidence in Lord Salisbury. Lord Lansdowne, however, carried with him to Downing Street some of the odium which attached to the War Office for which, under the existing conditions, he showed in his speech in the House of Lords, in reply to Lord Wolseley, that the Minister for War could be, at most, but technically responsible.

In the Foreign Office Lord Lansdowne has found his *métier*. Before a year had elapsed the consensus of opinion pronounced him to be a worthy successor to Salisbury, Disraeli, and Palmerston. The dispute that arose with the United States in respect of the proposed Nicaragua or Panama Canal, was the first grave crisis with which the new Foreign Secretary had to deal. By the Clayton-Bulwer Treaty of 1850, Great Britain and the United States each agreed not to construct a canal across the Isthmus of Panama without the consent of the other. In February 1900, a convention, negotiated by Mr. Hay and Lord Pauncefote, was signed, in virtue of which Great Britain consented to the construction of the Panama Canal by the United States, the latter undertaking to keep it open perpetually to the world's commerce, and to maintain its neutrality in time of war. No fortifications were to be erected, but the United States were permitted to police it for the maintenance of public order. The Senate amended the convention, claiming on behalf of the United States exclusive control of the waterway in time of war: they struck out the article under which the foreign Powers were to guarantee its neutrality, and they declared the Clayton-Bulwer Treaty, which they greatly disliked, owing, it is said, to having been outwitted by it, to be superseded by the amended convention. Lord Lansdowne without hesitation rejected the new convention, observing that the convention already agreed represented the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000042

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



maximum of British concessions. In the further negotiations he stoutly maintained his ground. His vigorous action might easily have resulted in war, the risk of which no person appreciated more fully than Lord Lansdowne. But he held the cards, and therefore knew the Senate was "bluffing." His action was justified in November 1901, when a new Treaty was signed providing for the neutralisation of the Canal in time of war, as in the case of the Suez Canal.

Lord Lansdowne's dual aim in China was to punish the chief organisers of the Boxer movement, and thwart Russian designs on Manchuria. The Pekin concert prescribed death penalties against Prince Tuan, Duke Lan, Tung-Fu-Hsiang, and others, but Russia, France, and the United States shied at this sentence. After protracted negotiations, Lord Lansdowne agreed to the substitution in the Punishments and Preparations Note of the word "severest" for "death." The United States sought to re-open the question on the grounds of a misunderstanding with their representative, but Lord Lansdowne firmly protested against a further postponement, as already justice had been delayed two months. The result was that the Note was forthwith signed. To Lord Lansdowne was due the insertion of the provision for the continued occupation of Pekin and the province of Pechili, until the terms of the Note were fulfilled. Unfortunately his efforts to secure the execution of the three above-named offenders were unsuccessful, owing, it is said, to the fact that Li Hung Chang manipulated the concert through M. de Giers.

It was through the *Times* correspondent at Pekin that the Foreign Office first learned of Russia's secret negotiations with China for preferential rights in Manchuria. Officialdom "poohpoohed" the news, but Lord Lansdowne saw no antecedent improbability of its being true. He determined to discover whether any negotiations were on foot, and immediately instructed the British Ambassador at St. Petersburg to make unofficial inquiries. Count Lamsdorff met them with a categorical denial. The Foreign Secretary, knowing the devious ways of Muscovite diplomacy, was by no means reassured. He warned China to beware of the consequences of signing the alleged agreement, at the same moment moving Germany, the United States, and Japan, to address similar notes to Pekin. Most unexpectedly fortune dealt the ace of trumps to Lord Lansdowne, when the actual text of the proposed agreement was officially forwarded by the Viceroy of Hankow. It was at once sent to St. Petersburg and an explanation demanded. Caught *flagrante delicto*, Lamsdorff declined to discuss the matter further, on the ground that it had no bearing on the concert. At the same time increased pressure

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

was put on China to sign the agreement. The Emperor appealed to Lord Lansdowne for help to oppose Russia, which was willingly promised, and in the result the obnoxious agreement was withdrawn. No less complete was his victory over Russian intrigues for the possession of the Chinese railways.[1]

The Foreign Minister's cautious and inexpansive policy in Somaliland is approved on both sides of the House. Owing to his vigilant watch on the Balkan Provinces the Sultan fears him more than any other European statesman, but the nation may feel assured that he will embark on no heroic adventure to cleanse the Augean stables on the Bosphorus. In 1903 he concluded an Arbitration Treaty with France, described by the *Daily News* as "the high-water mark of the present arbitration movement." In the Anglo-French Agreement of last year he bartered for definite obligations and advantages, certain inchoate rights in Egypt and Morocco, in Newfoundland and West Africa, in Siam, Madagascar and the New Hebrides, the exercise of which provided a fertile source of friction between Downing Street and the Quai D'Orsay. His foresight and judgment secured for Great Britain an alliance in the Far East, the value of which it would be well-nigh impossible to over-estimate. As one born out of due time, Lord Lansdowne realised that the best hope in the future lay in the co-operation of the three great naval Powers of Europe, Asia, and America—the most progressive in their spirit and methods. His happy combination of firmness, tempered with moderation, was again witnessed in the negotiations following the North Sea outrage, and the determination of the gravest international crisis, by the novel expedient of arbitration.

Happily the Foreign Minister's public career is not closed. In the conduct of the affairs of a mighty Empire international complications calling for prompt and skilful handling must often occur. In such circumstances, if the task of adjusting them be laid upon Lord Lansdowne, the nation may unhesitatingly place implicit confidence in his subtlety and nimbleness of mind, his fearlessness of action, his determination of will, and his inflexibility of purpose.

F. St. John Morrow.

Note.—Since these pages were sent to press the Treaty between Great Britain and the Amir of Afghanistan, dated March 21st, 1905, has been circulated as a Parliamentary Paper (East India: Afghanistan. Cd. 2534).—F. St. J. M.

(1) *Vide Command Papers*: China, No. 7, 1901.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000014

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE MISSION TO CABUL.

THE circumstances which brought about the despatch of the mission to Cabul to negotiate the various points at issue between the Amir of Afghanistan and the Government of India, are probably too fresh in the mind of the public to call for any lengthy recapitulation. In brief, it may be said that the late mission arose from the proposal of the Amir Habib Ullah to the Government of India, that he should receive at Cabul, at the time when it was arranged that the Sirdar Inayat Ullah, his eldest son, should visit India to see the Viceroy on the return of Lord Curzon to office, a specially accredited agent for the discussing of various questions concerning his relations with us. As a matter of course, the Government of India welcomed a suggestion which appeared to provide a means of adjusting the difficulties which had arisen between India and Afghanistan.

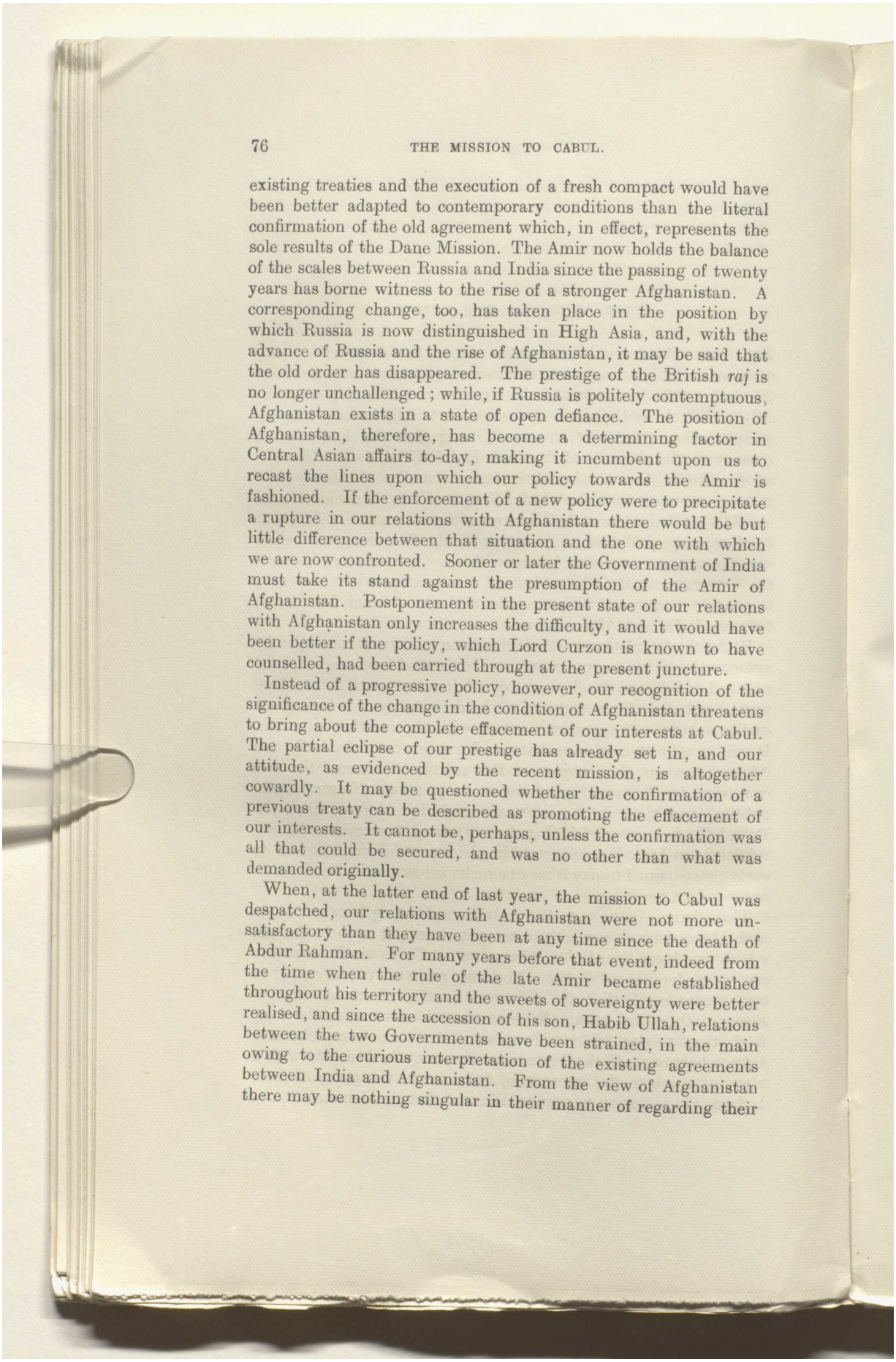
Hitherto our relations with Afghanistan have been controlled by agreements which recent occurrences in Central Asia, in part, have nullified, while the development of Afghanistan itself, since they were concluded, further points to the desirability of bringing our earlier enactments more into accord with the existing situation. It will be admitted at once that any discussion between India and Afghanistan on the subject of the relations between the two countries, touches upon every important question in Central Asian politics, and that, in the interval which has elapsed since the Rawal Pindi Durbar of 1885 and the Durand Agreement of 1893, Afghanistan has advanced from the chaos and disintegration of its earlier state, until to-day it may be reckoned as a united and quasi-independent territory.

This change imparts to the relations subsisting between India and Afghanistan a new complexion, and one, it is to be feared, which was borne insufficiently in mind by Sir Louis Dane at the recent conference in Cabul. Nothing, perhaps, is less suited to our present needs than the mere confirmation of our old engagements with Afghanistan. New questions have come to the fore, fresh ties are ripe for consideration, and a more comprehensive acknowledgment of the British paramountcy is desirable with a view, as much to the interests of India, as to the peace of Asia. Indeed, the situation is now so different that the denunciation of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000043

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



existing treaties and the execution of a fresh compact would have been better adapted to contemporary conditions than the literal confirmation of the old agreement which, in effect, represents the sole results of the Dane Mission. The Amir now holds the balance of the scales between Russia and India since the passing of twenty years has borne witness to the rise of a stronger Afghanistan. A corresponding change, too, has taken place in the position by which Russia is now distinguished in High Asia, and, with the advance of Russia and the rise of Afghanistan, it may be said that the old order has disappeared. The prestige of the British *raj* is no longer unchallenged; while, if Russia is politely contemptuous, Afghanistan exists in a state of open defiance. The position of Afghanistan, therefore, has become a determining factor in Central Asian affairs to-day, making it incumbent upon us to recast the lines upon which our policy towards the Amir is fashioned. If the enforcement of a new policy were to precipitate a rupture in our relations with Afghanistan there would be but little difference between that situation and the one with which we are now confronted. Sooner or later the Government of India must take its stand against the presumption of the Amir of Afghanistan. Postponement in the present state of our relations with Afghanistan only increases the difficulty, and it would have been better if the policy, which Lord Curzon is known to have counselled, had been carried through at the present juncture.

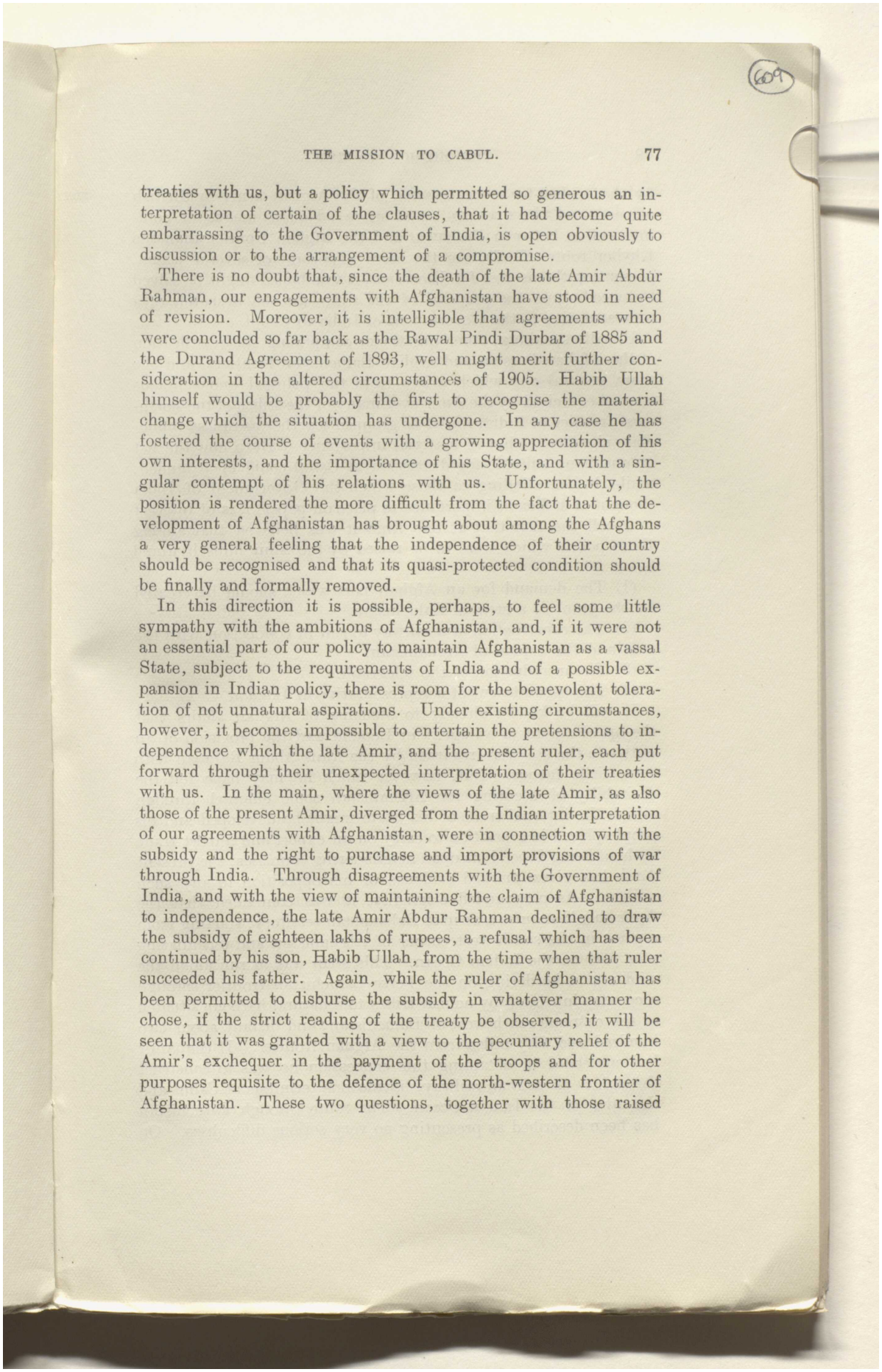
Instead of a progressive policy, however, our recognition of the significance of the change in the condition of Afghanistan threatens to bring about the complete effacement of our interests at Cabul. The partial eclipse of our prestige has already set in, and our attitude, as evidenced by the recent mission, is altogether cowardly. It may be questioned whether the confirmation of a previous treaty can be described as promoting the effacement of our interests. It cannot be, perhaps, unless the confirmation was all that could be secured, and was no other than what was demanded originally.

When, at the latter end of last year, the mission to Cabul was despatched, our relations with Afghanistan were not more unsatisfactory than they have been at any time since the death of Abdur Rahman. For many years before that event, indeed from the time when the rule of the late Amir became established throughout his territory and the sweets of sovereignty were better realised, and since the accession of his son, Habib Ullah, relations between the two Governments have been strained, in the main owing to the curious interpretation of the existing agreements between India and Afghanistan. From the view of Afghanistan there may be nothing singular in their manner of regarding their

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000090

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



treaties with us, but a policy which permitted so generous an interpretation of certain of the clauses, that it had become quite embarrassing to the Government of India, is open obviously to discussion or to the arrangement of a compromise.

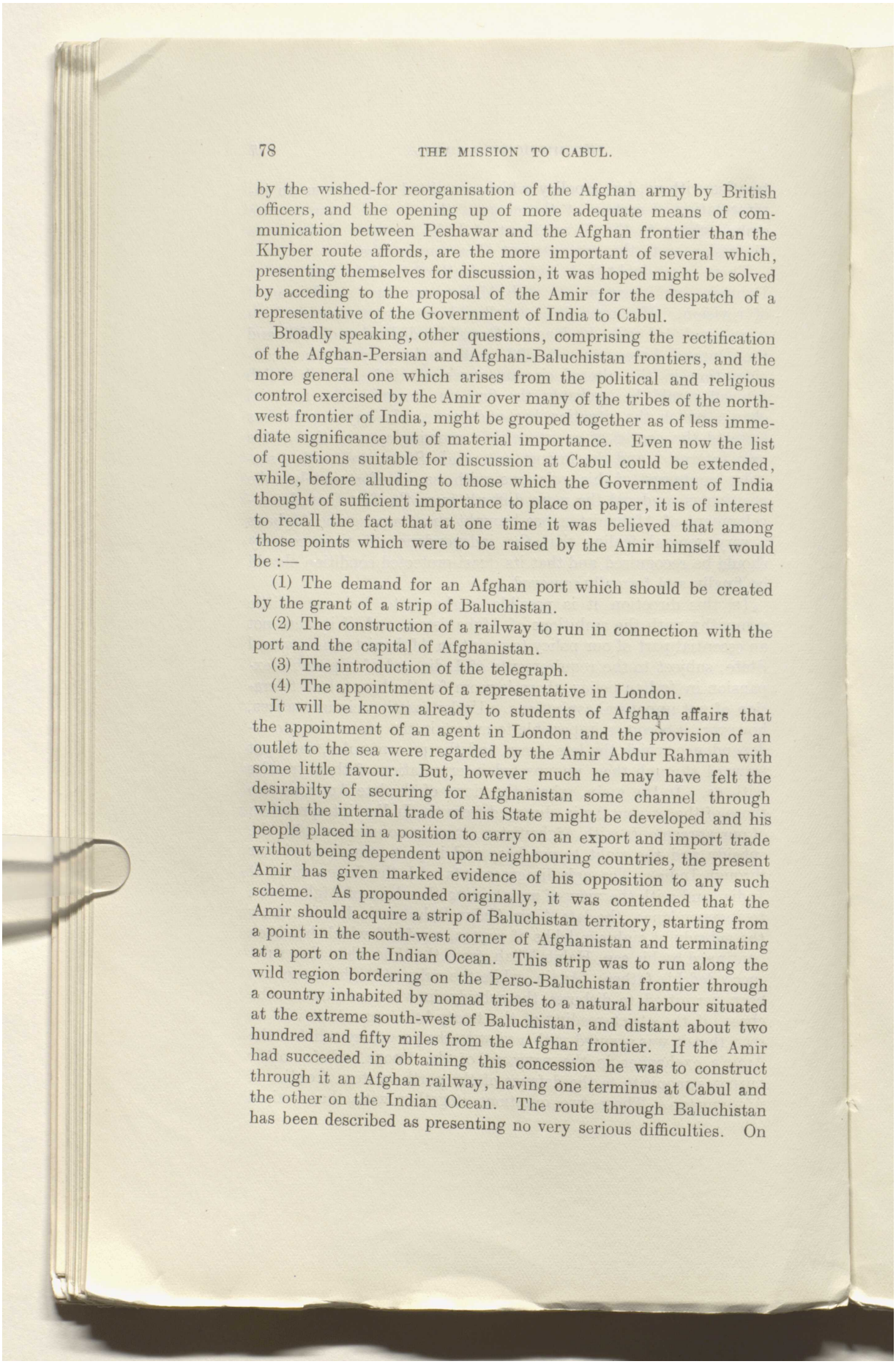
There is no doubt that, since the death of the late Amir Abdur Rahman, our engagements with Afghanistan have stood in need of revision. Moreover, it is intelligible that agreements which were concluded so far back as the Rawal Pindi Durbar of 1885 and the Durand Agreement of 1893, well might merit further consideration in the altered circumstances of 1905. Habib Ullah himself would be probably the first to recognise the material change which the situation has undergone. In any case he has fostered the course of events with a growing appreciation of his own interests, and the importance of his State, and with a singular contempt of his relations with us. Unfortunately, the position is rendered the more difficult from the fact that the development of Afghanistan has brought about among the Afghans a very general feeling that the independence of their country should be recognised and that its quasi-protected condition should be finally and formally removed.

In this direction it is possible, perhaps, to feel some little sympathy with the ambitions of Afghanistan, and, if it were not an essential part of our policy to maintain Afghanistan as a vassal State, subject to the requirements of India and of a possible expansion in Indian policy, there is room for the benevolent toleration of not unnatural aspirations. Under existing circumstances, however, it becomes impossible to entertain the pretensions to independence which the late Amir, and the present ruler, each put forward through their unexpected interpretation of their treaties with us. In the main, where the views of the late Amir, as also those of the present Amir, diverged from the Indian interpretation of our agreements with Afghanistan, were in connection with the subsidy and the right to purchase and import provisions of war through India. Through disagreements with the Government of India, and with the view of maintaining the claim of Afghanistan to independence, the late Amir Abdur Rahman declined to draw the subsidy of eighteen lakhs of rupees, a refusal which has been continued by his son, Habib Ullah, from the time when that ruler succeeded his father. Again, while the ruler of Afghanistan has been permitted to disburse the subsidy in whatever manner he chose, if the strict reading of the treaty be observed, it will be seen that it was granted with a view to the pecuniary relief of the Amir's exchequer in the payment of the troops and for other purposes requisite to the defence of the north-western frontier of Afghanistan. These two questions, together with those raised

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



by the wished-for reorganisation of the Afghan army by British officers, and the opening up of more adequate means of communication between Peshawar and the Afghan frontier than the Khyber route affords, are the more important of several which, presenting themselves for discussion, it was hoped might be solved by acceding to the proposal of the Amir for the despatch of a representative of the Government of India to Cabul.

Broadly speaking, other questions, comprising the rectification of the Afghan-Persian and Afghan-Baluchistan frontiers, and the more general one which arises from the political and religious control exercised by the Amir over many of the tribes of the north-west frontier of India, might be grouped together as of less immediate significance but of material importance. Even now the list of questions suitable for discussion at Cabul could be extended, while, before alluding to those which the Government of India thought of sufficient importance to place on paper, it is of interest to recall the fact that at one time it was believed that among those points which were to be raised by the Amir himself would be :—

(1) The demand for an Afghan port which should be created by the grant of a strip of Baluchistan.

(2) The construction of a railway to run in connection with the port and the capital of Afghanistan.

(3) The introduction of the telegraph.

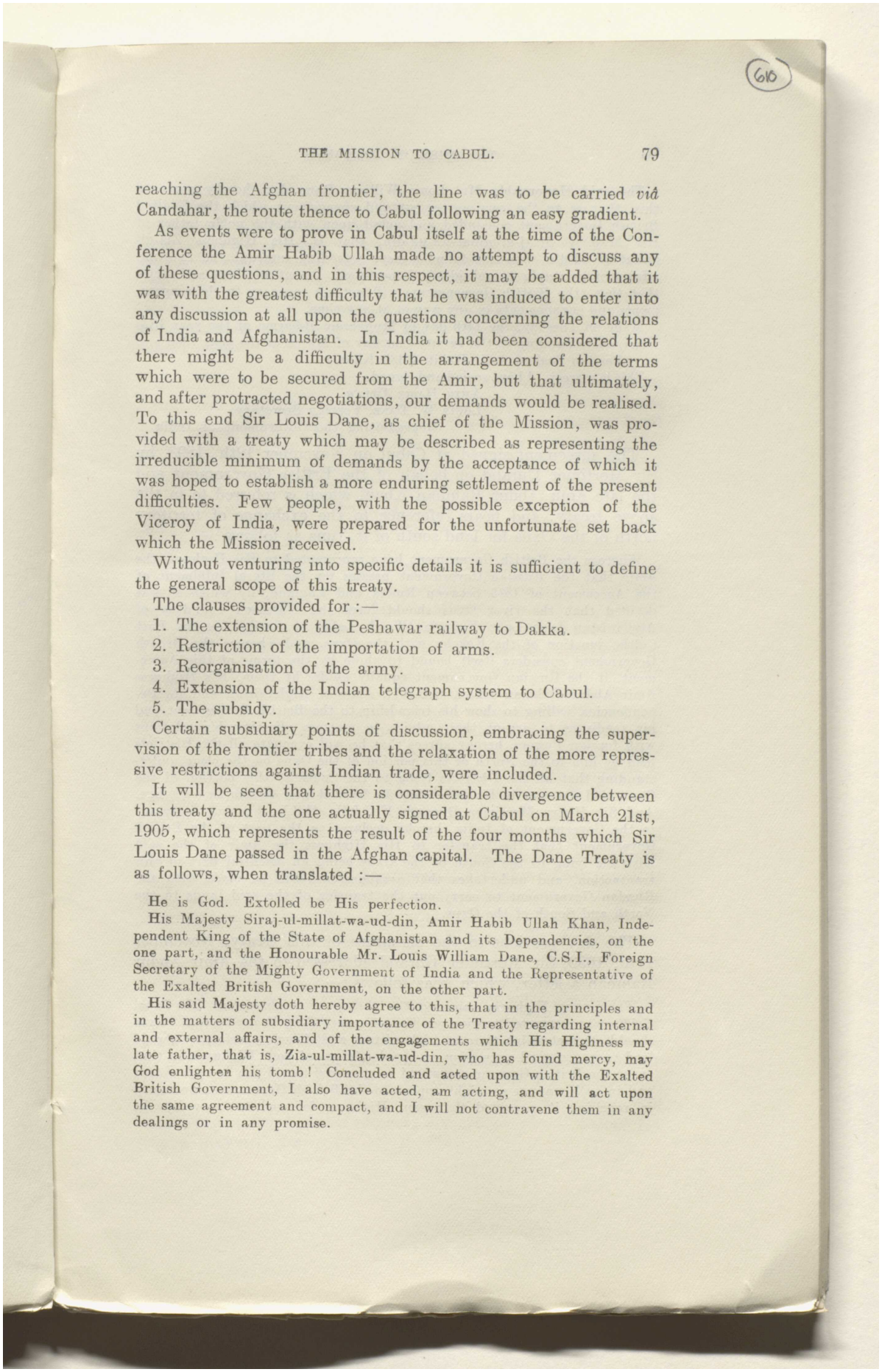
(4) The appointment of a representative in London.

It will be known already to students of Afghan affairs that the appointment of an agent in London and the provision of an outlet to the sea were regarded by the Amir Abdur Rahman with some little favour. But, however much he may have felt the desirabilty of securing for Afghanistan some channel through which the internal trade of his State might be developed and his people placed in a position to carry on an export and import trade without being dependent upon neighbouring countries, the present Amir has given marked evidence of his opposition to any such scheme. As propounded originally, it was contended that the Amir should acquire a strip of Baluchistan territory, starting from a point in the south-west corner of Afghanistan and terminating at a port on the Indian Ocean. This strip was to run along the wild region bordering on the Perso-Baluchistan frontier through a country inhabited by nomad tribes to a natural harbour situated at the extreme south-west of Baluchistan, and distant about two hundred and fifty miles from the Afghan frontier. If the Amir had succeeded in obtaining this concession he was to construct through it an Afghan railway, having one terminus at Cabul and the other on the Indian Ocean. The route through Baluchistan has been described as presenting no very serious difficulties. On

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



reaching the Afghan frontier, the line was to be carried *viâ* Candahar, the route thence to Cabul following an easy gradient.

As events were to prove in Cabul itself at the time of the Conference the Amir Habib Ullah made no attempt to discuss any of these questions, and in this respect, it may be added that it was with the greatest difficulty that he was induced to enter into any discussion at all upon the questions concerning the relations of India and Afghanistan. In India it had been considered that there might be a difficulty in the arrangement of the terms which were to be secured from the Amir, but that ultimately, and after protracted negotiations, our demands would be realised. To this end Sir Louis Dane, as chief of the Mission, was provided with a treaty which may be described as representing the irreducible minimum of demands by the acceptance of which it was hoped to establish a more enduring settlement of the present difficulties. Few people, with the possible exception of the Viceroy of India, were prepared for the unfortunate set back which the Mission received.

Without venturing into specific details it is sufficient to define the general scope of this treaty.

The clauses provided for :—

1. The extension of the Peshawar railway to Dakka.
2. Restriction of the importation of arms.
3. Reorganisation of the army.
4. Extension of the Indian telegraph system to Cabul.
5. The subsidy.

Certain subsidiary points of discussion, embracing the supervision of the frontier tribes and the relaxation of the more repressive restrictions against Indian trade, were included.

It will be seen that there is considerable divergence between this treaty and the one actually signed at Cabul on March 21st, 1905, which represents the result of the four months which Sir Louis Dane passed in the Afghan capital. The Dane Treaty is as follows, when translated :—

He is God. Extolled be His perfection.

His Majesty Siraj-ul-millat-wa-ud-din, Amir Habib Ullah Khan, Independent King of the State of Afghanistan and its Dependencies, on the one part, and the Honourable Mr. Louis William Dane, C.S.I., Foreign Secretary of the Mighty Government of India and the Representative of the Exalted British Government, on the other part.

His said Majesty doth hereby agree to this, that in the principles and in the matters of subsidiary importance of the Treaty regarding internal and external affairs, and of the engagements which His Highness my late father, that is, Zia-ul-millat-wa-ud-din, who has found mercy, may God enlighten his tomb! Concluded and acted upon with the Exalted British Government, I also have acted, am acting, and will act upon the same agreement and compact, and I will not contravene them in any dealings or in any promise.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000b

مكتبة قطر الوطنية
Qatar National Library

The said Honourable Mr. Louis William Dane does hereby agree to this, that as to the very agreement and engagement which the Exalted British Government concluded and acted upon with the noble father of His Majesty Siraj-ul-millat-wa-ud-din, that is, His Highness Zia-ul-millat-wa-ud-din, who has found mercy, regarding internal and external affairs of principle or subsidiary importance, I confirm them and write that they (the British Government) will not act contrary to those agreements and engagements in any way or at any time.

Made on Tuesday, the 14th day of Muharram-ul-haram of the year 1323 Hijri, corresponding to the twenty-first day of March of the year 1905 A.D.

(Persian Seal of Amir Habib Ullah Khan.)

This is correct. I have sealed and signed.

AMIR HABIB ULLAH,
LOUIS W. DANE, Foreign Secretary,
Representing the Government of India.

The agreement signed at Cabul on November 12th, 1893, by Sir Mortimer Durand on behalf of the British Government and the late Amir Abdur Rahman Khan, which is referred to in the above treaty, and bears reference to the exchange of territory north of the Oxus for land south of it, runs as follows :—

Whereas the British Government have represented to His Highness the Amir that the Russian Government presses for the literal fulfilment of the Agreement of 1873 between Russia and England, by which it was decided that the river Oxus should form the Northern boundary of Afghanistan from Lake Victoria (Woods Lake) or Sarikul on the East to the junction of the Kokcha with the Oxus, and whereas the British Government considers itself bound to abide by the terms of this Agreement, if the Russian Government equally abides by them, His Highness Amir Abdur Rahman Khan, G.C.S.I., Amir of Afghanistan and its Dependencies, willing to show his friendship to the British Government and his readiness to accept their advice in matters affecting his relations with foreign Powers, hereby agrees that he will evacuate all the Districts held by him to the North of this portion of the Oxus on the clear understanding that all the Districts lying to the South of this portion of the Oxus, and not now in his possession, be handed over to him in exchange. And Sir Henry Mortimer Durand, K.C.I.E., C.S.I., Foreign Secretary to the Government of India, hereby declares on the part of the British Government that the transfer to His Highness the Amir of the said Districts lying to the South of the Oxus being an essential part of this transaction, and undertakes that arrangements will be made with the Russian Government to carry out the transfer of the said lands to the North and South of the Oxus.

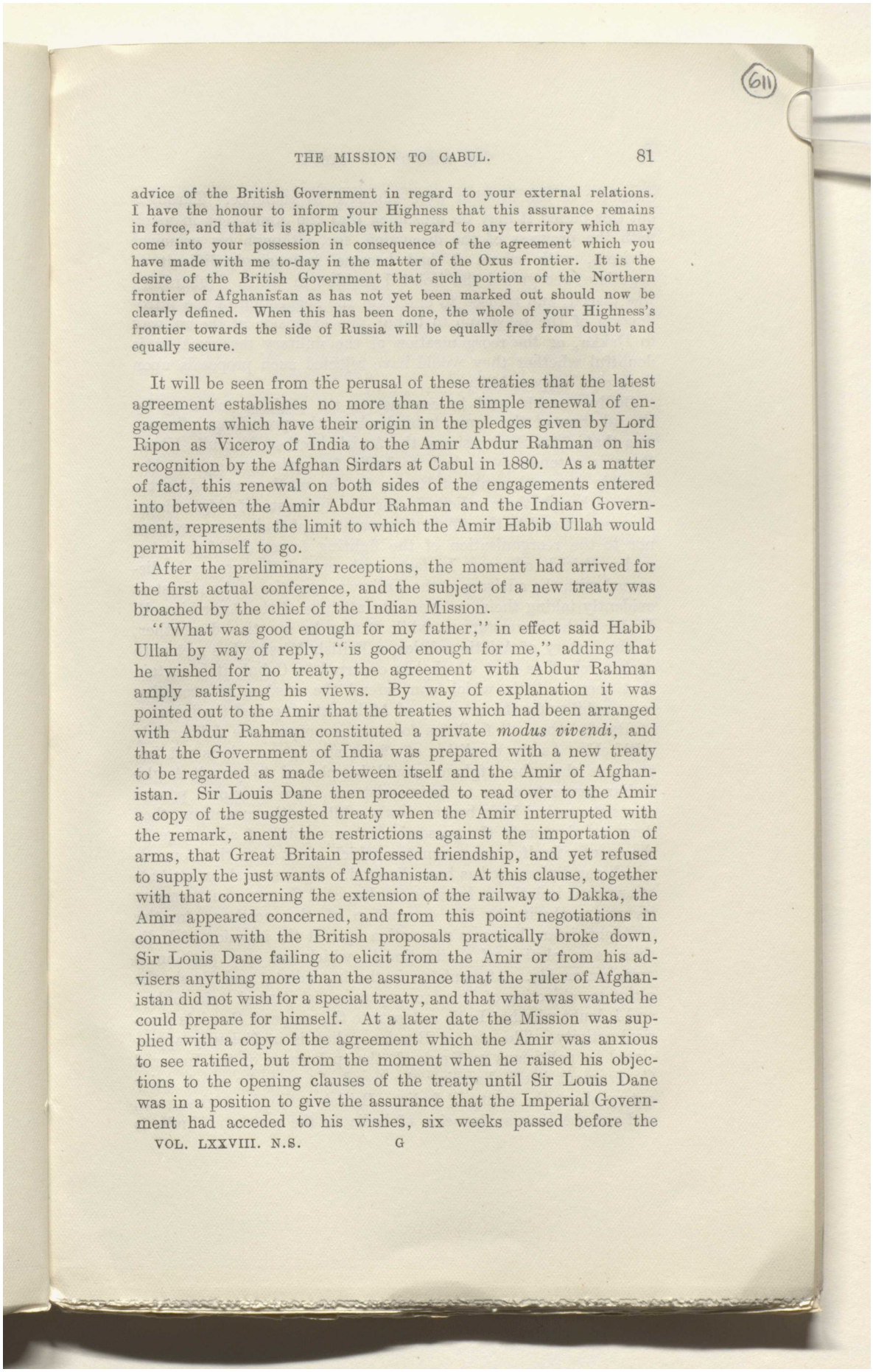
The day previous to the signature of this treaty, November 11th, 1893, Sir Mortimer Durand addressed to the Amir Abdur Rahman a letter, which is as follows :—

When your Highness came to the throne of Afghanistan, Sir Lepel Griffin was instructed to give you the assurance that, if any foreign Power should attempt to interfere in Afghanistan, and if such interference should lead to unprovoked aggression on the dominions of your Highness, in that event the British Government would be prepared to aid you to such extent and in such manner as might appear to the British Government necessary in repelling it, provided that your Highness followed unreservedly the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



advice of the British Government in regard to your external relations. I have the honour to inform your Highness that this assurance remains in force, and that it is applicable with regard to any territory which may come into your possession in consequence of the agreement which you have made with me to-day in the matter of the Oxus frontier. It is the desire of the British Government that such portion of the Northern frontier of Afghanistan as has not yet been marked out should now be clearly defined. When this has been done, the whole of your Highness's frontier towards the side of Russia will be equally free from doubt and equally secure.

It will be seen from the perusal of these treaties that the latest agreement establishes no more than the simple renewal of engagements which have their origin in the pledges given by Lord Ripon as Viceroy of India to the Amir Abdur Rahman on his recognition by the Afghan Sirdars at Cabul in 1880. As a matter of fact, this renewal on both sides of the engagements entered into between the Amir Abdur Rahman and the Indian Government, represents the limit to which the Amir Habib Ullah would permit himself to go.

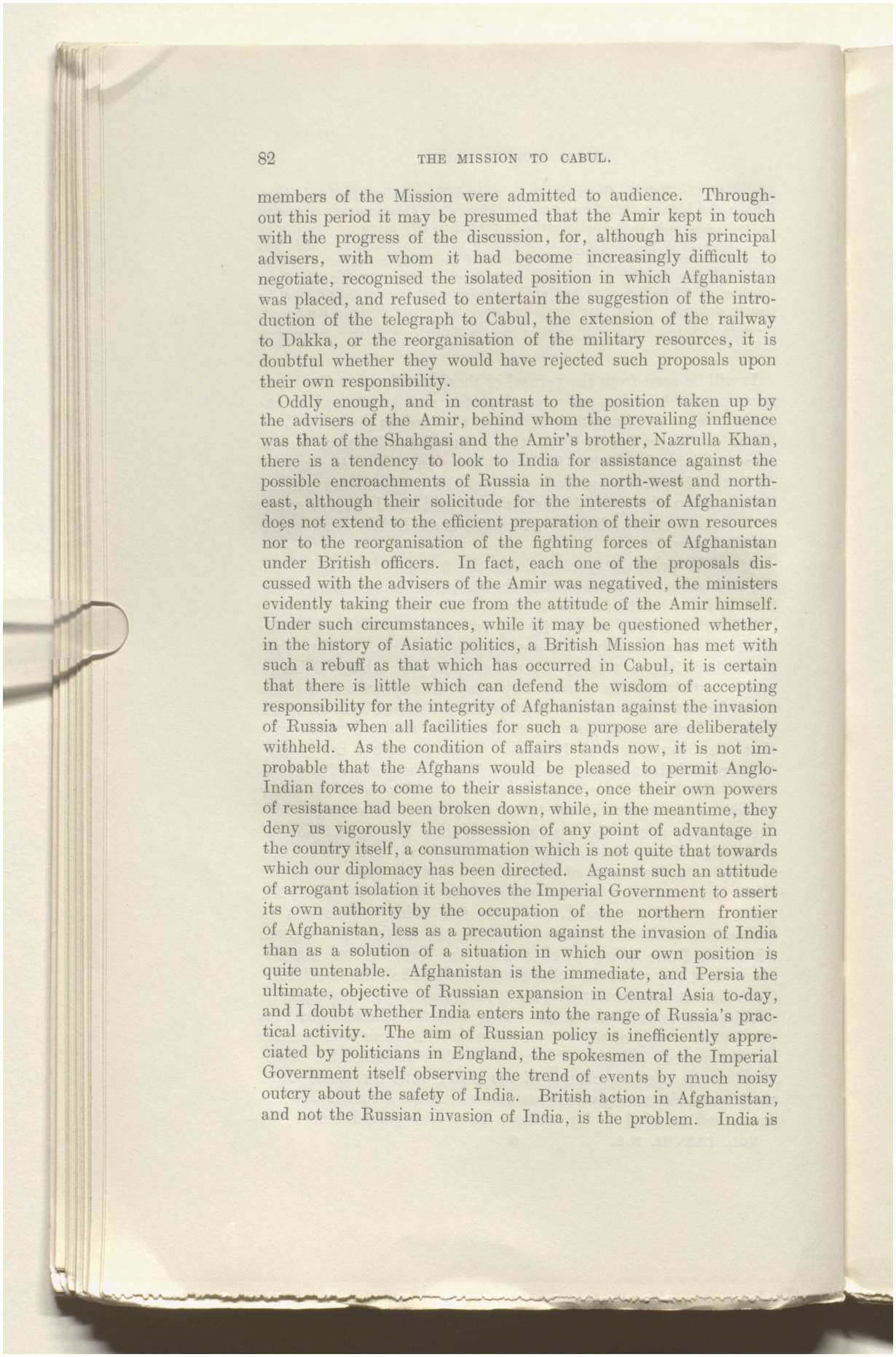
After the preliminary receptions, the moment had arrived for the first actual conference, and the subject of a new treaty was broached by the chief of the Indian Mission.

"What was good enough for my father," in effect said Habib Ullah by way of reply, "is good enough for me," adding that he wished for no treaty, the agreement with Abdur Rahman amply satisfying his views. By way of explanation it was pointed out to the Amir that the treaties which had been arranged with Abdur Rahman constituted a private *modus vivendi*, and that the Government of India was prepared with a new treaty to be regarded as made between itself and the Amir of Afghanistan. Sir Louis Dane then proceeded to read over to the Amir a copy of the suggested treaty when the Amir interrupted with the remark, anent the restrictions against the importation of arms, that Great Britain professed friendship, and yet refused to supply the just wants of Afghanistan. At this clause, together with that concerning the extension of the railway to Dakka, the Amir appeared concerned, and from this point negotiations in connection with the British proposals practically broke down, Sir Louis Dane failing to elicit from the Amir or from his advisers anything more than the assurance that the ruler of Afghanistan did not wish for a special treaty, and that what was wanted he could prepare for himself. At a later date the Mission was supplied with a copy of the agreement which the Amir was anxious to see ratified, but from the moment when he raised his objections to the opening clauses of the treaty until Sir Louis Dane was in a position to give the assurance that the Imperial Government had acceded to his wishes, six weeks passed before the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



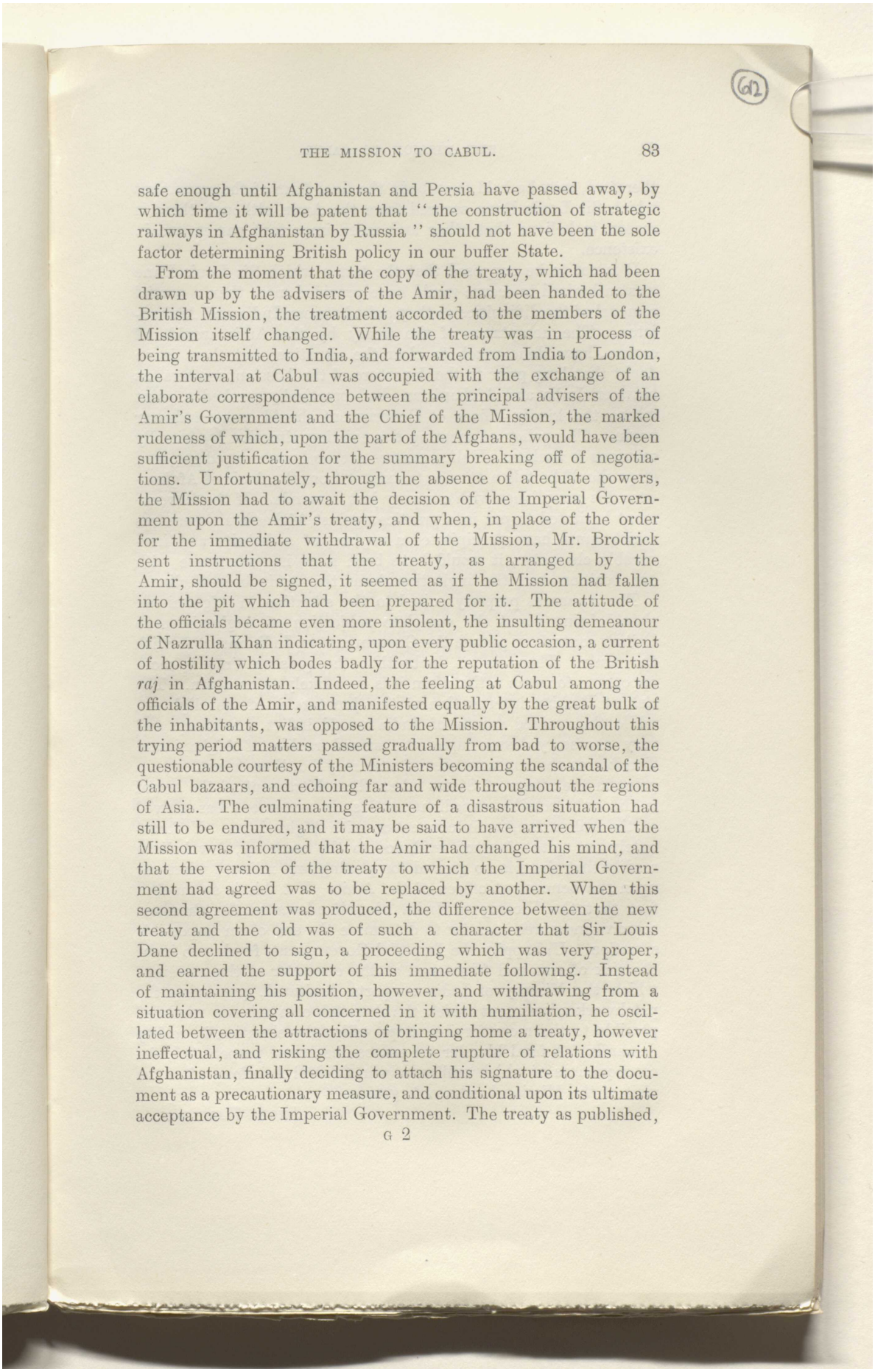
members of the Mission were admitted to audience. Throughout this period it may be presumed that the Amir kept in touch with the progress of the discussion, for, although his principal advisers, with whom it had become increasingly difficult to negotiate, recognised the isolated position in which Afghanistan was placed, and refused to entertain the suggestion of the introduction of the telegraph to Cabul, the extension of the railway to Dakka, or the reorganisation of the military resources, it is doubtful whether they would have rejected such proposals upon their own responsibility.

Oddly enough, and in contrast to the position taken up by the advisers of the Amir, behind whom the prevailing influence was that of the Shahgasi and the Amir's brother, Nazrulla Khan, there is a tendency to look to India for assistance against the possible encroachments of Russia in the north-west and north-east, although their solicitude for the interests of Afghanistan does not extend to the efficient preparation of their own resources nor to the reorganisation of the fighting forces of Afghanistan under British officers. In fact, each one of the proposals discussed with the advisers of the Amir was negatived, the ministers evidently taking their cue from the attitude of the Amir himself. Under such circumstances, while it may be questioned whether, in the history of Asiatic politics, a British Mission has met with such a rebuff as that which has occurred in Cabul, it is certain that there is little which can defend the wisdom of accepting responsibility for the integrity of Afghanistan against the invasion of Russia when all facilities for such a purpose are deliberately withheld. As the condition of affairs stands now, it is not improbable that the Afghans would be pleased to permit Anglo-Indian forces to come to their assistance, once their own powers of resistance had been broken down, while, in the meantime, they deny us vigorously the possession of any point of advantage in the country itself, a consummation which is not quite that towards which our diplomacy has been directed. Against such an attitude of arrogant isolation it behoves the Imperial Government to assert its own authority by the occupation of the northern frontier of Afghanistan, less as a precaution against the invasion of India than as a solution of a situation in which our own position is quite untenable. Afghanistan is the immediate, and Persia the ultimate, objective of Russian expansion in Central Asia to-day, and I doubt whether India enters into the range of Russia's practical activity. The aim of Russian policy is inefficiently appreciated by politicians in England, the spokesmen of the Imperial Government itself observing the trend of events by much noisy outcry about the safety of India. British action in Afghanistan, and not the Russian invasion of India, is the problem. India is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00009e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



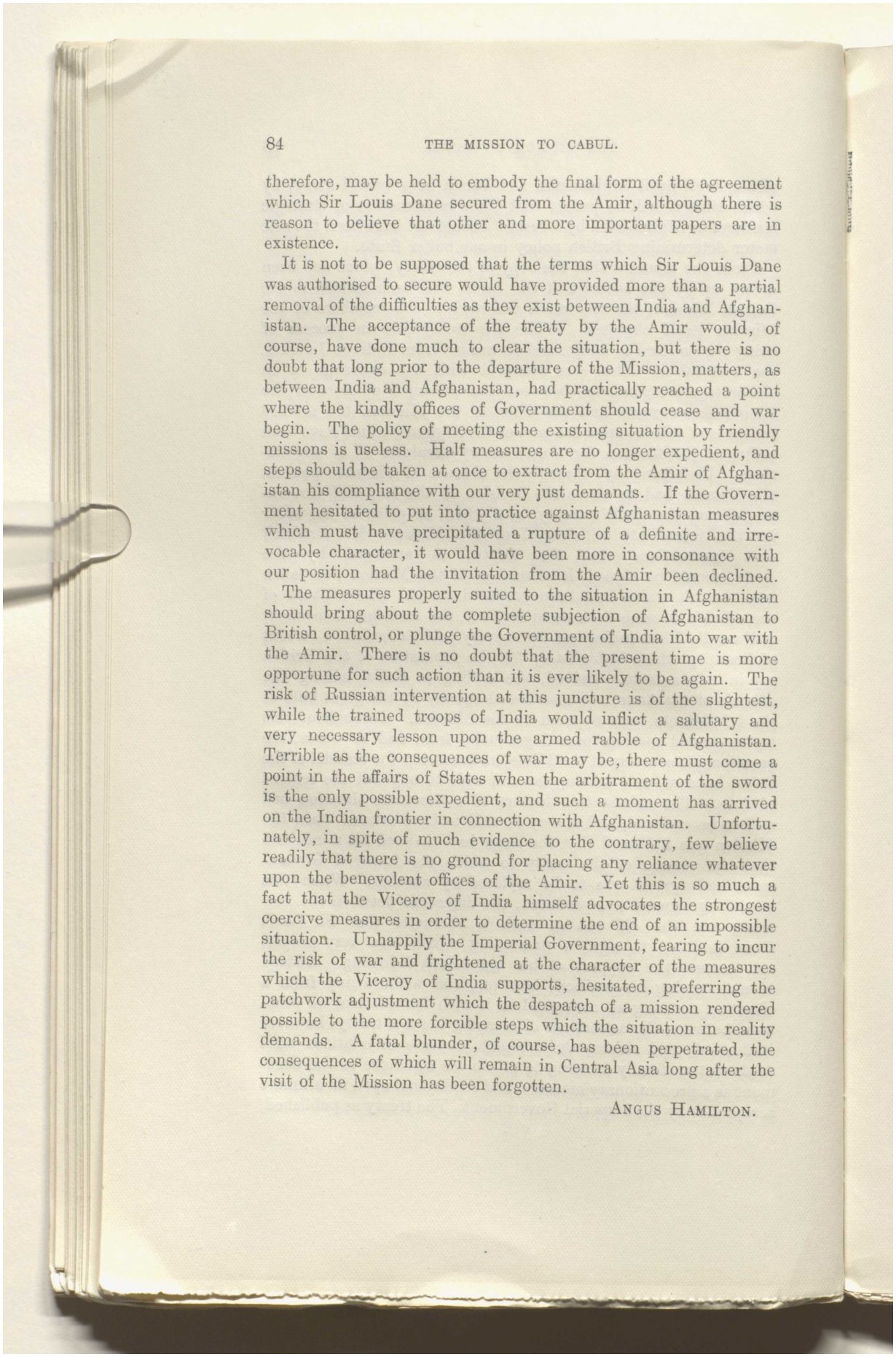
safe enough until Afghanistan and Persia have passed away, by which time it will be patent that "the construction of strategic railways in Afghanistan by Russia" should not have been the sole factor determining British policy in our buffer State.

From the moment that the copy of the treaty, which had been drawn up by the advisers of the Amir, had been handed to the British Mission, the treatment accorded to the members of the Mission itself changed. While the treaty was in process of being transmitted to India, and forwarded from India to London, the interval at Cabul was occupied with the exchange of an elaborate correspondence between the principal advisers of the Amir's Government and the Chief of the Mission, the marked rudeness of which, upon the part of the Afghans, would have been sufficient justification for the summary breaking off of negotiations. Unfortunately, through the absence of adequate powers, the Mission had to await the decision of the Imperial Government upon the Amir's treaty, and when, in place of the order for the immediate withdrawal of the Mission, Mr. Brodrick sent instructions that the treaty, as arranged by the Amir, should be signed, it seemed as if the Mission had fallen into the pit which had been prepared for it. The attitude of the officials became even more insolent, the insulting demeanour of Nazrulla Khan indicating, upon every public occasion, a current of hostility which bodes badly for the reputation of the British *raj* in Afghanistan. Indeed, the feeling at Cabul among the officials of the Amir, and manifested equally by the great bulk of the inhabitants, was opposed to the Mission. Throughout this trying period matters passed gradually from bad to worse, the questionable courtesy of the Ministers becoming the scandal of the Cabul bazaars, and echoing far and wide throughout the regions of Asia. The culminating feature of a disastrous situation had still to be endured, and it may be said to have arrived when the Mission was informed that the Amir had changed his mind, and that the version of the treaty to which the Imperial Government had agreed was to be replaced by another. When this second agreement was produced, the difference between the new treaty and the old was of such a character that Sir Louis Dane declined to sign, a proceeding which was very proper, and earned the support of his immediate following. Instead of maintaining his position, however, and withdrawing from a situation covering all concerned in it with humiliation, he oscillated between the attractions of bringing home a treaty, however ineffectual, and risking the complete rupture of relations with Afghanistan, finally deciding to attach his signature to the document as a precautionary measure, and conditional upon its ultimate acceptance by the Imperial Government. The treaty as published,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000085

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



therefore, may be held to embody the final form of the agreement which Sir Louis Dane secured from the Amir, although there is reason to believe that other and more important papers are in existence.

It is not to be supposed that the terms which Sir Louis Dane was authorised to secure would have provided more than a partial removal of the difficulties as they exist between India and Afghanistan. The acceptance of the treaty by the Amir would, of course, have done much to clear the situation, but there is no doubt that long prior to the departure of the Mission, matters, as between India and Afghanistan, had practically reached a point where the kindly offices of Government should cease and war begin. The policy of meeting the existing situation by friendly missions is useless. Half measures are no longer expedient, and steps should be taken at once to extract from the Amir of Afghanistan his compliance with our very just demands. If the Government hesitated to put into practice against Afghanistan measures which must have precipitated a rupture of a definite and irrevocable character, it would have been more in consonance with our position had the invitation from the Amir been declined.

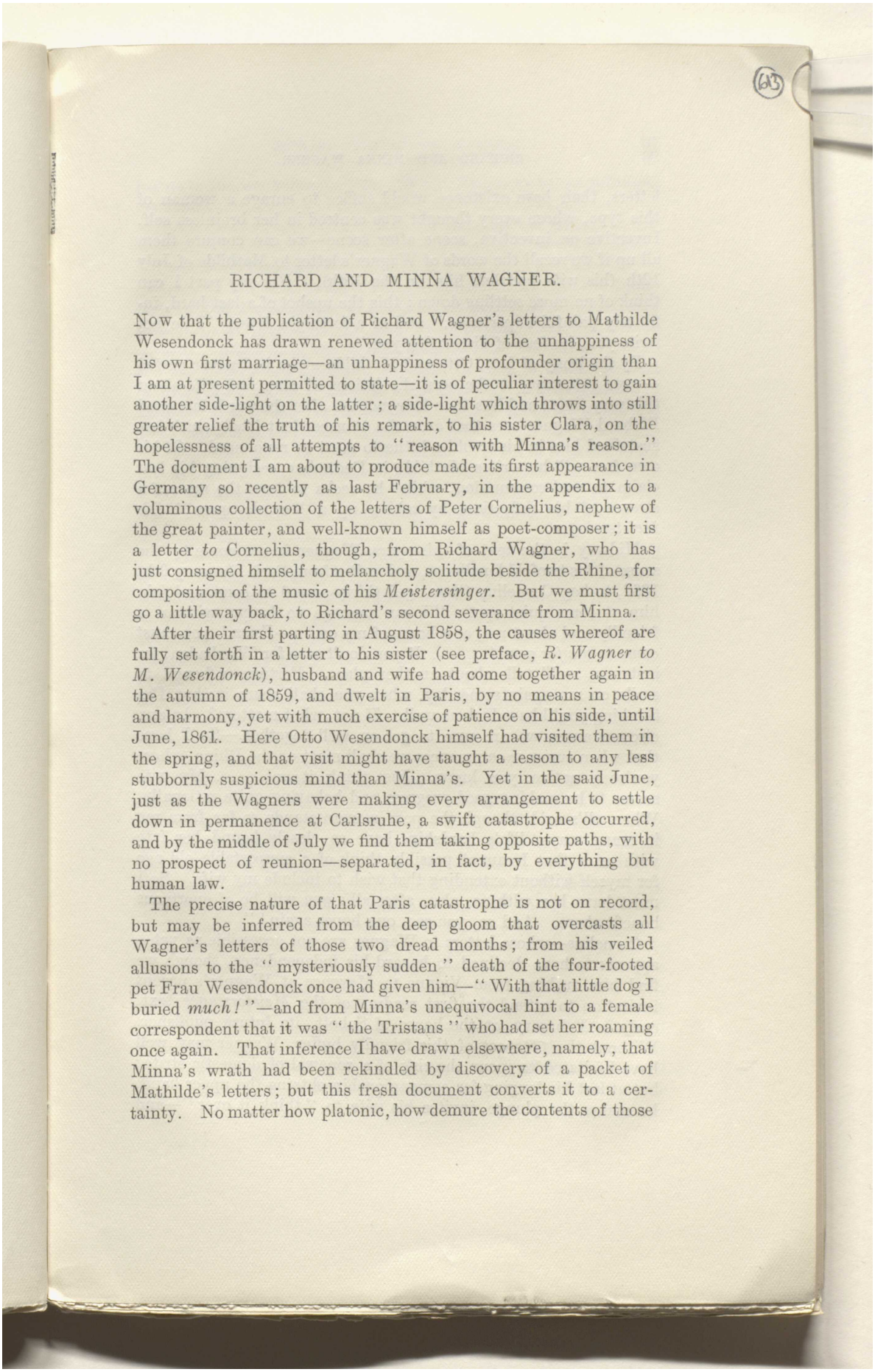
The measures properly suited to the situation in Afghanistan should bring about the complete subjection of Afghanistan to British control, or plunge the Government of India into war with the Amir. There is no doubt that the present time is more opportune for such action than it is ever likely to be again. The risk of Russian intervention at this juncture is of the slightest, while the trained troops of India would inflict a salutary and very necessary lesson upon the armed rabble of Afghanistan. Terrible as the consequences of war may be, there must come a point in the affairs of States when the arbitrament of the sword is the only possible expedient, and such a moment has arrived on the Indian frontier in connection with Afghanistan. Unfortunately, in spite of much evidence to the contrary, few believe readily that there is no ground for placing any reliance whatever upon the benevolent offices of the Amir. Yet this is so much a fact that the Viceroy of India himself advocates the strongest coercive measures in order to determine the end of an impossible situation. Unhappily the Imperial Government, fearing to incur the risk of war and frightened at the character of the measures which the Viceroy of India supports, hesitated, preferring the patchwork adjustment which the despatch of a mission rendered possible to the more forcible steps which the situation in reality demands. A fatal blunder, of course, has been perpetrated, the consequences of which will remain in Central Asia long after the visit of the Mission has been forgotten.

ANGUS HAMILTON.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



RICHARD AND MINNA WAGNER.

Now that the publication of Richard Wagner's letters to Mathilde Wesendonck has drawn renewed attention to the unhappiness of his own first marriage—an unhappiness of profounder origin than I am at present permitted to state—it is of peculiar interest to gain another side-light on the latter; a side-light which throws into still greater relief the truth of his remark, to his sister Clara, on the hopelessness of all attempts to "reason with Minna's reason." The document I am about to produce made its first appearance in Germany so recently as last February, in the appendix to a voluminous collection of the letters of Peter Cornelius, nephew of the great painter, and well-known himself as poet-composer; it is a letter *to* Cornelius, though, from Richard Wagner, who has just consigned himself to melancholy solitude beside the Rhine, for composition of the music of his *Meistersinger*. But we must first go a little way back, to Richard's second severance from Minna.

After their first parting in August 1858, the causes whereof are fully set forth in a letter to his sister (see preface, *R. Wagner to M. Wesendonck*), husband and wife had come together again in the autumn of 1859, and dwelt in Paris, by no means in peace and harmony, yet with much exercise of patience on his side, until June, 1861. Here Otto Wesendonck himself had visited them in the spring, and that visit might have taught a lesson to any less stubbornly suspicious mind than Minna's. Yet in the said June, just as the Wagners were making every arrangement to settle down in permanence at Carlsruhe, a swift catastrophe occurred, and by the middle of July we find them taking opposite paths, with no prospect of reunion—separated, in fact, by everything but human law.

The precise nature of that Paris catastrophe is not on record, but may be inferred from the deep gloom that overcasts all Wagner's letters of those two dread months; from his veiled allusions to the "mysteriously sudden" death of the four-footed pet Frau Wesendonck once had given him—"With that little dog I buried *much!*"—and from Minna's unequivocal hint to a female correspondent that it was "the Tristans" who had set her roaming once again. That inference I have drawn elsewhere, namely, that Minna's wrath had been rekindled by discovery of a packet of Mathilde's letters; but this fresh document converts it to a certainty. No matter how platonic, how demure the contents of those

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000059

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

letters, their bare existence would suffice to enrage a woman of this type, whose every thought was centred in her brainless self. Invective on invective, scene after scene—we can conjure them all up if we recall the words of Wagner's letter to Mathilde of July 12th (his wife had left him on the 10th), "For my part I can think of no more settling down: this the upshot of a last hard, infinitely painful experience," and of a fortnight later, "I do not write you, for fear of distressing you."

By the irony of fate, Otto and Mathilde—who had never parted—were returning to the normal relations of man and wife about this very time; and less than four months after the words last cited Richard Wagner sees that even the transcendent ideal which has sustained him in his troubles hitherto must be renounced. Of his own free will he writes Mathilde in December, resigning his last claim to soul-communion, whilst he seeks to turn the mournful stream of his reflections by taking up a "comic opera," *Die Meistersinger*.

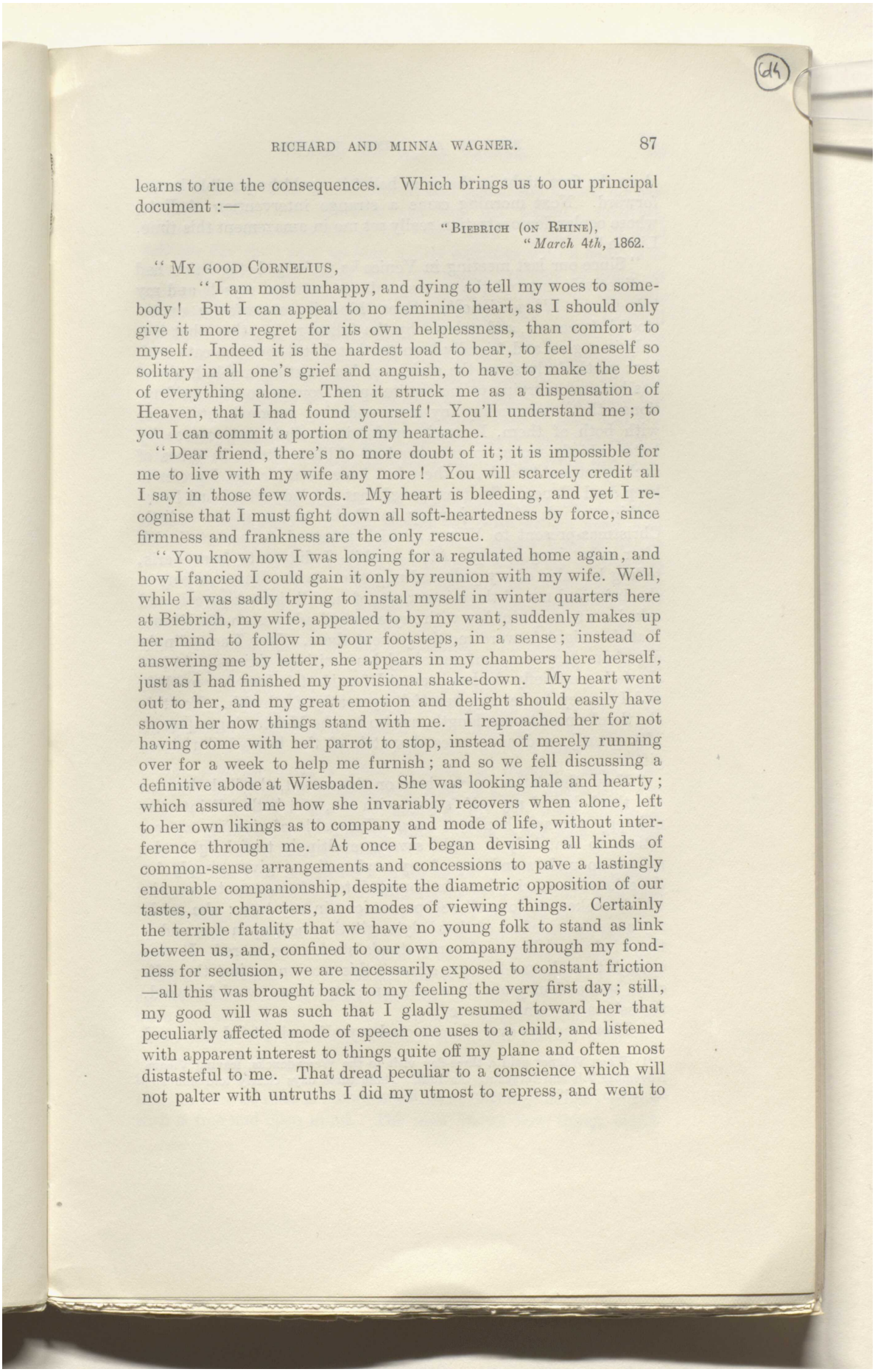
Midway in the text of this opera Wagner is overcome by the sense of his twofold loneliness, and writes from Paris, January 9th, 1862, to beg Cornelius (then aged thirty-seven) to come and join him at some quiet spot: "I can manage no longer without a friendly soul about me, or a home of my own:—*Friend, you must come to me for good!* . . . . If you don't care for Wiesbaden, for instance, we'll talk about another place. Fortune is bound to smile on me again some day, when you shall share it; but I'm thinking you'll have luck as well. If not, what matters? In any circumstances we are sure to get on well together.—So I hope that when summer commences we shall meet on the Rhine, where you're a native, you know. Just think it out. . . . My wife seems to be making good progress and behaving quite rationally. When all's said, though the poor woman stands so far from me in many ways, life's hardships have so closely bound her fate with mine that I cannot possibly think of a supportable old age for myself without extending that wish to include my wife. So I must have her with us, also, after all: *you* will be of enormous benefit there. And so, you see, one hopes again!"

Cornelius—whose letters to Wagner are not accessible as yet—appears to have declined to hazard his independence, though we find him rushing from Vienna to Mayence at Wagner's urgent invitation to attend the first reading of the *Meistersinger* text, early in February, at the house of Schott, its future publisher. Without the prospect of this friendly buffer, Wagner may well have hesitated to incur the risk of a renewal of domestic strife; but at last his longing for companionship obtains the upper hand, he makes the plunge, invites his wife to "think it over"—and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



learns to rue the consequences. Which brings us to our principal document :—

"BIEBRICH (ON RHINE),
"*March 4th*, 1862.

"MY GOOD CORNELIUS,

"I am most unhappy, and dying to tell my woes to somebody! But I can appeal to no feminine heart, as I should only give it more regret for its own helplessness, than comfort to myself. Indeed it is the hardest load to bear, to feel oneself so solitary in all one's grief and anguish, to have to make the best of everything alone. Then it struck me as a dispensation of Heaven, that I had found yourself! You'll understand me; to you I can commit a portion of my heartache.

"Dear friend, there's no more doubt of it; it is impossible for me to live with my wife any more! You will scarcely credit all I say in those few words. My heart is bleeding, and yet I recognise that I must fight down all soft-heartedness by force, since firmness and frankness are the only rescue.

"You know how I was longing for a regulated home again, and how I fancied I could gain it only by reunion with my wife. Well, while I was sadly trying to instal myself in winter quarters here at Biebrich, my wife, appealed to by my want, suddenly makes up her mind to follow in your footsteps, in a sense; instead of answering me by letter, she appears in my chambers here herself, just as I had finished my provisional shake-down. My heart went out to her, and my great emotion and delight should easily have shown her how things stand with me. I reproached her for not having come with her parrot to stop, instead of merely running over for a week to help me furnish; and so we fell discussing a definitive abode at Wiesbaden. She was looking hale and hearty; which assured me how she invariably recovers when alone, left to her own likings as to company and mode of life, without interference through me. At once I began devising all kinds of common-sense arrangements and concessions to pave a lastingly endurable companionship, despite the diametric opposition of our tastes, our characters, and modes of viewing things. Certainly the terrible fatality that we have no young folk to stand as link between us, and, confined to our own company through my fondness for seclusion, we are necessarily exposed to constant friction —all this was brought back to my feeling the very first day; still, my good will was such that I gladly resumed toward her that peculiarly affected mode of speech one uses to a child, and listened with apparent interest to things quite off my plane and often most distasteful to me. That dread peculiar to a conscience which will not palter with untruths I did my utmost to repress, and went to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00006d

مكتبة قطر الوطنية
Qatar National Library

sleep the first night in the calm belief it would be possible henceforward. Next morning came a strange intervention of Fate, whose ocular demonstration really set me in amazement this time. Listen!

"Since our last meeting in Venice[1] a prolonged stagnation had instinctively entered the correspondence between myself and my lady-friend W[esendonc]k. Everything is so perfectly understood between us, and ordered by the fullest resignation, that it is only in a good and friendly humour that I still communicate with her; particularly since the society of her most estimable husband has become so trying to me—quite apart from personal considerations—that, renouncing any more enduring personal intercourse with both of them, I merely maintain a slight intercourse by letter, chiefly meant to ease her load of life a little: in times of such upset and trouble, as these last have been for me, I prefer to keep dead silence. So it happened that my lady-friend had heard nothing at all of my journey to Paris, and sent me a little Christmas-present to Vienna, which returned to her at Zurich after going long astray. After a while I did write from Paris, telling her also of my proposed migration to the Rhine; whereon she informed me of the miscarriage of her Christmas parcel, and asked me to acquaint her with my eventual address on the Rhine, that she might forward me the present there. This I accordingly did, from Mayence, but remained long without tidings. At last she tells me briefly she has been at Düsseldorf to bury her mother, and I convey to her my heartfelt sympathy forthwith. For this she thanks me at some length, as also for the Meistersinger [rough MS. poem], and announces despatch of the belated Christmas gift.

"Now, that letter arrives here on the second, the little box on the third day of my wife's stay with me, and both fall into the unhappy woman's hands at once. Incapable of viewing my relations to that lady in aught save a revoltingly trivial light, she refuses to understand any of my explanations—given simply for the sake of reassuring her—but bursts into that common tone again which makes me lose all self-possession, in my turn: she reads my anger as an effect of that lady's agitating hold upon me, and—the whole mad house of cards stands stark once more! It was enough to make me lose my senses: this woman on just the self-same spot as four years since; the same explosions, word for word, the self-same common tone!

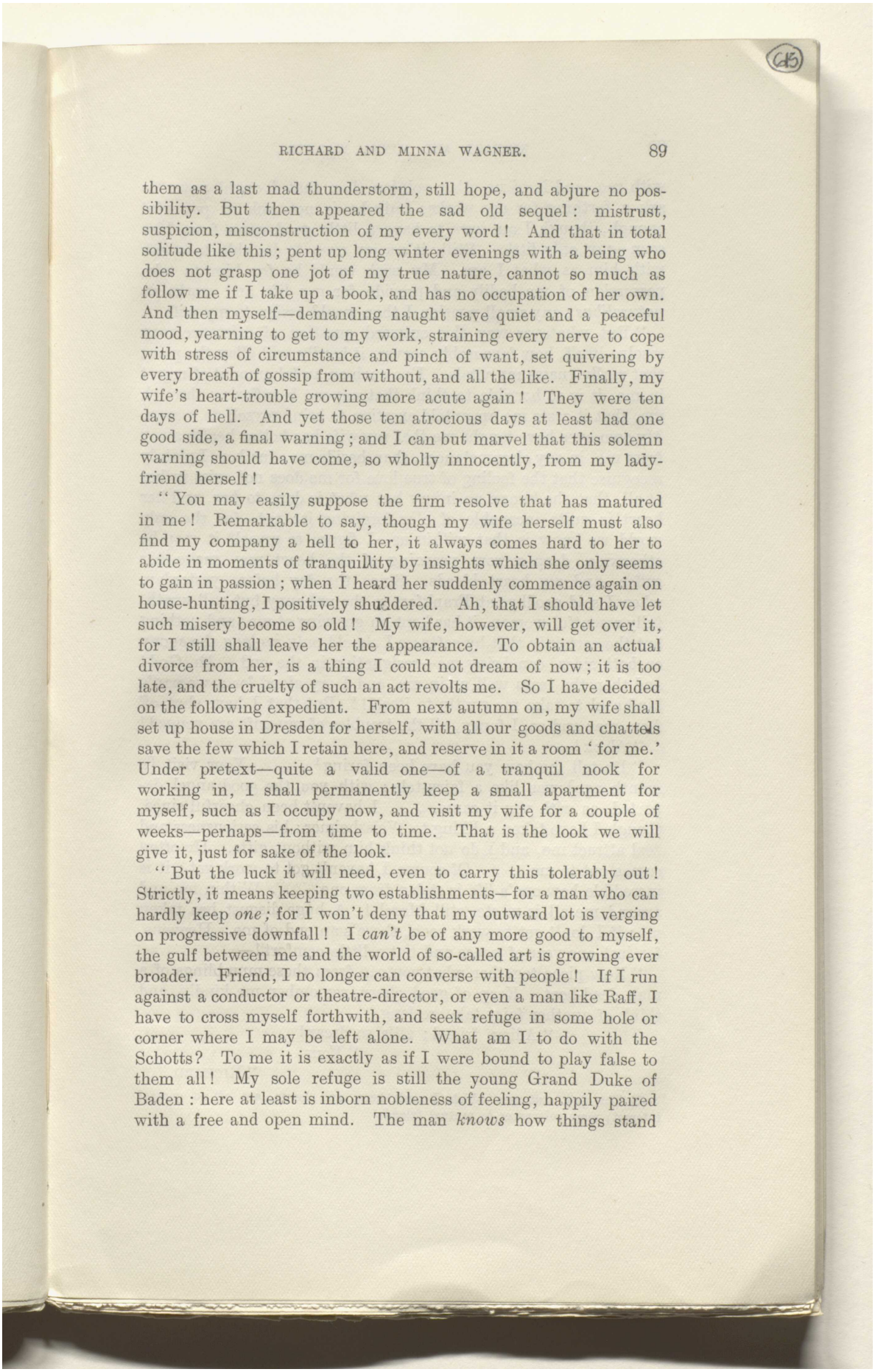
"These ragings over, I composed myself again, tried to regard

(1) When Wagner paid a three-day visit to the Wesendoncks, leaving Vienna November 7th and returning the 13th. Those three days clearly told him all; see letters 124–125, *R. Wagner to M. Wesendonck*.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00005a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



them as a last mad thunderstorm, still hope, and abjure no possibility. But then appeared the sad old sequel: mistrust, suspicion, misconstruction of my every word! And that in total solitude like this; pent up long winter evenings with a being who does not grasp one jot of my true nature, cannot so much as follow me if I take up a book, and has no occupation of her own. And then myself—demanding naught save quiet and a peaceful mood, yearning to get to my work, straining every nerve to cope with stress of circumstance and pinch of want, set quivering by every breath of gossip from without, and all the like. Finally, my wife's heart-trouble growing more acute again! They were ten days of hell. And yet those ten atrocious days at least had one good side, a final warning; and I can but marvel that this solemn warning should have come, so wholly innocently, from my lady-friend herself!

"You may easily suppose the firm resolve that has matured in me! Remarkable to say, though my wife herself must also find my company a hell to her, it always comes hard to her to abide in moments of tranquillity by insights which she only seems to gain in passion; when I heard her suddenly commence again on house-hunting, I positively shuddered. Ah, that I should have let such misery become so old! My wife, however, will get over it, for I still shall leave her the appearance. To obtain an actual divorce from her, is a thing I could not dream of now; it is too late, and the cruelty of such an act revolts me. So I have decided on the following expedient. From next autumn on, my wife shall set up house in Dresden for herself, with all our goods and chattels save the few which I retain here, and reserve in it a room 'for me.' Under pretext—quite a valid one—of a tranquil nook for working in, I shall permanently keep a small apartment for myself, such as I occupy now, and visit my wife for a couple of weeks—perhaps—from time to time. That is the look we will give it, just for sake of the look.

"But the luck it will need, even to carry this tolerably out! Strictly, it means keeping two establishments—for a man who can hardly keep *one;* for I won't deny that my outward lot is verging on progressive downfall! I *can't* be of any more good to myself, the gulf between me and the world of so-called art is growing ever broader. Friend, I no longer can converse with people! If I run against a conductor or theatre-director, or even a man like Raff, I have to cross myself forthwith, and seek refuge in some hole or corner where I may be left alone. What am I to do with the Schotts? To me it is exactly as if I were bound to play false to them all! My sole refuge is still the young Grand Duke of Baden: here at least is inborn nobleness of feeling, happily paired with a free and open mind. The man *knows* how things stand

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000048

مكتبة قطر الوطنية
Qatar National Library

with me, and is of no other opinion than that I ought never to ask a farthing for my works; only he is not rich or powerful enough, though I am sure to have a little good news from him soon—my only little. Still, it's a joy even to be able to speak with him as what I am. My wish would be for him to take possession of me bodily and provide for my life and works *in naturalibus*; any small pension I then would assign to my wife.

"But whatever way this outward question of existence may resolve itself, how favourably soever, it hardly will allay the point that really gnaws my vitals. I've such an awful amount of regret in me, it is so horrible to think that anyone is suffering through me, that it costs me an untold exertion to bring myself to reason. My own eyes have taught me that my wife has better health away from me, in any circumstances, than beside me; further, I plainly recognise that the feeling of true love for me does not exist in her at all, that she knows no injury but what is done *to her*, and her heart is quite incapable of e'er forgiving it; yet—for the only world we know is that *within* us—I figure to myself it *may* be otherwise, deep sorrow, yearning of the heart may make her suffer—and *my* heart bleeds. Since the day before yesterday, when I said goodbye at Frankfort to the unhappy but still wrathfully resentful woman, it has kept on gnawing at me; and nothing but the certainty that by softness I should only prolong the agony on *both* sides, can bring me—resignation in the end. Ah, God! and then the tears well up in me, and I cry aloud for a woman's kind soul to take me gently to itself!! But that I have shut off from me; and so, I fancy, all the troubles of my wife are venged!

"Alack!—

"Do tell me how you have been faring[1] . . . . Your visit [a month ago] was like a fairy-tale: with you the good angel departed, as with you it came. . . . I haven't been cheerful since, though I have taken a liking to Weissheimer; his seriousness and zeal attract me, and I do not think him without gifts. He often comes out to me. . . . Of course I haven't got to work yet: it is incredible how one's life is stolen from one. . . . Within me and around me all is waste, still March! A huge disgust has taken me; if I don't get to work soon, there's an end of me. Heavens, for just one year of peace and but a little comfort!—

"Now piece together what you can from these mumblings of a man dead-beat. Keep of good cheer, remember me kindly, and think of another fairy-tale ere long.

"Adieu, friend; all's so drear!

"Your

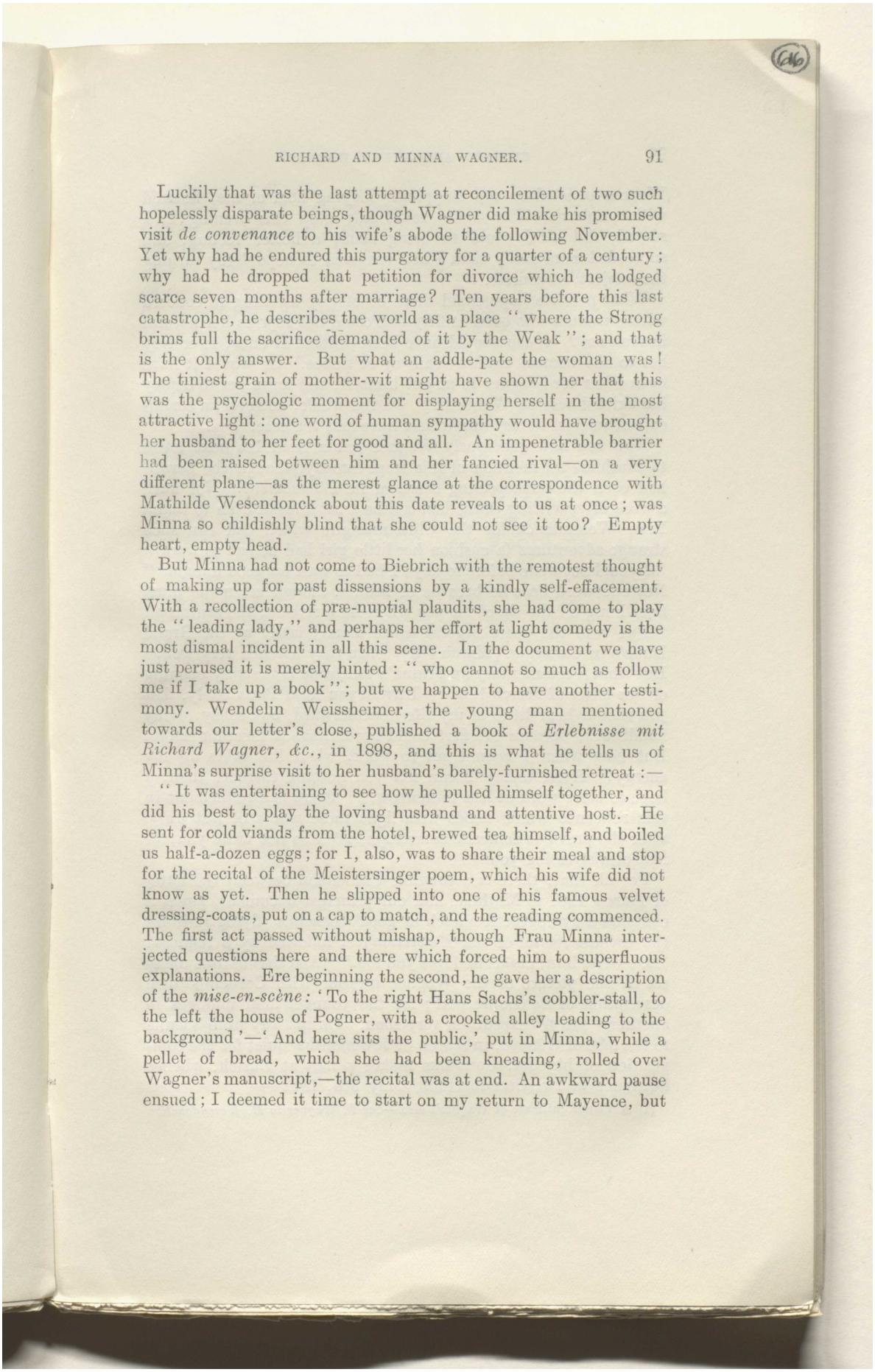
"RICHARD."

(1) The few sentences which I omit here, and lower, are of no general interest; mere references to mutual friends.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00002a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Luckily that was the last attempt at reconcilement of two such hopelessly disparate beings, though Wagner did make his promised visit *de convenance* to his wife's abode the following November. Yet why had he endured this purgatory for a quarter of a century; why had he dropped that petition for divorce which he lodged scarce seven months after marriage? Ten years before this last catastrophe, he describes the world as a place "where the Strong brims full the sacrifice demanded of it by the Weak"; and that is the only answer. But what an addle-pate the woman was! The tiniest grain of mother-wit might have shown her that this was the psychologic moment for displaying herself in the most attractive light: one word of human sympathy would have brought her husband to her feet for good and all. An impenetrable barrier had been raised between him and her fancied rival—on a very different plane—as the merest glance at the correspondence with Mathilde Wesendonck about this date reveals to us at once; was Minna so childishly blind that she could not see it too? Empty heart, empty head.

But Minna had not come to Biebrich with the remotest thought of making up for past dissensions by a kindly self-effacement. With a recollection of præ-nuptial plaudits, she had come to play the "leading lady," and perhaps her effort at light comedy is the most dismal incident in all this scene. In the document we have just perused it is merely hinted: "who cannot so much as follow me if I take up a book"; but we happen to have another testimony. Wendelin Weissheimer, the young man mentioned towards our letter's close, published a book of *Erlebnisse mit Richard Wagner, &c.*, in 1898, and this is what he tells us of Minna's surprise visit to her husband's barely-furnished retreat:—

"It was entertaining to see how he pulled himself together, and did his best to play the loving husband and attentive host. He sent for cold viands from the hotel, brewed tea himself, and boiled us half-a-dozen eggs; for I, also, was to share their meal and stop for the recital of the Meistersinger poem, which his wife did not know as yet. Then he slipped into one of his famous velvet dressing-coats, put on a cap to match, and the reading commenced. The first act passed without mishap, though Frau Minna interjected questions here and there which forced him to superfluous explanations. Ere beginning the second, he gave her a description of the *mise-en-scène:* 'To the right Hans Sachs's cobbler-stall, to the left the house of Pogner, with a crooked alley leading to the background'—'And here sits the public,' put in Minna, while a pellet of bread, which she had been kneading, rolled over Wagner's manuscript,—the recital was at end. An awkward pause ensued; I deemed it time to start on my return to Mayence, but

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Wagner insisted on my stopping. Laying hold of me, he said with emphasis, 'For God's sake, only stop this evening!' I stayed, did all I could to bring about a better feeling, and succeeded more easily than I had ventured to hope" (by turning the subject, of course).

What possible hope could there be of any dwelling in concord with a woman who even at fifty-two could not repress her natural irreverence? A cab should have been ordered at once, to convey her to the nearest station—railway or police. Or would it have been wiser for Wagner to go out himself, and leave her to deploy her skittishness on Wendelin? On the whole, however, a certificate of suicidal lunacy might best have met the case.

Now see how generously Wagner omits from his next letter to Mathilde all mention of this tragi-comedy, though she herself had been the unsuspecting cause of its *dénouement*. Not until a week after writing Cornelius, can he trust himself even to thank Frau Wesendonck for the Christmas-gift which had run such strange adventures (a cushion her little girl had helped to work): "I could not write before to-day; I had to wait for good humour." Not one word does he breathe of Minna, though her name must have hung on the tip of his pen when he arrived at the sentence: "I've read the poem several times aloud; lastly at the Grand Duke's in Carlsruhe [March 7th], when they listened very well." But what a commentary on Minna's tantrums is the very opening of this letter of March 12th: "I wrote you from Paris lately, that you should hear little of my life henceforward, but solely of my handiwork, because the first could never have a meaning more. But how when I cannot get to work, when life takes all my energy? Even to-day I can tell you nothing further, than, I hope to start work at last to-morrow." There is a refinement in this reticence which floods with light those words of last July, after the previous domestic catastrophe: "I do not write you, for fear of distressing you."

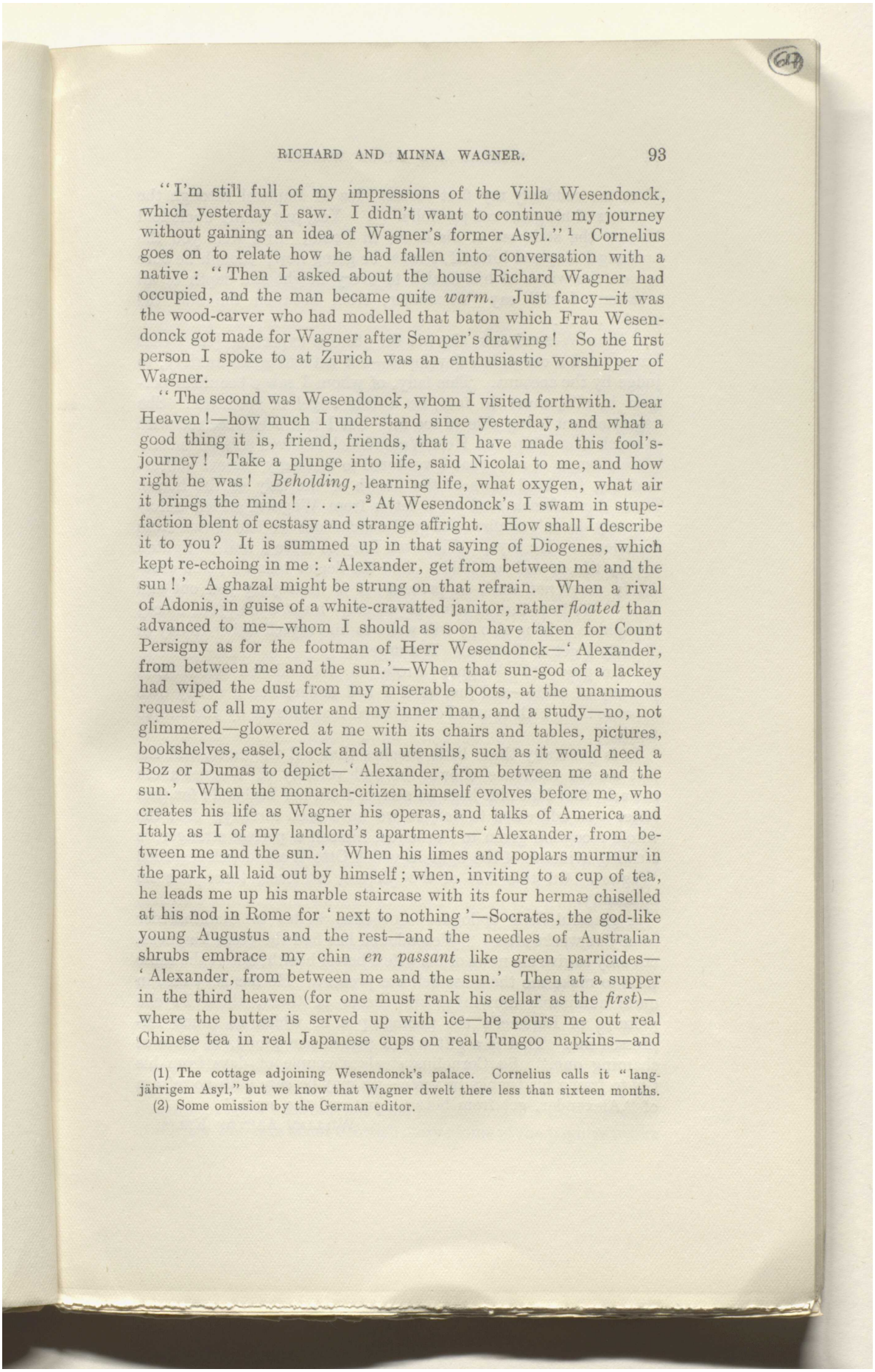
For all that, there *is* a tangible connection between the letter of March 12th to Mathilde and our principal document, since it contains a sympathetic sketch of good Cornelius' flying visit for the earliest recital of the *Meistersinger*, followed by a request: "Do write him, child; he loves you too." And that tempts me to set off the picture of the Wagner interior with Cornelius' own description of its counterpart; for the younger man indulges in another "fairy" expedition very soon. On his way from Vienna to the lake of Geneva, in search of two months' quiet for the composition of his *Cid*, Cornelius makes a halt at Zurich, whence he writes to Dr. Standhartner,[1] May 5th, 1862:—

(1) A Vienna intimate of Wagner's also.—See *R. Wagner to M. Wesendonck.*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000057

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"I'm still full of my impressions of the Villa Wesendonck, which yesterday I saw. I didn't want to continue my journey without gaining an idea of Wagner's former Asyl."[1] Cornelius goes on to relate how he had fallen into conversation with a native: "Then I asked about the house Richard Wagner had occupied, and the man became quite *warm*. Just fancy—it was the wood-carver who had modelled that baton which Frau Wesendonck got made for Wagner after Semper's drawing! So the first person I spoke to at Zurich was an enthusiastic worshipper of Wagner.

"The second was Wesendonck, whom I visited forthwith. Dear Heaven!—how much I understand since yesterday, and what a good thing it is, friend, friends, that I have made this fool's-journey! Take a plunge into life, said Nicolai to me, and how right he was! *Beholding*, learning life, what oxygen, what air it brings the mind! . . . . [2] At Wesendonck's I swam in stupefaction blent of ecstasy and strange affright. How shall I describe it to you? It is summed up in that saying of Diogenes, which kept re-echoing in me: 'Alexander, get from between me and the sun!' A ghazal might be strung on that refrain. When a rival of Adonis, in guise of a white-cravatted janitor, rather *floated* than advanced to me—whom I should as soon have taken for Count Persigny as for the footman of Herr Wesendonck—'Alexander, from between me and the sun.'—When that sun-god of a lackey had wiped the dust from my miserable boots, at the unanimous request of all my outer and my inner man, and a study—no, not glimmered—glowered at me with its chairs and tables, pictures, bookshelves, easel, clock and all utensils, such as it would need a Boz or Dumas to depict—'Alexander, from between me and the sun.' When the monarch-citizen himself evolves before me, who creates his life as Wagner his operas, and talks of America and Italy as I of my landlord's apartments—'Alexander, from between me and the sun.' When his limes and poplars murmur in the park, all laid out by himself; when, inviting to a cup of tea, he leads me up his marble staircase with its four hermæ chiselled at his nod in Rome for 'next to nothing'—Socrates, the god-like young Augustus and the rest—and the needles of Australian shrubs embrace my chin *en passant* like green parricides—'Alexander, from between me and the sun.' Then at a supper in the third heaven (for one must rank his cellar as the *first*)—where the butter is served up with ice—he pours me out real Chinese tea in real Japanese cups on real Tungoo napkins—and

(1) The cottage adjoining Wesendonck's palace. Cornelius calls it "langjährigem Asyl," but we know that Wagner dwelt there less than sixteen months.
(2) Some omission by the German editor.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000083

مكتبة قطر الوطنية
Qatar National Library

gives me suddenly my first correct idea of Raphael through the wonders of his giant red portfolio. . . . Yes, just as my uncle told him on the staircase of his house in Rome, 'And were you the archangel Raphael himself, I must be going now,' though he bore me on the wings of his wealth to every height and depth of all creation, I still say 'Alexander, from between me and the sun!' . . . .

"Frau Wesendonck, alas! is ill. She is expecting [six weeks hence] and a cough has developed—not without some anxiety, to judge by the account. This lady, of whom I saw a beautiful portrait in oils, must, in fact, be a dear angel of goodness! She regretted not being able to see me—but I had been received with so much friendship, and Herr Wesendonck behaved with such complete absence of *side*, that I ventured to leave my Geneva address and beg for kind news of the health of the lady of the house. Herr Wesendonck read me a letter from Wagner, which unfortunately doesn't confirm the good conclusions we had drawn from his silence. He says, 'Wherever I try to drive a nail to tighten up my life, it will not hold! And the doctor tells me, You *absolutely must not* work at present—it is destroying you out and out!' Write to him as often as you can—insist upon [your niece] Seraphine writing also; I will write to him myself either to-day or directly I get to Geneva! It's urgent.

"Imagine it! Wagner wrote to Wesendonck about that journey of mine—and just as if I had undertaken it at my own expense! . . . Of course I demolished that illusion by the simple truth."

It is generally these little touches that tell the most, and the last simple reference shows the full veracity of Wagner's old remark, that Mathilde kept no secrets from her husband; for that letter was addressed to *her*, as we have seen already. But the whole reception given to Cornelius, himself a perfect stranger, is striking evidence of the light in which Otto Wesendonck regarded Wagner. On this side of the picture, at least, there was no animosity.

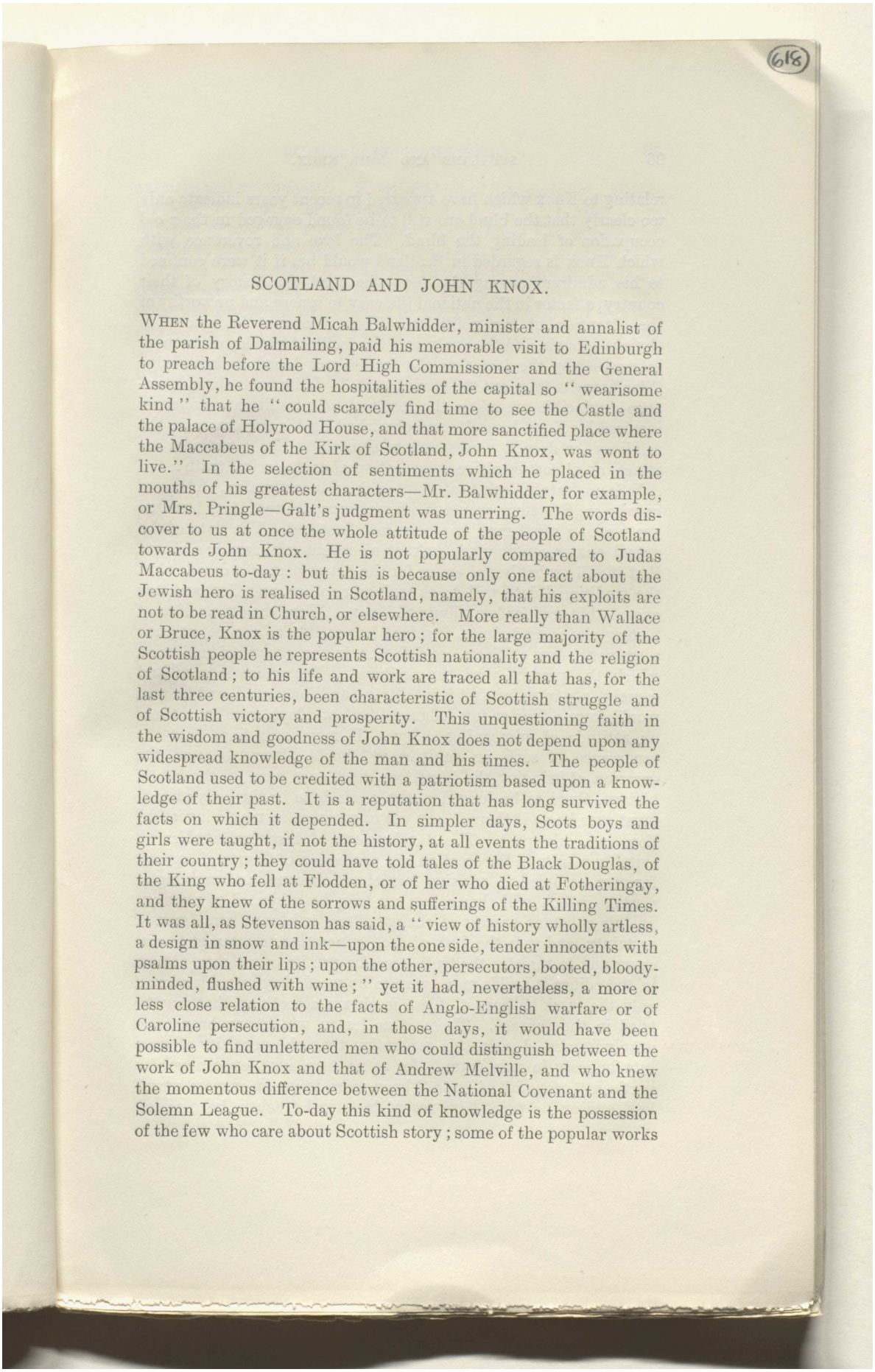
A graceful little epilogue.—Cornelius writes to Standhartner some five weeks after: "Wesendonck has had the great kindness, not only to give me news of his wife's better health, but at the same time to make me the most delicate present. He has sent me, in quite admirable drawings, six sheets of them, those Psyche pictures of Raphael's the photographs of which so much impressed me. That is a gift which makes one proud, in place of shaming one." So Cornelius steals a couple of days from his *Cid* to frame his thanks in verse—we may be sure with no refrain of "Alexander, get from between me and the sun!"

WILLIAM ASHTON ELLIS.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



SCOTLAND AND JOHN KNOX.

When the Reverend Micah Balwhidder, minister and annalist of the parish of Dalmailing, paid his memorable visit to Edinburgh to preach before the Lord High Commissioner and the General Assembly, he found the hospitalities of the capital so "wearisome kind" that he "could scarcely find time to see the Castle and the palace of Holyrood House, and that more sanctified place where the Maccabeus of the Kirk of Scotland, John Knox, was wont to live." In the selection of sentiments which he placed in the mouths of his greatest characters—Mr. Balwhidder, for example, or Mrs. Pringle—Galt's judgment was unerring. The words discover to us at once the whole attitude of the people of Scotland towards John Knox. He is not popularly compared to Judas Maccabeus to-day: but this is because only one fact about the Jewish hero is realised in Scotland, namely, that his exploits are not to be read in Church, or elsewhere. More really than Wallace or Bruce, Knox is the popular hero; for the large majority of the Scottish people he represents Scottish nationality and the religion of Scotland; to his life and work are traced all that has, for the last three centuries, been characteristic of Scottish struggle and of Scottish victory and prosperity. This unquestioning faith in the wisdom and goodness of John Knox does not depend upon any widespread knowledge of the man and his times. The people of Scotland used to be credited with a patriotism based upon a knowledge of their past. It is a reputation that has long survived the facts on which it depended. In simpler days, Scots boys and girls were taught, if not the history, at all events the traditions of their country; they could have told tales of the Black Douglas, of the King who fell at Flodden, or of her who died at Fotheringay, and they knew of the sorrows and sufferings of the Killing Times. It was all, as Stevenson has said, a "view of history wholly artless, a design in snow and ink—upon the one side, tender innocents with psalms upon their lips; upon the other, persecutors, booted, bloody-minded, flushed with wine;" yet it had, nevertheless, a more or less close relation to the facts of Anglo-English warfare or of Caroline persecution, and, in those days, it would have been possible to find unlettered men who could distinguish between the work of John Knox and that of Andrew Melville, and who knew the momentous difference between the National Covenant and the Solemn League. To-day this kind of knowledge is the possession of the few who care about Scottish story; some of the popular works

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000078

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

relating to Knox which have appeared in recent years indicate only too clearly that the blind are still to be found engaged in their old occupation of leading the blind. The love and reverence with which Knox is regarded in Scotland would be, if it were confined to his admirers among the few who read the history of their country, a factor in the national life easy to ignore and unworthy of the attention of the politician. That it cannot be ignored is obvious enough, and the analysis of the feeling is rendered the more interesting by the fact that the love is not based on knowledge "far brought from out the storied past." Is its basis sheer ignorance, invincible prejudice, the result of long tradition consciously inspired by Knox himself, and cherished by his successors in the ministry, or does it correspond to something like a national instinct, an almost intuitive appreciation of an historical truth?

It is no grateful task to attempt such an investigation. Those of us who are Scotsmen would much rather rejoice that, four hundred years ago, a great man was born into Scotland. The date of the actual quater-centenary is unknown; recent criticism has shown that it will probably not arrive for the better part of a decade; but the traditional date will do as well as another, and Scotland has chosen this year for her tribute to Knox. Were the conclusions of history clear and definite, it might be possible to silence, at such a moment, any criticism, and to join in the chorus of jubilation which the present year has produced. But praise is good and comely only in so far as it is intelligent and instructed, and he who would form a true or fair judgment cannot adopt, even for a time, an attitude of unmeaning eulogy. It may seem hard that the occurrence of such an anniversary should always become the occasion of bringing the illustrious dead once more to the bar of history, there to be judged of the deeds done in the body; but it must ever be so if there is any use or progress in man's investigation into his past. The development of historical studies inevitably results in the creation of a succession of Courts of Appeal, for ever occupied in revising former conclusions, and arriving at verdicts which will themselves ere long be subjected to revision. In this constant process of change, there is always some gain of certainty, and it is the duty of each generation to attempt to discover and to register the truth according to its own lights. Much in the edifice it builds may prove to be wood, hay, stubble; but if only the work be honest, there is always something that may be tried in the furnace. There is no lesson which has been more deeply impressed upon this generation than the necessity of absolute honesty in this regard, for at no time have exposures of a partisan "economy of truth" been more frequent or more merciless, and on no point have recent historical teachers been so un-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

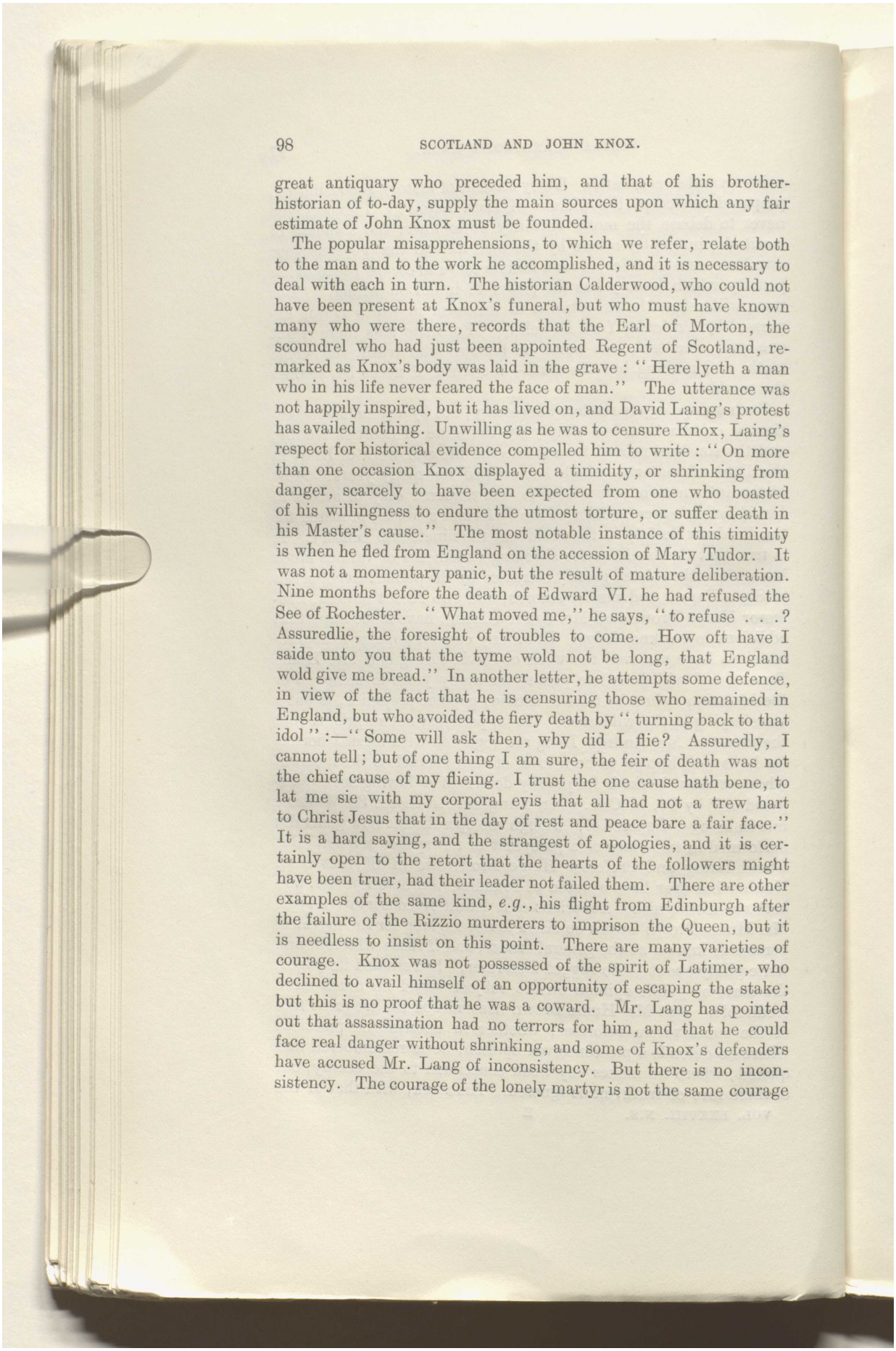
animous and so emphatic. Every student of history is not, indeed, prepared to accept the dictum of Lord Acton: "I exhort you never to debase the moral currency or to lower the standard of rectitude, but to try others by the final maxim that governs your own lives, and to suffer no man and no cause to escape the undying penalty which history has the power to inflict on wrong." But none will refuse the exhortation in the form in which it was expressed by Professor York Powell:—"For historians there is but one goal, one test, one point of honour—the truth, the whole truth, and nothing but the truth—the truth, if needs be, against the world."

Such an apology is rendered necessary, not by any sudden accession of information, but simply by the state of Scottish feeling, and the constant refusal to estimate the life and work of Knox in the light of material which has existed for many years. Most of the information now available was rendered easy of access in David Laing's great edition of the Reformer's works, prepared for the Wodrow Society in the middle of the nineteenth century. It is true that the facilities for checking statements of various kinds have, since then, been greatly increased by the publication of series of State Papers and similar records, and two recent writers, Professor Hume Brown and Mr. Andrew Lang, have made important additions to our knowledge. But many current popular misapprehensions have survived the work of David Laing and Mr. Hume Brown, and will doubtless persist for many years to come. For the historian, when he tries to combat popular prejudice, is but a voice crying in the wilderness. It is, perhaps, not surprising that the views of Mr. Andrew Lang are regarded with special horror, for he is well known to be a lover of that shameless Scot, one of whose greatest books is frequently described as having been "disposed of" by Dr. McCrie. Mr. Lang himself shares Sir Walter's fate in being "disposed of," though the operation is now generally performed in two lines of a pamphlet or newspaper article. But David Laing and Professor Hume Brown are in different case. Neither has ever been accused of sounding the heretic blast, and both are distinguished historians of a definitely conservative type. Mr. Hume Brown's work on Knox is not too long for the mythical personage known as the general reader, and if those who talk and write glibly about "the rugged Reformer," had studied its pages, the state of public opinion on the subject would be much more creditable. But Mr. Hume Brown has suffered the frequent fate of the conservative reformer, whether in doctrine or practice: where he defends a pre-conceived opinion, he is remembered and quoted; where he makes any weak concession to the enemy, out of mere love of truth, he is ignored. His work, with that of the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000082

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



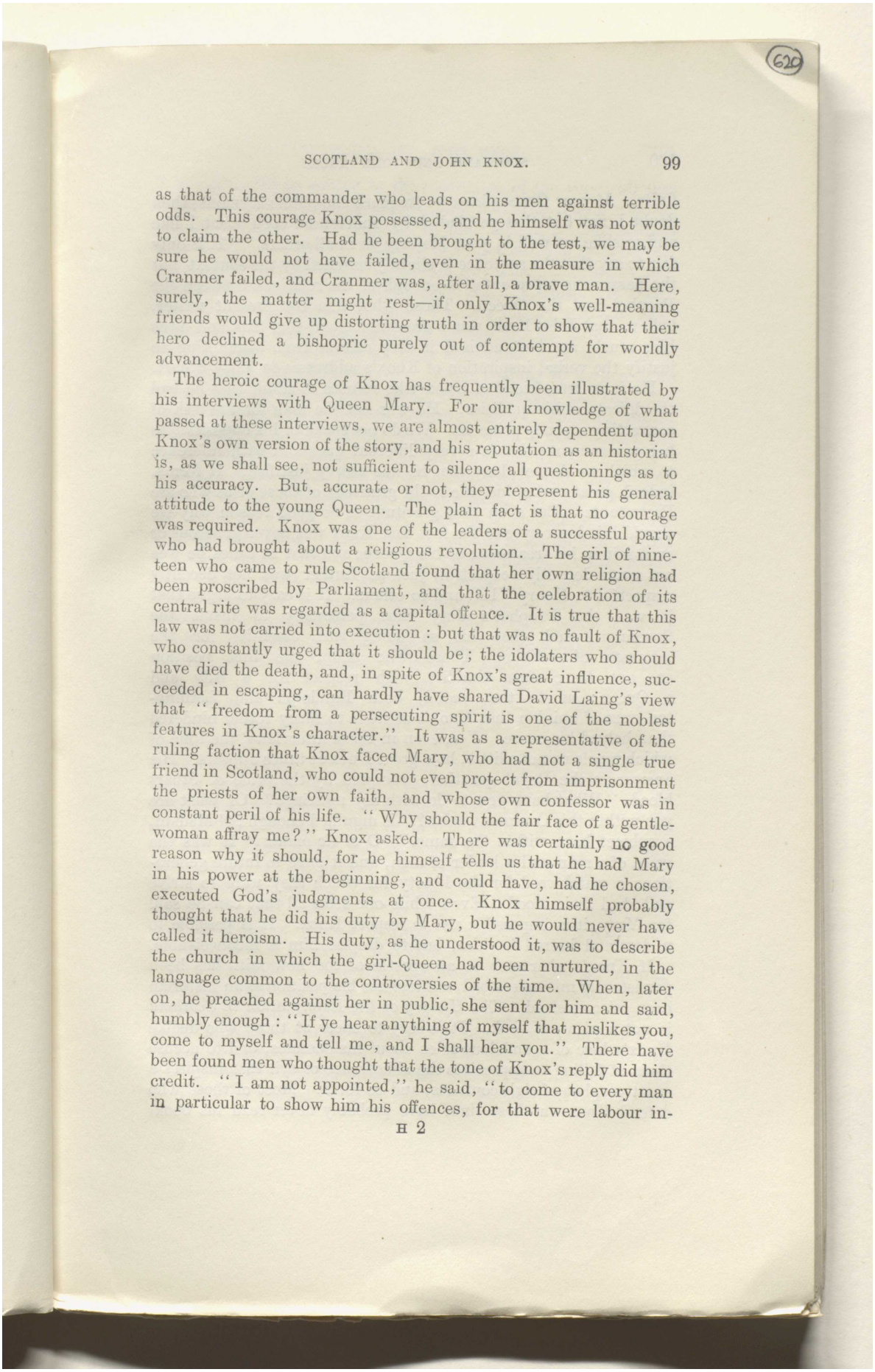
great antiquary who preceded him, and that of his brother-historian of to-day, supply the main sources upon which any fair estimate of John Knox must be founded.

The popular misapprehensions, to which we refer, relate both to the man and to the work he accomplished, and it is necessary to deal with each in turn. The historian Calderwood, who could not have been present at Knox's funeral, but who must have known many who were there, records that the Earl of Morton, the scoundrel who had just been appointed Regent of Scotland, remarked as Knox's body was laid in the grave : "Here lyeth a man who in his life never feared the face of man." The utterance was not happily inspired, but it has lived on, and David Laing's protest has availed nothing. Unwilling as he was to censure Knox, Laing's respect for historical evidence compelled him to write : "On more than one occasion Knox displayed a timidity, or shrinking from danger, scarcely to have been expected from one who boasted of his willingness to endure the utmost torture, or suffer death in his Master's cause." The most notable instance of this timidity is when he fled from England on the accession of Mary Tudor. It was not a momentary panic, but the result of mature deliberation. Nine months before the death of Edward VI. he had refused the See of Rochester. "What moved me," he says, "to refuse . . . ? Assuredlie, the foresight of troubles to come. How oft have I saide unto you that the tyme wold not be long, that England wold give me bread." In another letter, he attempts some defence, in view of the fact that he is censuring those who remained in England, but who avoided the fiery death by "turning back to that idol" :—"Some will ask then, why did I flie? Assuredly, I cannot tell; but of one thing I am sure, the feir of death was not the chief cause of my flieing. I trust the one cause hath bene, to lat me sie with my corporal eyis that all had not a trew hart to Christ Jesus that in the day of rest and peace bare a fair face." It is a hard saying, and the strangest of apologies, and it is certainly open to the retort that the hearts of the followers might have been truer, had their leader not failed them. There are other examples of the same kind, *e.g.*, his flight from Edinburgh after the failure of the Rizzio murderers to imprison the Queen, but it is needless to insist on this point. There are many varieties of courage. Knox was not possessed of the spirit of Latimer, who declined to avail himself of an opportunity of escaping the stake; but this is no proof that he was a coward. Mr. Lang has pointed out that assassination had no terrors for him, and that he could face real danger without shrinking, and some of Knox's defenders have accused Mr. Lang of inconsistency. But there is no inconsistency. The courage of the lonely martyr is not the same courage

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000009

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



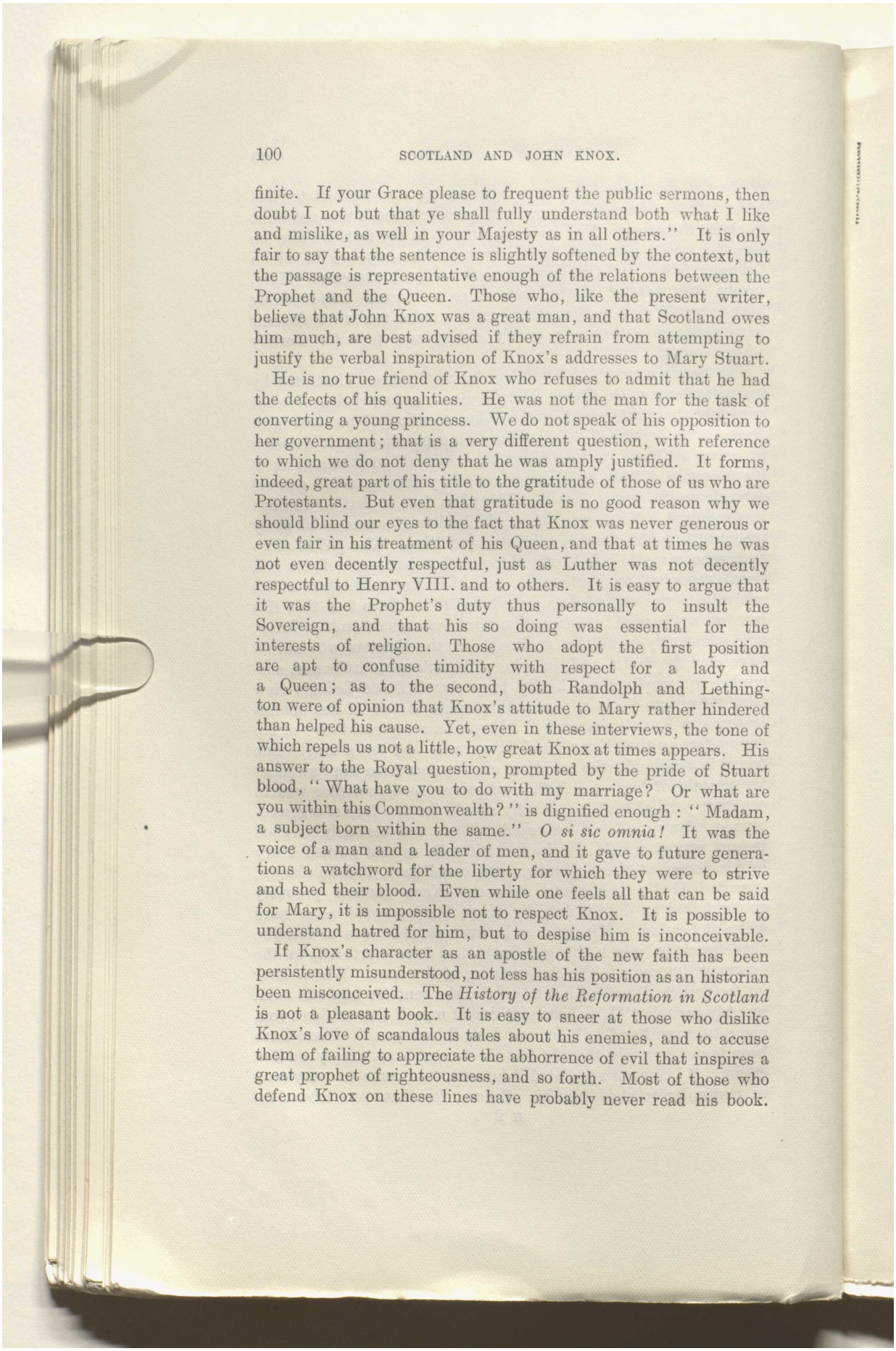
as that of the commander who leads on his men against terrible odds. This courage Knox possessed, and he himself was not wont to claim the other. Had he been brought to the test, we may be sure he would not have failed, even in the measure in which Cranmer failed, and Cranmer was, after all, a brave man. Here, surely, the matter might rest—if only Knox's well-meaning friends would give up distorting truth in order to show that their hero declined a bishopric purely out of contempt for worldly advancement.

The heroic courage of Knox has frequently been illustrated by his interviews with Queen Mary. For our knowledge of what passed at these interviews, we are almost entirely dependent upon Knox's own version of the story, and his reputation as an historian is, as we shall see, not sufficient to silence all questionings as to his accuracy. But, accurate or not, they represent his general attitude to the young Queen. The plain fact is that no courage was required. Knox was one of the leaders of a successful party who had brought about a religious revolution. The girl of nineteen who came to rule Scotland found that her own religion had been proscribed by Parliament, and that the celebration of its central rite was regarded as a capital offence. It is true that this law was not carried into execution : but that was no fault of Knox, who constantly urged that it should be ; the idolaters who should have died the death, and, in spite of Knox's great influence, succeeded in escaping, can hardly have shared David Laing's view that "freedom from a persecuting spirit is one of the noblest features in Knox's character." It was as a representative of the ruling faction that Knox faced Mary, who had not a single true friend in Scotland, who could not even protect from imprisonment the priests of her own faith, and whose own confessor was in constant peril of his life. "Why should the fair face of a gentlewoman affray me?" Knox asked. There was certainly no good reason why it should, for he himself tells us that he had Mary in his power at the beginning, and could have, had he chosen, executed God's judgments at once. Knox himself probably thought that he did his duty by Mary, but he would never have called it heroism. His duty, as he understood it, was to describe the church in which the girl-Queen had been nurtured, in the language common to the controversies of the time. When, later on, he preached against her in public, she sent for him and said, humbly enough : "If ye hear anything of myself that mislikes you, come to myself and tell me, and I shall hear you." There have been found men who thought that the tone of Knox's reply did him credit. "I am not appointed," he said, "to come to every man in particular to show him his offences, for that were labour in-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000035

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



finite. If your Grace please to frequent the public sermons, then doubt I not but that ye shall fully understand both what I like and mislike, as well in your Majesty as in all others." It is only fair to say that the sentence is slightly softened by the context, but the passage is representative enough of the relations between the Prophet and the Queen. Those who, like the present writer, believe that John Knox was a great man, and that Scotland owes him much, are best advised if they refrain from attempting to justify the verbal inspiration of Knox's addresses to Mary Stuart.

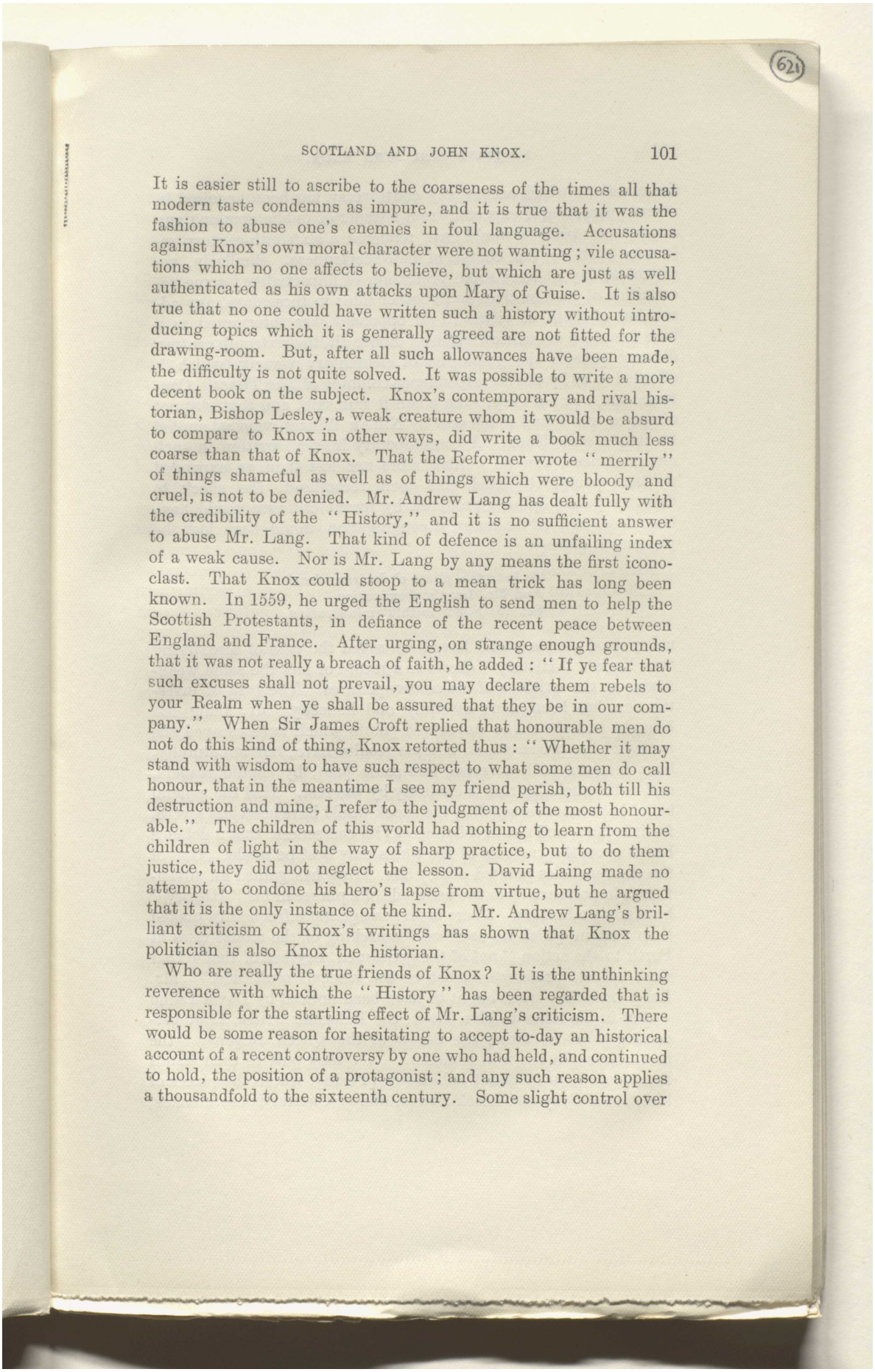
He is no true friend of Knox who refuses to admit that he had the defects of his qualities. He was not the man for the task of converting a young princess. We do not speak of his opposition to her government; that is a very different question, with reference to which we do not deny that he was amply justified. It forms, indeed, great part of his title to the gratitude of those of us who are Protestants. But even that gratitude is no good reason why we should blind our eyes to the fact that Knox was never generous or even fair in his treatment of his Queen, and that at times he was not even decently respectful, just as Luther was not decently respectful to Henry VIII. and to others. It is easy to argue that it was the Prophet's duty thus personally to insult the Sovereign, and that his so doing was essential for the interests of religion. Those who adopt the first position are apt to confuse timidity with respect for a lady and a Queen; as to the second, both Randolph and Lethington were of opinion that Knox's attitude to Mary rather hindered than helped his cause. Yet, even in these interviews, the tone of which repels us not a little, how great Knox at times appears. His answer to the Royal question, prompted by the pride of Stuart blood, "What have you to do with my marriage? Or what are you within this Commonwealth?" is dignified enough: "Madam, a subject born within the same." *O si sic omnia!* It was the voice of a man and a leader of men, and it gave to future generations a watchword for the liberty for which they were to strive and shed their blood. Even while one feels all that can be said for Mary, it is impossible not to respect Knox. It is possible to understand hatred for him, but to despise him is inconceivable.

If Knox's character as an apostle of the new faith has been persistently misunderstood, not less has his position as an historian been misconceived. The *History of the Reformation in Scotland* is not a pleasant book. It is easy to sneer at those who dislike Knox's love of scandalous tales about his enemies, and to accuse them of failing to appreciate the abhorrence of evil that inspires a great prophet of righteousness, and so forth. Most of those who defend Knox on these lines have probably never read his book.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000044

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



It is easier still to ascribe to the coarseness of the times all that modern taste condemns as impure, and it is true that it was the fashion to abuse one's enemies in foul language. Accusations against Knox's own moral character were not wanting; vile accusations which no one affects to believe, but which are just as well authenticated as his own attacks upon Mary of Guise. It is also true that no one could have written such a history without introducing topics which it is generally agreed are not fitted for the drawing-room. But, after all such allowances have been made, the difficulty is not quite solved. It was possible to write a more decent book on the subject. Knox's contemporary and rival historian, Bishop Lesley, a weak creature whom it would be absurd to compare to Knox in other ways, did write a book much less coarse than that of Knox. That the Reformer wrote "merrily" of things shameful as well as of things which were bloody and cruel, is not to be denied. Mr. Andrew Lang has dealt fully with the credibility of the "History," and it is no sufficient answer to abuse Mr. Lang. That kind of defence is an unfailing index of a weak cause. Nor is Mr. Lang by any means the first iconoclast. That Knox could stoop to a mean trick has long been known. In 1559, he urged the English to send men to help the Scottish Protestants, in defiance of the recent peace between England and France. After urging, on strange enough grounds, that it was not really a breach of faith, he added: "If ye fear that such excuses shall not prevail, you may declare them rebels to your Realm when ye shall be assured that they be in our company." When Sir James Croft replied that honourable men do not do this kind of thing, Knox retorted thus: "Whether it may stand with wisdom to have such respect to what some men do call honour, that in the meantime I see my friend perish, both till his destruction and mine, I refer to the judgment of the most honourable." The children of this world had nothing to learn from the children of light in the way of sharp practice, but to do them justice, they did not neglect the lesson. David Laing made no attempt to condone his hero's lapse from virtue, but he argued that it is the only instance of the kind. Mr. Andrew Lang's brilliant criticism of Knox's writings has shown that Knox the politician is also Knox the historian.

Who are really the true friends of Knox? It is the unthinking reverence with which the "History" has been regarded that is responsible for the startling effect of Mr. Lang's criticism. There would be some reason for hesitating to accept to-day an historical account of a recent controversy by one who had held, and continued to hold, the position of a protagonist; and any such reason applies a thousandfold to the sixteenth century. Some slight control over

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000002

مكتبة قطر الوطنية
Qatar National Library

the emotions which accompany controversy has been acquired in recent years, and is expected from a leader of public opinion; any control over passion would have rendered a sixteenth-century reformer open to the charge of half-heartedness. Similarly, we expect to-day at least some profession of impartiality: some recognition of good motives on the other side; in those days, any admission of truth or virtue in an opponent was interpreted as a base desertion of one's own cause. Above all, the sixteenth century did not possess the guarantee of elementary veracity which is afforded to us by the correspondence columns of *The Times*. Contradiction was not easy, even when it was safe, and that was not often, as was found to his cost by Ninian Winzet, who attempted to debate with Knox. A contemporary history, written in such circumstances, can be neither more nor less than an expanded political pamphlet. Had this been recognised, the shock to Scottish public opinion produced by recent criticism would have been less, and while many a congregation would have lost the pleasure it gives—

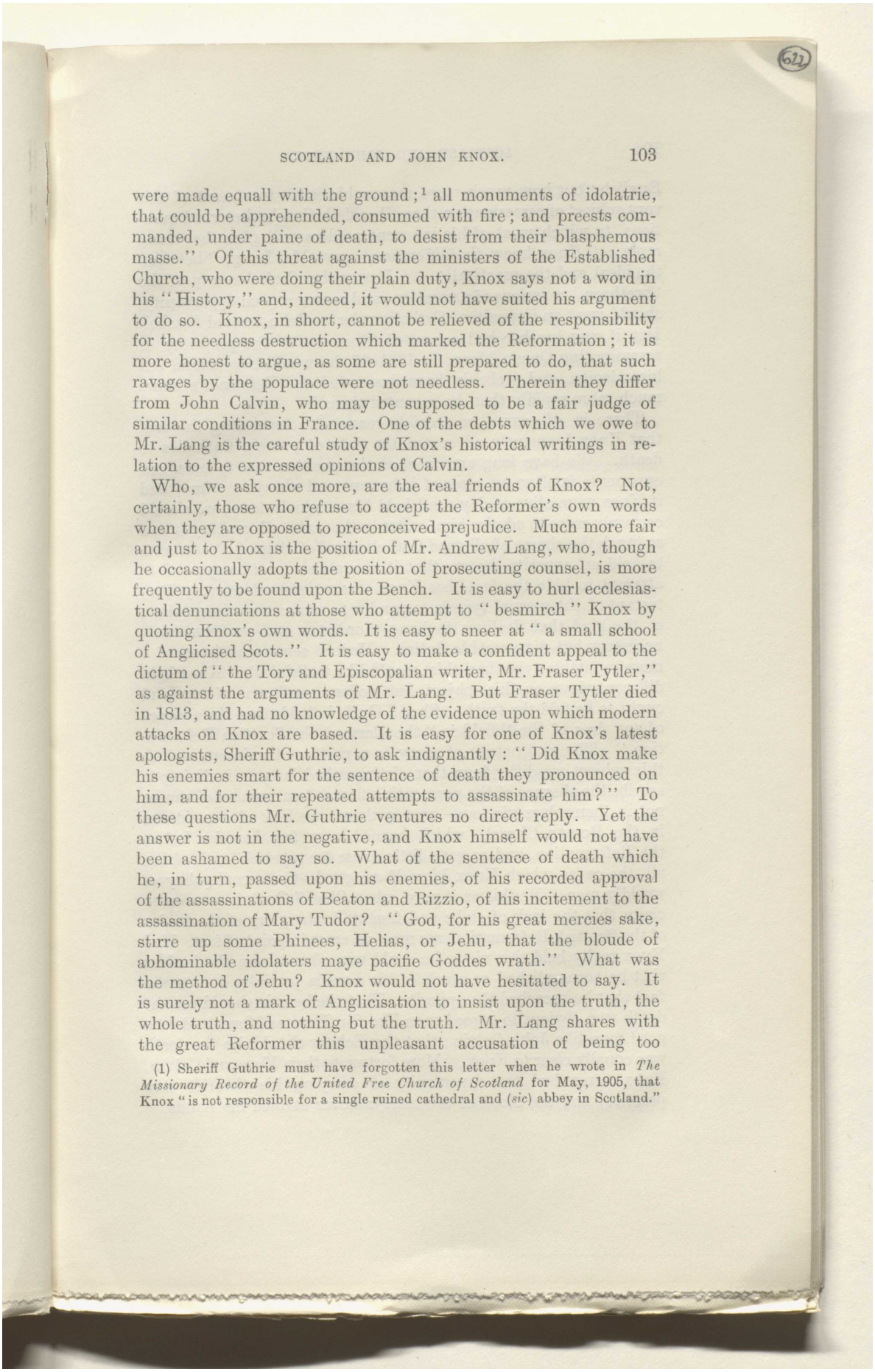
> To hear two p'ints o' doctrine clearit
> And Mr. Lang's abomination
> Set fürth wi' faithfü' ministration,

many good people would have been saved the pain of discovering that Knox's "History" shows as a record of fact the same weaknesses as the writings of his contemporaries. The task of investigation has been done carefully and honestly; Mr. Lang has brought to light many important points which have escaped the notice of his predecessors, and his results have, not unnaturally, been received with surprise, and some pain, by candid readers, and with whole-hearted incredulity by the rest. Had the general belief been more reasonable, the shock would have been less severe, for it is here, and not in reference to its coarseness, that a defence based upon the customs of the times may best be made. One of the discrepancies pointed out by Mr. Lang has gained an adventitious importance from the use made of a phrase in his "History" by Knox's admirers. There is no passage more frequently quoted than that in which he ascribes the sacking of the monasteries at Perth to the action "not of the gentilmen, neyther of thame that were earnest professouris, bot of the raschall multitude." Mr. Lang remarks—what ought to have been noticed by David Laing—that in his letter to Mrs. Lock, the Reformer writes, that, perceiving what he terms the deceit of the Queen Regent, "the brethrein soght the nixt remedie . . . . they putt to their hands to reformatioun in Sanct Johnstoun [Perth], where the places of idolotrie of Gray and Black Friers, and of Charter-house monkes,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



were made equall with the ground;[1] all monuments of idolatrie, that could be apprehended, consumed with fire; and preests commanded, under paine of death, to desist from their blasphemous masse." Of this threat against the ministers of the Established Church, who were doing their plain duty, Knox says not a word in his "History," and, indeed, it would not have suited his argument to do so. Knox, in short, cannot be relieved of the responsibility for the needless destruction which marked the Reformation; it is more honest to argue, as some are still prepared to do, that such ravages by the populace were not needless. Therein they differ from John Calvin, who may be supposed to be a fair judge of similar conditions in France. One of the debts which we owe to Mr. Lang is the careful study of Knox's historical writings in relation to the expressed opinions of Calvin.

Who, we ask once more, are the real friends of Knox? Not, certainly, those who refuse to accept the Reformer's own words when they are opposed to preconceived prejudice. Much more fair and just to Knox is the position of Mr. Andrew Lang, who, though he occasionally adopts the position of prosecuting counsel, is more frequently to be found upon the Bench. It is easy to hurl ecclesiastical denunciations at those who attempt to "besmirch" Knox by quoting Knox's own words. It is easy to sneer at "a small school of Anglicised Scots." It is easy to make a confident appeal to the dictum of "the Tory and Episcopalian writer, Mr. Fraser Tytler," as against the arguments of Mr. Lang. But Fraser Tytler died in 1813, and had no knowledge of the evidence upon which modern attacks on Knox are based. It is easy for one of Knox's latest apologists, Sheriff Guthrie, to ask indignantly: "Did Knox make his enemies smart for the sentence of death they pronounced on him, and for their repeated attempts to assassinate him?" To these questions Mr. Guthrie ventures no direct reply. Yet the answer is not in the negative, and Knox himself would not have been ashamed to say so. What of the sentence of death which he, in turn, passed upon his enemies, of his recorded approval of the assassinations of Beaton and Rizzio, of his incitement to the assassination of Mary Tudor? "God, for his great mercies sake, stirre up some Phinees, Helias, or Jehu, that the bloude of abhominable idolaters maye pacifie Goddes wrath." What was the method of Jehu? Knox would not have hesitated to say. It is surely not a mark of Anglicisation to insist upon the truth, the whole truth, and nothing but the truth. Mr. Lang shares with the great Reformer this unpleasant accusation of being too

(1) Sheriff Guthrie must have forgotten this letter when he wrote in *The Missionary Record of the United Free Church of Scotland* for May, 1905, that Knox "is not responsible for a single ruined cathedral and (*sic*) abbey in Scotland."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000af

مكتبة قطر الوطنية
Qatar National Library

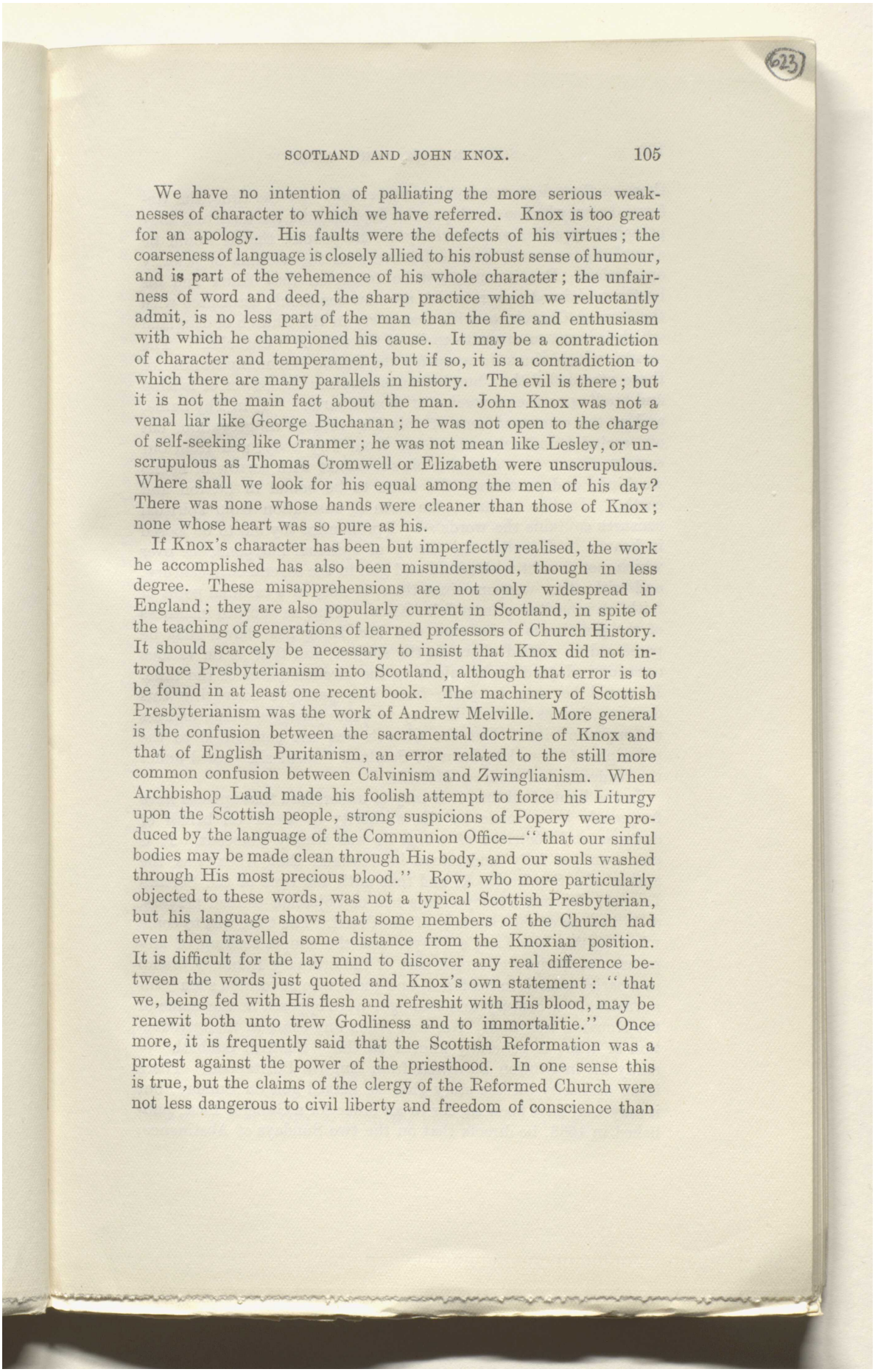
English; but how much more reasonable is his treatment of this very subject of assassination than Sheriff Guthrie's rhetorical questions, to which most of his innocent readers will give the wrong reply. "Knox knew the difference," says Mr. Lang, "between the ideal and the practical. . . . It was the ideal that any of the 'brethren,' conscious of a vocation, and seeing a good opportunity, should treat an impenitent Catholic ruler as Jehu treated Jezebel. But if any brother had consulted Knox as to the propriety of assassinating Queen Mary, in 1561–67, he would have found out his mistake, and probably have descended the Reformer's stairs much more rapidly than he mounted them."

There is, of course, no possible reason for concealing the fact that Knox frequently advocated the duty of putting Catholics to death. We have long ago reached the position that to burn our opponents is often an error of judgment and always a crime, and if Knox were alive to-day, and held his original views, we should certainly cease to admire him. But in the sixteenth century it was so much the shame of all good Catholics and of all good Protestants to hold an opposite theory, that it was no shame to any; and to attempt to hide the fact that Knox was a sixteenth-century Protestant of the normal type is to pander to modern sentimentalism of the kind that declines to hang murderers and perform other necessary but disagreeable duties. Modern sentiment (even of a more reputable type than this) would like to think that Knox held different views on this subject, but modern sentiment of any kind ought to be told the truth. Sheriff Guthrie holds that the absence of any fires of Smithfield is "the glory of the Scottish Reformation." The real nature of glory is a matter of opinion, and on this subject we differ from that distinguished lawyer, inclining to ascribe the absence of the persecuting flames to a number of causes not in themselves glorious—among them, the lack of earnestness in the Roman Church, which burned very few heretics before the Reformation, and so gave little cause for reprisals, and, above all, the cause which Knox himself assigned—the carnal policy of worldly men. Be this as it may, when Sheriff Guthrie goes on to claim that the lack of stake and faggots is the glory of the leader of the Scottish Reformation, we meet an error in point of fact. Had Knox really held this view, he could never have been the leader; that he accomplished so much of his aims is partially due to the fact that he preached the opposite. That the heretic should die the death was obvious to a good man like Sir Thomas More, and to a good man like John Calvin; that the idolater should die the death was equally clear to Knox. More fortunate than More and Calvin, Knox never had the opportunity of carrying his theories into practice, and the blood of the martyr never stained his hands.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000ba

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



We have no intention of palliating the more serious weaknesses of character to which we have referred. Knox is too great for an apology. His faults were the defects of his virtues; the coarseness of language is closely allied to his robust sense of humour, and is part of the vehemence of his whole character; the unfairness of word and deed, the sharp practice which we reluctantly admit, is no less part of the man than the fire and enthusiasm with which he championed his cause. It may be a contradiction of character and temperament, but if so, it is a contradiction to which there are many parallels in history. The evil is there; but it is not the main fact about the man. John Knox was not a venal liar like George Buchanan; he was not open to the charge of self-seeking like Cranmer; he was not mean like Lesley, or unscrupulous as Thomas Cromwell or Elizabeth were unscrupulous. Where shall we look for his equal among the men of his day? There was none whose hands were cleaner than those of Knox; none whose heart was so pure as his.

If Knox's character has been but imperfectly realised, the work he accomplished has also been misunderstood, though in less degree. These misapprehensions are not only widespread in England; they are also popularly current in Scotland, in spite of the teaching of generations of learned professors of Church History. It should scarcely be necessary to insist that Knox did not introduce Presbyterianism into Scotland, although that error is to be found in at least one recent book. The machinery of Scottish Presbyterianism was the work of Andrew Melville. More general is the confusion between the sacramental doctrine of Knox and that of English Puritanism, an error related to the still more common confusion between Calvinism and Zwinglianism. When Archbishop Laud made his foolish attempt to force his Liturgy upon the Scottish people, strong suspicions of Popery were produced by the language of the Communion Office—"that our sinful bodies may be made clean through His body, and our souls washed through His most precious blood." Row, who more particularly objected to these words, was not a typical Scottish Presbyterian, but his language shows that some members of the Church had even then travelled some distance from the Knoxian position. It is difficult for the lay mind to discover any real difference between the words just quoted and Knox's own statement: "that we, being fed with His flesh and refreshit with His blood, may be renewit both unto trew Godliness and to immortalitie." Once more, it is frequently said that the Scottish Reformation was a protest against the power of the priesthood. In one sense this is true, but the claims of the clergy of the Reformed Church were not less dangerous to civil liberty and freedom of conscience than

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

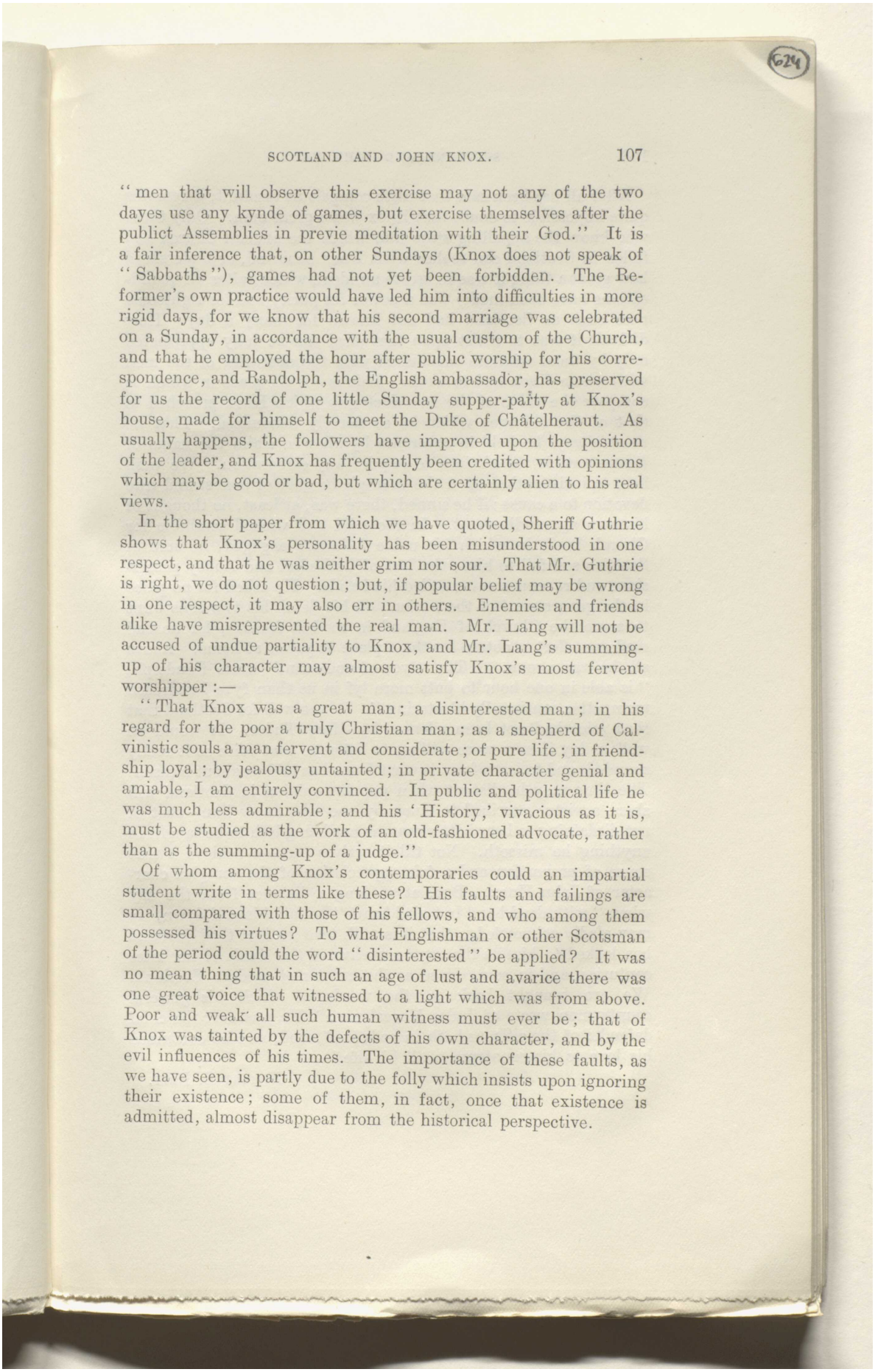
those of the priests whom they succeeded. At the time, the Reformed clergy had so much popular support, and the doctrines they preached appealed so powerfully to the people, that it would be absurd to represent Knox's followers as the victims of priestly oppression. But it must not be forgotten that Knox and his brethren claimed powers which are now commonly associated with the Roman Church, or with that party in the Church of England which is wont to arrogate to itself the title of "Catholic." The service which Knox drew up for the Public Excommunication of those who defied the Church Courts assumes the power of loosing and binding as the possession of these Courts. "I, in Thy name, and at the commandment of this Thy present congregation, cut off, seclude, and excommunicate from Thy body, and from our society, N. . . . . And this his sin (albeit with sorrow of heart) we bind, and pronounce the same to be bound in heaven and earth." In like manner, the form of absolution from spiritual censures contains the words:—"I pronounce thy sin to be loosed in heaven." Finally, the theory of spiritual independence over which men fought with sword and gun in the seventeenth century, and with other weapons since then, is not, as a cardinal point of faith, an inheritance from John Knox. That he afforded instances of the practice is quite true, but Mr. Lang has shown that he possessed no settled views on the subject, and that he on various occasions adapted his opinions to the circumstances of the time. It would be easy to quote from him passages conveying this doctrine, just as it would be easy to quote passages which express an opposite view. But the Church was not committed to the principle of "two kingdoms in Scotland" until she passed under the leadership of Andrew Melville.

In the light of all this, it is easy to understand that appeals have frequently been made to the authority of Knox on behalf of customs and doctrines of which he was wholly innocent. It is not even yet fully understood in Scotland that Knox was the author of a Service-Book, and that until the time of the Solemn League, Scottish Presbyterians had no objection to read prayers, or to the use of the Gloria or of the Creed. The time was to come when neither the Lord's Prayer nor the simple reading of any passage of Scripture formed part of the ordinary Public Worship in a parish church in Scotland, and those who advocated such "innovations," a century and less ago, were opposed in the name of the Knoxian tradition. Nor had Knox any share in the introduction of what is generally known as the "Scottish Sabbath"—really an institution borrowed from English Puritanism. There is no authority for the story that he played golf on Sunday, but it may well have been so, for in an order for a General Fast, published in 1566, he directs that on the two Sundays of Abstinence,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00001f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"men that will observe this exercise may not any of the two dayes use any kynde of games, but exercise themselves after the publict Assemblies in previe meditation with their God." It is a fair inference that, on other Sundays (Knox does not speak of "Sabbaths"), games had not yet been forbidden. The Reformer's own practice would have led him into difficulties in more rigid days, for we know that his second marriage was celebrated on a Sunday, in accordance with the usual custom of the Church, and that he employed the hour after public worship for his correspondence, and Randolph, the English ambassador, has preserved for us the record of one little Sunday supper-party at Knox's house, made for himself to meet the Duke of Châtelheraut. As usually happens, the followers have improved upon the position of the leader, and Knox has frequently been credited with opinions which may be good or bad, but which are certainly alien to his real views.

In the short paper from which we have quoted, Sheriff Guthrie shows that Knox's personality has been misunderstood in one respect, and that he was neither grim nor sour. That Mr. Guthrie is right, we do not question; but, if popular belief may be wrong in one respect, it may also err in others. Enemies and friends alike have misrepresented the real man. Mr. Lang will not be accused of undue partiality to Knox, and Mr. Lang's summing-up of his character may almost satisfy Knox's most fervent worshipper:—

"That Knox was a great man; a disinterested man; in his regard for the poor a truly Christian man; as a shepherd of Calvinistic souls a man fervent and considerate; of pure life; in friendship loyal; by jealousy untainted; in private character genial and amiable, I am entirely convinced. In public and political life he was much less admirable; and his 'History,' vivacious as it is, must be studied as the work of an old-fashioned advocate, rather than as the summing-up of a judge."

Of whom among Knox's contemporaries could an impartial student write in terms like these? His faults and failings are small compared with those of his fellows, and who among them possessed his virtues? To what Englishman or other Scotsman of the period could the word "disinterested" be applied? It was no mean thing that in such an age of lust and avarice there was one great voice that witnessed to a light which was from above. Poor and weak all such human witness must ever be; that of Knox was tainted by the defects of his own character, and by the evil influences of his times. The importance of these faults, as we have seen, is partly due to the folly which insists upon ignoring their existence; some of them, in fact, once that existence is admitted, almost disappear from the historical perspective.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

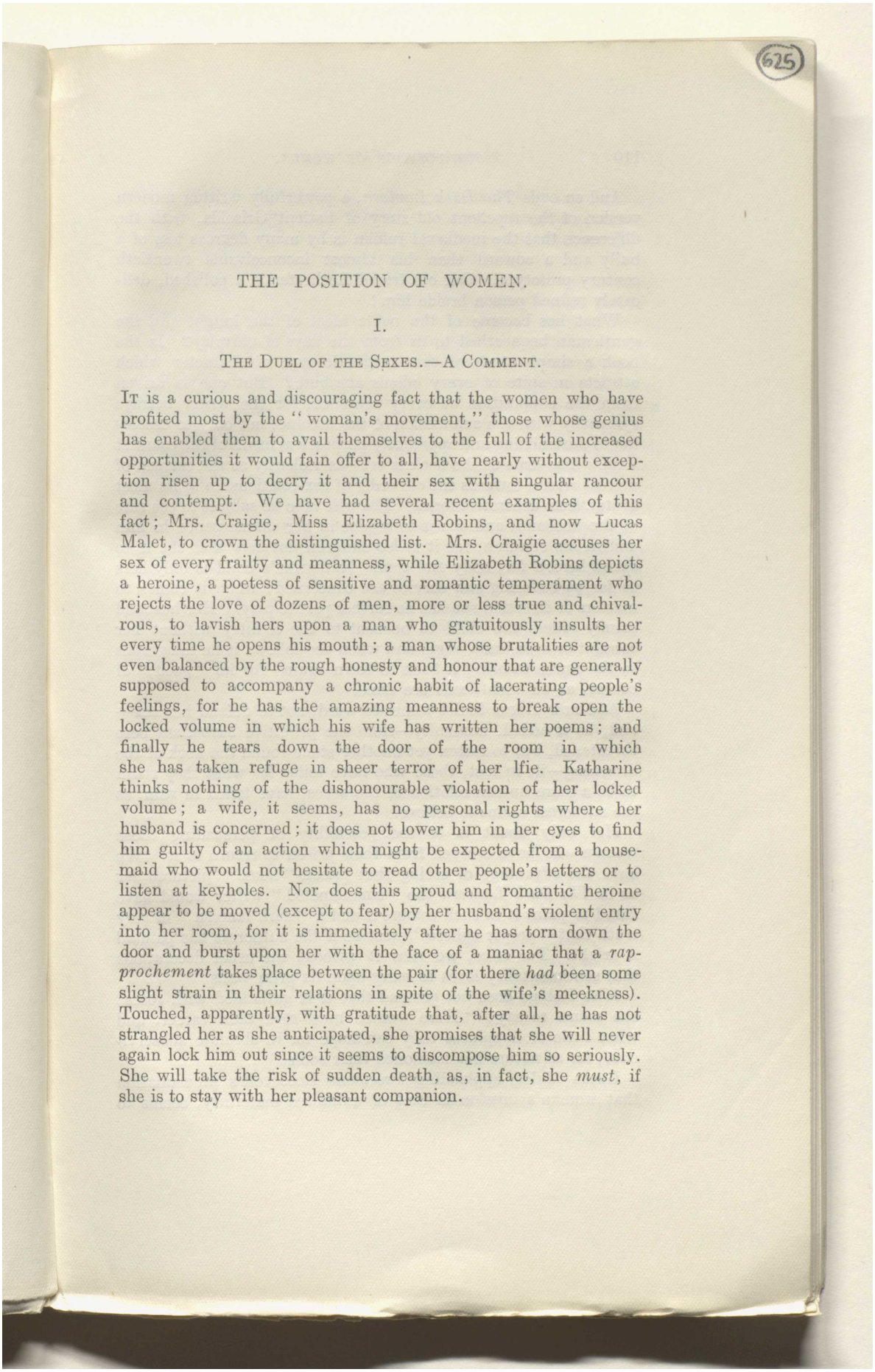
After all has been said that truth compels us to admit, it remains quite impossible to doubt that Knox was a great man. Only those who know the appalling state into which the ancient Church had fallen in Scotland can realise what Knox achieved, or understand how great a thing it was to create an ideal, which (after all qualifications have been made) was a power for purity and for righteousness such as Scotland had not known for many a day. How difficult it was to insist upon that ideal can be fully appreciated only by those who are acquainted with the character of the men with whom Knox had to work. This is not the place in which to compare the value of the new doctrines which Knox preached to that of the old ones which he so fiercely denounced. That he must always be held in reverence by all who claim the name of Protestant, is too obvious to require any elaboration. We wish here to insist rather upon the example he gave of honest and true devotion to a cause; if he sinned, there was, at least, no thought of his own aggrandisement. In the wild and wicked scramble for Church lands in which his noble followers engaged, no acre of Scottish soil fell to him; the loot of Cathedral and Abbey possessions and revenues never soiled his hands. He asked for no place in the government of the nation; on his death his two sons went to serve the Church of England in modest fashion, for he had made no effort to obtain for them place or power at home. Above all, he was a man. "The voyce of one man," wrote Randolph, "is able in one hour to putt more lyf in us than fyve hundredth trumpettes continually blustering." It was well for Scotland that that voice had not been silenced by Mary Tudor. It would be well to-day if men were willing to listen to that voice as it really sounded, and to learn from it what Knox has told us about himself. The time may be distant when popular opinion in Scotland will share a virtue ascribed to Knox by one who knew him—that of not disdaining to hear better reasons nor being loth to be taught in anything he misseth. Not till it arrives can we achieve a true sense of proportion and a fair appreciation of the complex character of John Knox. But, at so long a distance from the day when "with dead hand but glad heart" he laid himself down, we may gladly acknowledge that it is with true instinct that Scotland has looked to him as the representative of the ideals of her later centuries, and in some sense as the creator of modern Scotland. We are brought back to the words in which his grateful countrymen wrote of Judas Maccabeus: "He was ever the chief defender of the citizens both in body and mind, and he continued his love to his countrymen all his life."

ROBERT S. RAIT.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



625

THE POSITION OF WOMEN.

I.

The Duel of the Sexes.—A Comment.

It is a curious and discouraging fact that the women who have profited most by the "woman's movement," those whose genius has enabled them to avail themselves to the full of the increased opportunities it would fain offer to all, have nearly without exception risen up to decry it and their sex with singular rancour and contempt. We have had several recent examples of this fact; Mrs. Craigie, Miss Elizabeth Robins, and now Lucas Malet, to crown the distinguished list. Mrs. Craigie accuses her sex of every frailty and meanness, while Elizabeth Robins depicts a heroine, a poetess of sensitive and romantic temperament who rejects the love of dozens of men, more or less true and chivalrous, to lavish hers upon a man who gratuitously insults her every time he opens his mouth; a man whose brutalities are not even balanced by the rough honesty and honour that are generally supposed to accompany a chronic habit of lacerating people's feelings, for he has the amazing meanness to break open the locked volume in which his wife has written her poems; and finally he tears down the door of the room in which she has taken refuge in sheer terror of her lfie. Katharine thinks nothing of the dishonourable violation of her locked volume; a wife, it seems, has no personal rights where her husband is concerned; it does not lower him in her eyes to find him guilty of an action which might be expected from a housemaid who would not hesitate to read other people's letters or to listen at keyholes. Nor does this proud and romantic heroine appear to be moved (except to fear) by her husband's violent entry into her room, for it is immediately after he has torn down the door and burst upon her with the face of a maniac that a *rapprochement* takes place between the pair (for there *had* been some slight strain in their relations in spite of the wife's meekness). Touched, apparently, with gratitude that, after all, he has not strangled her as she anticipated, she promises that she will never again lock him out since it seems to discompose him so seriously. She will take the risk of sudden death, as, in fact, she *must*, if she is to stay with her pleasant companion.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

And so ends *The Dark Lantern*, a powerfully written modern version of the repellent old story of Patient Griselda, with the difference that the mediæval ruffian is by many degrees less of a bully and a coward than his almost inconceivable twentieth century prototype. Our old friend Rochester is a polished, delicately refined person beside him!

What has become of the noble ideal of the knight and the gentleman bequeathed to us from the days of chivalry? Is the book a simple study of that magnetic type of character which attracts in spite of every odious attribute? But one is driven from the supposition at every sentence, for the writer betrays sympathy with the submission of the heroine, not only to cruelty but to unremitting and apparently purposeless insult of the coarsest kind. The drift of the book is set—as violently as the current of a great river—towards the old order of sex-relationship in its most brutal, least decorative form. The wife is to be subject to the rule of the husband, and she is to rejoice in her submergence in him and in his children, for it is *his* children not *hers* that she is to spend herself for, body and soul. Katharine's child is only hers as far as suffering and service are concerned; when it comes to matters of direction she has no further part to play. Her husband calmly orders the child to be sent to the country without her consent or even knowledge, and when she follows it he telegraphs to the nurse to bring it back to town again—for its "good," of course, as all such deeds are done.

And now Lucas Malet comes forward, not to defend her sex—and, be it added, humanity—from the primitive barbarism here threatened, but to fasten yet another stone round the neck of the drowning—if, in fact, those who have toiled for what they claim to be a more human relation of the sexes, have toiled in vain, as the authoress seems to believe.

Her only doubt is of the possibility of persuading those women who have escaped from their prison to return to it. We have the advantage of seeing that prison-"home" pictured for us in *The Dark Lantern* (no "emancipated" writer would have dared to paint it in such colours!) and a "dark lantern" in very truth that "proper sphere" must be if the authoress has painted it aright. For once, we view it without the usual decorations that sentimentality loves to hang upon its grim walls.

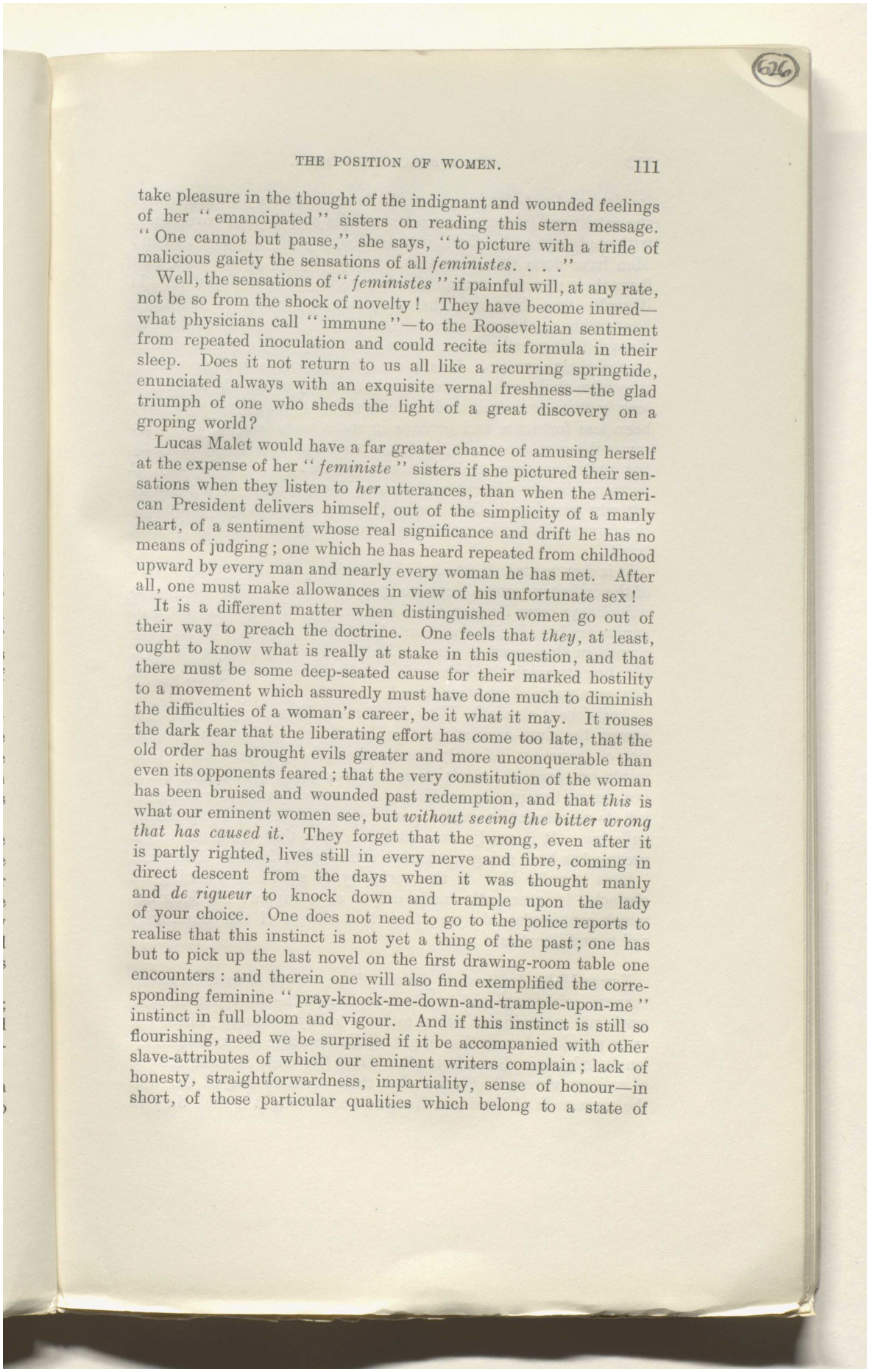
Miss Robins does not pretend that it is garlanded with roses; she seems to say: "Here women must seek their career, and what little of happiness they can hope for in absolute subservience, for so nature has fashioned their souls."

Lucas Malet, applauding President Roosevelt's proclamation that woman's mission is that of unlimited maternity, seems to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00001a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



take pleasure in the thought of the indignant and wounded feelings of her "emancipated" sisters on reading this stern message. "One cannot but pause," she says, "to picture with a trifle of malicious gaiety the sensations of all *feministes*. . . ."

Well, the sensations of "*feministes*" if painful will, at any rate, not be so from the shock of novelty! They have become inured—what physicians call "immune"—to the Rooseveltian sentiment from repeated inoculation and could recite its formula in their sleep. Does it not return to us all like a recurring springtide, enunciated always with an exquisite vernal freshness—the glad triumph of one who sheds the light of a great discovery on a groping world?

Lucas Malet would have a far greater chance of amusing herself at the expense of her "*feministe*" sisters if she pictured their sensations when they listen to *her* utterances, than when the American President delivers himself, out of the simplicity of a manly heart, of a sentiment whose real significance and drift he has no means of judging; one which he has heard repeated from childhood upward by every man and nearly every woman he has met. After all, one must make allowances in view of his unfortunate sex!

It is a different matter when distinguished women go out of their way to preach the doctrine. One feels that *they*, at least, ought to know what is really at stake in this question, and that there must be some deep-seated cause for their marked hostility to a movement which assuredly must have done much to diminish the difficulties of a woman's career, be it what it may. It rouses the dark fear that the liberating effort has come too late, that the old order has brought evils greater and more unconquerable than even its opponents feared; that the very constitution of the woman has been bruised and wounded past redemption, and that *this* is what our eminent women see, but *without seeing the bitter wrong that has caused it*. They forget that the wrong, even after it is partly righted, lives still in every nerve and fibre, coming in direct descent from the days when it was thought manly and *de rigueur* to knock down and trample upon the lady of your choice. One does not need to go to the police reports to realise that this instinct is not yet a thing of the past; one has but to pick up the last novel on the first drawing-room table one encounters: and therein one will also find exemplified the corresponding feminine "pray-knock-me-down-and-trample-upon-me" instinct in full bloom and vigour. And if this instinct is still so flourishing, need we be surprised if it be accompanied with other slave-attributes of which our eminent writers complain; lack of honesty, straightforwardness, impartiality, sense of honour—in short, of those particular qualities which belong to a state of

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000007

مكتبة قطر الوطنية
Qatar National Library

freedom and not of subservience? Is it fair to deny human beings the conditions for acquiring certain traits and then to cover them with contempt and ridicule because they are often without them? Men have done this from time immemorial; it seems hard that from their own sex women should receive the same injustice. Is it really true, however, that they are so lacking in the more honourable qualities at the present day? Individual experience gives differing testimony, in some cases very different indeed from that of their accusers. In any case, is it generous in those women who have shaken themselves free from many of the old fetters, to look back so scornfully and mercilessly on those others who have been less fortunate and perhaps in some cases less valiant? To say nothing of generosity, is it good sociology to attribute nothing but paltry motives and ridiculous conduct to a whole body of persons who are advocates of certain ideas, even if these ideas be entirely mistaken? One surely does not arrive at understanding the forces at work in society by approaching its members in that spirit.

It is easy to make light of the hampering and imprisoning nature of the orthodox woman's sphere by asserting that, after all, genius will always carve its way out of any prison. First of all, cases of genius are here beside the point, for it is *all* women who are concerned in this great question. But if genius does carve its way, bleeding, through the dense prison walls of human stupidity, what a piteous waste of precious force!

And *does* it always? Why do we never hear of a genius arising among the slum-population of our great cities, where the proportion of chances is infinitely greater than in any other class? Certainly not because among those millions no genius is ever born, but simply because the conditions are so cruelly unfavourable as to kill its manifestation except, perhaps, in the form of inexpressible suffering. It is surely impossible to doubt that the same tragic process has been going on through centuries in the case of women.

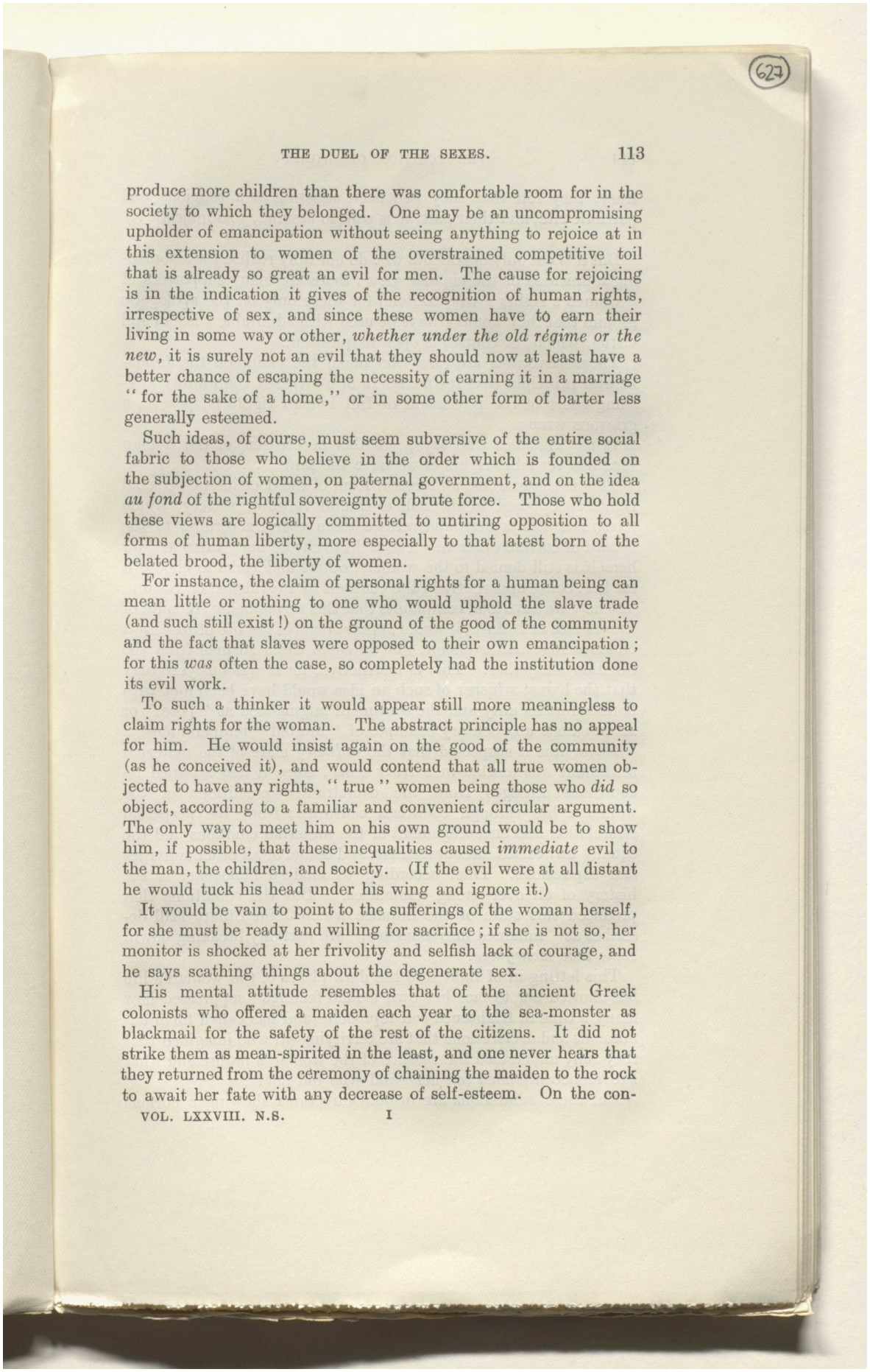
This popular idea of the certainty of genius overcoming all obstacles is incessantly made use of as a support for doctrines which contemplate denying to certain classes of the community rights and liberties.

Lucas Malet draws a sad picture of the crowds of modern bread-earners—girls employed in offices and so forth—hurrying to their work and returning at night to some lonely lodging. There are some populous homes that might with advantage be exchanged for lonely lodgings. But what, after all, is the cause of these crowds of solitary women? Simply that their mothers obeyed too well the commands of President Roosevelt and thought it their duty to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



produce more children than there was comfortable room for in the society to which they belonged. One may be an uncompromising upholder of emancipation without seeing anything to rejoice at in this extension to women of the overstrained competitive toil that is already so great an evil for men. The cause for rejoicing is in the indication it gives of the recognition of human rights, irrespective of sex, and since these women have to earn their living in some way or other, *whether under the old régime or the new*, it is surely not an evil that they should now at least have a better chance of escaping the necessity of earning it in a marriage "for the sake of a home," or in some other form of barter less generally esteemed.

Such ideas, of course, must seem subversive of the entire social fabric to those who believe in the order which is founded on the subjection of women, on paternal government, and on the idea *au fond* of the rightful sovereignty of brute force. Those who hold these views are logically committed to untiring opposition to all forms of human liberty, more especially to that latest born of the belated brood, the liberty of women.

For instance, the claim of personal rights for a human being can mean little or nothing to one who would uphold the slave trade (and such still exist!) on the ground of the good of the community and the fact that slaves were opposed to their own emancipation; for this *was* often the case, so completely had the institution done its evil work.

To such a thinker it would appear still more meaningless to claim rights for the woman. The abstract principle has no appeal for him. He would insist again on the good of the community (as he conceived it), and would contend that all true women objected to have any rights, "true" women being those who *did* so object, according to a familiar and convenient circular argument. The only way to meet him on his own ground would be to show him, if possible, that these inequalities caused *immediate* evil to the man, the children, and society. (If the evil were at all distant he would tuck his head under his wing and ignore it.)

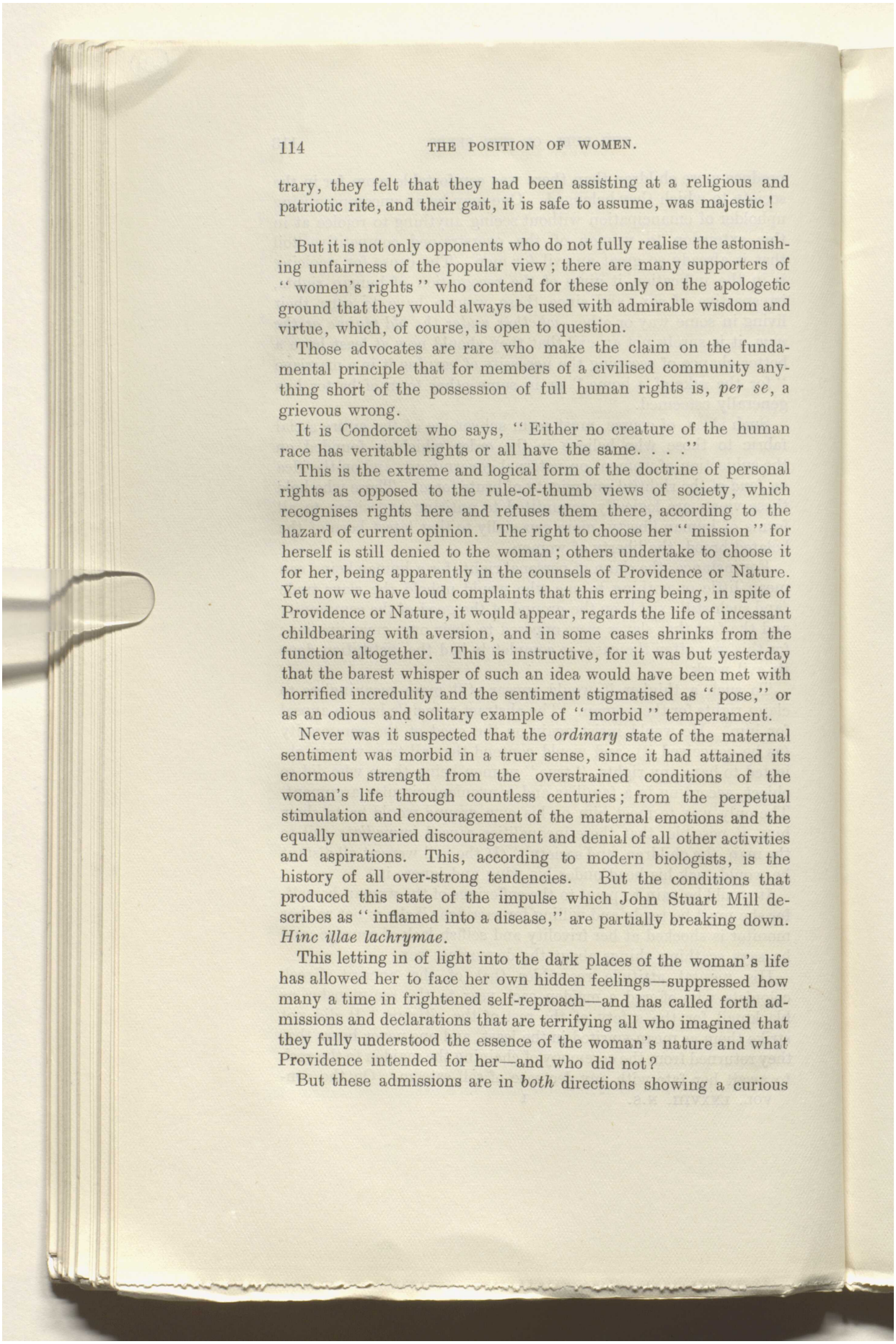
It would be vain to point to the sufferings of the woman herself, for she must be ready and willing for sacrifice; if she is not so, her monitor is shocked at her frivolity and selfish lack of courage, and he says scathing things about the degenerate sex.

His mental attitude resembles that of the ancient Greek colonists who offered a maiden each year to the sea-monster as blackmail for the safety of the rest of the citizens. It did not strike them as mean-spirited in the least, and one never hears that they returned from the ceremony of chaining the maiden to the rock to await her fate with any decrease of self-esteem. On the con-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



trary, they felt that they had been assisting at a religious and patriotic rite, and their gait, it is safe to assume, was majestic!

But it is not only opponents who do not fully realise the astonishing unfairness of the popular view; there are many supporters of "women's rights" who contend for these only on the apologetic ground that they would always be used with admirable wisdom and virtue, which, of course, is open to question.

Those advocates are rare who make the claim on the fundamental principle that for members of a civilised community anything short of the possession of full human rights is, *per se*, a grievous wrong.

It is Condorcet who says, "Either no creature of the human race has veritable rights or all have the same. . . ."

This is the extreme and logical form of the doctrine of personal rights as opposed to the rule-of-thumb views of society, which recognises rights here and refuses them there, according to the hazard of current opinion. The right to choose her "mission" for herself is still denied to the woman; others undertake to choose it for her, being apparently in the counsels of Providence or Nature. Yet now we have loud complaints that this erring being, in spite of Providence or Nature, it would appear, regards the life of incessant childbearing with aversion, and in some cases shrinks from the function altogether. This is instructive, for it was but yesterday that the barest whisper of such an idea would have been met with horrified incredulity and the sentiment stigmatised as "pose," or as an odious and solitary example of "morbid" temperament.

Never was it suspected that the *ordinary* state of the maternal sentiment was morbid in a truer sense, since it had attained its enormous strength from the overstrained conditions of the woman's life through countless centuries; from the perpetual stimulation and encouragement of the maternal emotions and the equally unwearied discouragement and denial of all other activities and aspirations. This, according to modern biologists, is the history of all over-strong tendencies. But the conditions that produced this state of the impulse which John Stuart Mill describes as "inflamed into a disease," are partially breaking down. *Hinc illae lachrymae.*

This letting in of light into the dark places of the woman's life has allowed her to face her own hidden feelings—suppressed how many a time in frightened self-reproach—and has called forth admissions and declarations that are terrifying all who imagined that they fully understood the essence of the woman's nature and what Providence intended for her—and who did not?

But these admissions are in *both* directions showing a curious

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

divergence in development among this complex sex; and in both directions they seem to create almost equal horror!

On the one hand we find the shrinking from the maternal function in varying degrees of intensity; on the other a desperate and overwhelming desire for it, quite regardless of the proprieties.

If some strange facts of history were more generally known,[1] the methods of reward and threat and savage punishment resorted to among almost every people of the world in order to persuade and force women to their "divine mission," there would be less surprise at this painful obsession in unapproved circumstances. Since the numbers of the sexes are not equal, many women must remain unmarried, and the suffering that often arises from this cause is piteous. Brought up, as a rule, with the sole idea of marriage and the domestic life, they have few resources and their existence becomes a struggle between instinct and principle, or settles down into a state of hopeless endurance. Escape for a woman of this type there is none, for she will not satisfy her desire for the duties of motherhood by adopting and caring for the children of others. No, other people's children have not caused her unspeakable agony, have not perchance broken her health, her nerves, and perhaps her heart. Therefore—so says this strange instinct—they cannot claim the devotion of her longing heart, be their helplessness and their need ever so pitiful! This blind animal feeling we are taught to call holy, and supremely unselfish! Yet this very sentiment in a stepmother actually prompts to hardness and injustice towards those children in her power who do not happen to be compounded of her own flesh and blood! Such a woman, not really fit to bring up a canary, is thought a suitable educator for a family of human creatures, who are destined, in their different degrees, to be makers of the world! It is preposterous to claim for such an impulse a place among the higher affections. The world is miserable and tormented because its inhabitants are all more or less like the orthodox mother—who has no tenderness but for her *own*.

It is surely time for a little plain-speaking on this subject, especially at a moment when we seem to be threatened by a movement of thought that would drive the developing race back upon mere instinct, just when it seemed to be on the eve of rising to the level of a more human sentiment.

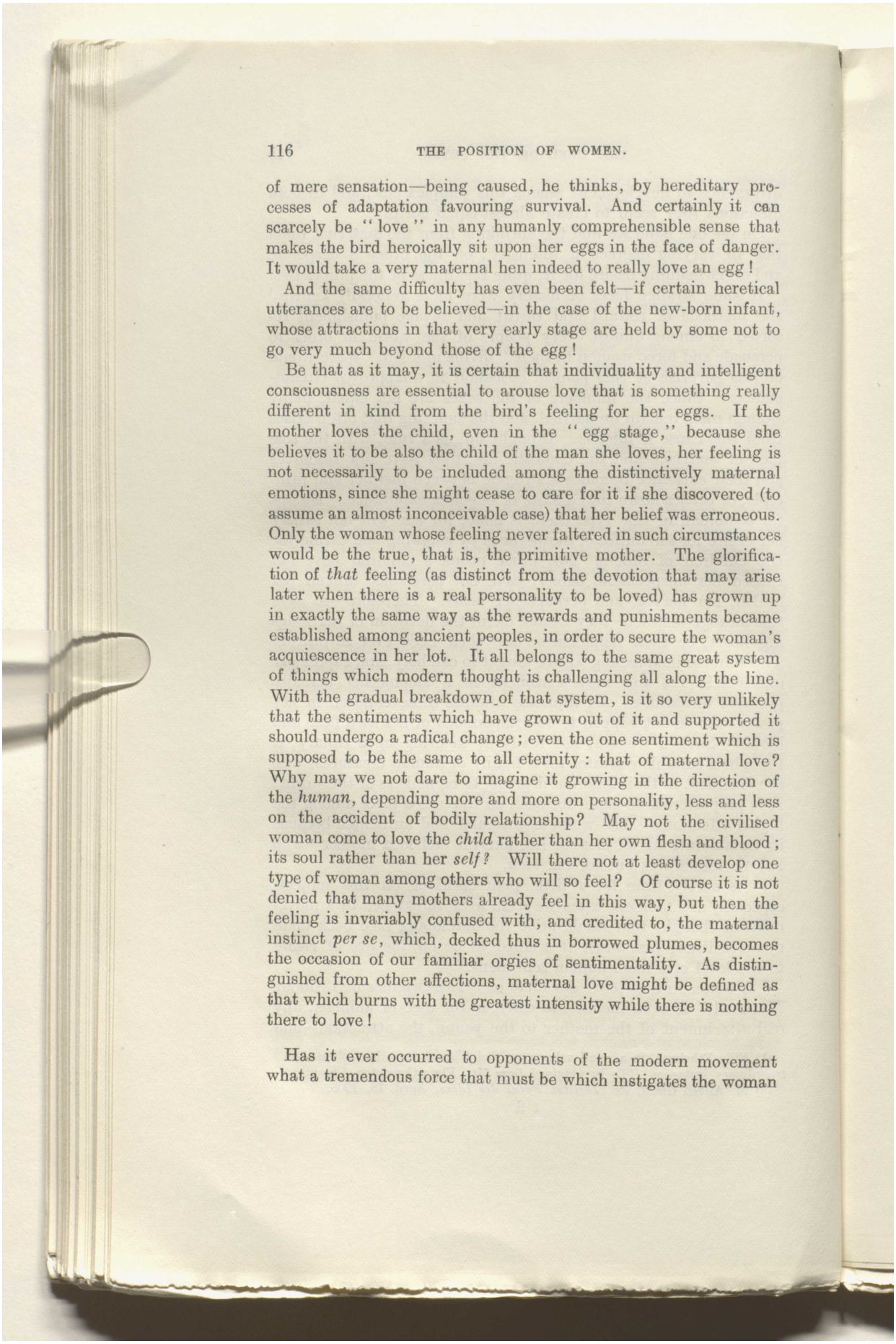
[2] A writer in the *Revue des Idées* on "Les Origines de l'Amour Maternel," is even inclined to deny, in the case of animals, any real attachment of the mother to the young, the attraction—one

(1) Ellis Ethelmer, in a small volume entitled *Woman Free*, has collected extraordinary instances. (To be obtained from Mrs. Elmy Congleton, Cheshire.)
(2) M. Alfred Giard, *de l'Institut Revue des Idées*, April 15, 1905.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



of mere sensation—being caused, he thinks, by hereditary processes of adaptation favouring survival. And certainly it can scarcely be "love" in any humanly comprehensible sense that makes the bird heroically sit upon her eggs in the face of danger. It would take a very maternal hen indeed to really love an egg!

And the same difficulty has even been felt—if certain heretical utterances are to be believed—in the case of the new-born infant, whose attractions in that very early stage are held by some not to go very much beyond those of the egg!

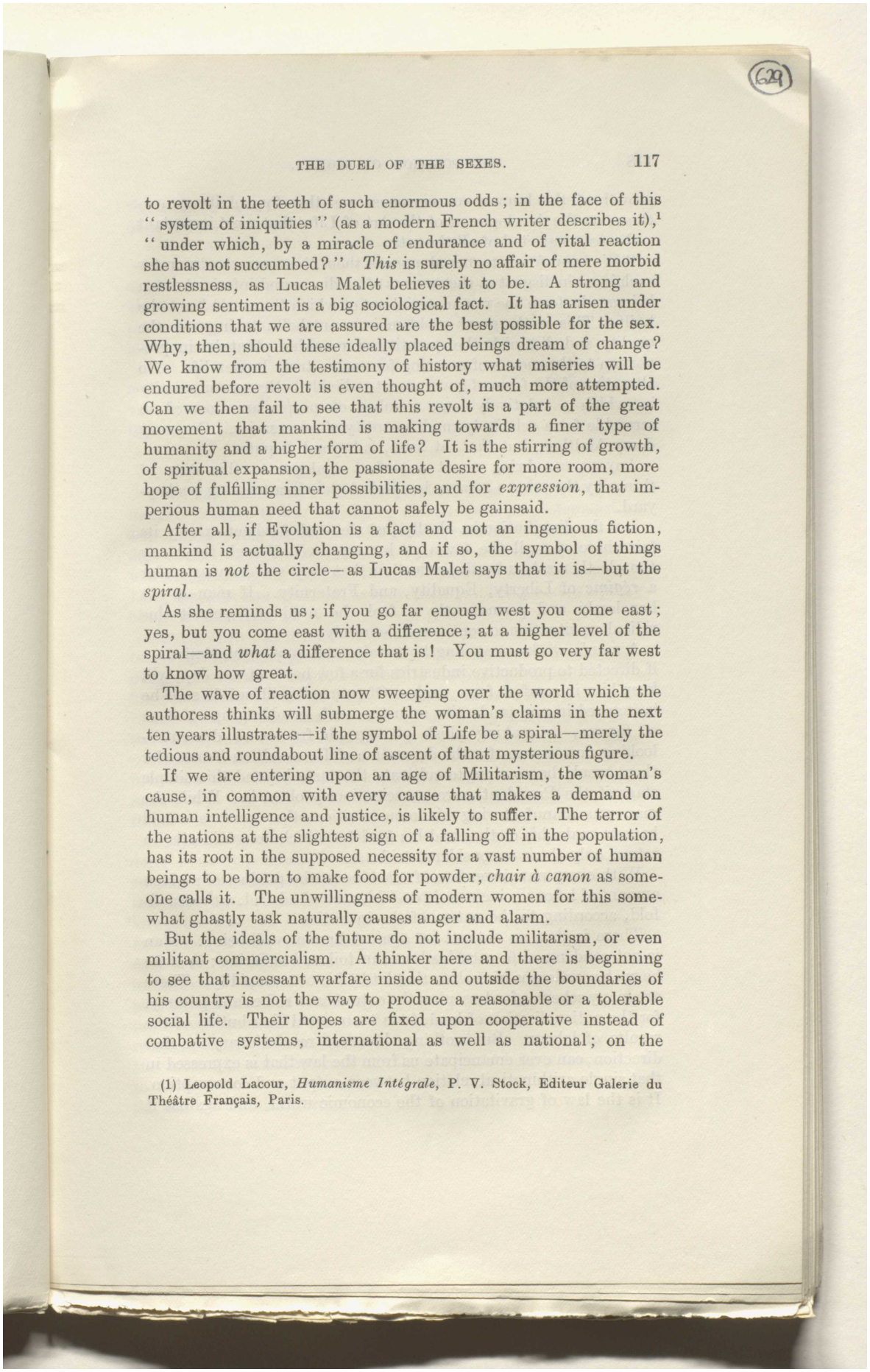
Be that as it may, it is certain that individuality and intelligent consciousness are essential to arouse love that is something really different in kind from the bird's feeling for her eggs. If the mother loves the child, even in the "egg stage," because she believes it to be also the child of the man she loves, her feeling is not necessarily to be included among the distinctively maternal emotions, since she might cease to care for it if she discovered (to assume an almost inconceivable case) that her belief was erroneous. Only the woman whose feeling never faltered in such circumstances would be the true, that is, the primitive mother. The glorification of *that* feeling (as distinct from the devotion that may arise later when there is a real personality to be loved) has grown up in exactly the same way as the rewards and punishments became established among ancient peoples, in order to secure the woman's acquiescence in her lot. It all belongs to the same great system of things which modern thought is challenging all along the line. With the gradual breakdown of that system, is it so very unlikely that the sentiments which have grown out of it and supported it should undergo a radical change; even the one sentiment which is supposed to be the same to all eternity: that of maternal love? Why may we not dare to imagine it growing in the direction of the *human*, depending more and more on personality, less and less on the accident of bodily relationship? May not the civilised woman come to love the *child* rather than her own flesh and blood; its soul rather than her *self*? Will there not at least develop one type of woman among others who will so feel? Of course it is not denied that many mothers already feel in this way, but then the feeling is invariably confused with, and credited to, the maternal instinct *per se*, which, decked thus in borrowed plumes, becomes the occasion of our familiar orgies of sentimentality. As distinguished from other affections, maternal love might be defined as that which burns with the greatest intensity while there is nothing there to love!

Has it ever occurred to opponents of the modern movement what a tremendous force that must be which instigates the woman

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000064

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



to revolt in the teeth of such enormous odds; in the face of this "system of iniquities" (as a modern French writer describes it),[1] "under which, by a miracle of endurance and of vital reaction she has not succumbed?" *This* is surely no affair of mere morbid restlessness, as Lucas Malet believes it to be. A strong and growing sentiment is a big sociological fact. It has arisen under conditions that we are assured are the best possible for the sex. Why, then, should these ideally placed beings dream of change? We know from the testimony of history what miseries will be endured before revolt is even thought of, much more attempted. Can we then fail to see that this revolt is a part of the great movement that mankind is making towards a finer type of humanity and a higher form of life? It is the stirring of growth, of spiritual expansion, the passionate desire for more room, more hope of fulfilling inner possibilities, and for *expression*, that imperious human need that cannot safely be gainsaid.

After all, if Evolution is a fact and not an ingenious fiction, mankind is actually changing, and if so, the symbol of things human is *not* the circle—as Lucas Malet says that it is—but the *spiral*.

As she reminds us; if you go far enough west you come east; yes, but you come east with a difference; at a higher level of the spiral—and *what* a difference that is! You must go very far west to know how great.

The wave of reaction now sweeping over the world which the authoress thinks will submerge the woman's claims in the next ten years illustrates—if the symbol of Life be a spiral—merely the tedious and roundabout line of ascent of that mysterious figure.

If we are entering upon an age of Militarism, the woman's cause, in common with every cause that makes a demand on human intelligence and justice, is likely to suffer. The terror of the nations at the slightest sign of a falling off in the population, has its root in the supposed necessity for a vast number of human beings to be born to make food for powder, *chair à canon* as someone calls it. The unwillingness of modern women for this somewhat ghastly task naturally causes anger and alarm.

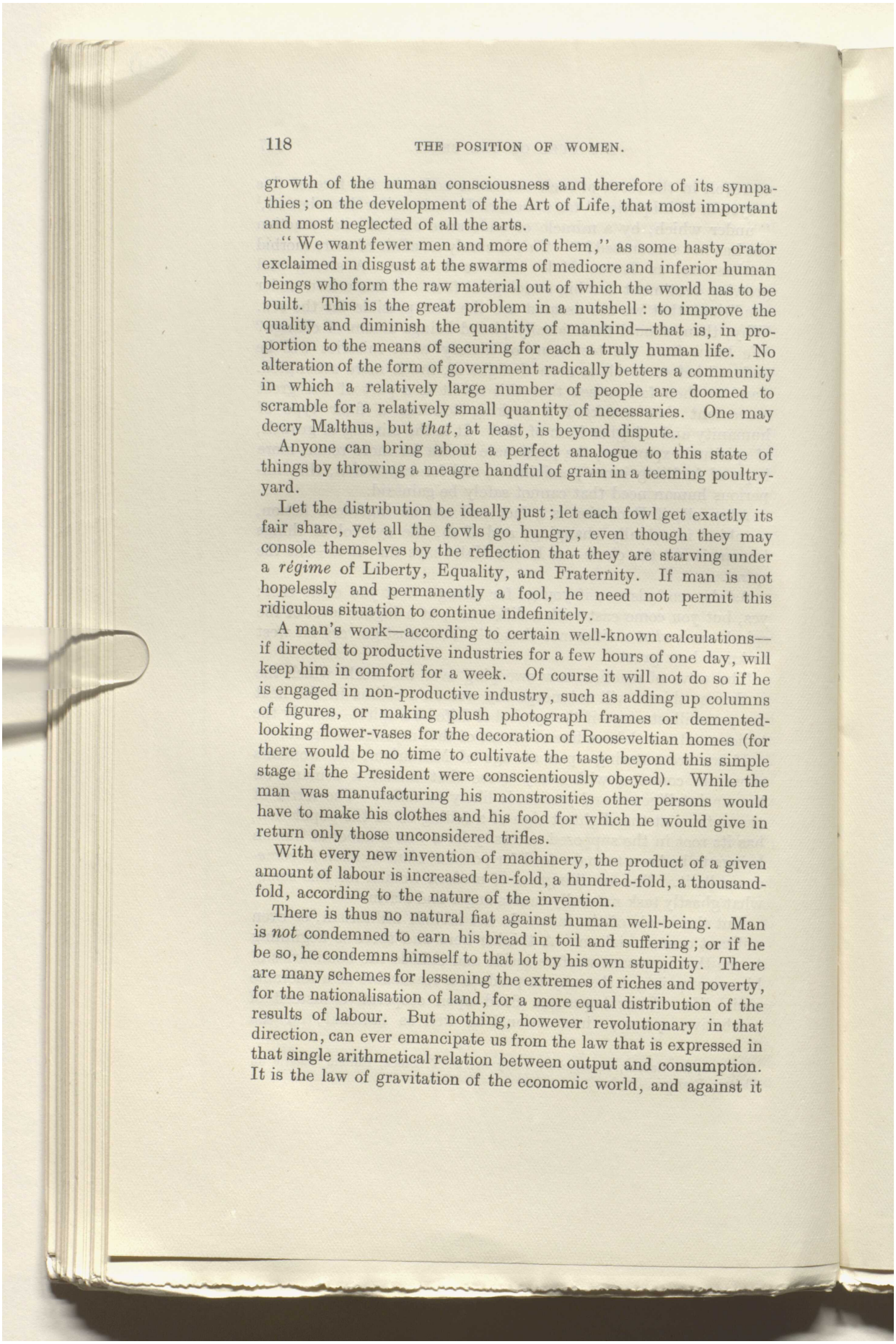
But the ideals of the future do not include militarism, or even militant commercialism. A thinker here and there is beginning to see that incessant warfare inside and outside the boundaries of his country is not the way to produce a reasonable or a tolerable social life. Their hopes are fixed upon cooperative instead of combative systems, international as well as national; on the

(1) Leopold Lacour, *Humanisme Intégrale*, P. V. Stock, Editeur Galerie du Théâtre Français, Paris.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



growth of the human consciousness and therefore of its sympathies; on the development of the Art of Life, that most important and most neglected of all the arts.

"We want fewer men and more of them," as some hasty orator exclaimed in disgust at the swarms of mediocre and inferior human beings who form the raw material out of which the world has to be built. This is the great problem in a nutshell: to improve the quality and diminish the quantity of mankind—that is, in proportion to the means of securing for each a truly human life. No alteration of the form of government radically betters a community in which a relatively large number of people are doomed to scramble for a relatively small quantity of necessaries. One may decry Malthus, but *that*, at least, is beyond dispute.

Anyone can bring about a perfect analogue to this state of things by throwing a meagre handful of grain in a teeming poultry-yard.

Let the distribution be ideally just; let each fowl get exactly its fair share, yet all the fowls go hungry, even though they may console themselves by the reflection that they are starving under a *régime* of Liberty, Equality, and Fraternity. If man is not hopelessly and permanently a fool, he need not permit this ridiculous situation to continue indefinitely.

A man's work—according to certain well-known calculations—if directed to productive industries for a few hours of one day, will keep him in comfort for a week. Of course it will not do so if he is engaged in non-productive industry, such as adding up columns of figures, or making plush photograph frames or demented-looking flower-vases for the decoration of Rooseveltian homes (for there would be no time to cultivate the taste beyond this simple stage if the President were conscientiously obeyed). While the man was manufacturing his monstrosities other persons would have to make his clothes and his food for which he would give in return only those unconsidered trifles.

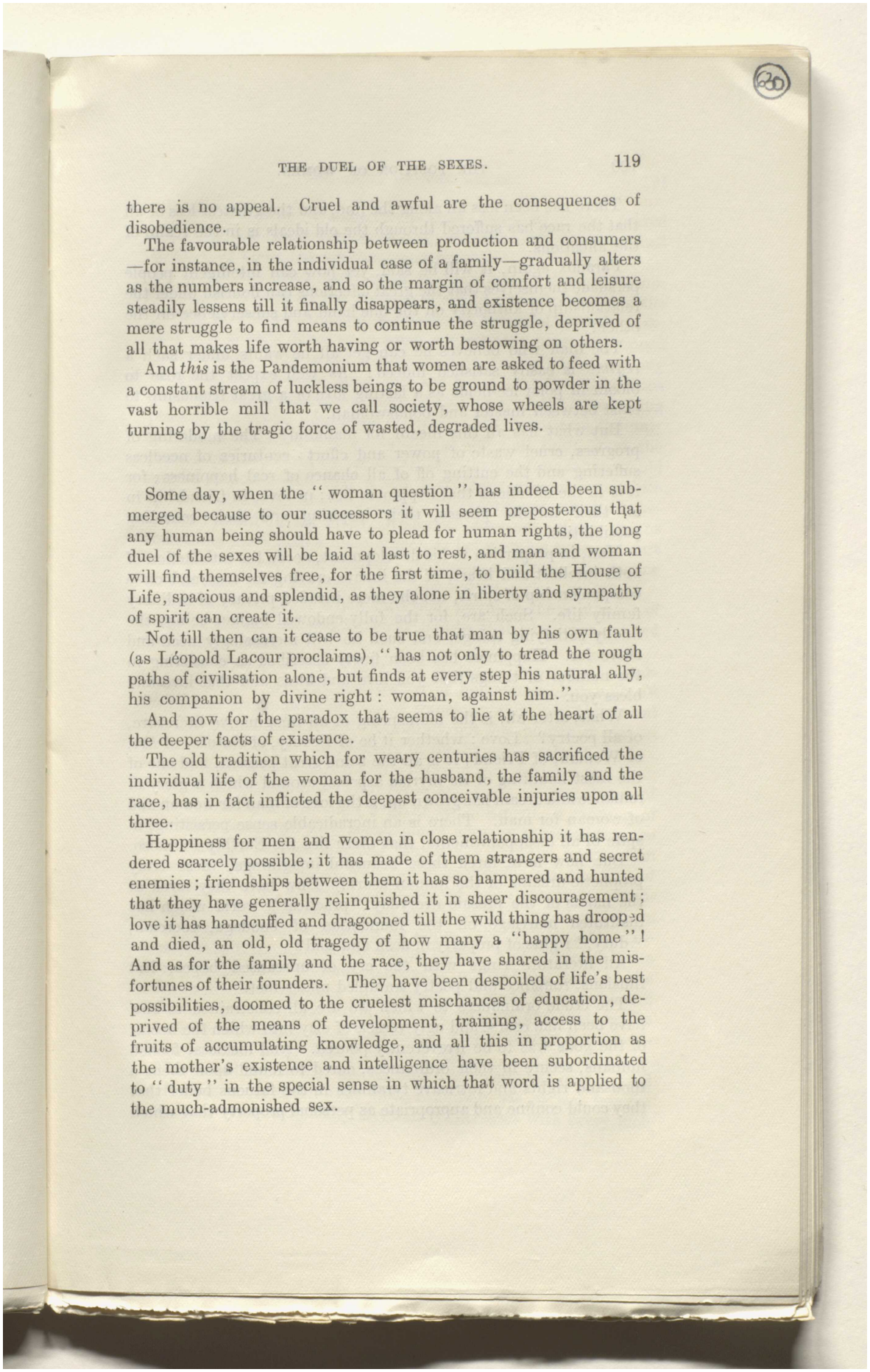
With every new invention of machinery, the product of a given amount of labour is increased ten-fold, a hundred-fold, a thousand-fold, according to the nature of the invention.

There is thus no natural fiat against human well-being. Man is *not* condemned to earn his bread in toil and suffering; or if he be so, he condemns himself to that lot by his own stupidity. There are many schemes for lessening the extremes of riches and poverty, for the nationalisation of land, for a more equal distribution of the results of labour. But nothing, however revolutionary in that direction, can ever emancipate us from the law that is expressed in that single arithmetical relation between output and consumption. It is the law of gravitation of the economic world, and against it

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000096

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



there is no appeal. Cruel and awful are the consequences of disobedience.

The favourable relationship between production and consumers —for instance, in the individual case of a family—gradually alters as the numbers increase, and so the margin of comfort and leisure steadily lessens till it finally disappears, and existence becomes a mere struggle to find means to continue the struggle, deprived of all that makes life worth having or worth bestowing on others.

And *this* is the Pandemonium that women are asked to feed with a constant stream of luckless beings to be ground to powder in the vast horrible mill that we call society, whose wheels are kept turning by the tragic force of wasted, degraded lives.

Some day, when the "woman question" has indeed been submerged because to our successors it will seem preposterous that any human being should have to plead for human rights, the long duel of the sexes will be laid at last to rest, and man and woman will find themselves free, for the first time, to build the House of Life, spacious and splendid, as they alone in liberty and sympathy of spirit can create it.

Not till then can it cease to be true that man by his own fault (as Léopold Lacour proclaims), "has not only to tread the rough paths of civilisation alone, but finds at every step his natural ally, his companion by divine right: woman, against him."

And now for the paradox that seems to lie at the heart of all the deeper facts of existence.

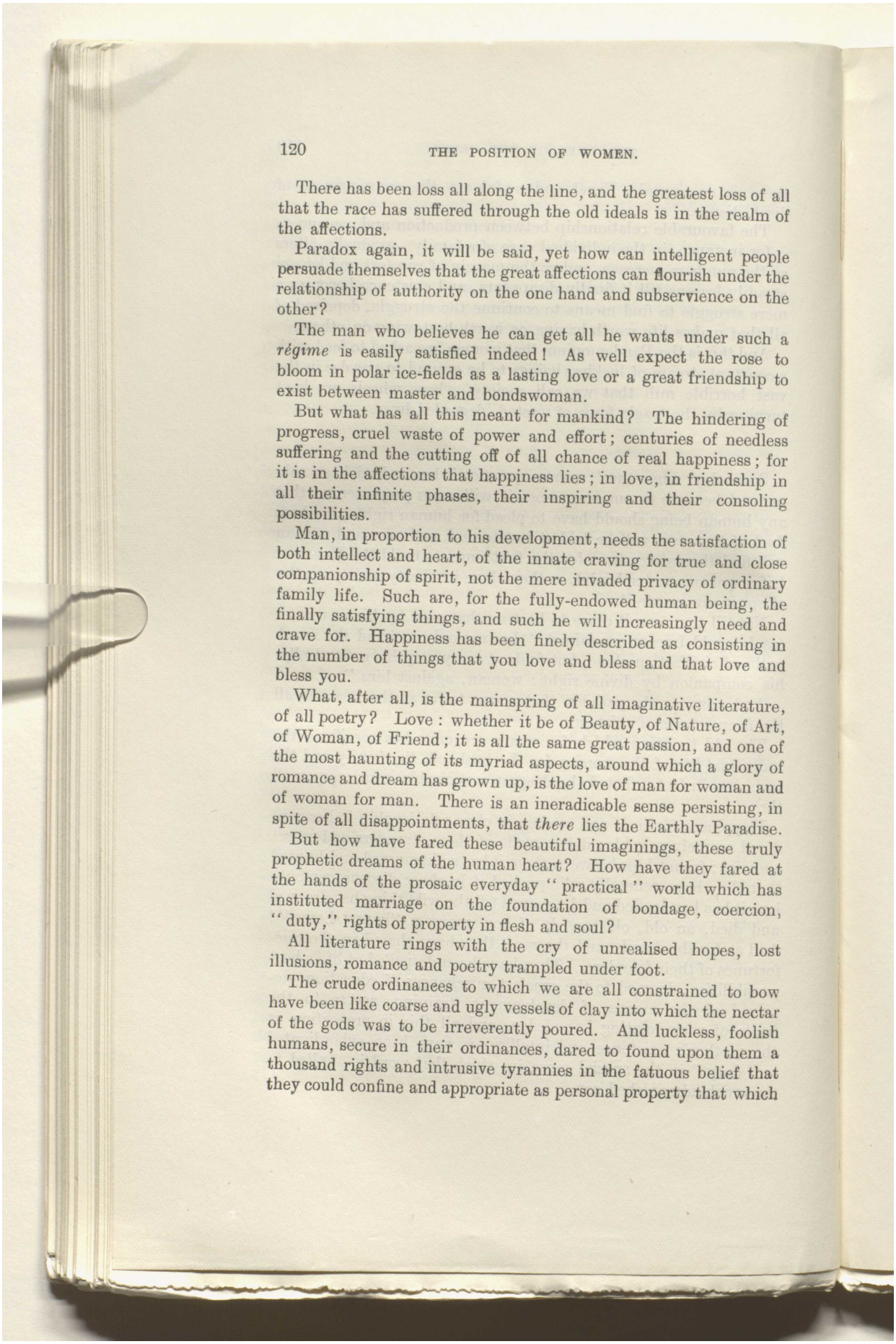
The old tradition which for weary centuries has sacrificed the individual life of the woman for the husband, the family and the race, has in fact inflicted the deepest conceivable injuries upon all three.

Happiness for men and women in close relationship it has rendered scarcely possible; it has made of them strangers and secret enemies; friendships between them it has so hampered and hunted that they have generally relinquished it in sheer discouragement; love it has handcuffed and dragooned till the wild thing has drooped and died, an old, old tragedy of how many a "happy home"! And as for the family and the race, they have shared in the misfortunes of their founders. They have been despoiled of life's best possibilities, doomed to the cruelest mischances of education, deprived of the means of development, training, access to the fruits of accumulating knowledge, and all this in proportion as the mother's existence and intelligence have been subordinated to "duty" in the special sense in which that word is applied to the much-admonished sex.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00000b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



There has been loss all along the line, and the greatest loss of all that the race has suffered through the old ideals is in the realm of the affections.

Paradox again, it will be said, yet how can intelligent people persuade themselves that the great affections can flourish under the relationship of authority on the one hand and subservience on the other?

The man who believes he can get all he wants under such a *régime* is easily satisfied indeed! As well expect the rose to bloom in polar ice-fields as a lasting love or a great friendship to exist between master and bondswoman.

But what has all this meant for mankind? The hindering of progress, cruel waste of power and effort; centuries of needless suffering and the cutting off of all chance of real happiness; for it is in the affections that happiness lies; in love, in friendship in all their infinite phases, their inspiring and their consoling possibilities.

Man, in proportion to his development, needs the satisfaction of both intellect and heart, of the innate craving for true and close companionship of spirit, not the mere invaded privacy of ordinary family life. Such are, for the fully-endowed human being, the finally satisfying things, and such he will increasingly need and crave for. Happiness has been finely described as consisting in the number of things that you love and bless and that love and bless you.

What, after all, is the mainspring of all imaginative literature, of all poetry? Love: whether it be of Beauty, of Nature, of Art, of Woman, of Friend; it is all the same great passion, and one of the most haunting of its myriad aspects, around which a glory of romance and dream has grown up, is the love of man for woman and of woman for man. There is an ineradicable sense persisting, in spite of all disappointments, that *there* lies the Earthly Paradise.

But how have fared these beautiful imaginings, these truly prophetic dreams of the human heart? How have they fared at the hands of the prosaic everyday "practical" world which has instituted marriage on the foundation of bondage, coercion, "duty," rights of property in flesh and soul?

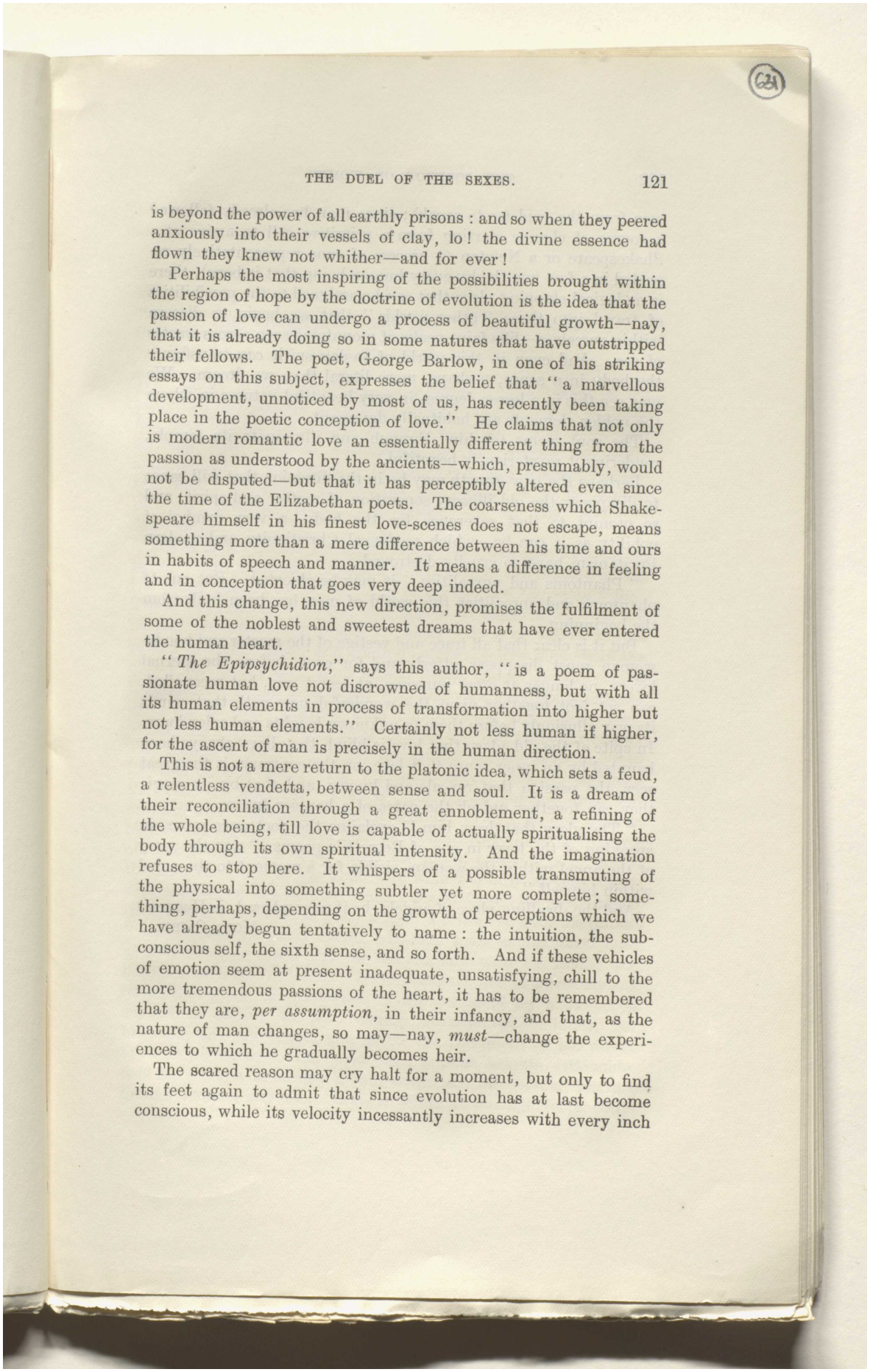
All literature rings with the cry of unrealised hopes, lost illusions, romance and poetry trampled under foot.

The crude ordinances to which we are all constrained to bow have been like coarse and ugly vessels of clay into which the nectar of the gods was to be irreverently poured. And luckless, foolish humans, secure in their ordinances, dared to found upon them a thousand rights and intrusive tyrannies in the fatuous belief that they could confine and appropriate as personal property that which

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000013

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



is beyond the power of all earthly prisons : and so when they peered anxiously into their vessels of clay, lo ! the divine essence had flown they knew not whither—and for ever !

Perhaps the most inspiring of the possibilities brought within the region of hope by the doctrine of evolution is the idea that the passion of love can undergo a process of beautiful growth—nay, that it is already doing so in some natures that have outstripped their fellows. The poet, George Barlow, in one of his striking essays on this subject, expresses the belief that "a marvellous development, unnoticed by most of us, has recently been taking place in the poetic conception of love." He claims that not only is modern romantic love an essentially different thing from the passion as understood by the ancients—which, presumably, would not be disputed—but that it has perceptibly altered even since the time of the Elizabethan poets. The coarseness which Shakespeare himself in his finest love-scenes does not escape, means something more than a mere difference between his time and ours in habits of speech and manner. It means a difference in feeling and in conception that goes very deep indeed.

And this change, this new direction, promises the fulfilment of some of the noblest and sweetest dreams that have ever entered the human heart.

"*The Epipsychidion*," says this author, "is a poem of passionate human love not discrowned of humanness, but with all its human elements in process of transformation into higher but not less human elements." Certainly not less human if higher, for the ascent of man is precisely in the human direction.

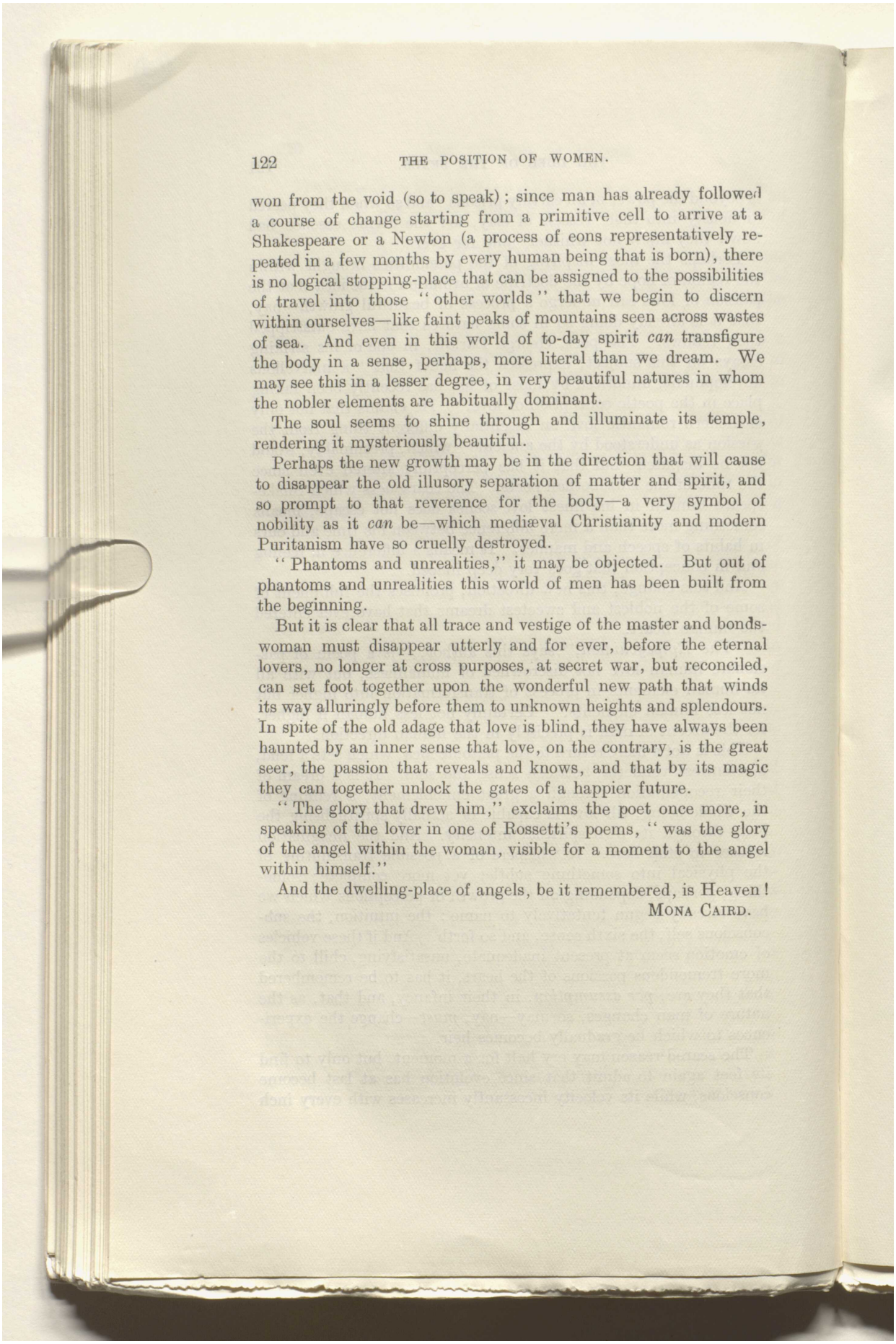
This is not a mere return to the platonic idea, which sets a feud, a relentless vendetta, between sense and soul. It is a dream of their reconciliation through a great ennoblement, a refining of the whole being, till love is capable of actually spiritualising the body through its own spiritual intensity. And the imagination refuses to stop here. It whispers of a possible transmuting of the physical into something subtler yet more complete ; something, perhaps, depending on the growth of perceptions which we have already begun tentatively to name : the intuition, the subconscious self, the sixth sense, and so forth. And if these vehicles of emotion seem at present inadequate, unsatisfying, chill to the more tremendous passions of the heart, it has to be remembered that they are, *per assumption*, in their infancy, and that, as the nature of man changes, so may—nay, *must*—change the experiences to which he gradually becomes heir.

The scared reason may cry halt for a moment, but only to find its feet again to admit that since evolution has at last become conscious, while its velocity incessantly increases with every inch

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



won from the void (so to speak); since man has already followed a course of change starting from a primitive cell to arrive at a Shakespeare or a Newton (a process of eons representatively repeated in a few months by every human being that is born), there is no logical stopping-place that can be assigned to the possibilities of travel into those "other worlds" that we begin to discern within ourselves—like faint peaks of mountains seen across wastes of sea. And even in this world of to-day spirit *can* transfigure the body in a sense, perhaps, more literal than we dream. We may see this in a lesser degree, in very beautiful natures in whom the nobler elements are habitually dominant.

The soul seems to shine through and illuminate its temple, rendering it mysteriously beautiful.

Perhaps the new growth may be in the direction that will cause to disappear the old illusory separation of matter and spirit, and so prompt to that reverence for the body—a very symbol of nobility as it *can* be—which mediæval Christianity and modern Puritanism have so cruelly destroyed.

"Phantoms and unrealities," it may be objected. But out of phantoms and unrealities this world of men has been built from the beginning.

But it is clear that all trace and vestige of the master and bondswoman must disappear utterly and for ever, before the eternal lovers, no longer at cross purposes, at secret war, but reconciled, can set foot together upon the wonderful new path that winds its way alluringly before them to unknown heights and splendours. In spite of the old adage that love is blind, they have always been haunted by an inner sense that love, on the contrary, is the great seer, the passion that reveals and knows, and that by its magic they can together unlock the gates of a happier future.

"The glory that drew him," exclaims the poet once more, in speaking of the lover in one of Rossetti's poems, "was the glory of the angel within the woman, visible for a moment to the angel within himself."

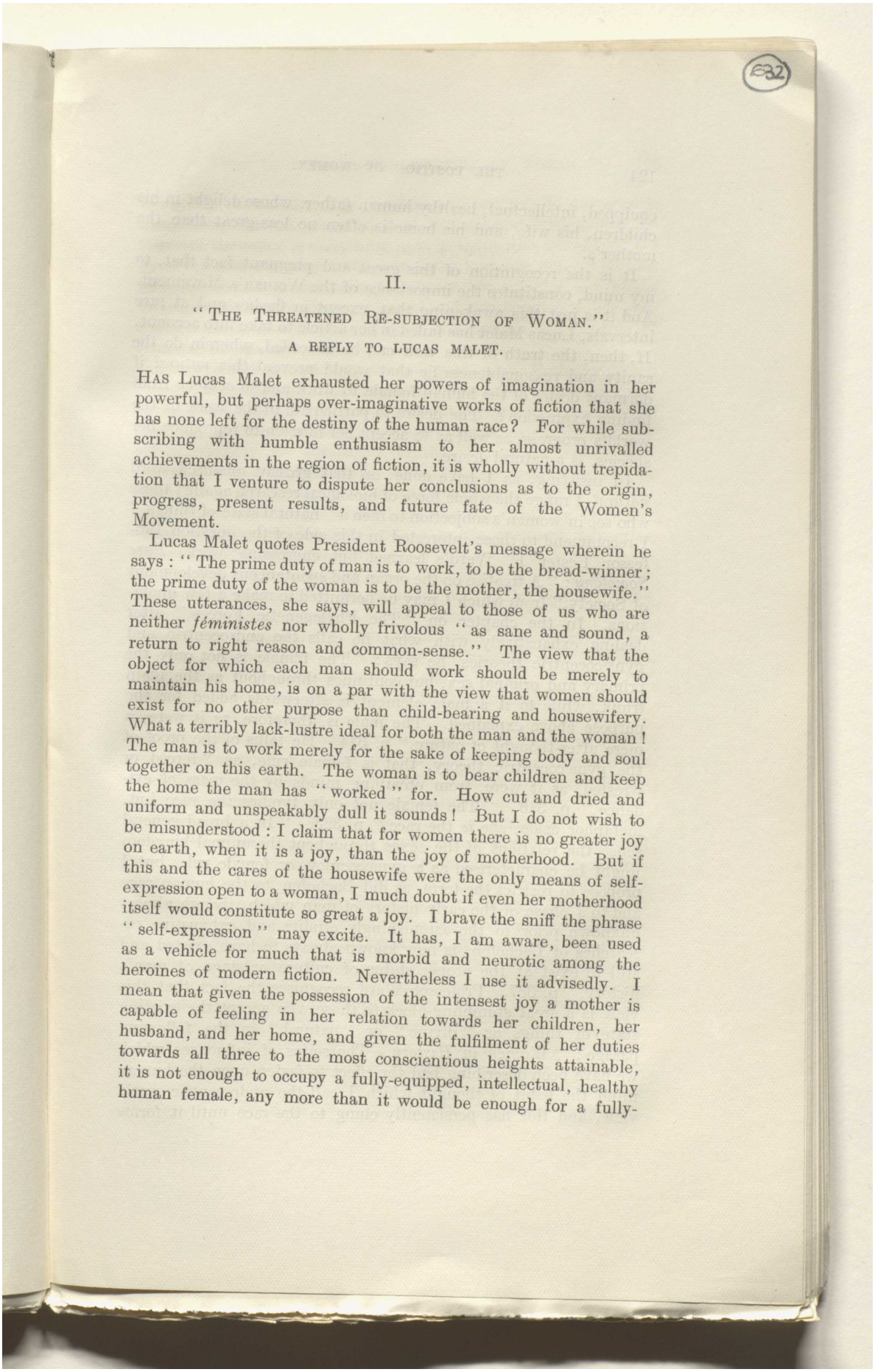
And the dwelling-place of angels, be it remembered, is Heaven!

MONA CAIRD.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000077

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



632

II.

"The Threatened Re-subjection of Woman."

A reply to Lucas Malet.

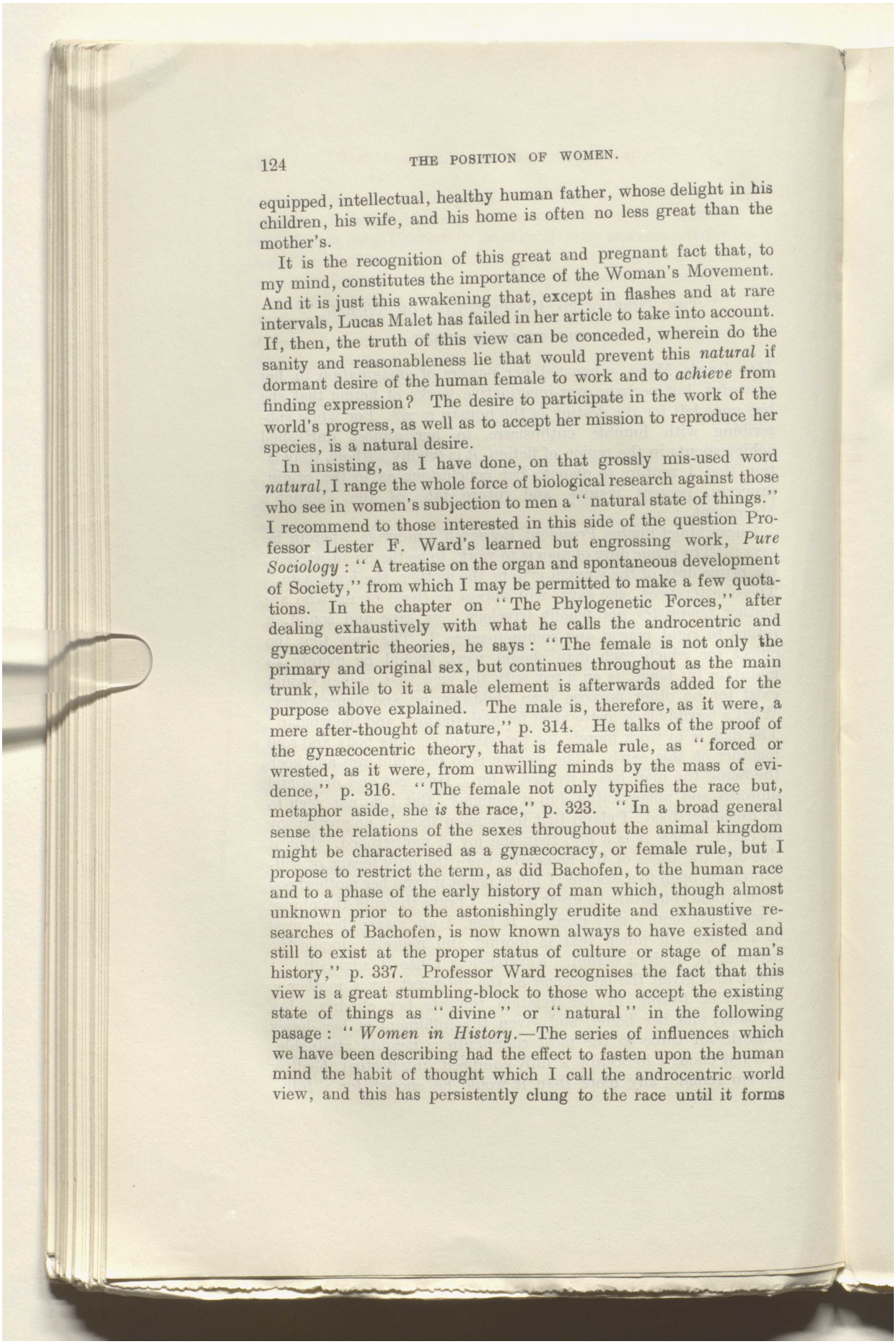
Has Lucas Malet exhausted her powers of imagination in her powerful, but perhaps over-imaginative works of fiction that she has none left for the destiny of the human race? For while subscribing with humble enthusiasm to her almost unrivalled achievements in the region of fiction, it is wholly without trepidation that I venture to dispute her conclusions as to the origin, progress, present results, and future fate of the Women's Movement.

Lucas Malet quotes President Roosevelt's message wherein he says: "The prime duty of man is to work, to be the bread-winner; the prime duty of the woman is to be the mother, the housewife." These utterances, she says, will appeal to those of us who are neither *féministes* nor wholly frivolous "as sane and sound, a return to right reason and common-sense." The view that the object for which each man should work should be merely to maintain his home, is on a par with the view that women should exist for no other purpose than child-bearing and housewifery. What a terribly lack-lustre ideal for both the man and the woman! The man is to work merely for the sake of keeping body and soul together on this earth. The woman is to bear children and keep the home the man has "worked" for. How cut and dried and uniform and unspeakably dull it sounds! But I do not wish to be misunderstood: I claim that for women there is no greater joy on earth, when it is a joy, than the joy of motherhood. But if this and the cares of the housewife were the only means of self-expression open to a woman, I much doubt if even her motherhood itself would constitute so great a joy. I brave the sniff the phrase "self-expression" may excite. It has, I am aware, been used as a vehicle for much that is morbid and neurotic among the heroines of modern fiction. Nevertheless I use it advisedly. I mean that given the possession of the intensest joy a mother is capable of feeling in her relation towards her children, her husband, and her home, and given the fulfilment of her duties towards all three to the most conscientious heights attainable, it is not enough to occupy a fully-equipped, intellectual, healthy human female, any more than it would be enough for a fully-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



equipped, intellectual, healthy human father, whose delight in his children, his wife, and his home is often no less great than the mother's.

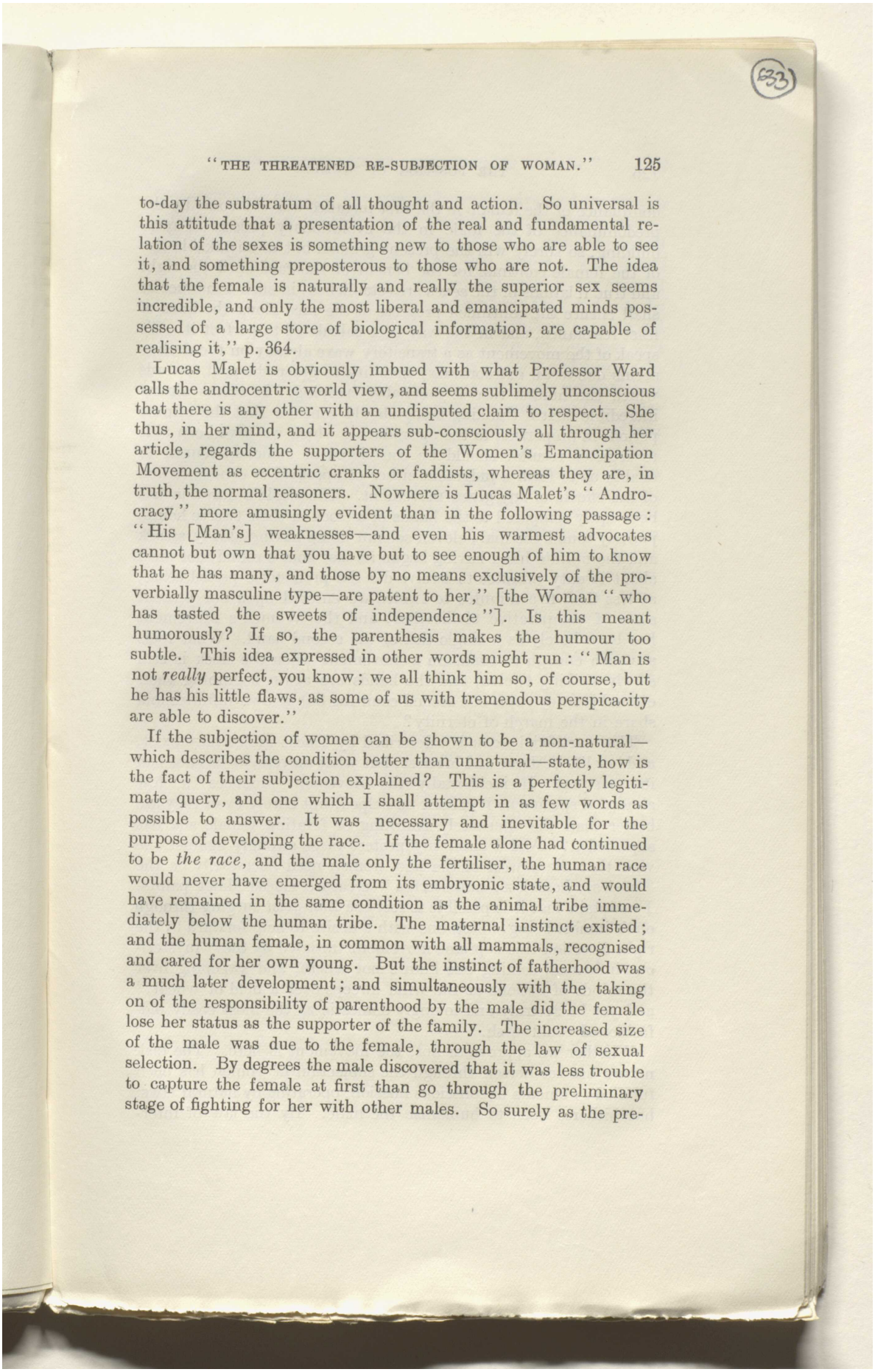
It is the recognition of this great and pregnant fact that, to my mind, constitutes the importance of the Woman's Movement. And it is just this awakening that, except in flashes and at rare intervals, Lucas Malet has failed in her article to take into account. If, then, the truth of this view can be conceded, wherein do the sanity and reasonableness lie that would prevent this *natural* if dormant desire of the human female to work and to *achieve* from finding expression? The desire to participate in the work of the world's progress, as well as to accept her mission to reproduce her species, is a natural desire.

In insisting, as I have done, on that grossly mis-used word *natural*, I range the whole force of biological research against those who see in women's subjection to men a "natural state of things." I recommend to those interested in this side of the question Professor Lester F. Ward's learned but engrossing work, *Pure Sociology*: "A treatise on the organ and spontaneous development of Society," from which I may be permitted to make a few quotations. In the chapter on "The Phylogenetic Forces," after dealing exhaustively with what he calls the androcentric and gynæcocentric theories, he says: "The female is not only the primary and original sex, but continues throughout as the main trunk, while to it a male element is afterwards added for the purpose above explained. The male is, therefore, as it were, a mere after-thought of nature," p. 314. He talks of the proof of the gynæcocentric theory, that is female rule, as "forced or wrested, as it were, from unwilling minds by the mass of evidence," p. 316. "The female not only typifies the race but, metaphor aside, she *is* the race," p. 323. "In a broad general sense the relations of the sexes throughout the animal kingdom might be characterised as a gynæcocracy, or female rule, but I propose to restrict the term, as did Bachofen, to the human race and to a phase of the early history of man which, though almost unknown prior to the astonishingly erudite and exhaustive researches of Bachofen, is now known always to have existed and still to exist at the proper status of culture or stage of man's history," p. 337. Professor Ward recognises the fact that this view is a great stumbling-block to those who accept the existing state of things as "divine" or "natural" in the following pasage: "*Women in History*.—The series of influences which we have been describing had the effect to fasten upon the human mind the habit of thought which I call the androcentric world view, and this has persistently clung to the race until it forms

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000053

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



to-day the substratum of all thought and action. So universal is this attitude that a presentation of the real and fundamental relation of the sexes is something new to those who are able to see it, and something preposterous to those who are not. The idea that the female is naturally and really the superior sex seems incredible, and only the most liberal and emancipated minds possessed of a large store of biological information, are capable of realising it," p. 364.

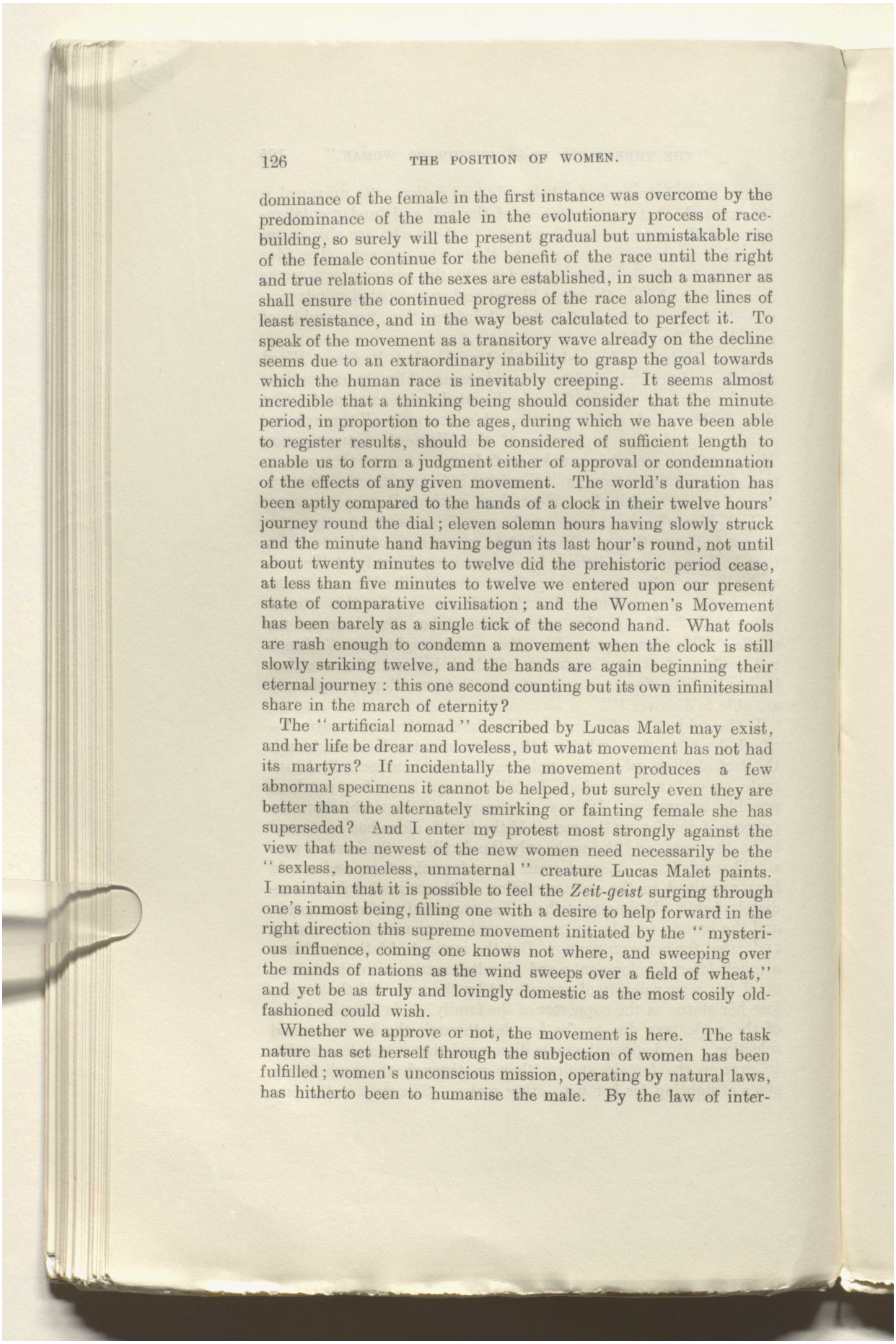
Lucas Malet is obviously imbued with what Professor Ward calls the androcentric world view, and seems sublimely unconscious that there is any other with an undisputed claim to respect. She thus, in her mind, and it appears sub-consciously all through her article, regards the supporters of the Women's Emancipation Movement as eccentric cranks or faddists, whereas they are, in truth, the normal reasoners. Nowhere is Lucas Malet's "Androcracy" more amusingly evident than in the following passage: "His [Man's] weaknesses—and even his warmest advocates cannot but own that you have but to see enough of him to know that he has many, and those by no means exclusively of the proverbially masculine type—are patent to her," [the Woman "who has tasted the sweets of independence"]. Is this meant humorously? If so, the parenthesis makes the humour too subtle. This idea expressed in other words might run: "Man is not *really* perfect, you know; we all think him so, of course, but he has his little flaws, as some of us with tremendous perspicacity are able to discover."

If the subjection of women can be shown to be a non-natural—which describes the condition better than unnatural—state, how is the fact of their subjection explained? This is a perfectly legitimate query, and one which I shall attempt in as few words as possible to answer. It was necessary and inevitable for the purpose of developing the race. If the female alone had continued to be *the race*, and the male only the fertiliser, the human race would never have emerged from its embryonic state, and would have remained in the same condition as the animal tribe immediately below the human tribe. The maternal instinct existed; and the human female, in common with all mammals, recognised and cared for her own young. But the instinct of fatherhood was a much later development; and simultaneously with the taking on of the responsibility of parenthood by the male did the female lose her status as the supporter of the family. The increased size of the male was due to the female, through the law of sexual selection. By degrees the male discovered that it was less trouble to capture the female at first than go through the preliminary stage of fighting for her with other males. So surely as the pre-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



dominance of the female in the first instance was overcome by the predominance of the male in the evolutionary process of race-building, so surely will the present gradual but unmistakable rise of the female continue for the benefit of the race until the right and true relations of the sexes are established, in such a manner as shall ensure the continued progress of the race along the lines of least resistance, and in the way best calculated to perfect it. To speak of the movement as a transitory wave already on the decline seems due to an extraordinary inability to grasp the goal towards which the human race is inevitably creeping. It seems almost incredible that a thinking being should consider that the minute period, in proportion to the ages, during which we have been able to register results, should be considered of sufficient length to enable us to form a judgment either of approval or condemnation of the effects of any given movement. The world's duration has been aptly compared to the hands of a clock in their twelve hours' journey round the dial; eleven solemn hours having slowly struck and the minute hand having begun its last hour's round, not until about twenty minutes to twelve did the prehistoric period cease, at less than five minutes to twelve we entered upon our present state of comparative civilisation; and the Women's Movement has been barely as a single tick of the second hand. What fools are rash enough to condemn a movement when the clock is still slowly striking twelve, and the hands are again beginning their eternal journey: this one second counting but its own infinitesimal share in the march of eternity?

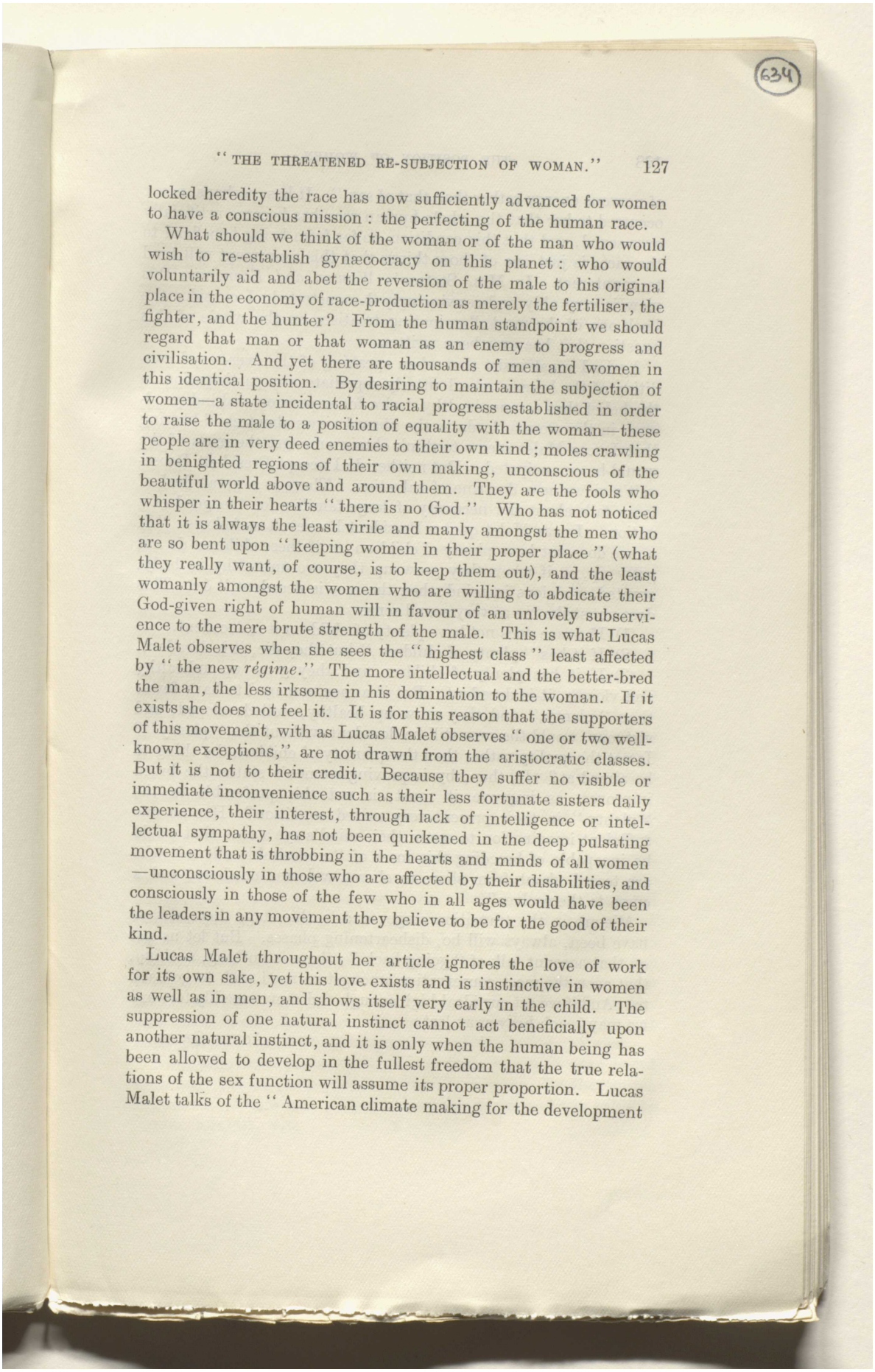
The "artificial nomad" described by Lucas Malet may exist, and her life be drear and loveless, but what movement has not had its martyrs? If incidentally the movement produces a few abnormal specimens it cannot be helped, but surely even they are better than the alternately smirking or fainting female she has superseded? And I enter my protest most strongly against the view that the newest of the new women need necessarily be the "sexless, homeless, unmaternal" creature Lucas Malet paints. I maintain that it is possible to feel the *Zeit-geist* surging through one's inmost being, filling one with a desire to help forward in the right direction this supreme movement initiated by the "mysterious influence, coming one knows not where, and sweeping over the minds of nations as the wind sweeps over a field of wheat," and yet be as truly and lovingly domestic as the most cosily old-fashioned could wish.

Whether we approve or not, the movement is here. The task nature has set herself through the subjection of women has been fulfilled; women's unconscious mission, operating by natural laws, has hitherto been to humanise the male. By the law of inter-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



locked heredity the race has now sufficiently advanced for women to have a conscious mission: the perfecting of the human race.

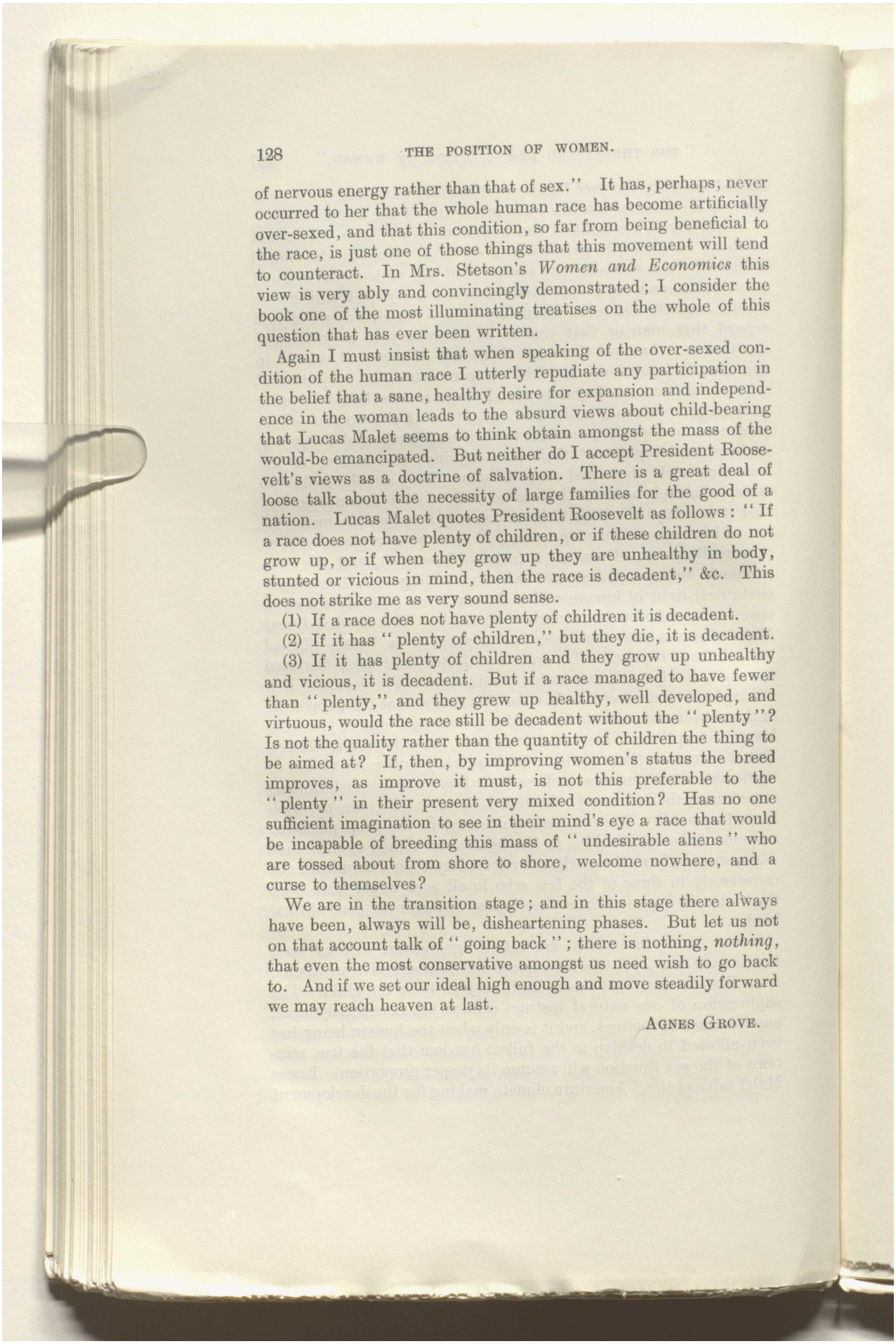
What should we think of the woman or of the man who would wish to re-establish gynæcocracy on this planet: who would voluntarily aid and abet the reversion of the male to his original place in the economy of race-production as merely the fertiliser, the fighter, and the hunter? From the human standpoint we should regard that man or that woman as an enemy to progress and civilisation. And yet there are thousands of men and women in this identical position. By desiring to maintain the subjection of women—a state incidental to racial progress established in order to raise the male to a position of equality with the woman—these people are in very deed enemies to their own kind; moles crawling in benighted regions of their own making, unconscious of the beautiful world above and around them. They are the fools who whisper in their hearts "there is no God." Who has not noticed that it is always the least virile and manly amongst the men who are so bent upon "keeping women in their proper place" (what they really want, of course, is to keep them out), and the least womanly amongst the women who are willing to abdicate their God-given right of human will in favour of an unlovely subservience to the mere brute strength of the male. This is what Lucas Malet observes when she sees the "highest class" least affected by "the new *régime*." The more intellectual and the better-bred the man, the less irksome in his domination to the woman. If it exists she does not feel it. It is for this reason that the supporters of this movement, with as Lucas Malet observes "one or two well-known exceptions," are not drawn from the aristocratic classes. But it is not to their credit. Because they suffer no visible or immediate inconvenience such as their less fortunate sisters daily experience, their interest, through lack of intelligence or intellectual sympathy, has not been quickened in the deep pulsating movement that is throbbing in the hearts and minds of all women—unconsciously in those who are affected by their disabilities, and consciously in those of the few who in all ages would have been the leaders in any movement they believe to be for the good of their kind.

Lucas Malet throughout her article ignores the love of work for its own sake, yet this love exists and is instinctive in women as well as in men, and shows itself very early in the child. The suppression of one natural instinct cannot act beneficially upon another natural instinct, and it is only when the human being has been allowed to develop in the fullest freedom that the true relations of the sex function will assume its proper proportion. Lucas Malet talks of the "American climate making for the development

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000be

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



of nervous energy rather than that of sex." It has, perhaps, never occurred to her that the whole human race has become artificially over-sexed, and that this condition, so far from being beneficial to the race, is just one of those things that this movement will tend to counteract. In Mrs. Stetson's *Women and Economics* this view is very ably and convincingly demonstrated; I consider the book one of the most illuminating treatises on the whole of this question that has ever been written.

Again I must insist that when speaking of the over-sexed condition of the human race I utterly repudiate any participation in the belief that a sane, healthy desire for expansion and independence in the woman leads to the absurd views about child-bearing that Lucas Malet seems to think obtain amongst the mass of the would-be emancipated. But neither do I accept President Roosevelt's views as a doctrine of salvation. There is a great deal of loose talk about the necessity of large families for the good of a nation. Lucas Malet quotes President Roosevelt as follows: "If a race does not have plenty of children, or if these children do not grow up, or if when they grow up they are unhealthy in body, stunted or vicious in mind, then the race is decadent," &c. This does not strike me as very sound sense.

(1) If a race does not have plenty of children it is decadent.

(2) If it has "plenty of children," but they die, it is decadent.

(3) If it has plenty of children and they grow up unhealthy and vicious, it is decadent. But if a race managed to have fewer than "plenty," and they grew up healthy, well developed, and virtuous, would the race still be decadent without the "plenty"? Is not the quality rather than the quantity of children the thing to be aimed at? If, then, by improving women's status the breed improves, as improve it must, is not this preferable to the "plenty" in their present very mixed condition? Has no one sufficient imagination to see in their mind's eye a race that would be incapable of breeding this mass of "undesirable aliens" who are tossed about from shore to shore, welcome nowhere, and a curse to themselves?

We are in the transition stage; and in this stage there always have been, always will be, disheartening phases. But let us not on that account talk of "going back"; there is nothing, *nothing*, that even the most conservative amongst us need wish to go back to. And if we set our ideal high enough and move steadily forward we may reach heaven at last.

AGNES GROVE.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000094

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE EXTRAVAGANT ECONOMY OF WOMEN.

THE trouble with women is that they do not know how to spend money. The great majority never have any money, or they are at the mercy of some grim masculine creature, be he father or husband, who demands items—now think of an average man bothering himself about items! I think it must be a survival of the time when we inhabited harems, or when we were beautiful dames to whom our true knights gave undying love but nothing more substantial, or we rejoiced the souls of the ancient patriarchs though we did not succeed in extracting any cash.

I don't for a moment believe that the lovely Hebrew damsel, Rebecca, had a penny of her own, nor that the peerless Guinevere had half-a-crown (or whatever the coinage was) to buy her Launcelot a love token. And though Scheherazade—that peerless, self-contained, circulating library of a thousand and one volumes—could tell enough stories to her Sultan to have made the fortune of a modern publisher, she could hardly have made less even if she had had the felicity to write a modern novel. The favourite of the harem would, I am sure, have found a purse a hollow mockery.

Now we modern women are the descendants, more or less remote, of Rebecca, Guinevere, and Scheherazade, and our greatest resemblance to our fair ancestresses is that most of us have no money to spend, and those of us who have do not know how to spend it. Heredity is an excuse for being what might be called the stingy sex.

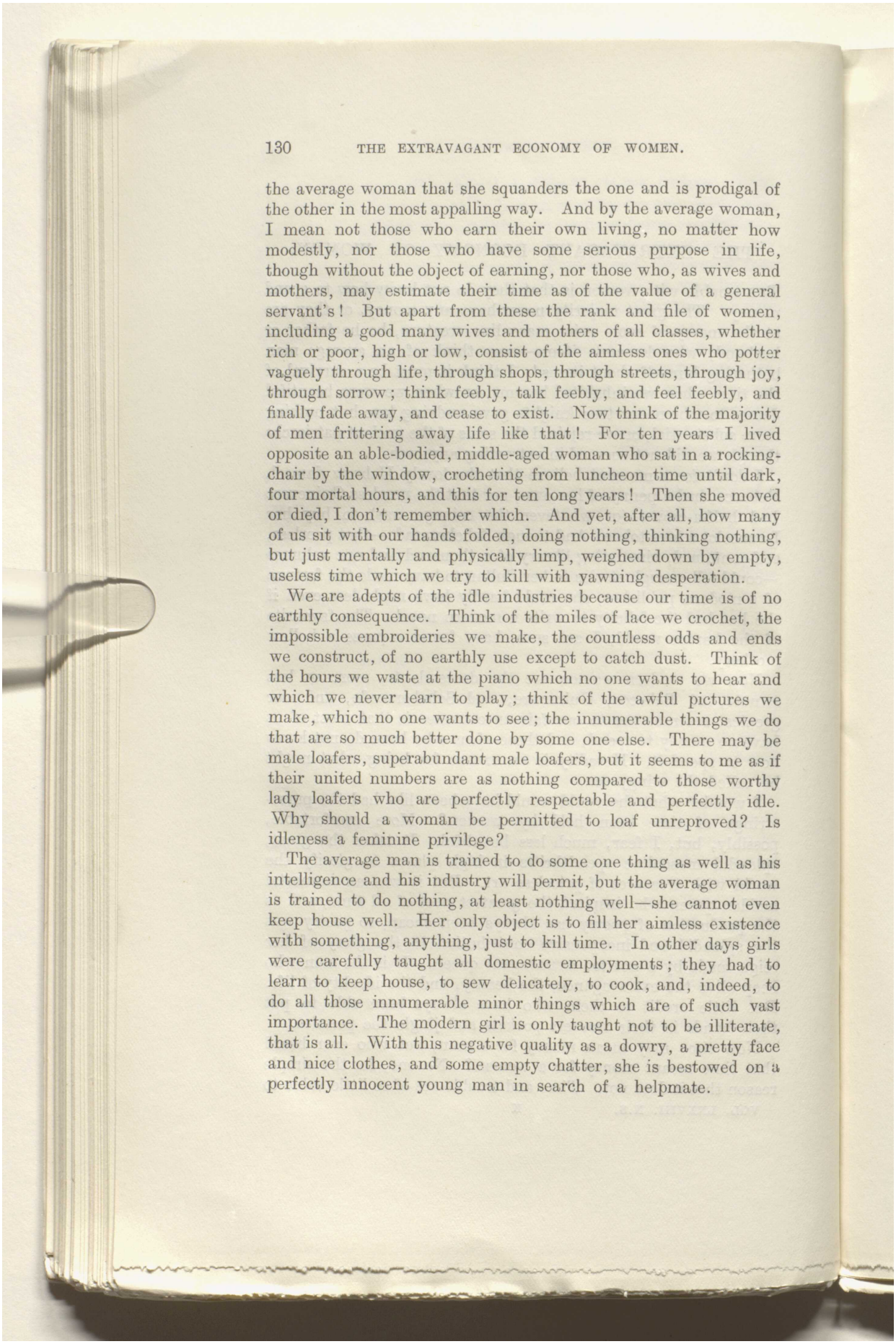
I wonder what the world would have been like had the purse-strings of time been held by women? More comfortable, possibly, but, I fear, much less beautiful. It takes the great, splendid masculine spendthrifts in high places to glorify the world with treasures of priceless art. But it was an immortal maiden queen who inspired the greatest poet of all time, and as the production of poetry has always been cheap, so poetry was the splendid and inexpensive contribution to the glory of her reign made by a not too extravagant queen. It is the men who keep alive the extravagance, the beauty, and the ideality of life. But little credit to them who have always been able to put their hands in their trousers pockets and jingle the pennies.

Now time may mean money for a man, but who ever heard that time meant money for a woman? No one, for the simple reason that it does not. Time and trouble are of so little value to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000002

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the average woman that she squanders the one and is prodigal of the other in the most appalling way. And by the average woman, I mean not those who earn their own living, no matter how modestly, nor those who have some serious purpose in life, though without the object of earning, nor those who, as wives and mothers, may estimate their time as of the value of a general servant's! But apart from these the rank and file of women, including a good many wives and mothers of all classes, whether rich or poor, high or low, consist of the aimless ones who potter vaguely through life, through shops, through streets, through joy, through sorrow; think feebly, talk feebly, and feel feebly, and finally fade away, and cease to exist. Now think of the majority of men frittering away life like that! For ten years I lived opposite an able-bodied, middle-aged woman who sat in a rocking-chair by the window, crocheting from luncheon time until dark, four mortal hours, and this for ten long years! Then she moved or died, I don't remember which. And yet, after all, how many of us sit with our hands folded, doing nothing, thinking nothing, but just mentally and physically limp, weighed down by empty, useless time which we try to kill with yawning desperation.

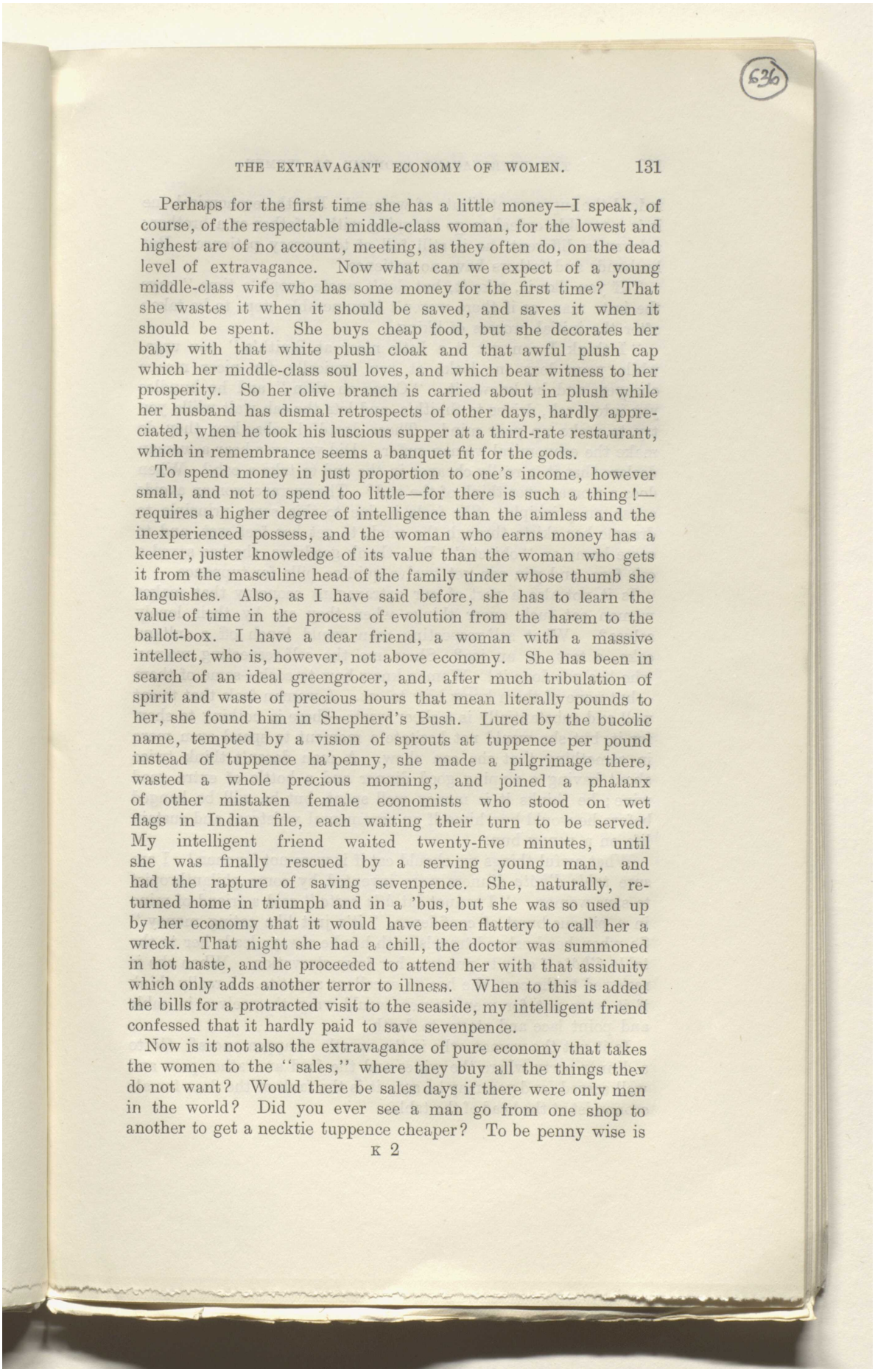
We are adepts of the idle industries because our time is of no earthly consequence. Think of the miles of lace we crochet, the impossible embroideries we make, the countless odds and ends we construct, of no earthly use except to catch dust. Think of the hours we waste at the piano which no one wants to hear and which we never learn to play; think of the awful pictures we make, which no one wants to see; the innumerable things we do that are so much better done by some one else. There may be male loafers, superabundant male loafers, but it seems to me as if their united numbers are as nothing compared to those worthy lady loafers who are perfectly respectable and perfectly idle. Why should a woman be permitted to loaf unreproved? Is idleness a feminine privilege?

The average man is trained to do some one thing as well as his intelligence and his industry will permit, but the average woman is trained to do nothing, at least nothing well—she cannot even keep house well. Her only object is to fill her aimless existence with something, anything, just to kill time. In other days girls were carefully taught all domestic employments; they had to learn to keep house, to sew delicately, to cook, and, indeed, to do all those innumerable minor things which are of such vast importance. The modern girl is only taught not to be illiterate, that is all. With this negative quality as a dowry, a pretty face and nice clothes, and some empty chatter, she is bestowed on a perfectly innocent young man in search of a helpmate.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000085

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Perhaps for the first time she has a little money—I speak, of course, of the respectable middle-class woman, for the lowest and highest are of no account, meeting, as they often do, on the dead level of extravagance. Now what can we expect of a young middle-class wife who has some money for the first time? That she wastes it when it should be saved, and saves it when it should be spent. She buys cheap food, but she decorates her baby with that white plush cloak and that awful plush cap which her middle-class soul loves, and which bear witness to her prosperity. So her olive branch is carried about in plush while her husband has dismal retrospects of other days, hardly appreciated, when he took his luscious supper at a third-rate restaurant, which in remembrance seems a banquet fit for the gods.

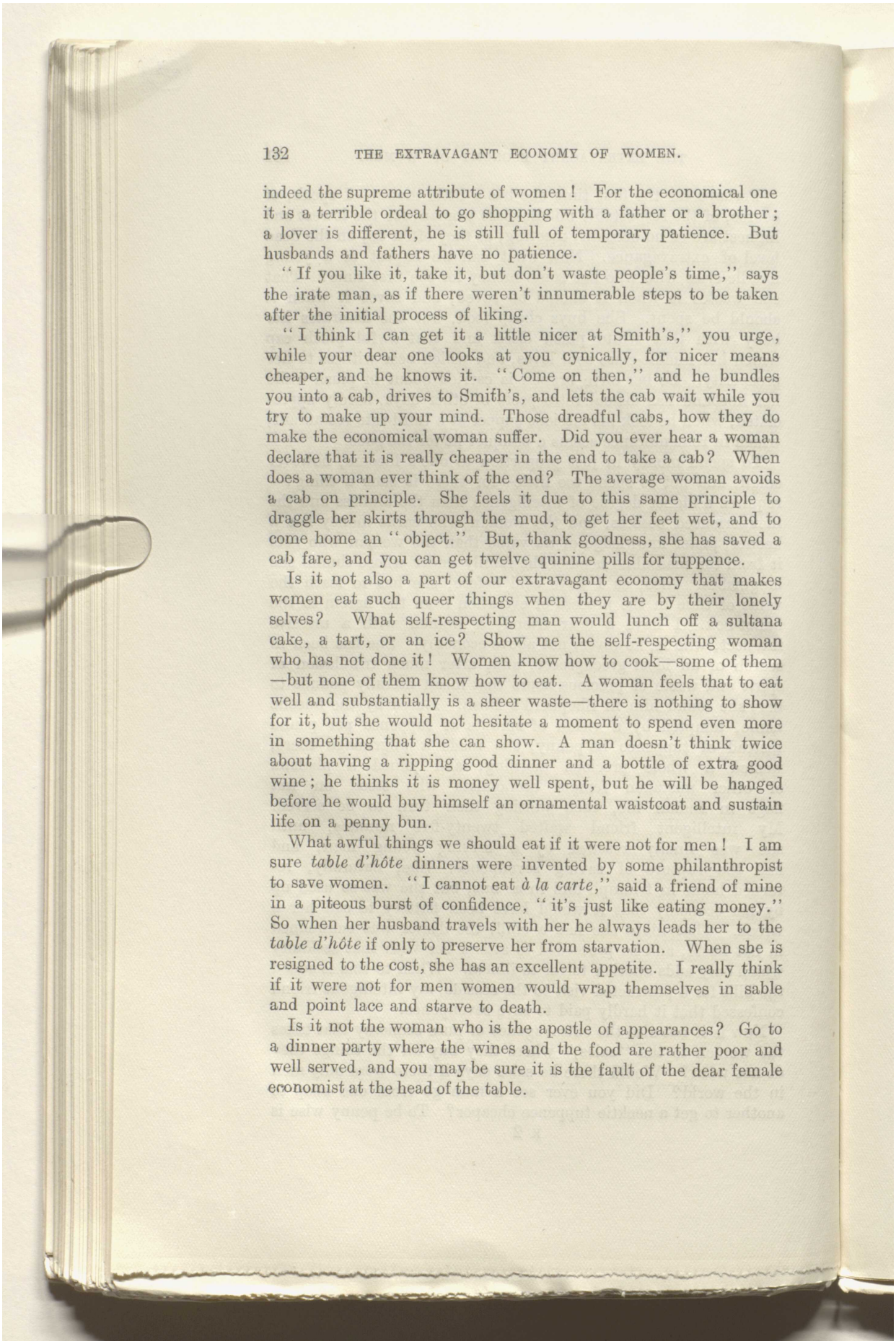
To spend money in just proportion to one's income, however small, and not to spend too little—for there is such a thing!—requires a higher degree of intelligence than the aimless and the inexperienced possess, and the woman who earns money has a keener, juster knowledge of its value than the woman who gets it from the masculine head of the family under whose thumb she languishes. Also, as I have said before, she has to learn the value of time in the process of evolution from the harem to the ballot-box. I have a dear friend, a woman with a massive intellect, who is, however, not above economy. She has been in search of an ideal greengrocer, and, after much tribulation of spirit and waste of precious hours that mean literally pounds to her, she found him in Shepherd's Bush. Lured by the bucolic name, tempted by a vision of sprouts at tuppence per pound instead of tuppence ha'penny, she made a pilgrimage there, wasted a whole precious morning, and joined a phalanx of other mistaken female economists who stood on wet flags in Indian file, each waiting their turn to be served. My intelligent friend waited twenty-five minutes, until she was finally rescued by a serving young man, and had the rapture of saving sevenpence. She, naturally, returned home in triumph and in a 'bus, but she was so used up by her economy that it would have been flattery to call her a wreck. That night she had a chill, the doctor was summoned in hot haste, and he proceeded to attend her with that assiduity which only adds another terror to illness. When to this is added the bills for a protracted visit to the seaside, my intelligent friend confessed that it hardly paid to save sevenpence.

Now is it not also the extravagance of pure economy that takes the women to the "sales," where they buy all the things they do not want? Would there be sales days if there were only men in the world? Did you ever see a man go from one shop to another to get a necktie tuppence cheaper? To be penny wise is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



indeed the supreme attribute of women! For the economical one it is a terrible ordeal to go shopping with a father or a brother; a lover is different, he is still full of temporary patience. But husbands and fathers have no patience.

"If you like it, take it, but don't waste people's time," says the irate man, as if there weren't innumerable steps to be taken after the initial process of liking.

"I think I can get it a little nicer at Smith's," you urge, while your dear one looks at you cynically, for nicer means cheaper, and he knows it. "Come on then," and he bundles you into a cab, drives to Smith's, and lets the cab wait while you try to make up your mind. Those dreadful cabs, how they do make the economical woman suffer. Did you ever hear a woman declare that it is really cheaper in the end to take a cab? When does a woman ever think of the end? The average woman avoids a cab on principle. She feels it due to this same principle to draggle her skirts through the mud, to get her feet wet, and to come home an "object." But, thank goodness, she has saved a cab fare, and you can get twelve quinine pills for tuppence.

Is it not also a part of our extravagant economy that makes women eat such queer things when they are by their lonely selves? What self-respecting man would lunch off a sultana cake, a tart, or an ice? Show me the self-respecting woman who has not done it! Women know how to cook—some of them—but none of them know how to eat. A woman feels that to eat well and substantially is a sheer waste—there is nothing to show for it, but she would not hesitate a moment to spend even more in something that she can show. A man doesn't think twice about having a ripping good dinner and a bottle of extra good wine; he thinks it is money well spent, but he will be hanged before he would buy himself an ornamental waistcoat and sustain life on a penny bun.

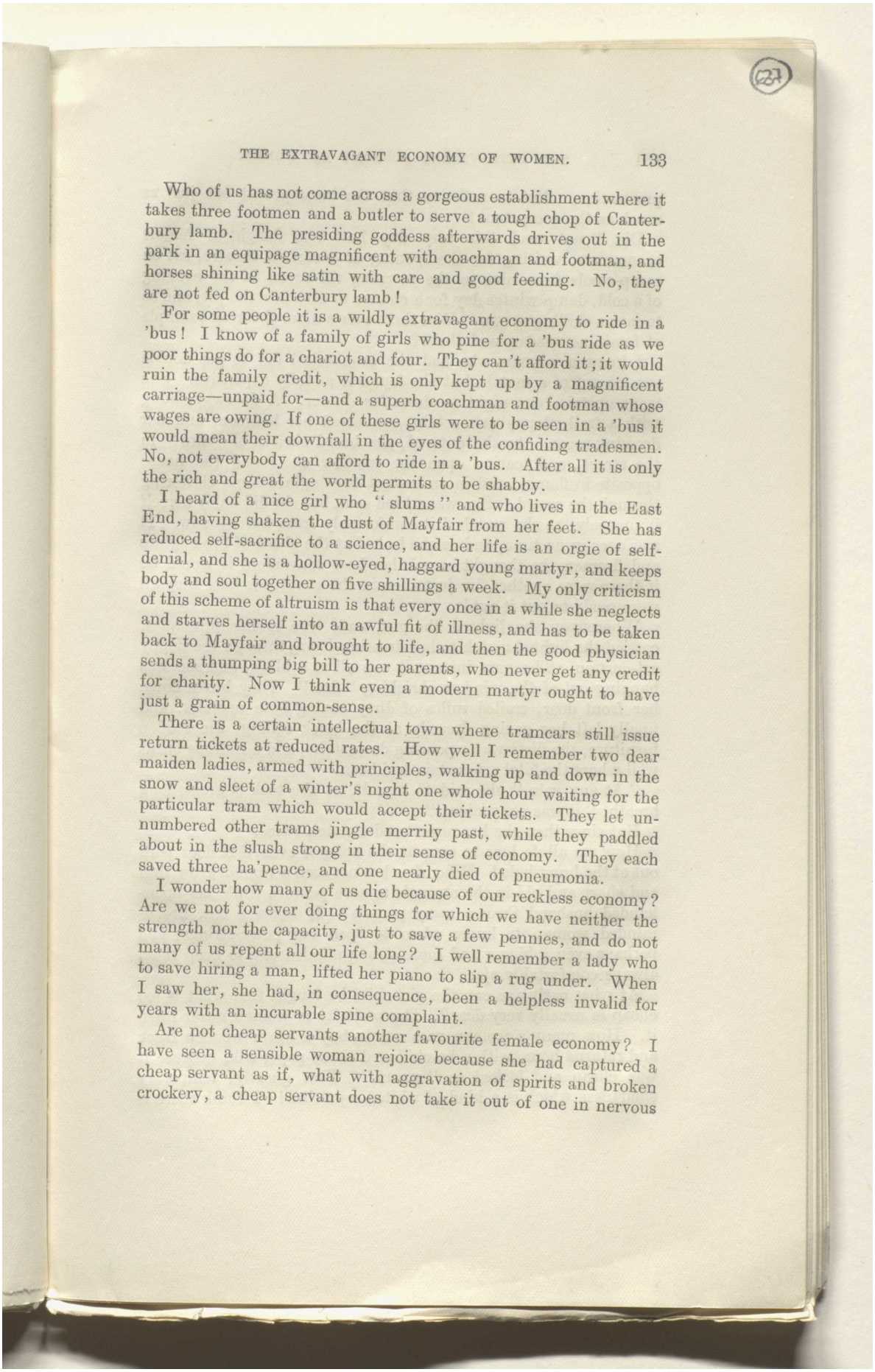
What awful things we should eat if it were not for men! I am sure *table d'hôte* dinners were invented by some philanthropist to save women. "I cannot eat *à la carte*," said a friend of mine in a piteous burst of confidence, "it's just like eating money." So when her husband travels with her he always leads her to the *table d'hôte* if only to preserve her from starvation. When she is resigned to the cost, she has an excellent appetite. I really think if it were not for men women would wrap themselves in sable and point lace and starve to death.

Is it not the woman who is the apostle of appearances? Go to a dinner party where the wines and the food are rather poor and well served, and you may be sure it is the fault of the dear female economist at the head of the table.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000011

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Who of us has not come across a gorgeous establishment where it takes three footmen and a butler to serve a tough chop of Canterbury lamb. The presiding goddess afterwards drives out in the park in an equipage magnificent with coachman and footman, and horses shining like satin with care and good feeding. No, they are not fed on Canterbury lamb!

For some people it is a wildly extravagant economy to ride in a 'bus! I know of a family of girls who pine for a 'bus ride as we poor things do for a chariot and four. They can't afford it; it would ruin the family credit, which is only kept up by a magnificent carriage—unpaid for—and a superb coachman and footman whose wages are owing. If one of these girls were to be seen in a 'bus it would mean their downfall in the eyes of the confiding tradesmen. No, not everybody can afford to ride in a 'bus. After all it is only the rich and great the world permits to be shabby.

I heard of a nice girl who "slums" and who lives in the East End, having shaken the dust of Mayfair from her feet. She has reduced self-sacrifice to a science, and her life is an orgie of self-denial, and she is a hollow-eyed, haggard young martyr, and keeps body and soul together on five shillings a week. My only criticism of this scheme of altruism is that every once in a while she neglects and starves herself into an awful fit of illness, and has to be taken back to Mayfair and brought to life, and then the good physician sends a thumping big bill to her parents, who never get any credit for charity. Now I think even a modern martyr ought to have just a grain of common-sense.

There is a certain intellectual town where tramcars still issue return tickets at reduced rates. How well I remember two dear maiden ladies, armed with principles, walking up and down in the snow and sleet of a winter's night one whole hour waiting for the particular tram which would accept their tickets. They let unnumbered other trams jingle merrily past, while they paddled about in the slush strong in their sense of economy. They each saved three ha'pence, and one nearly died of pneumonia.

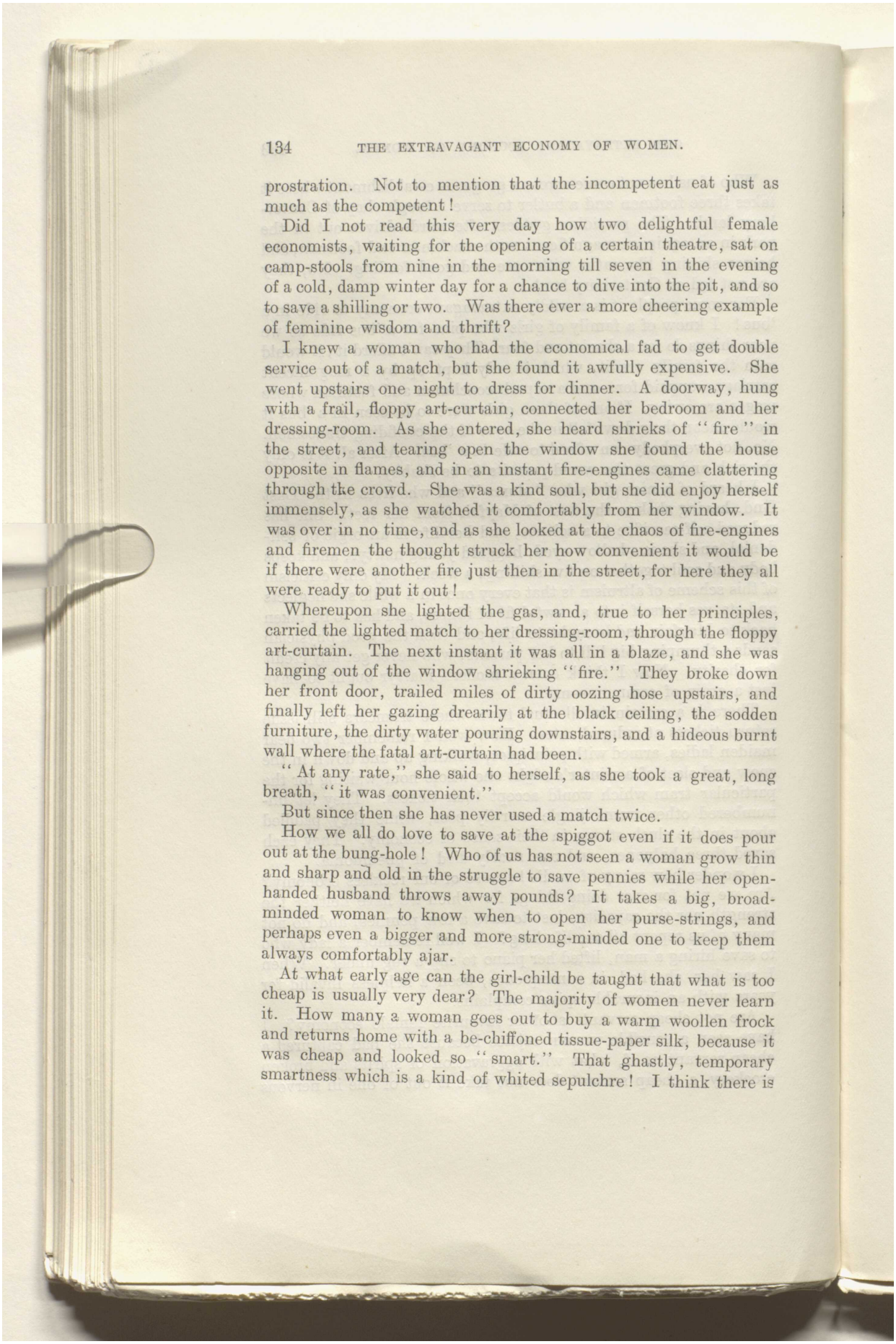
I wonder how many of us die because of our reckless economy? Are we not for ever doing things for which we have neither the strength nor the capacity, just to save a few pennies, and do not many of us repent all our life long? I well remember a lady who to save hiring a man, lifted her piano to slip a rug under. When I saw her, she had, in consequence, been a helpless invalid for years with an incurable spine complaint.

Are not cheap servants another favourite female economy? I have seen a sensible woman rejoice because she had captured a cheap servant as if, what with aggravation of spirits and broken crockery, a cheap servant does not take it out of one in nervous

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000037

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



prostration. Not to mention that the incompetent eat just as much as the competent!

Did I not read this very day how two delightful female economists, waiting for the opening of a certain theatre, sat on camp-stools from nine in the morning till seven in the evening of a cold, damp winter day for a chance to dive into the pit, and so to save a shilling or two. Was there ever a more cheering example of feminine wisdom and thrift?

I knew a woman who had the economical fad to get double service out of a match, but she found it awfully expensive. She went upstairs one night to dress for dinner. A doorway, hung with a frail, floppy art-curtain, connected her bedroom and her dressing-room. As she entered, she heard shrieks of "fire" in the street, and tearing open the window she found the house opposite in flames, and in an instant fire-engines came clattering through the crowd. She was a kind soul, but she did enjoy herself immensely, as she watched it comfortably from her window. It was over in no time, and as she looked at the chaos of fire-engines and firemen the thought struck her how convenient it would be if there were another fire just then in the street, for here they all were ready to put it out!

Whereupon she lighted the gas, and, true to her principles, carried the lighted match to her dressing-room, through the floppy art-curtain. The next instant it was all in a blaze, and she was hanging out of the window shrieking "fire." They broke down her front door, trailed miles of dirty oozing hose upstairs, and finally left her gazing drearily at the black ceiling, the sodden furniture, the dirty water pouring downstairs, and a hideous burnt wall where the fatal art-curtain had been.

"At any rate," she said to herself, as she took a great, long breath, "it was convenient."

But since then she has never used a match twice.

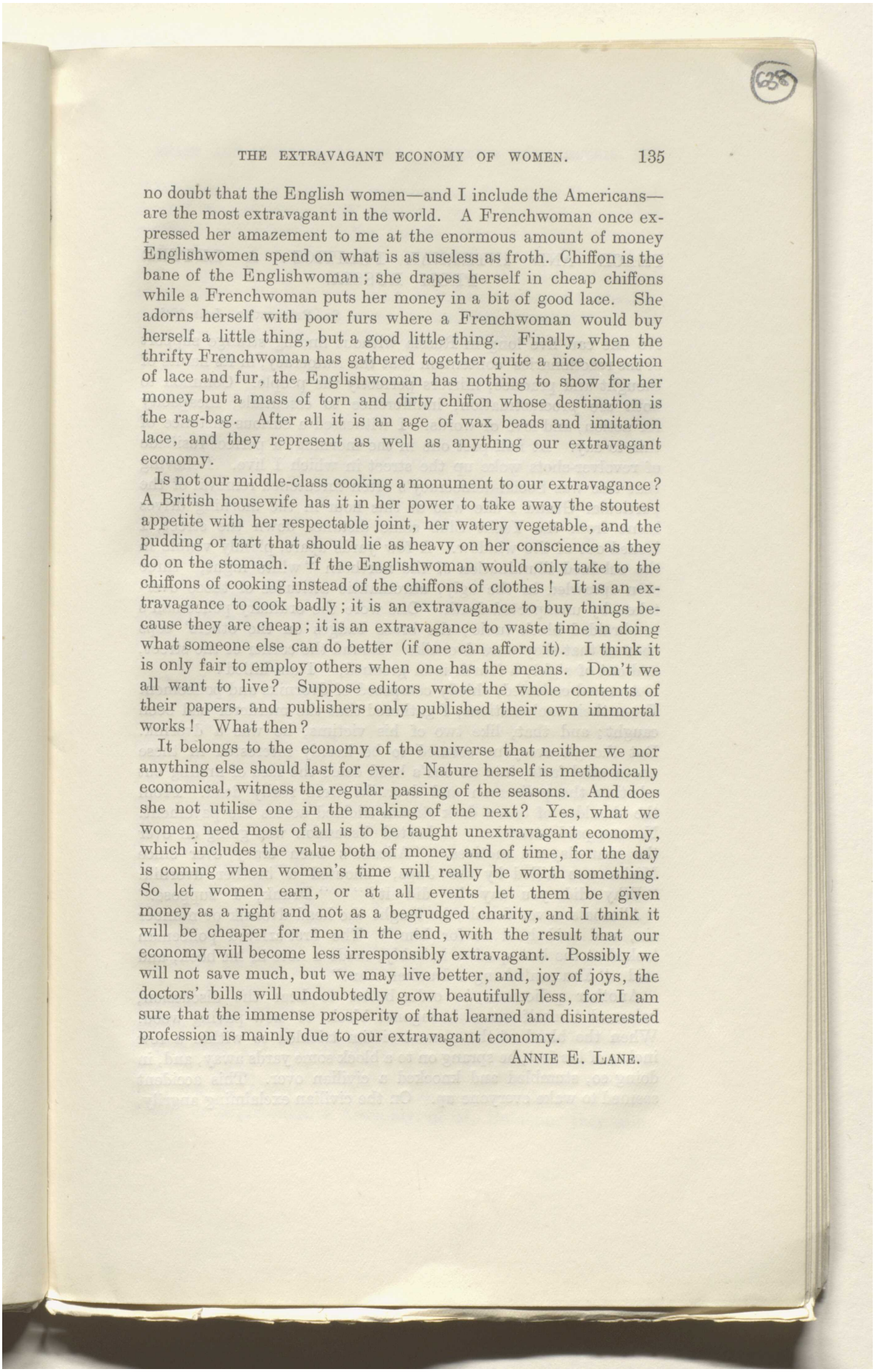
How we all do love to save at the spiggot even if it does pour out at the bung-hole! Who of us has not seen a woman grow thin and sharp and old in the struggle to save pennies while her open-handed husband throws away pounds? It takes a big, broad-minded woman to know when to open her purse-strings, and perhaps even a bigger and more strong-minded one to keep them always comfortably ajar.

At what early age can the girl-child be taught that what is too cheap is usually very dear? The majority of women never learn it. How many a woman goes out to buy a warm woollen frock and returns home with a be-chiffoned tissue-paper silk, because it was cheap and looked so "smart." That ghastly, temporary smartness which is a kind of whited sepulchre! I think there is

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



no doubt that the English women—and I include the Americans—are the most extravagant in the world. A Frenchwoman once expressed her amazement to me at the enormous amount of money Englishwomen spend on what is as useless as froth. Chiffon is the bane of the Englishwoman; she drapes herself in cheap chiffons while a Frenchwoman puts her money in a bit of good lace. She adorns herself with poor furs where a Frenchwoman would buy herself a little thing, but a good little thing. Finally, when the thrifty Frenchwoman has gathered together quite a nice collection of lace and fur, the Englishwoman has nothing to show for her money but a mass of torn and dirty chiffon whose destination is the rag-bag. After all it is an age of wax beads and imitation lace, and they represent as well as anything our extravagant economy.

Is not our middle-class cooking a monument to our extravagance? A British housewife has it in her power to take away the stoutest appetite with her respectable joint, her watery vegetable, and the pudding or tart that should lie as heavy on her conscience as they do on the stomach. If the Englishwoman would only take to the chiffons of cooking instead of the chiffons of clothes! It is an extravagance to cook badly; it is an extravagance to buy things because they are cheap; it is an extravagance to waste time in doing what someone else can do better (if one can afford it). I think it is only fair to employ others when one has the means. Don't we all want to live? Suppose editors wrote the whole contents of their papers, and publishers only published their own immortal works! What then?

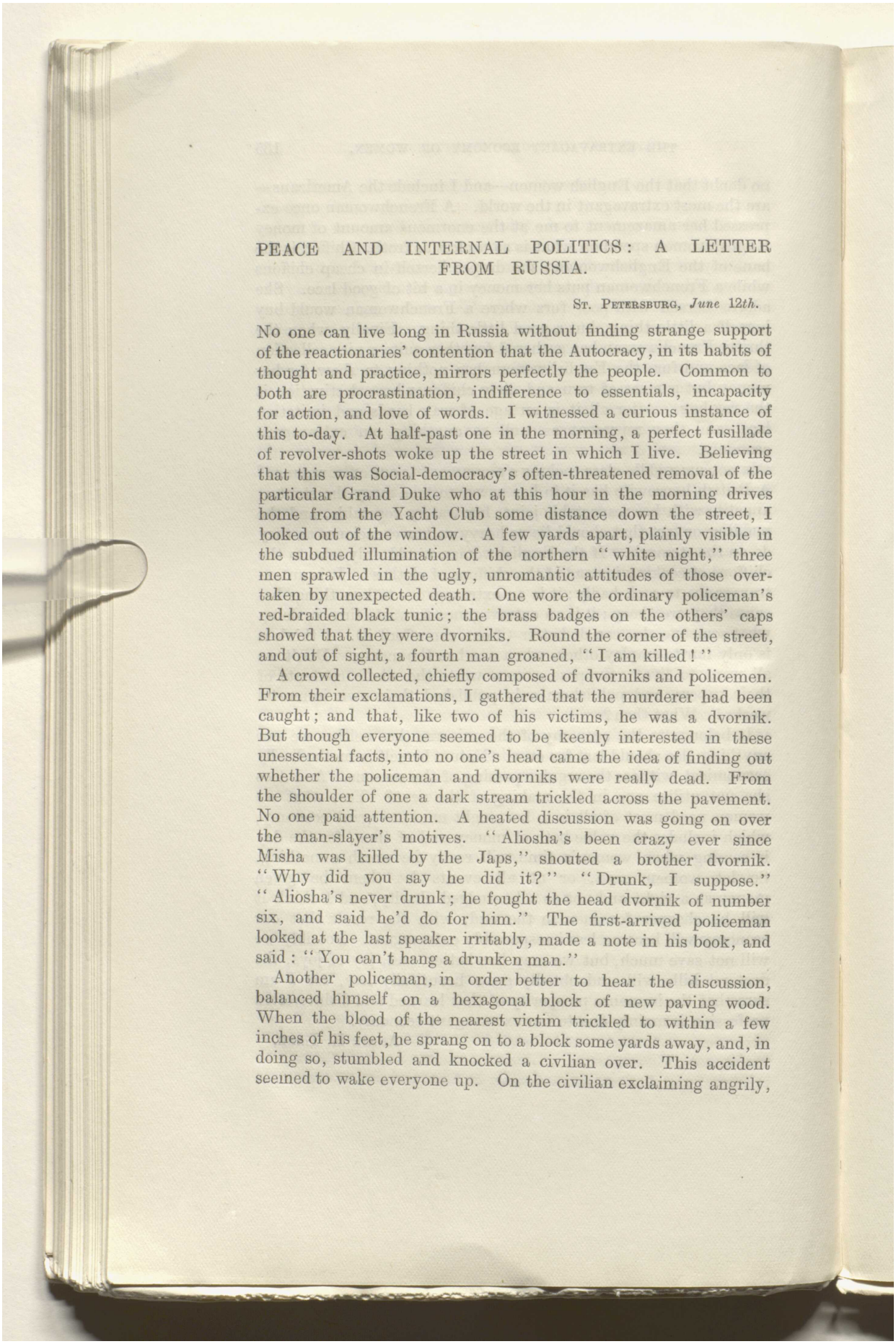
It belongs to the economy of the universe that neither we nor anything else should last for ever. Nature herself is methodically economical, witness the regular passing of the seasons. And does she not utilise one in the making of the next? Yes, what we women need most of all is to be taught unextravagant economy, which includes the value both of money and of time, for the day is coming when women's time will really be worth something. So let women earn, or at all events let them be given money as a right and not as a begrudged charity, and I think it will be cheaper for men in the end, with the result that our economy will become less irresponsibly extravagant. Possibly we will not save much, but we may live better, and, joy of joys, the doctors' bills will undoubtedly grow beautifully less, for I am sure that the immense prosperity of that learned and disinterested profession is mainly due to our extravagant economy.

ANNIE E. LANE.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



PEACE AND INTERNAL POLITICS: A LETTER FROM RUSSIA.

ST. PETERSBURG, *June 12th.*

No one can live long in Russia without finding strange support of the reactionaries' contention that the Autocracy, in its habits of thought and practice, mirrors perfectly the people. Common to both are procrastination, indifference to essentials, incapacity for action, and love of words. I witnessed a curious instance of this to-day. At half-past one in the morning, a perfect fusillade of revolver-shots woke up the street in which I live. Believing that this was Social-democracy's often-threatened removal of the particular Grand Duke who at this hour in the morning drives home from the Yacht Club some distance down the street, I looked out of the window. A few yards apart, plainly visible in the subdued illumination of the northern "white night," three men sprawled in the ugly, unromantic attitudes of those overtaken by unexpected death. One wore the ordinary policeman's red-braided black tunic; the brass badges on the others' caps showed that they were dvorniks. Round the corner of the street, and out of sight, a fourth man groaned, "I am killed!"

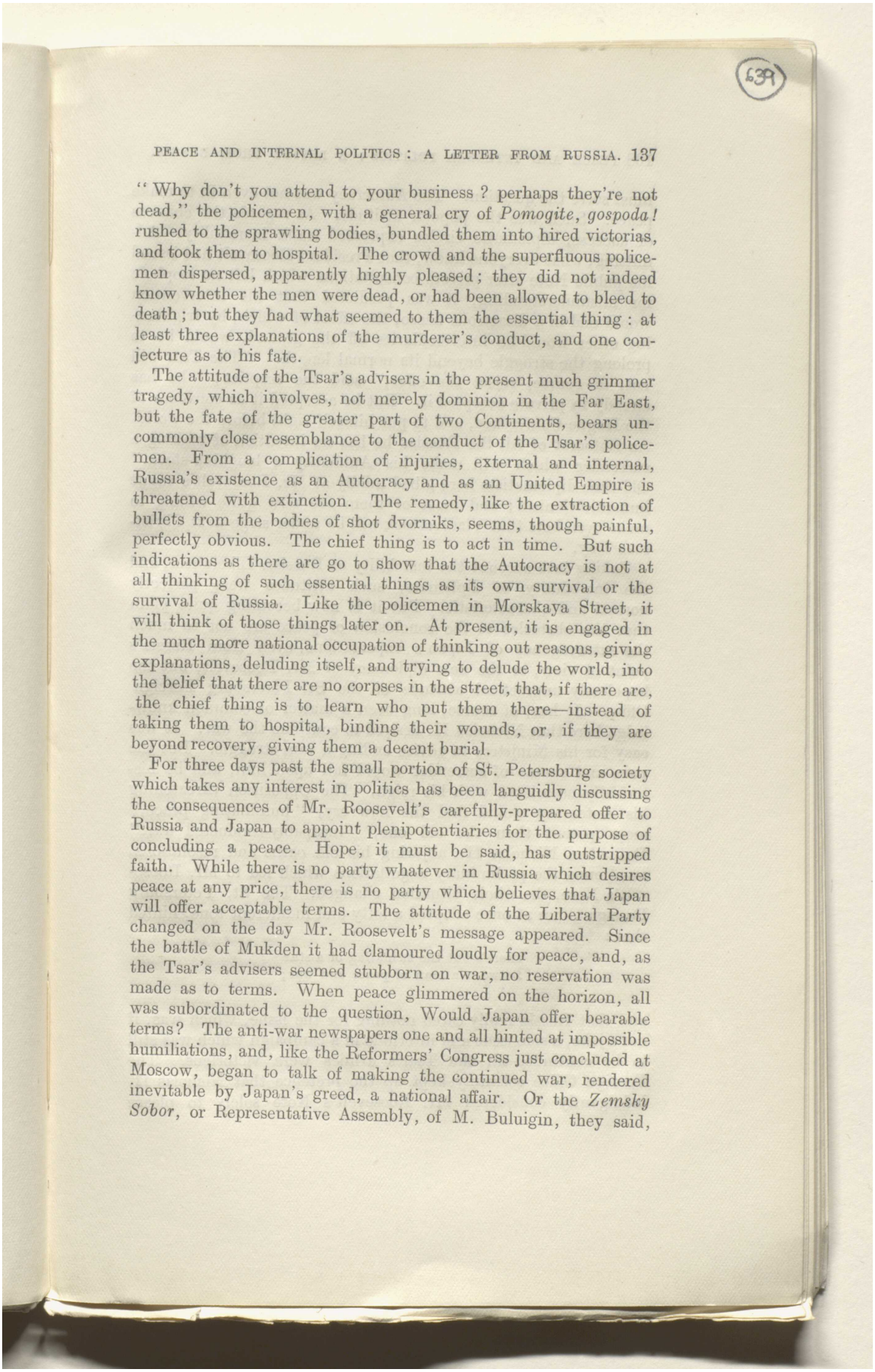
A crowd collected, chiefly composed of dvorniks and policemen. From their exclamations, I gathered that the murderer had been caught; and that, like two of his victims, he was a dvornik. But though everyone seemed to be keenly interested in these unessential facts, into no one's head came the idea of finding out whether the policeman and dvorniks were really dead. From the shoulder of one a dark stream trickled across the pavement. No one paid attention. A heated discussion was going on over the man-slayer's motives. "Aliosha's been crazy ever since Misha was killed by the Japs," shouted a brother dvornik. "Why did you say he did it?" "Drunk, I suppose." "Aliosha's never drunk; he fought the head dvornik of number six, and said he'd do for him." The first-arrived policeman looked at the last speaker irritably, made a note in his book, and said: "You can't hang a drunken man."

Another policeman, in order better to hear the discussion, balanced himself on a hexagonal block of new paving wood. When the blood of the nearest victim trickled to within a few inches of his feet, he sprang on to a block some yards away, and, in doing so, stumbled and knocked a civilian over. This accident seemed to wake everyone up. On the civilian exclaiming angrily,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000007

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"Why don't you attend to your business? perhaps they're not dead," the policemen, with a general cry of *Pomogite, gospoda!* rushed to the sprawling bodies, bundled them into hired victorias, and took them to hospital. The crowd and the superfluous policemen dispersed, apparently highly pleased; they did not indeed know whether the men were dead, or had been allowed to bleed to death; but they had what seemed to them the essential thing: at least three explanations of the murderer's conduct, and one conjecture as to his fate.

The attitude of the Tsar's advisers in the present much grimmer tragedy, which involves, not merely dominion in the Far East, but the fate of the greater part of two Continents, bears uncommonly close resemblance to the conduct of the Tsar's policemen. From a complication of injuries, external and internal, Russia's existence as an Autocracy and as an United Empire is threatened with extinction. The remedy, like the extraction of bullets from the bodies of shot dvorniks, seems, though painful, perfectly obvious. The chief thing is to act in time. But such indications as there are go to show that the Autocracy is not at all thinking of such essential things as its own survival or the survival of Russia. Like the policemen in Morskaya Street, it will think of those things later on. At present, it is engaged in the much more national occupation of thinking out reasons, giving explanations, deluding itself, and trying to delude the world, into the belief that there are no corpses in the street, that, if there are, the chief thing is to learn who put them there—instead of taking them to hospital, binding their wounds, or, if they are beyond recovery, giving them a decent burial.

For three days past the small portion of St. Petersburg society which takes any interest in politics has been languidly discussing the consequences of Mr. Roosevelt's carefully-prepared offer to Russia and Japan to appoint plenipotentiaries for the purpose of concluding a peace. Hope, it must be said, has outstripped faith. While there is no party whatever in Russia which desires peace at any price, there is no party which believes that Japan will offer acceptable terms. The attitude of the Liberal Party changed on the day Mr. Roosevelt's message appeared. Since the battle of Mukden it had clamoured loudly for peace, and, as the Tsar's advisers seemed stubborn on war, no reservation was made as to terms. When peace glimmered on the horizon, all was subordinated to the question, Would Japan offer bearable terms? The anti-war newspapers one and all hinted at impossible humiliations, and, like the Reformers' Congress just concluded at Moscow, began to talk of making the continued war, rendered inevitable by Japan's greed, a national affair. Or the *Zemsky Sobor*, or Representative Assembly, of M. Buluigin, they said,

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000015

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

must solve the question. The Autocracy was not even fit to make peace. Such was the popular attitude. As regards the chances of success, diplomatic circles expressed frank incredulity. Admitting, what everyone knew, that President Roosevelt had issued his public Note after private consultations which left no loophole for misunderstanding, it was predicted that his intervention would end in a disastrous fiasco, the effect of which, by frightening other would-be intermediaries off the ground, would be to prolong the struggle beyond its normal length. "The Tsar will not, of course, reject the offer," said the sceptics; "he has already in private accepted it. But he accepted it as convener of the Hague Conference, and to put himself right before the world. As Autocrat of All the Russias he has no intention of making a surrender which will make his Autocracy a laughing-stock." Old-time diplomatists here gibed mildly at Mr. Roosevelt's vague humanitarianism; and most of them are now quite willing to make even bets that Vladivostock will be under siege next Christmas Day.

Taking into account the instability of Russian Liberalism, and the incredulity of diplomats, such attitudes were perfectly normal and characteristic. But it is now becoming quite plain that the obstacles to the conclusion of peace are not so much the extravagance of Japan's expectations, even from Russia's point of view, or the new diplomacy of Mr. Roosevelt, but the hopelessly unpractical attitude of the St. Petersburg Foreign Office. It has, of course, long been a matter of common knowledge here that Nicholas II. desired to continue the war. It was easy for his Ministers to advise ending a vain struggle. But the pain and shame of surrender would fall upon him, and be historically associated with his reign. The Opposition threatening his Autocracy would find the new cry, "humiliating peace," more potent than the old one, "incapably-conducted war." But when Nicholas II., abjuring his old oaths and resolutions, sanctioned the preliminary negotiations which led to Mr. Roosevelt's Note, the whole situation changed. The St. Petersburg Foreign Office at once adopted a lofty and indifferent tone, hinted that:

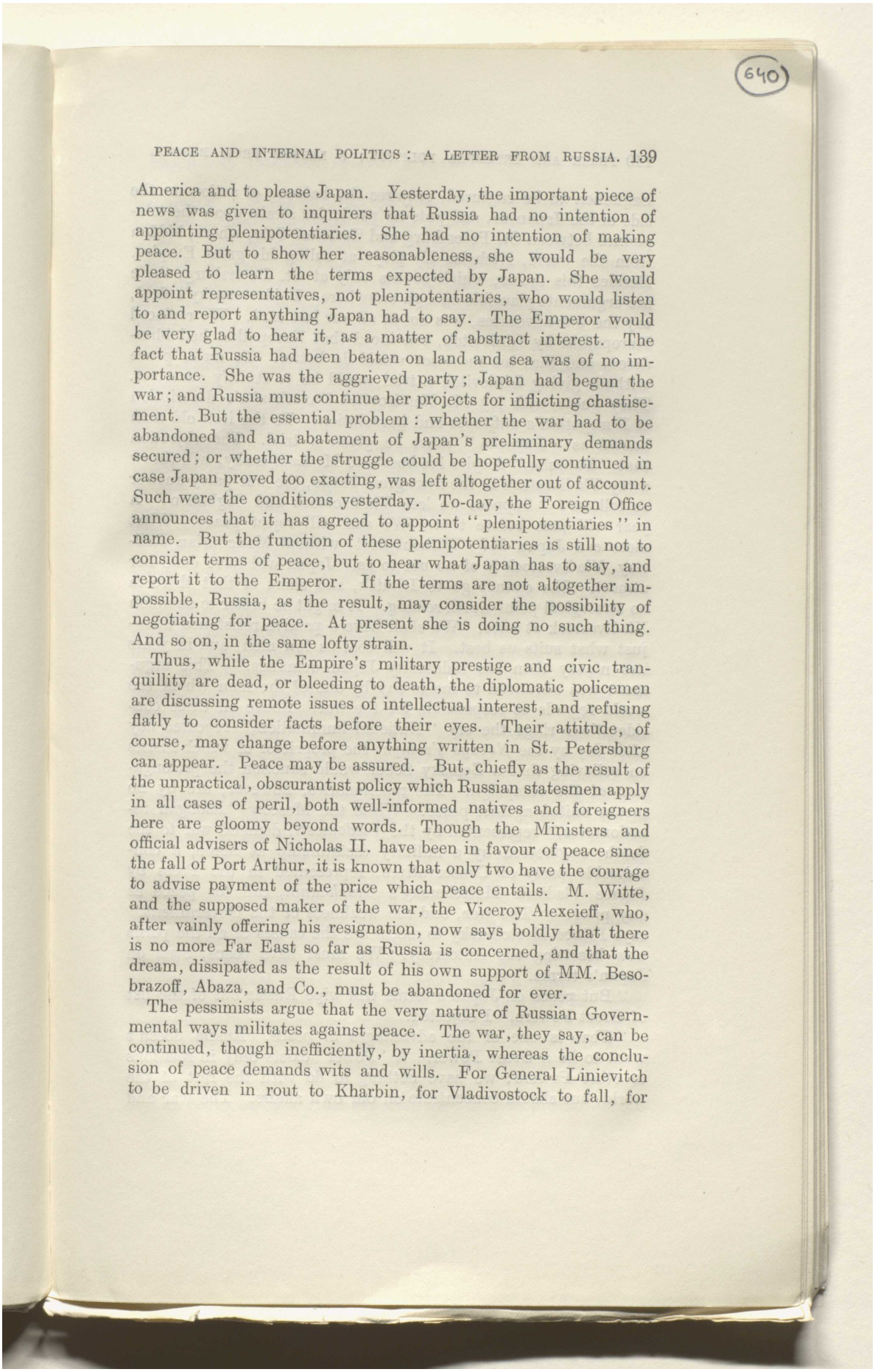
> There's but the twinkling of a star
> Between a man of peace and war;

and that Russia really cared nothing for the issue, which was, if not a joke, a side issue and interlude in a campaign which was still to be continued till the Tsar's armies were victorious. The Foreign Office solemnly kept up the pretence that Nicholas II. indulgently considered Mr. Roosevelt's Note solely to please

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000098

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



America and to please Japan. Yesterday, the important piece of news was given to inquirers that Russia had no intention of appointing plenipotentiaries. She had no intention of making peace. But to show her reasonableness, she would be very pleased to learn the terms expected by Japan. She would appoint representatives, not plenipotentiaries, who would listen to and report anything Japan had to say. The Emperor would be very glad to hear it, as a matter of abstract interest. The fact that Russia had been beaten on land and sea was of no importance. She was the aggrieved party; Japan had begun the war; and Russia must continue her projects for inflicting chastisement. But the essential problem: whether the war had to be abandoned and an abatement of Japan's preliminary demands secured; or whether the struggle could be hopefully continued in case Japan proved too exacting, was left altogether out of account. Such were the conditions yesterday. To-day, the Foreign Office announces that it has agreed to appoint "plenipotentiaries" in name. But the function of these plenipotentiaries is still not to consider terms of peace, but to hear what Japan has to say, and report it to the Emperor. If the terms are not altogether impossible, Russia, as the result, may consider the possibility of negotiating for peace. At present she is doing no such thing. And so on, in the same lofty strain.

Thus, while the Empire's military prestige and civic tranquillity are dead, or bleeding to death, the diplomatic policemen are discussing remote issues of intellectual interest, and refusing flatly to consider facts before their eyes. Their attitude, of course, may change before anything written in St. Petersburg can appear. Peace may be assured. But, chiefly as the result of the unpractical, obscurantist policy which Russian statesmen apply in all cases of peril, both well-informed natives and foreigners here are gloomy beyond words. Though the Ministers and official advisers of Nicholas II. have been in favour of peace since the fall of Port Arthur, it is known that only two have the courage to advise payment of the price which peace entails. M. Witte, and the supposed maker of the war, the Viceroy Alexeieff, who, after vainly offering his resignation, now says boldly that there is no more Far East so far as Russia is concerned, and that the dream, dissipated as the result of his own support of MM. Besobrazoff, Abaza, and Co., must be abandoned for ever.

The pessimists argue that the very nature of Russian Governmental ways militates against peace. The war, they say, can be continued, though inefficiently, by inertia, whereas the conclusion of peace demands wits and wills. For General Linievitch to be driven in rout to Kharbin, for Vladivostock to fall, for

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Saghalien to be captured, requires the balance of action on the side of the Japanese, and puts no particular strain upon the telephones between St. Petersburg and Tsarskoë Selo, where, hidden from the world, Nicholas II. plays at ruling his great Empire. Besides this factor, which counts only at St. Petersburg, there are arguments plausible enough anywhere. Rojdestvensky's fleet, say the war advocates, was not at all our last card. We replaced Kuropatkin by Linievitch, convinced that Kuropatkin had blundered, and that his successor would do better. To make peace without giving Linievitch a trial would be to stultify ourselves. They quote with joy M. Nemirovitch-Dantchenko's description of Kuropatkin's unfitness and irresolution. To the iron old man known as "Papasha" must be given a trial. The objection that "Papasha," despite his boasts to M. Ladijensky, will throw away Vladivostock in the next great battle, the war party answer as follows: "Suppose we lose Vladivostock and Saghalien? A year will pass before that. We can still reject peace. What more can Japan do? Without fleet, without Manchurian Railway, Vladivostock is of no use to us. Japan will have done her utmost. She cannot go to Irkutsk, and short of that there is no strategical point worth seizing. It might be better to abandon Vladivostock at once. We shall have a passive resistance war—just what suits us best. It will cost us few men, and in years less money than the indemnity Japan demands." This argument was advanced to me to-day by one of the men whom the world regards as responsible for the war. Above all these considerations rings the cry "National humiliation," repeated day after day by the *Novoye Vremya*, the proprietor of which insists on believing that a Zemsky Sobor would sanction the prolongation of the campaign. The reactionaries, however, are by no means united against peace. While the Moscow "hooligan reactionaries," represented by the *Viedomosti*, demand war to the death, engineered by a military dictatorship at home, a considerable party of Conservatives, represented in the Press by Prince Vladimir Mestchersky's *Grazhdanin*, call for peace at any price. "The war, and the weakness of the Government," says Prince Mestchersky to me, "are the causes of all the perils now besetting the Autocracy. We must have peace, even on Japan's terms."

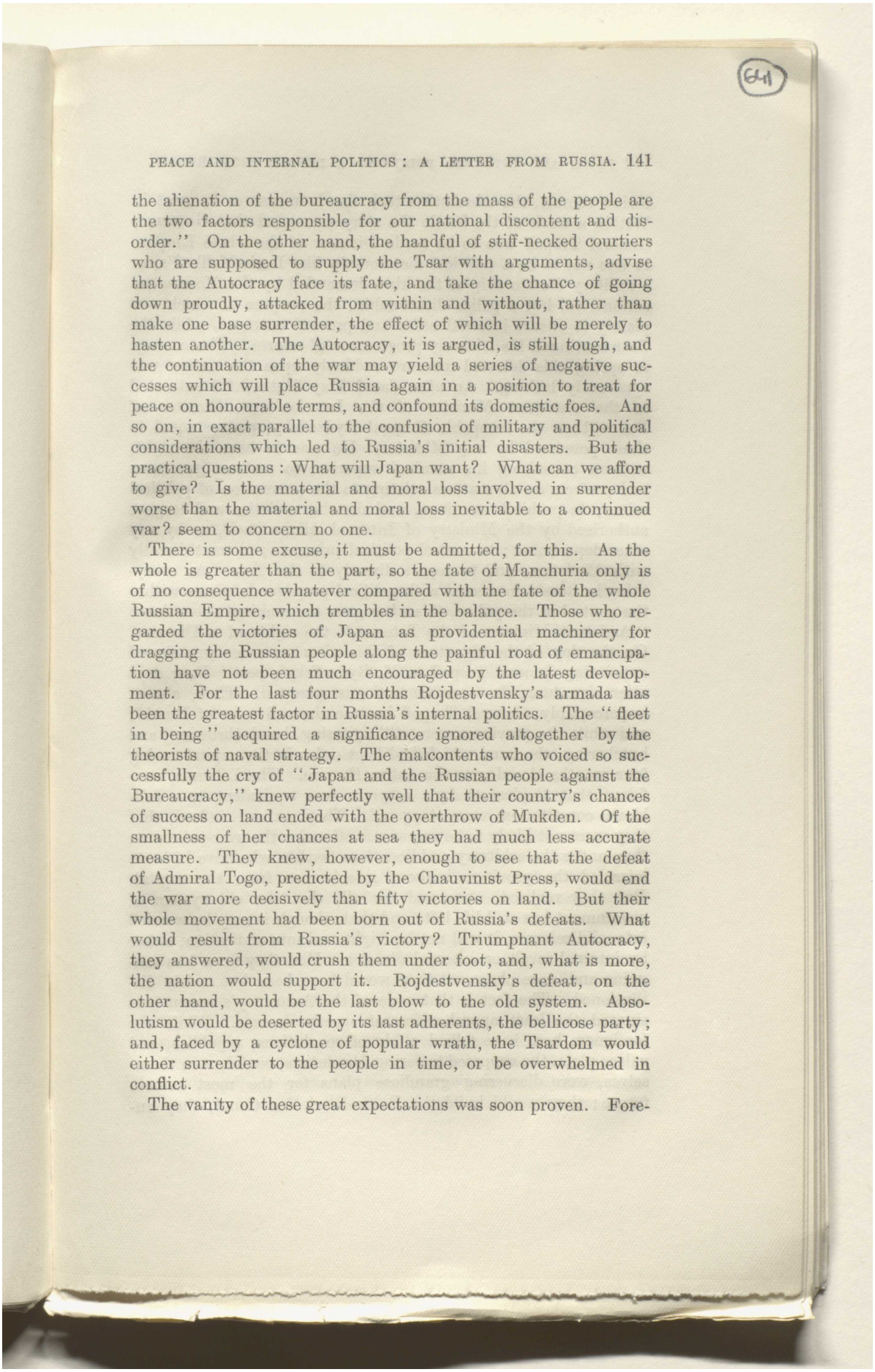
"But peace on Japan's terms will wipe Russia out of the list of Great Powers," I objected.

"That is one of the advantages of peace. Russia doesn't want to be a Great Power. A 'Power' exists only in relations to other Powers; we have nothing to do with the rest of the world, but should concentrate on our own affairs. The war and

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the alienation of the bureaucracy from the mass of the people are the two factors responsible for our national discontent and disorder.'' On the other hand, the handful of stiff-necked courtiers who are supposed to supply the Tsar with arguments, advise that the Autocracy face its fate, and take the chance of going down proudly, attacked from within and without, rather than make one base surrender, the effect of which will be merely to hasten another. The Autocracy, it is argued, is still tough, and the continuation of the war may yield a series of negative successes which will place Russia again in a position to treat for peace on honourable terms, and confound its domestic foes. And so on, in exact parallel to the confusion of military and political considerations which led to Russia's initial disasters. But the practical questions: What will Japan want? What can we afford to give? Is the material and moral loss involved in surrender worse than the material and moral loss inevitable to a continued war? seem to concern no one.

There is some excuse, it must be admitted, for this. As the whole is greater than the part, so the fate of Manchuria only is of no consequence whatever compared with the fate of the whole Russian Empire, which trembles in the balance. Those who regarded the victories of Japan as providential machinery for dragging the Russian people along the painful road of emancipation have not been much encouraged by the latest development. For the last four months Rojdestvensky's armada has been the greatest factor in Russia's internal politics. The ''fleet in being'' acquired a significance ignored altogether by the theorists of naval strategy. The malcontents who voiced so successfully the cry of ''Japan and the Russian people against the Bureaucracy,'' knew perfectly well that their country's chances of success on land ended with the overthrow of Mukden. Of the smallness of her chances at sea they had much less accurate measure. They knew, however, enough to see that the defeat of Admiral Togo, predicted by the Chauvinist Press, would end the war more decisively than fifty victories on land. But their whole movement had been born out of Russia's defeats. What would result from Russia's victory? Triumphant Autocracy, they answered, would crush them under foot, and, what is more, the nation would support it. Rojdestvensky's defeat, on the other hand, would be the last blow to the old system. Absolutism would be deserted by its last adherents, the bellicose party; and, faced by a cyclone of popular wrath, the Tsardom would either surrender to the people in time, or be overwhelmed in conflict.

The vanity of these great expectations was soon proven. Fore-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00001e

مكتبة قطر الوطنية
Qatar National Library

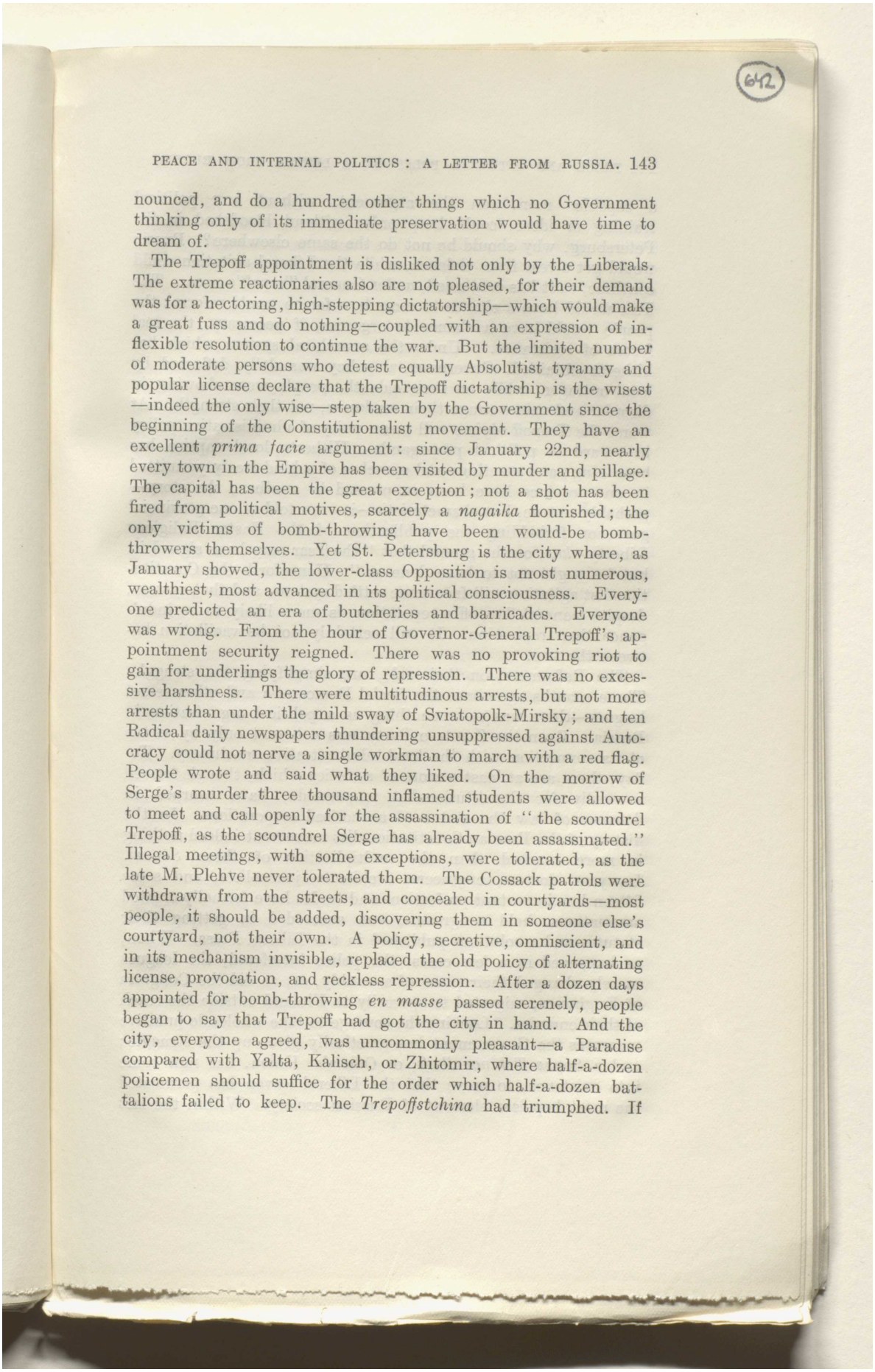
BRITISH LIBRARY

seeing tumult, the Absolutists took timely measures to meet it. Within a week of the battle the story circulated that Governor-General Trepoff was to be made Dictator of the whole Empire. It was not to be a political dictatorship like Loris-Melikoff's, or a military dictatorship of the kind demanded by the Moscow reactionaries, but a police dictatorship, the purpose of which was plainly to ensure internal order and prevent outrages, while the Tsar continued his leisurely programme of reform. The courage to spring this detested measure suddenly upon the nation was apparently lacking. An *ukaz* dated May 21st (O.S.) entrusted to the Assistant Minister of the Interior and Director of Police, then the incapable General Rydzeffsky, powers equal to those possessed by any Minister. He was to have the right, without consulting his nominal superior, to instruct governors and prefects on all matters relating to the prevention of political crime; to prohibit meetings, and dissolve societies and leagues authorised by the Ministry of Internal Affairs itself, or by any other department; to control political prisoners; to treat directly with Ministers, and to report directly to the Tsar. As everything in Russia connected with political propaganda comes within the control of the police, this *ukaz* gave the nominal subordinate "Assistant Minister of the Interior," the rights of a Dictator. On the day of the signature of this *ukaz* an order was signed appointing General Trepoff to M. Rydzeffsky's post. Four days after signature, the appointment was gazetted. Thus, almost imperceptibly, General Trepoff became the real ruler of Russia; and while the provinces were still agitating, bomb-throwing, and butchering, the hand which had kept order in the capital during four months closed over the entire Empire. The Liberals, confident that Rojdestvensky's *razgrom* was equivalent to a full-blown constitution, were staggered. They realised, indeed, that they were not likely to be any worse off under the over-policeman than under the arbitrary and licentious tsarlets who have hitherto misruled the provinces without interference from the capital. But they realised, once and for all, that the old system of government has still life left; and that, though it may be worried into mild reforms, it will not be frightened into abdication, either by internal revolt or external disaster. Had they been less sanguine and more observant they would have been less rudely disillusioned. The fact is that none of the Autocracy's recent acts showed the least apprehension of speedy decease. While the foreigners here have talked glibly of revolutions, republics, and palace plots, the supposed tottering Absolutists, confident in themselves, were discussing grandiose plans for the most remote future; they would build the Baltic-Black-Sea Canal, they an-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000046

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



nounced, and do a hundred other things which no Government thinking only of its immediate preservation would have time to dream of.

The Trepoff appointment is disliked not only by the Liberals. The extreme reactionaries also are not pleased, for their demand was for a hectoring, high-stepping dictatorship—which would make a great fuss and do nothing—coupled with an expression of inflexible resolution to continue the war. But the limited number of moderate persons who detest equally Absolutist tyranny and popular license declare that the Trepoff dictatorship is the wisest—indeed the only wise—step taken by the Government since the beginning of the Constitutionalist movement. They have an excellent *prima facie* argument: since January 22nd, nearly every town in the Empire has been visited by murder and pillage. The capital has been the great exception; not a shot has been fired from political motives, scarcely a *nagaika* flourished; the only victims of bomb-throwing have been would-be bomb-throwers themselves. Yet St. Petersburg is the city where, as January showed, the lower-class Opposition is most numerous, wealthiest, most advanced in its political consciousness. Everyone predicted an era of butcheries and barricades. Everyone was wrong. From the hour of Governor-General Trepoff's appointment security reigned. There was no provoking riot to gain for underlings the glory of repression. There was no excessive harshness. There were multitudinous arrests, but not more arrests than under the mild sway of Sviatopolk-Mirsky; and ten Radical daily newspapers thundering unsuppressed against Autocracy could not nerve a single workman to march with a red flag. People wrote and said what they liked. On the morrow of Serge's murder three thousand inflamed students were allowed to meet and call openly for the assassination of "the scoundrel Trepoff, as the scoundrel Serge has already been assassinated." Illegal meetings, with some exceptions, were tolerated, as the late M. Plehve never tolerated them. The Cossack patrols were withdrawn from the streets, and concealed in courtyards—most people, it should be added, discovering them in someone else's courtyard, not their own. A policy, secretive, omniscient, and in its mechanism invisible, replaced the old policy of alternating license, provocation, and reckless repression. After a dozen days appointed for bomb-throwing *en masse* passed serenely, people began to say that Trepoff had got the city in hand. And the city, everyone agreed, was uncommonly pleasant—a Paradise compared with Yalta, Kalisch, or Zhitomir, where half-a-dozen policemen should suffice for the order which half-a-dozen battalions failed to keep. The *Trepoffstchina* had triumphed. If

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000ae

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

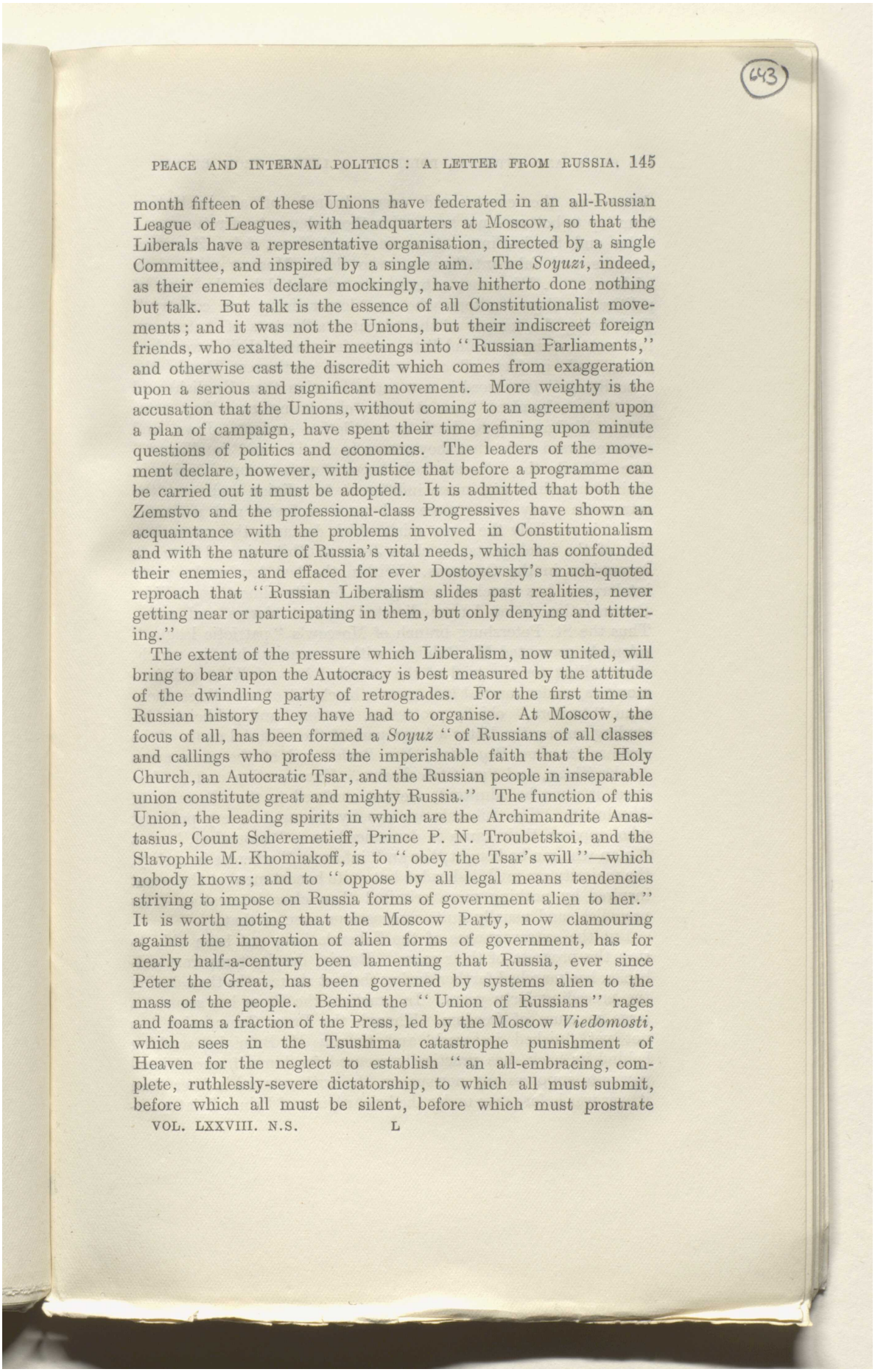
a capable man, ran the argument, without any political training or ideas, could keep order without bloodshed in St. Petersburg, why should he not do the same elsewhere? Russia would get a rest from violence, while the Liberal agitation could continue, as it has continued, under General Trepoff's nose. The Tsar would have a chance to show how far he would reform; the people would have a chance to organise, if necessary, the real forces of resistance. Under the anarchical system which has hitherto obtained, Governmental policy was daily deflected by local outrages, while on their side the people were showing in disorder and vain outrage their weakness, not their strength. At worst the Trepoff *régime* will mean unity of administrative policy in regard to political propaganda. Hitherto, local caprice has been king; and meetings and speeches of a kind freely permitted in one province have been suppressed in another; the story—probably untrue, but characteristic—is even told of one provincial governor forbidding the publication of the Easter Religious Liberty *ukaz*, on the ground that "the Tsar *may* have signed it, but he ought not to have done so." Henceforth the Constitutionalist agitation will face some settled system; and that system, despite General Trepoff's reputation, is more likely to be indulgence than repression. It will certainly not be vacillation between the two.

The Reformers, on their side, are simplifying the struggle. Three months ago—save the Social Democratic and other secret leagues—there was no such thing as a political organisation in Russia. Even the Zemtsvo Party was coherent only by virtue of its connection with the local administrative machinery. To-day, there are at least a score of societies which, though formed avowedly for Constitutionalist propaganda, have usurped in defiance of law the status of authorised corporations. In the history of the Russian Constitutionalist movement indeed nothing is more marked than the multiplication of these *Soyuzi*. Lawyers, doctors, engineers, architects, journalists, and some fifteen less important professions and trades have formally created associations, held congresses, and succeeded in getting their statutes and resolutions published in the Liberal Press. When, as happened in a few cases, the police interfered, the leagues merely changed their place of assembly, or, as did the Congress of Engineers, migrated temporarily to Finland outside the reach of their enemies. Lacking the courage to take wholesale punitive measures the Government has practically given up the struggle; and a *Soyuz Tchinovnikoff*, or Officials' Union, has now come into existence, to prove that the Liberal leaven has permeated the most hopeless element of Russian society. Within the last

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



month fifteen of these Unions have federated in an all-Russian League of Leagues, with headquarters at Moscow, so that the Liberals have a representative organisation, directed by a single Committee, and inspired by a single aim. The *Soyuzi*, indeed, as their enemies declare mockingly, have hitherto done nothing but talk. But talk is the essence of all Constitutionalist movements; and it was not the Unions, but their indiscreet foreign friends, who exalted their meetings into "Russian Parliaments," and otherwise cast the discredit which comes from exaggeration upon a serious and significant movement. More weighty is the accusation that the Unions, without coming to an agreement upon a plan of campaign, have spent their time refining upon minute questions of politics and economics. The leaders of the movement declare, however, with justice that before a programme can be carried out it must be adopted. It is admitted that both the Zemstvo and the professional-class Progressives have shown an acquaintance with the problems involved in Constitutionalism and with the nature of Russia's vital needs, which has confounded their enemies, and effaced for ever Dostoyevsky's much-quoted reproach that "Russian Liberalism slides past realities, never getting near or participating in them, but only denying and tittering."

The extent of the pressure which Liberalism, now united, will bring to bear upon the Autocracy is best measured by the attitude of the dwindling party of retrogrades. For the first time in Russian history they have had to organise. At Moscow, the focus of all, has been formed a *Soyuz* "of Russians of all classes and callings who profess the imperishable faith that the Holy Church, an Autocratic Tsar, and the Russian people in inseparable union constitute great and mighty Russia." The function of this Union, the leading spirits in which are the Archimandrite Anastasius, Count Scheremetieff, Prince P. N. Troubetskoi, and the Slavophile M. Khomiakoff, is to "obey the Tsar's will"—which nobody knows; and to "oppose by all legal means tendencies striving to impose on Russia forms of government alien to her." It is worth noting that the Moscow Party, now clamouring against the innovation of alien forms of government, has for nearly half-a-century been lamenting that Russia, ever since Peter the Great, has been governed by systems alien to the mass of the people. Behind the "Union of Russians" rages and foams a fraction of the Press, led by the Moscow *Viedomosti*, which sees in the Tsushima catastrophe punishment of Heaven for the neglect to establish "an all-embracing, complete, ruthlessly-severe dictatorship, to which all must submit, before which all must be silent, before which must prostrate

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00007c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

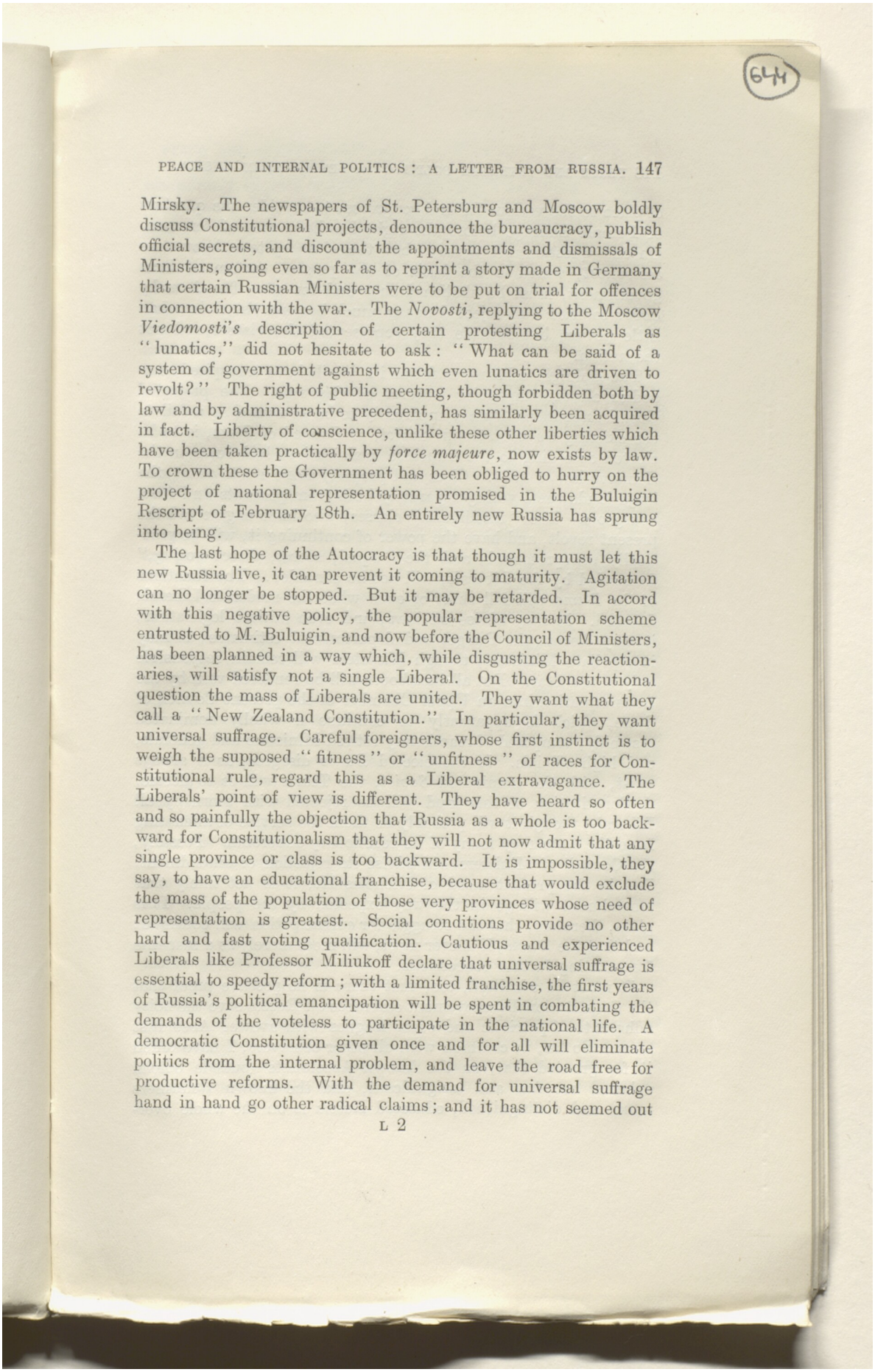
themselves the courts and every branch of administration from top to bottom—not to mention those elements of rottenness: Poles and Suedo-Finns, Armenians and Jews, false Zemstvo-workers and false-intelligents, who defile Moscow with their trickery. . . . We must exterminate without delay the gang of political hooligan-traitors who are demoralising our country." Such being the temper of the educated adherents of Autocracy, it is not surprising to find little restraint among their lower-class allies, and, in fact, all over south and south-west Russia the "hooligans" (the word is now more Russian than English) and the "black hundred" are at work, circulating incendiary pamphlets, bludgeoning to death or mutilation students, Jews, and anyone cursed with what they choose to consider an "intelligent" face. While the Liberals daily become more comprehensive in their sympathies and more indifferent to religion and race, the retrograde party grows more and more exclusive and national; and it is precisely the same spirit which demands the extermination of the intelligents, as clubs Jews at Zhitomir and butchers Armenians in the Caucasus. Within the last few weeks party intolerance has reached a stage of ferocity almost incredible. Denunciation is no longer directed against classes and races. Thus the St. Petersburg branch of Moscow's "patriotic league" solemnly presented M. Buluigin with a memorandum in which, after calling for the trial of the so-called *kramolniki* or sedition-mongers, under martial law, gave a black-list of over three thousand "traitors," chiefly professors, lawyers, and publicists, including among the latter a large part of the editorial staffs of the reviews *Russkoe Bagatstvo*, *Mir Bozhi*, and of the newspapers *Nasha Zhizn*, and *Syn Otetechestva*. Exasperation and intolerance, it must be admitted, are not confined to the adherents of Absolutism. The Liberals are equally incensed; every publicist who opposes their cause is denounced as a "scoundrel," or a "man who can be bought," or an "informer," whereas in reality, the majority are muddle-headed but quite honest men, at the worst inspired by nothing more criminal than class interest or class prejudice, and usually quite unconscious even of that.

But the extravagances of the Liberals have not been able to stop the progress of their cause. Russia, despite temporary setbacks, has marched farther during the last six months than during the preceding forty years. In practice, the Press has secured a large measure of freedom. Though the Press Commission has not yet finished its work, and though M. Buluigin, working behind its back, has practically secured for himself unrestricted power to suppress any newspaper, the written word is freer than it ever was before save under the brief *régime* of Prince Sviatopolk-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000083

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Mirsky. The newspapers of St. Petersburg and Moscow boldly discuss Constitutional projects, denounce the bureaucracy, publish official secrets, and discount the appointments and dismissals of Ministers, going even so far as to reprint a story made in Germany that certain Russian Ministers were to be put on trial for offences in connection with the war. The *Novosti*, replying to the Moscow *Viedomosti's* description of certain protesting Liberals as "lunatics," did not hesitate to ask: "What can be said of a system of government against which even lunatics are driven to revolt?" The right of public meeting, though forbidden both by law and by administrative precedent, has similarly been acquired in fact. Liberty of conscience, unlike these other liberties which have been taken practically by *force majeure*, now exists by law. To crown these the Government has been obliged to hurry on the project of national representation promised in the Buluigin Rescript of February 18th. An entirely new Russia has sprung into being.

The last hope of the Autocracy is that though it must let this new Russia live, it can prevent it coming to maturity. Agitation can no longer be stopped. But it may be retarded. In accord with this negative policy, the popular representation scheme entrusted to M. Buluigin, and now before the Council of Ministers, has been planned in a way which, while disgusting the reactionaries, will satisfy not a single Liberal. On the Constitutional question the mass of Liberals are united. They want what they call a "New Zealand Constitution." In particular, they want universal suffrage. Careful foreigners, whose first instinct is to weigh the supposed "fitness" or "unfitness" of races for Constitutional rule, regard this as a Liberal extravagance. The Liberals' point of view is different. They have heard so often and so painfully the objection that Russia as a whole is too backward for Constitutionalism that they will not now admit that any single province or class is too backward. It is impossible, they say, to have an educational franchise, because that would exclude the mass of the population of those very provinces whose need of representation is greatest. Social conditions provide no other hard and fast voting qualification. Cautious and experienced Liberals like Professor Miliukoff declare that universal suffrage is essential to speedy reform; with a limited franchise, the first years of Russia's political emancipation will be spent in combating the demands of the voteless to participate in the national life. A democratic Constitution given once and for all will eliminate politics from the internal problem, and leave the road free for productive reforms. With the demand for universal suffrage hand in hand go other radical claims; and it has not seemed out

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00007c

مكتبة قطر الوطنية
Qatar National Library

of place to the various Liberal congresses to consider the question of Female Suffrage before the right has been secured for men. On one question all agree; that the class system, known as *soslovnost*, which is the basis of the present system of local government, must be abolished once and for all. The *Zemsky Sobor* solution was rejected not so much because the *Sobors* had little power, but because they represented the classes and not the nation.

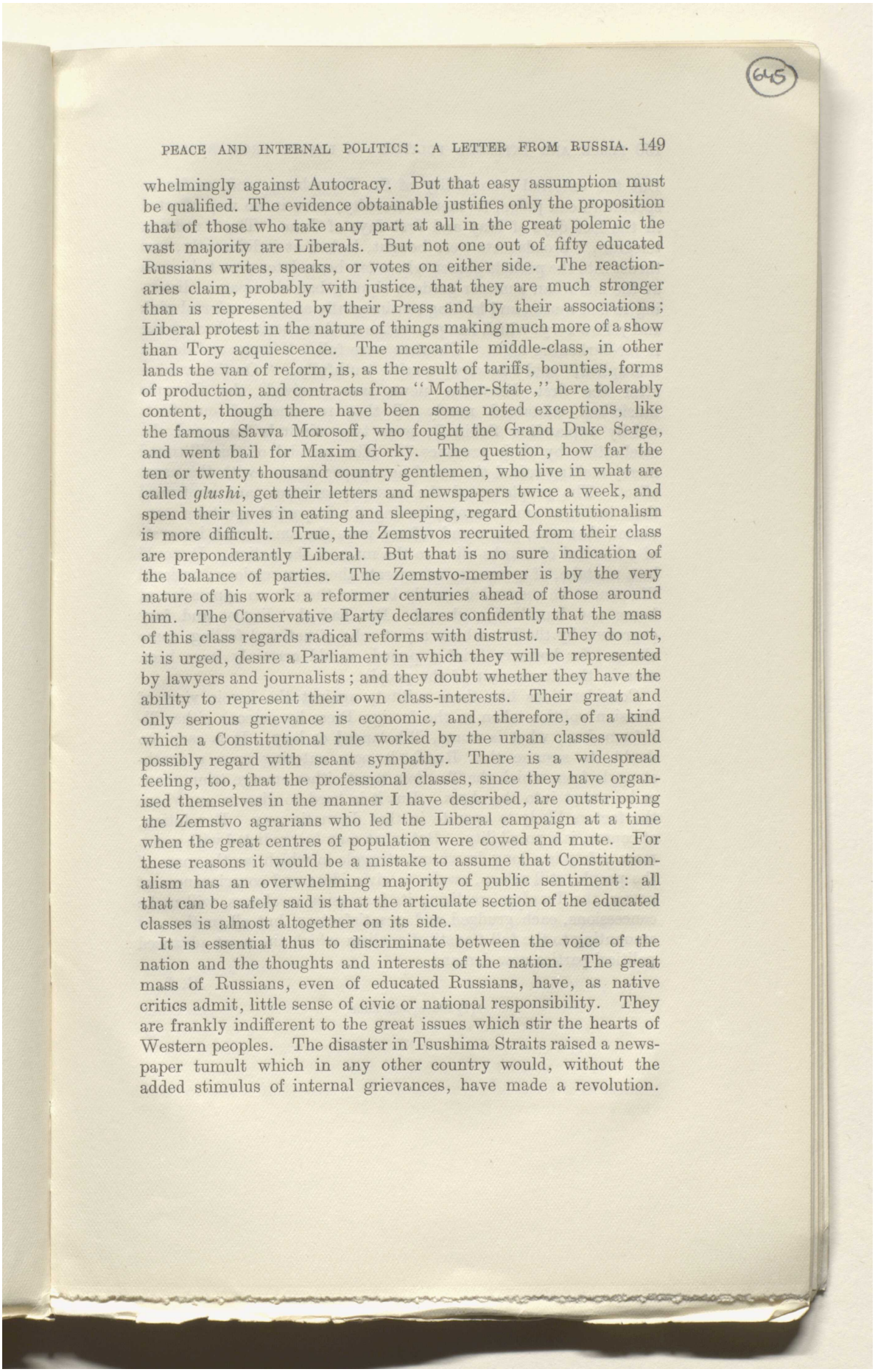
The Buluigin scheme, as far as its details have transpired, embodies all the unpopular features of class-rule. The projected *Gosudarstvennaya Duma*, apparently to be so-named as a foil to the existing *Gosudarstvenni Soviet*, or Council of State, is to be elected according to the franchise qualifications laid down in the Zemstvo law of 1864. Class and property alone are to count, the large landowners voting separately both from peasants and from bourgeois. The "intelligent" classes, who have engineered the present revolt, and have the power of continuing it, will be practically unrepresented; and the "equal, secret, direct voting," demanded by the Liberals, will not be conceded. The functions of the *Duma* will fall short of even what the moderate Liberals demand. It may advise on laws, and even initiate legislation; it may discuss the Budget and departmental estimates; it may interpellate Ministers, though Ministers will remain responsible only to the Tsar. But all its labours will be rendered vain by the transformation into an Upper Chamber of the present Council of State, which is apparently to continue a wholly nominated assembly, composed of reactionary retired Ministers and generals, and high officials. If the elected *Duma* disagree, as it always must, with the nominated *Soviet*, the Tsar's will is to decide. A Constitution of this kind will be rejected with scorn by all Liberals, though it will probably do them the service of alienating from the Autocracy many of its reactionary adherents. Possibly, the Council of Ministers will advise its rejection or amendment. But in the present mood of Nicholas II., it is not likely that amendment will go in the way expected by the people. It is plain, therefore, that the struggle for emancipation will continue; and that the *Duma*, if it ever meet, will meet merely as a machine for exacting further concessions.

It must be admitted, too, that there is no positive proof that the Constitutionalist movement embraces all Russia save the noisy adherents of patriotic and other leagues with avowed Absolutist aims. So far, in common with all other observers, I have taken it for granted that, as the known Absolutists (outside official spheres) are few and insignificant, and the known Reformers many and distinguished, educated Russia is on the whole over-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000018

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



whelmingly against Autocracy. But that easy assumption must be qualified. The evidence obtainable justifies only the proposition that of those who take any part at all in the great polemic the vast majority are Liberals. But not one out of fifty educated Russians writes, speaks, or votes on either side. The reactionaries claim, probably with justice, that they are much stronger than is represented by their Press and by their associations; Liberal protest in the nature of things making much more of a show than Tory acquiescence. The mercantile middle-class, in other lands the van of reform, is, as the result of tariffs, bounties, forms of production, and contracts from "Mother-State," here tolerably content, though there have been some noted exceptions, like the famous Savva Morosoff, who fought the Grand Duke Serge, and went bail for Maxim Gorky. The question, how far the ten or twenty thousand country gentlemen, who live in what are called *glushi*, get their letters and newspapers twice a week, and spend their lives in eating and sleeping, regard Constitutionalism is more difficult. True, the Zemstvos recruited from their class are preponderantly Liberal. But that is no sure indication of the balance of parties. The Zemstvo-member is by the very nature of his work a reformer centuries ahead of those around him. The Conservative Party declares confidently that the mass of this class regards radical reforms with distrust. They do not, it is urged, desire a Parliament in which they will be represented by lawyers and journalists; and they doubt whether they have the ability to represent their own class-interests. Their great and only serious grievance is economic, and, therefore, of a kind which a Constitutional rule worked by the urban classes would possibly regard with scant sympathy. There is a widespread feeling, too, that the professional classes, since they have organised themselves in the manner I have described, are outstripping the Zemstvo agrarians who led the Liberal campaign at a time when the great centres of population were cowed and mute. For these reasons it would be a mistake to assume that Constitutionalism has an overwhelming majority of public sentiment: all that can be safely said is that the articulate section of the educated classes is almost altogether on its side.

It is essential thus to discriminate between the voice of the nation and the thoughts and interests of the nation. The great mass of Russians, even of educated Russians, have, as native critics admit, little sense of civic or national responsibility. They are frankly indifferent to the great issues which stir the hearts of Western peoples. The disaster in Tsushima Straits raised a newspaper tumult which in any other country would, without the added stimulus of internal grievances, have made a revolution.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000014

مكتبة قطر الوطنية
Qatar National Library

But the external tranquillity of St. Petersburg, and, as far as spectators can judge, its mental serenity, were in no way affected in the last days of May and first days of June. The "evening telegram" broadsheets were bought, looked at indifferently, and thrust into the pockets of men who a few hours later were to be seen at the suburban summer-gardens sipping bad champagne, listening to bad music, and looking sentimentally at the wonderful pink and yellow *zarya* which hangs over the northern horizon through the never-darkening night. Theatres were full. "Songs and dances multiplied," said a newspaper critic truthfully. "On the evening after the first disastrous news was received, the Olympia music-hall contained nearly all that remained of our fleet, noisily applauding Sobinoff; even two admirals honoured the celebration by their presence."[1] The scandal of this ill-timed merry-making raised the usual newspaper storm—with the usual effect. The people voted the newspapers bores, and continued their innocent amusements, leaving the impartial spectator convinced that war, peace and reform were the amateurish interests of a handful of cranks alien to the mass of the nation. It would be a mistake, of course, to exaggerate these impressions; national life cannot be suspended merely because there is no oppression at home and humiliation abroad. But had the disgust and fury expressed by the Press been a just echo of national feeling, some change, for however brief a period, would certainly have been seen in the demeanour of the people.

Considerations like these militate against the heroic view of Russian politics taken in the foreign Press by persons either ill-informed or, what is worse, ill-balanced or lazy. It is easy, no doubt, to assume that Russia is now entering upon a death-struggle from which the Tsardom must either emerge triumphant or be swept into the abyss. But it is hard to discern anywhere the factors likely to operate in that dramatic way. Revolution, of course, is a possibility. But what may be predicted with much more safety is a long-drawn-out struggle in which, as the mass of the people, still asleep, awake to civic ideas and consciousness of power, the Tsardom, realising its increasing weakness, will make concessions, each grudged and unsatisfactory, but all in the end amounting to the full Constitutionalism which the most advanced political parties now demand.

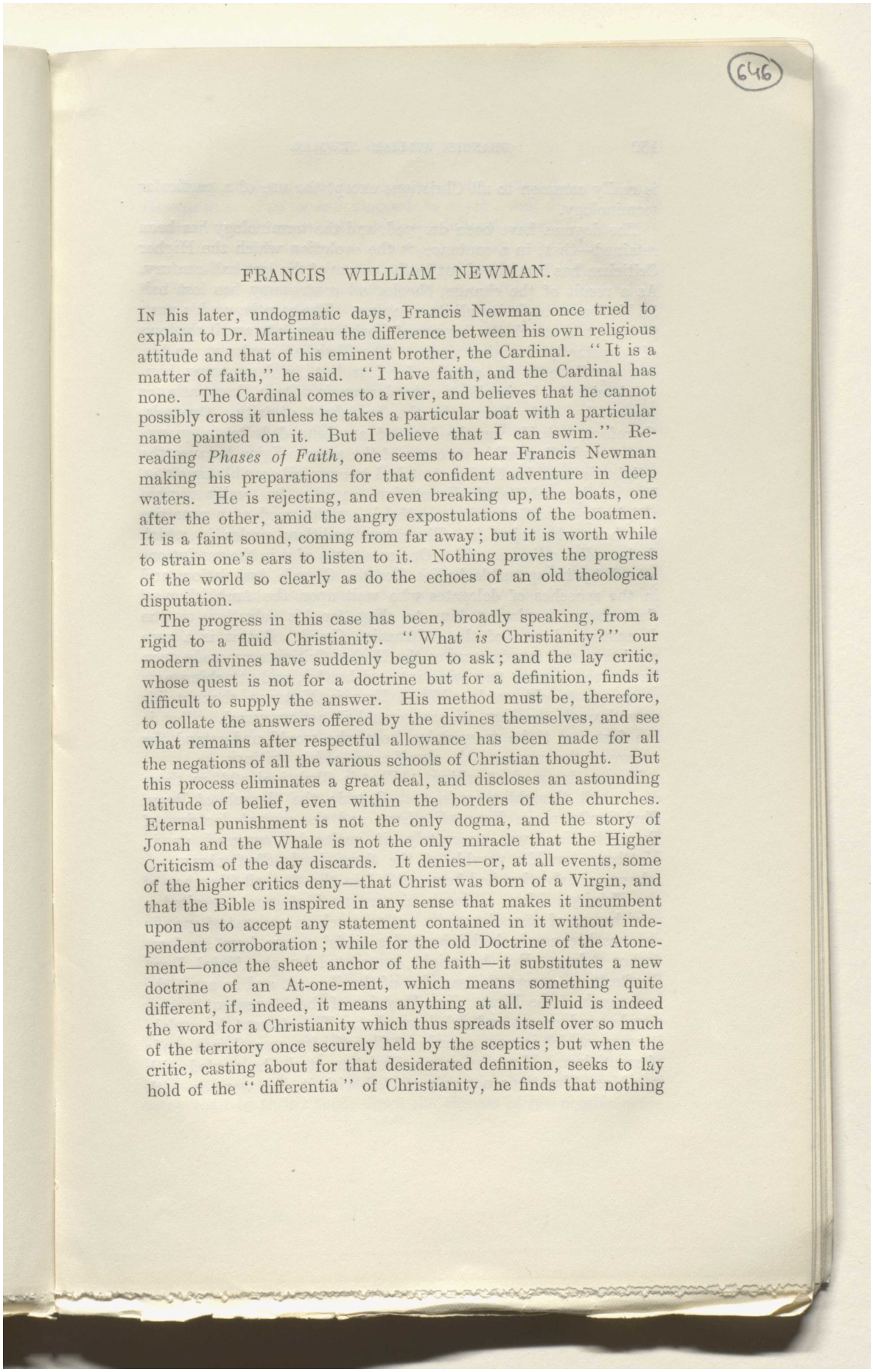
R. L.

(1) *Slovo*, 4th June.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



646

FRANCIS WILLIAM NEWMAN.

In his later, undogmatic days, Francis Newman once tried to explain to Dr. Martineau the difference between his own religious attitude and that of his eminent brother, the Cardinal. "It is a matter of faith," he said. "I have faith, and the Cardinal has none. The Cardinal comes to a river, and believes that he cannot possibly cross it unless he takes a particular boat with a particular name painted on it. But I believe that I can swim." Re-reading *Phases of Faith*, one seems to hear Francis Newman making his preparations for that confident adventure in deep waters. He is rejecting, and even breaking up, the boats, one after the other, amid the angry expostulations of the boatmen. It is a faint sound, coming from far away; but it is worth while to strain one's ears to listen to it. Nothing proves the progress of the world so clearly as do the echoes of an old theological disputation.

The progress in this case has been, broadly speaking, from a rigid to a fluid Christianity. "What *is* Christianity?" our modern divines have suddenly begun to ask; and the lay critic, whose quest is not for a doctrine but for a definition, finds it difficult to supply the answer. His method must be, therefore, to collate the answers offered by the divines themselves, and see what remains after respectful allowance has been made for all the negations of all the various schools of Christian thought. But this process eliminates a great deal, and discloses an astounding latitude of belief, even within the borders of the churches. Eternal punishment is not the only dogma, and the story of Jonah and the Whale is not the only miracle that the Higher Criticism of the day discards. It denies—or, at all events, some of the higher critics deny—that Christ was born of a Virgin, and that the Bible is inspired in any sense that makes it incumbent upon us to accept any statement contained in it without independent corroboration; while for the old Doctrine of the Atonement—once the sheet anchor of the faith—it substitutes a new doctrine of an At-one-ment, which means something quite different, if, indeed, it means anything at all. Fluid is indeed the word for a Christianity which thus spreads itself over so much of the territory once securely held by the sceptics; but when the critic, casting about for that desiderated definition, seeks to lay hold of the "differentia" of Christianity, he finds that nothing

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000056

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

is really common to all Christians except the use of a particular terminology.

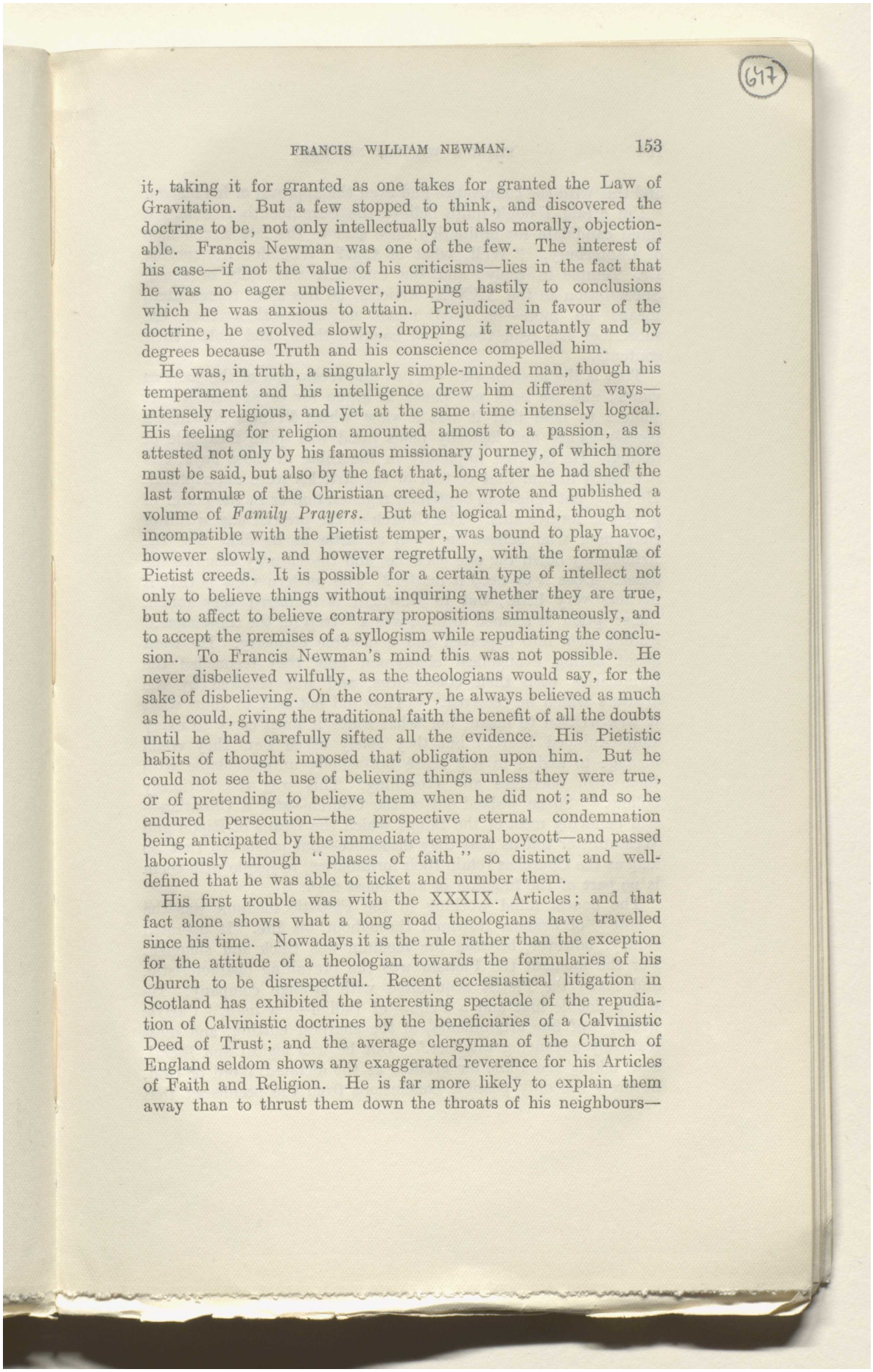
The dogmas have been dropped, and the terminology has been retained—that, in a sentence, is the evolution which the Higher Criticism has brought about in the course of the last half-century. As a result of the change, theological controversy has lost half its bitterness by losing all its meaning. The sceptic, on his part, feels that to attack the dogmas of Christianity is to assail shadows of perpetually changing shape. The Christian apologist, on his, can say little to the sceptic, for fear lest, in denouncing him, he should also by implication be denouncing Dean Fremantle, or some other office-bearer in the household of faith. Quarrels, therefore, subside for the lack of anything definite to quarrel about; and all sensible men are of the same religion because the religion is capable of being stretched to cover all sensible opinions. For really embittered disputation—as also for really morbid religiosity—the first thing needful is a rigid creed with penalties for those who reject it. There are doubtless circles in which that condition lingers still. One sees signs of it in the resolutions passed by irresponsible bodies like the Church Association, and in the speeches of delegates who wait upon the Archbishop of Canterbury, imploring him to cling for his salvation to the damnatory clauses of the Athanasian Creed. But it is a rare condition, and it gets rarer as the Higher Criticism proceeds upon its course, pouring new wine into old bottles, and attaching new meanings to old words. When Francis Newman thought his way through theology, it was general if not universal. That is the first fact to be grasped by those who would understand the nature of the man and the significance of his writings.

No one dreamed of asking "What is Christianity?" in those days. All thought they knew. Outside the Church of Rome Christianity mean Evangelicalism; and the central doctrine of Evangelicalism was accurately, if profanely, summed up in Matthew Arnold's parable of the three Lords Shaftesbury. A scheme of salvation had been settled in the Council Chamber of the Trinity. Man, a sinner in sore need of grace, merited a punishment of eternal torture, not so much on account of specific sins, as because he had inherited a sinful nature from his fore-father Adam. But he might, prompted by the Third Lord Shaftesbury, accept the sacrifice of the Second, and so avert the just wrath of the First. The Doctrine of the Atonement was as simple, and as cut and dried, as that. The attempt to explain it away, which is now a mode of Christianity, was then a mode of scepticism. If a man was a Christian at all, he started with it Most Christians not only started with it, but went on with

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000ac

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



it, taking it for granted as one takes for granted the Law of Gravitation. But a few stopped to think, and discovered the doctrine to be, not only intellectually but also morally, objectionable. Francis Newman was one of the few. The interest of his case—if not the value of his criticisms—lies in the fact that he was no eager unbeliever, jumping hastily to conclusions which he was anxious to attain. Prejudiced in favour of the doctrine, he evolved slowly, dropping it reluctantly and by degrees because Truth and his conscience compelled him.

He was, in truth, a singularly simple-minded man, though his temperament and his intelligence drew him different ways—intensely religious, and yet at the same time intensely logical. His feeling for religion amounted almost to a passion, as is attested not only by his famous missionary journey, of which more must be said, but also by the fact that, long after he had shed the last formulæ of the Christian creed, he wrote and published a volume of *Family Prayers*. But the logical mind, though not incompatible with the Pietist temper, was bound to play havoc, however slowly, and however regretfully, with the formulæ of Pietist creeds. It is possible for a certain type of intellect not only to believe things without inquiring whether they are true, but to affect to believe contrary propositions simultaneously, and to accept the premises of a syllogism while repudiating the conclusion. To Francis Newman's mind this was not possible. He never disbelieved wilfully, as the theologians would say, for the sake of disbelieving. On the contrary, he always believed as much as he could, giving the traditional faith the benefit of all the doubts until he had carefully sifted all the evidence. His Pietistic habits of thought imposed that obligation upon him. But he could not see the use of believing things unless they were true, or of pretending to believe them when he did not; and so he endured persecution—the prospective eternal condemnation being anticipated by the immediate temporal boycott—and passed laboriously through "phases of faith" so distinct and well-defined that he was able to ticket and number them.

His first trouble was with the XXXIX. Articles; and that fact alone shows what a long road theologians have travelled since his time. Nowadays it is the rule rather than the exception for the attitude of a theologian towards the formularies of his Church to be disrespectful. Recent ecclesiastical litigation in Scotland has exhibited the interesting spectacle of the repudiation of Calvinistic doctrines by the beneficiaries of a Calvinistic Deed of Trust; and the average clergyman of the Church of England seldom shows any exaggerated reverence for his Articles of Faith and Religion. He is far more likely to explain them away than to thrust them down the throats of his neighbours—

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000034

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

and this with the connivance and even the approval of his bishop. "I'm afraid I don't quite believe the Seventeenth Article," a timid candidate for ordination once said to the late Archbishop of Canterbury. "Well, what of that? Who does?" snorted Dr. Temple in reply; and the candidate was duly ordained. Subscription to the XXXIX. Articles, he has since represented, means no more—or need mean no more—than that the subscriber has read them, and counted them, and noted their contents.

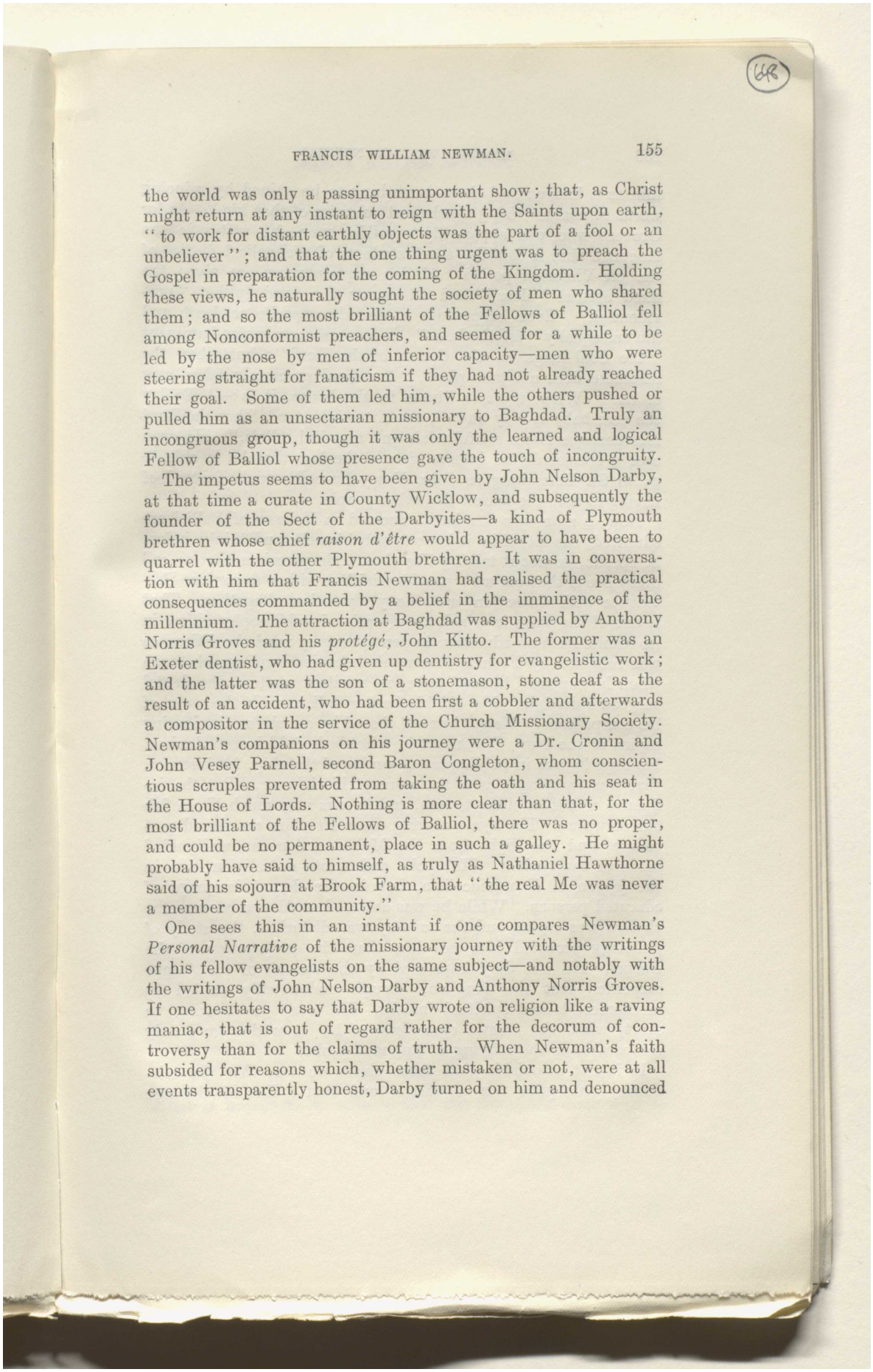
That is the modern view—or, at all events, one of the modern views; and we need not pause to argue for or against it. It suffices to note that it was a view which Francis Newman's piously logical and logically pious mind was quite incapable of taking. He believed implicitly in the Bible in those days, and it seemed to him that certain of the Articles were unscriptural. He could not believe in baptismal regeneration or in the power of priests to forgive sins. The Church at the present day is full of clergymen who believe in them as little as he did. Yet the Articles lay down the one doctrine, and the Liturgy assumes the other. Does it or need it matter? The modern view is that it matters very little; but to Newman it mattered very much. Subscription, it seemed to him, was a "trap for the conscience," leading men into depraved and deplorable casuistry. He went about asking evangelical clergymen how they reconciled the formularies with their consciences, and was shocked by the answers which he received. "They did not seek to know what it was written to mean, nor what sense it must carry to every simple-minded hearer; but they solely asked how they could manage to assign to it a sense not wholly unreconcilable with their own doctrines and preaching. This was too obviously hollow." So he walked out of the Church—still a Christian—still believing most of the things which the Deans of Ripon and Westminster tell us that they disbelieve—but persuaded that, so long as the Churches retain their formularies, to juggle with them is no part of the function of an honest man.

The honest mind working in the Pietistic medium was the "note" of Francis Newman throughout his life. It operated slowly, however, because the medium was thick and sluggish. For the moment the Pietism was the prevailing characteristic, and made the Pietist acquainted with strange company. He was a double first and a Fellow of Balliol—"a man," Carlyle wrote, "of fine attainments, of the sharpest cutting, and most restlessly advancing intellect." But he was logical and literal, and, taking the Bible for granted as the dictated Word of God, he drew the only possible conclusions from the premises: that

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000025

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the world was only a passing unimportant show; that, as Christ might return at any instant to reign with the Saints upon earth, "to work for distant earthly objects was the part of a fool or an unbeliever"; and that the one thing urgent was to preach the Gospel in preparation for the coming of the Kingdom. Holding these views, he naturally sought the society of men who shared them; and so the most brilliant of the Fellows of Balliol fell among Nonconformist preachers, and seemed for a while to be led by the nose by men of inferior capacity—men who were steering straight for fanaticism if they had not already reached their goal. Some of them led him, while the others pushed or pulled him as an unsectarian missionary to Baghdad. Truly an incongruous group, though it was only the learned and logical Fellow of Balliol whose presence gave the touch of incongruity.

The impetus seems to have been given by John Nelson Darby, at that time a curate in County Wicklow, and subsequently the founder of the Sect of the Darbyites—a kind of Plymouth brethren whose chief *raison d'être* would appear to have been to quarrel with the other Plymouth brethren. It was in conversation with him that Francis Newman had realised the practical consequences commanded by a belief in the imminence of the millennium. The attraction at Baghdad was supplied by Anthony Norris Groves and his *protégé*, John Kitto. The former was an Exeter dentist, who had given up dentistry for evangelistic work; and the latter was the son of a stonemason, stone deaf as the result of an accident, who had been first a cobbler and afterwards a compositor in the service of the Church Missionary Society. Newman's companions on his journey were a Dr. Cronin and John Vesey Parnell, second Baron Congleton, whom conscientious scruples prevented from taking the oath and his seat in the House of Lords. Nothing is more clear than that, for the most brilliant of the Fellows of Balliol, there was no proper, and could be no permanent, place in such a galley. He might probably have said to himself, as truly as Nathaniel Hawthorne said of his sojourn at Brook Farm, that "the real Me was never a member of the community."

One sees this in an instant if one compares Newman's *Personal Narrative* of the missionary journey with the writings of his fellow evangelists on the same subject—and notably with the writings of John Nelson Darby and Anthony Norris Groves. If one hesitates to say that Darby wrote on religion like a raving maniac, that is out of regard rather for the decorum of controversy than for the claims of truth. When Newman's faith subsided for reasons which, whether mistaken or not, were at all events transparently honest, Darby turned on him and denounced

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

him as a knave; and there is nothing to be gained by mincing words in characterising theological polemics of that kind. As for Groves—who was apparently a milder man—he writes in the language that is familiar to all students of evangelical diaries of the pre-Victorian period. All his acquaintances are given the fixed epithet "dear," and all events the fixed epithet "providential." Even happenings so directly opposite as death and life are equally "for the best." When massacre seems imminent "the Soul longs for the Courts of the Lord"; but when the massacre does not take place, "the Lord graciously takes care of us." When there is illness in the house, it is:—"To-day the dear baby is very unwell, but Kitto is better. Thus the Lord interchanges His merciful trials and merciful reliefs." He even sees a special divine intervention in the fact that he is able to go to St. Petersburg on John Vesey Parnell's yacht instead of having to take the packet like other people.

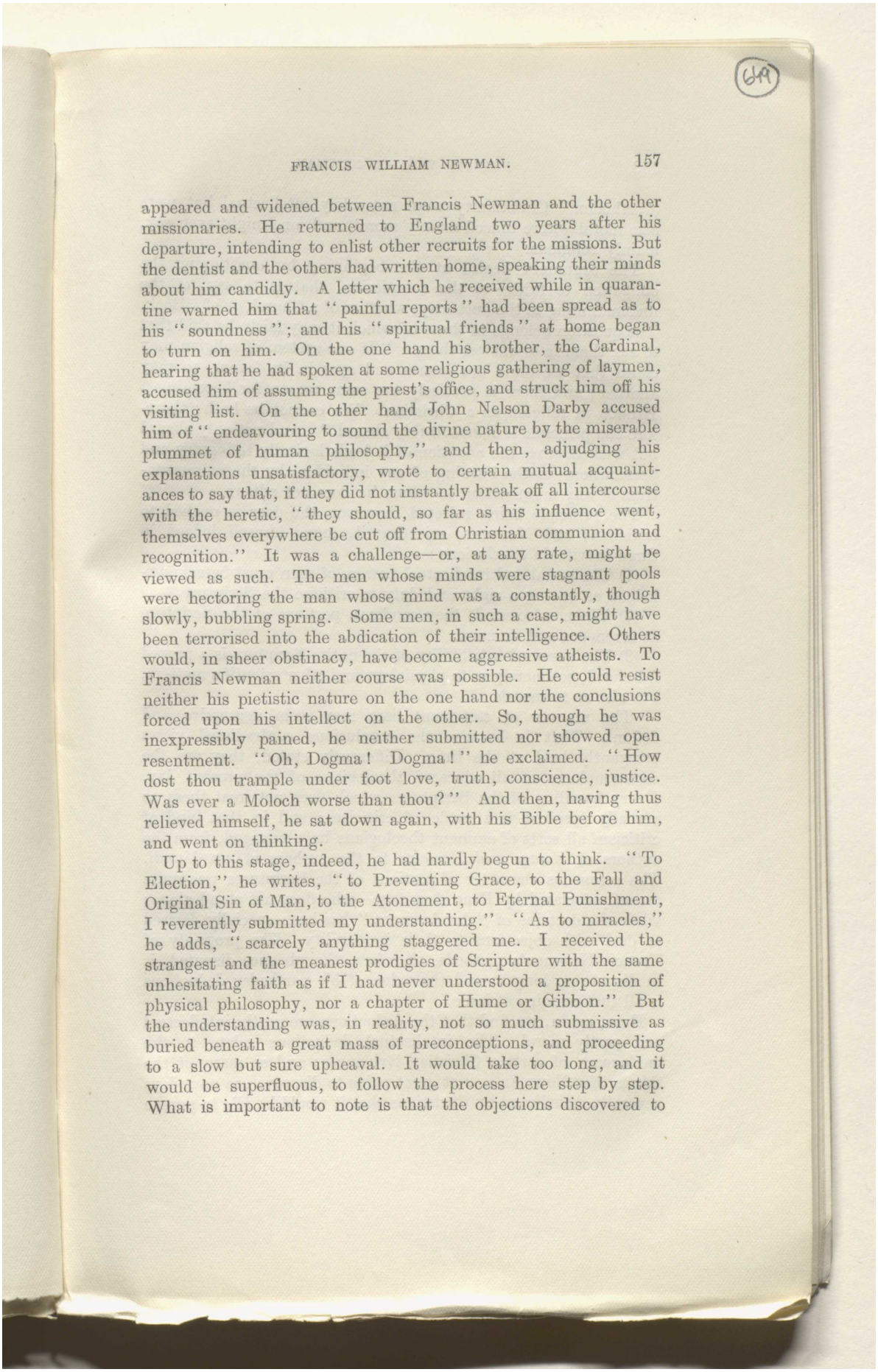
Now, a man who has been educated as Fellows of Balliol are educated, cannot, if he is honest with himself, and thinks before he speaks, go about talking like that. He perceives that to call every event that occurs "providential," is either to confuse Providence with Causation or to deny Causation altogether. That is one of the ways in which an education in philosophy differs in its results from an education in dental surgery; and the difference was reflected by Francis Newman's behaviour and speech, even when he supposed himself to be, in spiritual matters, the dental surgeon's disciple. He did his best to fall in with the ways of his companions. He got himself chased by a mob for distributing copies of the New Testament in a hot-bed of Mohammedanism. He sang hymns in public places—on board the ship, for instance, that was carrying him to the scene of his labours. But the influence of Balliol clung to him, and he was very much like a fish out of water. The hymn-singing seemed to him an absurd procedure, and the flight from the Mohammedans an undignified mode of martyrdom. He spoke and wrote of religion, not in the jargon of Evangelicalism, but in the decent language of educated persons. While he was detained at Aleppo because the cholera was raging and the country was disturbed, the study of philology occupied him not less than the propagation of the Gospel. He was duly impressed by the remark of the Aleppo carpenter that the English, though undoubtedly skilled in mechanics, lacked spiritual insight. He went on thinking, in short, while the mental operations of his comrades were only comparable to the stirring of stagnant pools.

It is not astonishing, in these circumstances, that the missionary enterprise was a failure, and that a line of cleavage

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000041

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



appeared and widened between Francis Newman and the other missionaries. He returned to England two years after his departure, intending to enlist other recruits for the missions. But the dentist and the others had written home, speaking their minds about him candidly. A letter which he received while in quarantine warned him that "painful reports" had been spread as to his "soundness"; and his "spiritual friends" at home began to turn on him. On the one hand his brother, the Cardinal, hearing that he had spoken at some religious gathering of laymen, accused him of assuming the priest's office, and struck him off his visiting list. On the other hand John Nelson Darby accused him of "endeavouring to sound the divine nature by the miserable plummet of human philosophy," and then, adjudging his explanations unsatisfactory, wrote to certain mutual acquaintances to say that, if they did not instantly break off all intercourse with the heretic, "they should, so far as his influence went, themselves everywhere be cut off from Christian communion and recognition." It was a challenge—or, at any rate, might be viewed as such. The men whose minds were stagnant pools were hectoring the man whose mind was a constantly, though slowly, bubbling spring. Some men, in such a case, might have been terrorised into the abdication of their intelligence. Others would, in sheer obstinacy, have become aggressive atheists. To Francis Newman neither course was possible. He could resist neither his pietistic nature on the one hand nor the conclusions forced upon his intellect on the other. So, though he was inexpressibly pained, he neither submitted nor showed open resentment. "Oh, Dogma! Dogma!" he exclaimed. "How dost thou trample under foot love, truth, conscience, justice. Was ever a Moloch worse than thou?" And then, having thus relieved himself, he sat down again, with his Bible before him, and went on thinking.

Up to this stage, indeed, he had hardly begun to think. "To Election," he writes, "to Preventing Grace, to the Fall and Original Sin of Man, to the Atonement, to Eternal Punishment, I reverently submitted my understanding." "As to miracles," he adds, "scarcely anything staggered me. I received the strangest and the meanest prodigies of Scripture with the same unhesitating faith as if I had never understood a proposition of physical philosophy, nor a chapter of Hume or Gibbon." But the understanding was, in reality, not so much submissive as buried beneath a great mass of preconceptions, and proceeding to a slow but sure upheaval. It would take too long, and it would be superfluous, to follow the process here step by step. What is important to note is that the objections discovered to

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000095

مكتبة قطر الوطنية
Qatar National Library

"orthodox" Christianity were not solely intellectual but were also moral—were indeed mainly moral, and, one might even say, mainly religious.

The argument begins at the beginning by questioning the obligation to faith—to the submission, that is to say, of the understanding to the authority, whether of a Church or of a Book. The question belongs to those of which it may fairly be said that to ask them is to answer them. "If one system of religion may claim that we blind our hearts and eyes in its favour, so may another; and there is precisely the same reason for becoming a Hindoo in religion as a Christian. We cannot be both; therefore the principle is *demonstrably* absurd." And not only absurd but wicked, since the adoption of it leads logically to bigotry and persecution—to the burning of any individual by the representatives of any organisation to which he does not adhere.

The principle being rejected, however, the door is opened to criticism; and Newman, rejecting it, found himself lodged in three inevitable conclusions:—

(1) The moral and intellectual powers of man must be acknowledged as having a right and duty to criticise the Scripture.

(2) When so exerted, they condemn portions of the Scripture as erroneous and immoral.

(3) The assumed infallibility of the entire Scripture is a proved falsehood, not merely as to physiology and other scientific matters, but also as to morals.

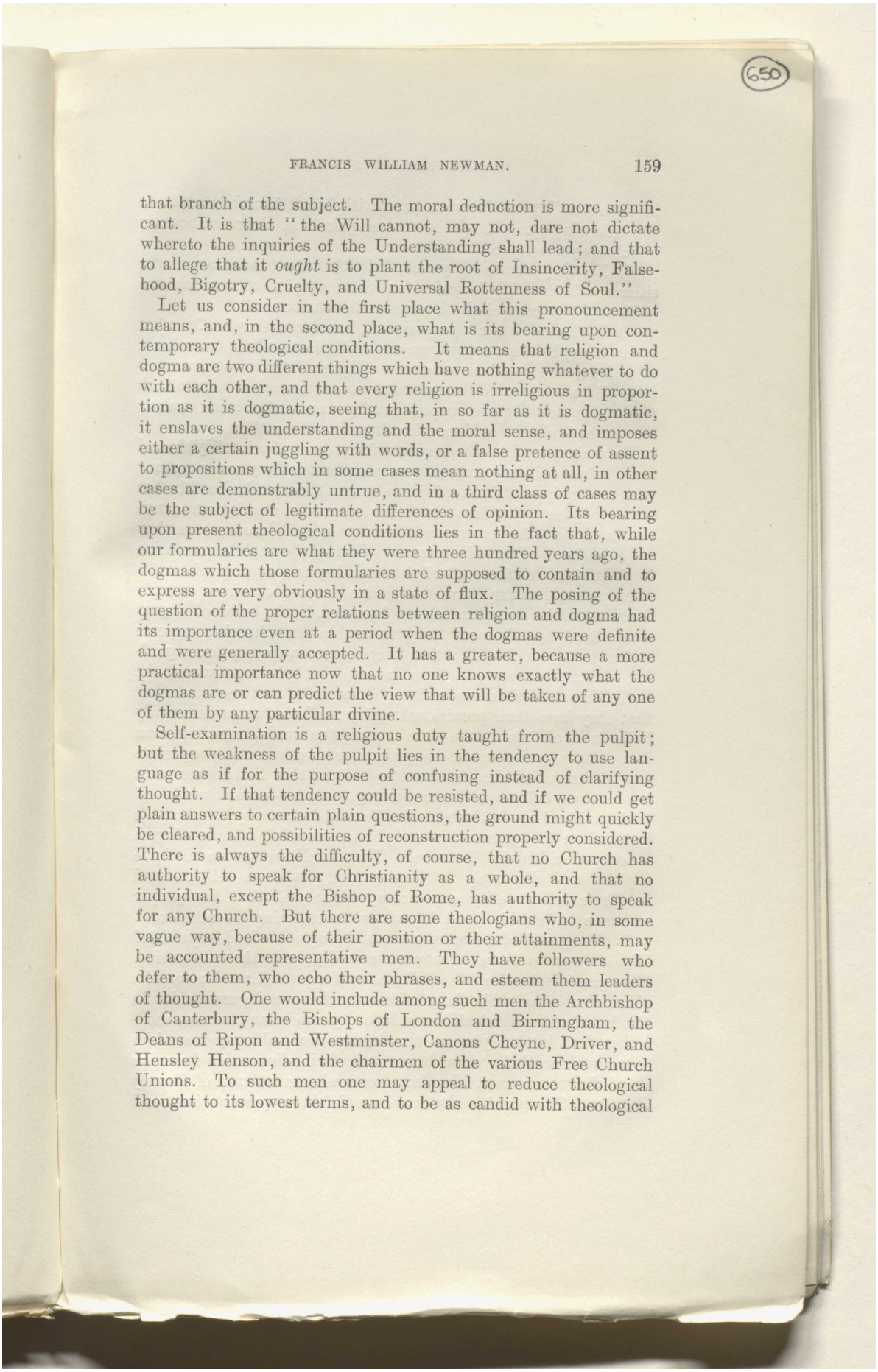
The manner of statement here may seem aggressive and defiant. That is because the conclusions contradicted views arrogantly held at the time. Differently stated, they are the commonplaces of all educated theologians of the present day. Every handling of the Scriptures which does not treat them as verbally inspired is a mode of criticism; and in that kind of criticism all sorts of eminent theologians have engaged, from the authors of *Essays and Reviews* to the authors of *Lux Mundi*. The erroneous character of portions of the Scriptures was quite recently declared by Dean Armitage—who does not stand alone; while the doctrine of "development" has been specially devised to deal with objections to their immorality. The propriety of Francis Newman's methods, therefore, though once disputed, is in dispute no longer; and the value of his particular deductions is all that remains at issue.

Here, again, we find that the deductions are partly intellectual and partly moral. The intellectual deductions relate to the inadequacy of certain Christian Evidences; and so many of the things that Newman was at great pains to disprove are nowadays generally disbelieved by Christians that it would be idle to pursue

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000051

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



that branch of the subject. The moral deduction is more significant. It is that "the Will cannot, may not, dare not dictate whereto the inquiries of the Understanding shall lead; and that to allege that it *ought* is to plant the root of Insincerity, Falsehood, Bigotry, Cruelty, and Universal Rottenness of Soul."

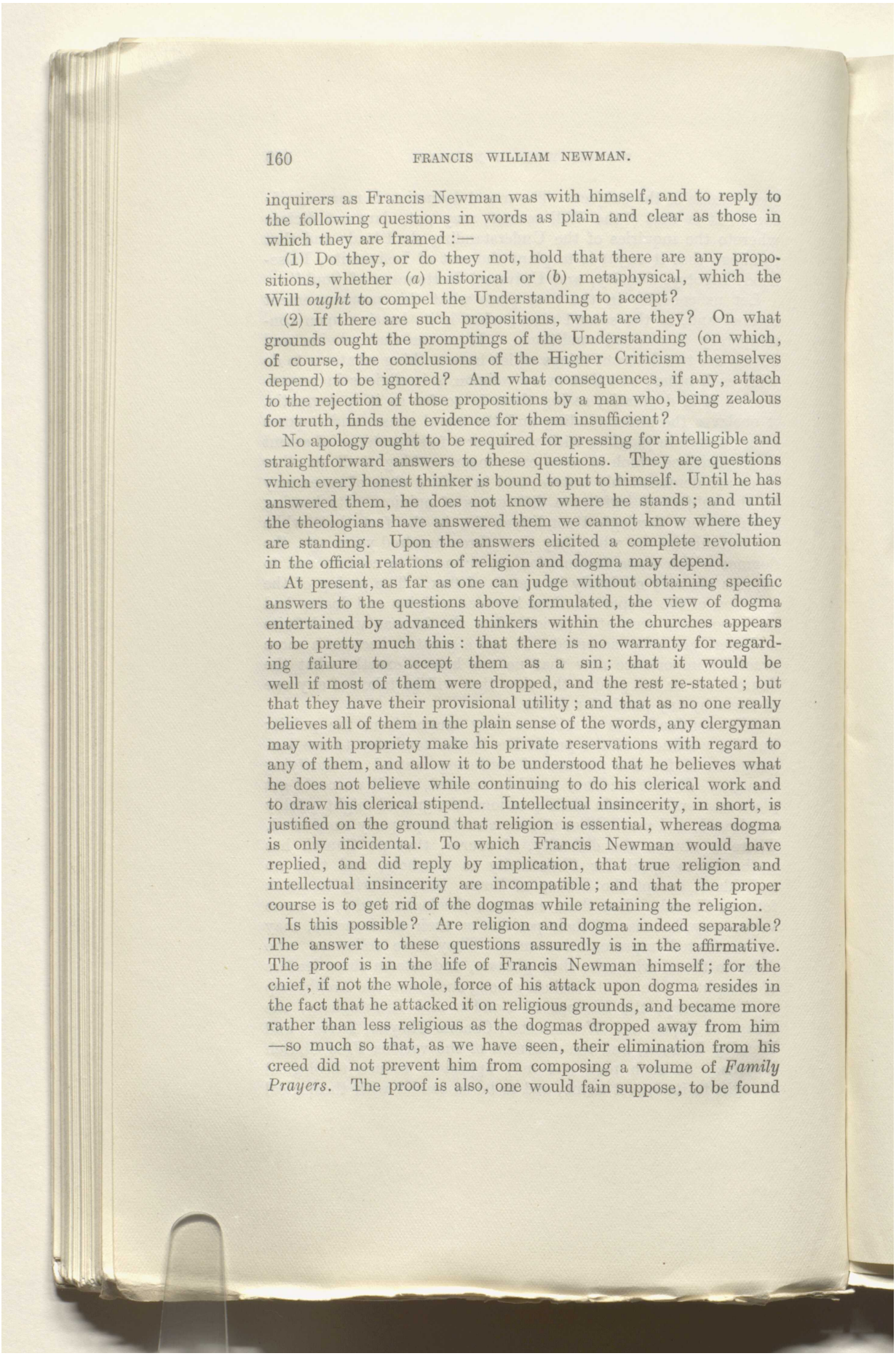
Let us consider in the first place what this pronouncement means, and, in the second place, what is its bearing upon contemporary theological conditions. It means that religion and dogma are two different things which have nothing whatever to do with each other, and that every religion is irreligious in proportion as it is dogmatic, seeing that, in so far as it is dogmatic, it enslaves the understanding and the moral sense, and imposes either a certain juggling with words, or a false pretence of assent to propositions which in some cases mean nothing at all, in other cases are demonstrably untrue, and in a third class of cases may be the subject of legitimate differences of opinion. Its bearing upon present theological conditions lies in the fact that, while our formularies are what they were three hundred years ago, the dogmas which those formularies are supposed to contain and to express are very obviously in a state of flux. The posing of the question of the proper relations between religion and dogma had its importance even at a period when the dogmas were definite and were generally accepted. It has a greater, because a more practical importance now that no one knows exactly what the dogmas are or can predict the view that will be taken of any one of them by any particular divine.

Self-examination is a religious duty taught from the pulpit; but the weakness of the pulpit lies in the tendency to use language as if for the purpose of confusing instead of clarifying thought. If that tendency could be resisted, and if we could get plain answers to certain plain questions, the ground might quickly be cleared, and possibilities of reconstruction properly considered. There is always the difficulty, of course, that no Church has authority to speak for Christianity as a whole, and that no individual, except the Bishop of Rome, has authority to speak for any Church. But there are some theologians who, in some vague way, because of their position or their attainments, may be accounted representative men. They have followers who defer to them, who echo their phrases, and esteem them leaders of thought. One would include among such men the Archbishop of Canterbury, the Bishops of London and Birmingham, the Deans of Ripon and Westminster, Canons Cheyne, Driver, and Hensley Henson, and the chairmen of the various Free Church Unions. To such men one may appeal to reduce theological thought to its lowest terms, and to be as candid with theological

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



inquirers as Francis Newman was with himself, and to reply to the following questions in words as plain and clear as those in which they are framed:—

(1) Do they, or do they not, hold that there are any propositions, whether (*a*) historical or (*b*) metaphysical, which the Will *ought* to compel the Understanding to accept?

(2) If there are such propositions, what are they? On what grounds ought the promptings of the Understanding (on which, of course, the conclusions of the Higher Criticism themselves depend) to be ignored? And what consequences, if any, attach to the rejection of those propositions by a man who, being zealous for truth, finds the evidence for them insufficient?

No apology ought to be required for pressing for intelligible and straightforward answers to these questions. They are questions which every honest thinker is bound to put to himself. Until he has answered them, he does not know where he stands; and until the theologians have answered them we cannot know where they are standing. Upon the answers elicited a complete revolution in the official relations of religion and dogma may depend.

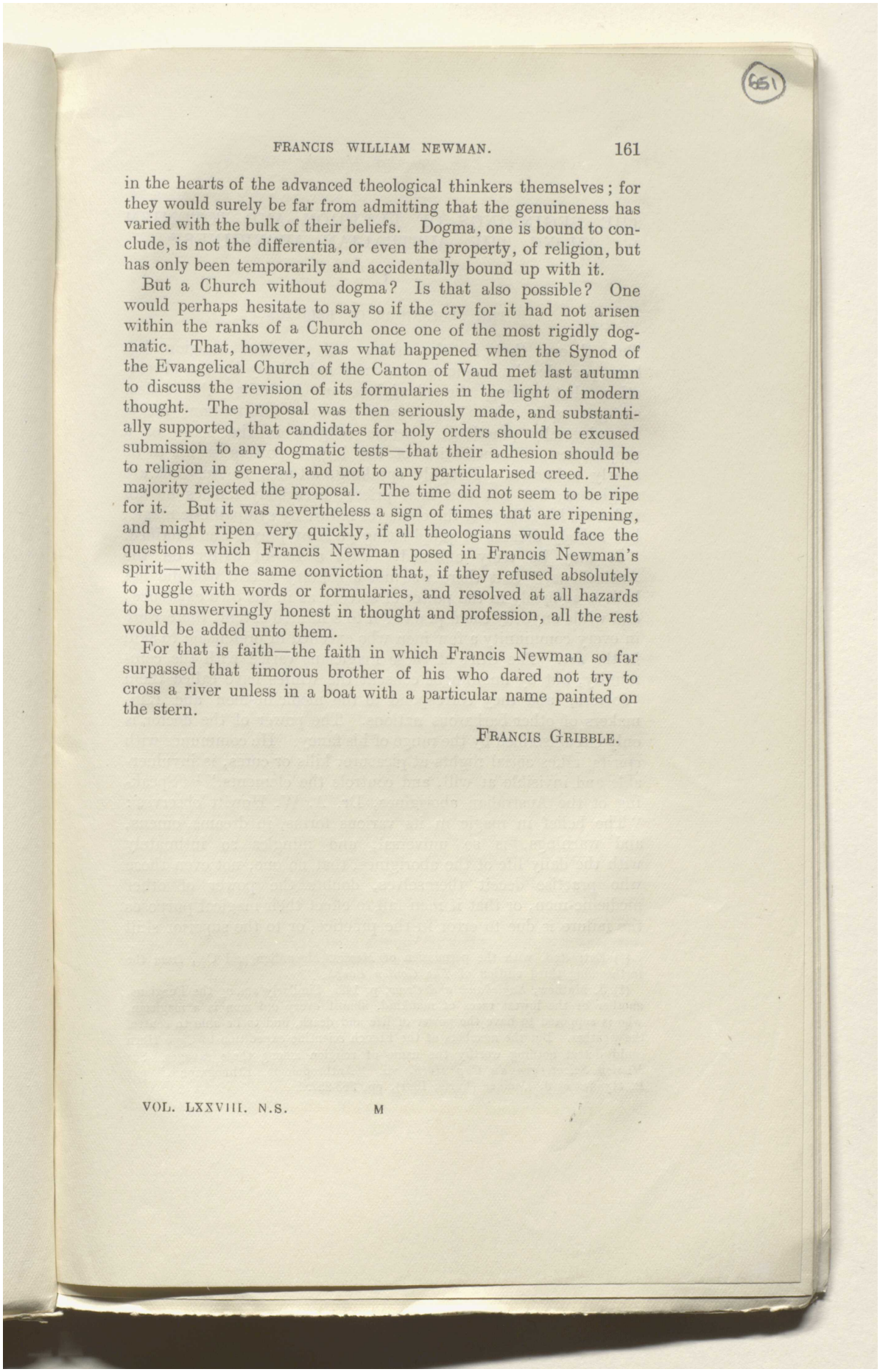
At present, as far as one can judge without obtaining specific answers to the questions above formulated, the view of dogma entertained by advanced thinkers within the churches appears to be pretty much this: that there is no warranty for regarding failure to accept them as a sin; that it would be well if most of them were dropped, and the rest re-stated; but that they have their provisional utility; and that as no one really believes all of them in the plain sense of the words, any clergyman may with propriety make his private reservations with regard to any of them, and allow it to be understood that he believes what he does not believe while continuing to do his clerical work and to draw his clerical stipend. Intellectual insincerity, in short, is justified on the ground that religion is essential, whereas dogma is only incidental. To which Francis Newman would have replied, and did reply by implication, that true religion and intellectual insincerity are incompatible; and that the proper course is to get rid of the dogmas while retaining the religion.

Is this possible? Are religion and dogma indeed separable? The answer to these questions assuredly is in the affirmative. The proof is in the life of Francis Newman himself; for the chief, if not the whole, force of his attack upon dogma resides in the fact that he attacked it on religious grounds, and became more rather than less religious as the dogmas dropped away from him —so much so that, as we have seen, their elimination from his creed did not prevent him from composing a volume of *Family Prayers*. The proof is also, one would fain suppose, to be found

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000ad

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



in the hearts of the advanced theological thinkers themselves; for they would surely be far from admitting that the genuineness has varied with the bulk of their beliefs. Dogma, one is bound to conclude, is not the differentia, or even the property, of religion, but has only been temporarily and accidentally bound up with it.

But a Church without dogma? Is that also possible? One would perhaps hesitate to say so if the cry for it had not arisen within the ranks of a Church once one of the most rigidly dogmatic. That, however, was what happened when the Synod of the Evangelical Church of the Canton of Vaud met last autumn to discuss the revision of its formularies in the light of modern thought. The proposal was then seriously made, and substantially supported, that candidates for holy orders should be excused submission to any dogmatic tests—that their adhesion should be to religion in general, and not to any particularised creed. The majority rejected the proposal. The time did not seem to be ripe for it. But it was nevertheless a sign of times that are ripening, and might ripen very quickly, if all theologians would face the questions which Francis Newman posed in Francis Newman's spirit—with the same conviction that, if they refused absolutely to juggle with words or formularies, and resolved at all hazards to be unswervingly honest in thought and profession, all the rest would be added unto them.

For that is faith—the faith in which Francis Newman so far surpassed that timorous brother of his who dared not try to cross a river unless in a boat with a particular name painted on the stern.

FRANCIS GRIBBLE.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000a3

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

THE BEGINNINGS OF RELIGION AND TOTEMISM AMONG THE AUSTRALIAN ABORIGINES.*

I.

THE BEGINNINGS OF RELIGION.

THE theory that in the history of mankind religion has been preceded by magic is confirmed inductively by the observation that among the aborigines of Australia, the rudest savages as to whom we possess accurate information, magic is universally practised, whereas religion in the sense of a propitiation or conciliation of the higher powers seems to be nearly unknown. Roughly speaking, all men in Australia are magicians, but not one is a priest; everybody fancies he can influence his fellows or the course of nature by sympathetic magic, but nobody dreams of propitiating gods by prayer and sacrifice. "It may be truly affirmed," says a recent writer on the Australians, "that there was not a solitary native who did not believe as firmly in the power of sorcery as in his own existence; and while anybody could practise it to a limited extent, there were in every community a few men who excelled in pretension to skill in the art. The titles of these magicians varied with the community, but by unanimous consent the whites have called them 'doctors,' and they correspond to the medicine-men and rain-makers of other barbarous nations. The power of the doctor is only circumscribed by the range of his fancy. He communes with spirits, takes aërial flights at pleasure, kills or cures, is invulnerable and invisible at will, and controls the elements."[1] Speaking of the Australian aborigines, Dr. A. W. Howitt observes: "The belief in magic in its various forms, in dreams, omens, and warnings, is so universal, and mingles so intimately with the daily life of the aborigines, that no one, not even those who practise deceit themselves, doubts the power of other medicine-men, or that if men fail to effect their magical purposes the failure is due to error in the practice, or to the superior skill

(*) Extracted, with the permission of Messrs. Macmillan and Co., from the forthcoming third edition of *The Golden Bough*.

(1) J. Mathew, *Eaglehawk and Crow*, p. 142. Similarly among the Fuegians, another of the lowest races of mankind, almost every old man is a magician, who is supposed to have the power of life and death, and to be able to control the weather. But the members of the French scientific expedition to Cape Horn could detect nothing worthy the name of religion among these savages. See *Mission Scientifique du Cap Horn*, vii. "Anthropologie, Ethnographie," par P. Hyades et J. Deniker (Paris, 1891), pp. 253-257.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000033

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

or power of some adverse practitioner."[2] On the same subject Mr. E. M. Curr wrote: "In connection with the manners and customs of our aboriginal race a great motor power is the belief in sorcery or witchcraft. In the everyday life of the Black, a pressure originating in this source may be said to be always at work. As it seems to me, no writer has given this fact quite its due weight, and yet it is impossible to appreciate correctly the manners and customs of our tribes until the more salient features in connection with their ideas about sorcery have been mastered. The groundwork of sorcery amongst the Blacks is the belief that several things of importance can be effected by means of charms and incantations. The tribes differ somewhat in details and ceremonies, but there is no doubt that the system is the same throughout."[3]

Yet though religion, in the sense in which I use that word, seems to be nearly unknown among the Australian aborigines, some of them nevertheless hold beliefs and observe practices which might have grown into a regular religion, if their development had not been cut short by European intervention. Thus in the south-eastern parts of the continent, where the conditions of life in respect of climate, water, and food are more favourable than elsewhere, some rudiments of religion appear in a regard for the comfort of departed friends. For example, certain Victorian tribes are said to have kindled fires near the bodies of their dead in order to warm the ghost, but "the recent custom of providing food for it is derided by the intelligent old aborigines as 'white fellow's gammon.'"[4] Among the Dieri, if the deceased was a person of importance, food is placed for many days at the grave, and in winter a fire is lighted in order that the ghost may warm himself at it.[5] Some of the natives of western Australia keep up a fire for this purpose on the grave for more than a month. But they expect the dead to return to life, for they detach the nails from the thumb and forefinger of the deceased and deposit them in a small hole beside the grave, in order that they may know him again when he comes back to the world.[6] Again, the natives of the Herbert river, in north-east Queensland, often put food and water in the grave, and they deposit with the dead his weapons, ornaments, and indeed everything he used in life. On the other

(2) A. W. Howitt, *Native Tribes of South-East Australia*, p. 356.
(3) E. M. Curr, *The Australian Race*, i. 45.
(4) J. Dawson, *Australian Aborigines*, pp. 50 *sq.*
(5) Mr. O. Siebert, in A. W. Howitt's *Native Tribes of South-East Australia*, p. 448.
(6) R. Salvado, *Mémoires historiques sur l'Australie* (Paris, 1854), p. 261; *Missions Catholiques*, x. (1878), p. 247. For more instances of lighting fires for this purpose, see Dr. A. W. Howitt, *Native Tribes of South-East Australia*, pp. 452, 455, 470.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00003e

مكتبة قطر الوطنية
Qatar National Library

hand, they generally break his legs to prevent him from wandering at night, and for the same purpose they cut gashes in his stomach, shoulders, and lungs, and fill the gashes with stones.[7] The Turribul tribe placed their dead in trees. If the deceased was a man, they left a spear and a club near him that his spirit might kill game for its sustenance in the future state; but if the deceased was a woman, they laid a yam stick near her body in order that she might dig for roots.[8] Among the Jupagalk, a person in great pain would call on some dead friend to come and help him—that is, to visit him in a dream, and teach him some song whereby he might avert the evil magic that was hurting him.[8a] Customs like these, it is plain, might easily develop into a worship of the dead.

Further, the Queensland aborigines on the Tully River and Proserpine River are wont to call on their totems by name before they fall asleep, and they believe that they derive certain benefits from so doing. For example, if their totem is an animal, it will warn the man who thus invokes it of the approach of other animals and so forth during his sleep; or, if it is itself a dangerous creature, such as a crocodile or a snake, it will not bite or sting the man without serving him with due notice of its intention to injure him. Again, if his totem is thunder or rain, the man who fails to invoke it will lose his power of making thunder or rain at will.[8b] Such beliefs and practices, it is clear, might grow into a regular propitiation or worship of the totems. Again, the Warramunga of Central Australia believe in the existence of a gigantic but wholly fabulous water-snake called Wollunqua, the totem and ancestor of one of their clans. His home is in a rocky gorge which runs into the heart of the Murchison Ranges. In this secluded spot there is a picturesque pool of deep water with a sandy margin on the south and a little precipice of red rock curving round the northern edge. Over these red rocks after rain the water tumbles in a cascade into the pool below, and the rocks are hollowed out below so that they beetle over the water, forming a long shallow cave, from the roof of which roots of trees, that have forced their way down through clefts, hang pendulous. According to the natives, the Wollunqua lives in the water of the pool, and the pendulous roots are his whiskers. They have a tradition that he once came out of the pool and destroyed some men and women, but was at last obliged to retreat under a shower of stones. To prevent him from repeating his ravages they perform ceremonies by which they seem to think that

(7) A. W. Howitt, *op. cit.*, p. 474.
(8) A. W. Howitt, *op. cit.*, p. 470.
(8a) A. W. Howitt, *op. cit.*, p. 435.
(8b) W. E. Roth, *North Queensland Ethnography, Bulletin No.* 5 (Brisbane, 1903), § 74, pp. 20 *sq.*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00008b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

they can at once propitiate and coerce him. Thus they make a long mound of wet sand and draw wavy bands on it to represent the water-snake. Round this at night they sing and dance by the light of fires until the earliest streak of dawn glimmers in the east. Then they attack the mound fiercely with their weapons and soon demolish it. If shortly afterwards they hear thunder rumbling in the distance, they declare that it is the voice of the water-snake saying that he is pleased with what they have done and that he will send rain. But if the remains of the ruined mound are left uncovered, he growls, and his growl is a peal of thunder. When they hear it they hasten to cover the ruins with branches, lest the snake should come and eat them up. On the other hand, the savage destruction of the mound seems to imply that they can to some extent control the beast by force. The Wollunqua differs from all other known Australian totems in that he is a purely mythical being. He is not the only snake totem of the Warramunga, but he is the most important, and, more than that, he apparently occupies in the native mind the position of a dominant totem.[9] In short, he seems to be a totem on the high road to become a god.

Again, in the south-eastern parts of Australia "a belief exists in an anthropomorphic supernatural being, who lives in the sky, and who is supposed to have some kind of influence on the morals of the natives. . . . This supernatural being, by whatever name he is known, is represented as having at one time dwelt on the earth, but afterwards to have ascended to a land beyond the sky, where he still remains, observing mankind. As Daramulun, he is said to be able 'to go anywhere and do anything.' He can be invisible; but when he makes himself visible, it is in the form of an old man of the Australian race. He is evidently everlasting, for he has existed from the beginning of things, and he still lives. But in being so he is merely in that state in which, these aborigines believe, every one would be, if not prematurely killed by evil magic. . . . In this being, though supernatural, there is no trace of a divine nature. All that can be said of him is that he is imagined as the ideal of those qualities which are, according to their standard, virtues worthy of being imitated. Such would be a man who is skilful in the use of weapons of offence and defence, all-powerful in magic, but generous and liberal to his people, who does no injury or violence to any one, yet treats with severity any breaches of custom or morality. Such is, according to my knowledge of the Australian tribes, their ideal of a headman, and naturally it is that of Biamban, the master, in the sky-country.

(9) Spencer and Gillen, *Northern Tribes of Central Australia*, ch. vii., and pp. 495 *sq.*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00001b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Such a being, from Bunjil to Baiame, is *Mami-ngata*, that is, 'our father'; in other words, the All-father of the tribes. . . . Although it cannot be alleged that these aborigines have consciously any form of religion, it may be said that their beliefs are such that, under favourable conditions, they might have developed into an actual religion, based on the worship of Mungan-ngaua, or Baiame. There is not any worship of Daramulun; but the dances round the figure of clay and the invocating of his name by the medicine-men certainly might have led up to it. If such a change as a recognised religion had ever become possible, I feel that it would have been brought about by those men who are the depositaries of the tribal beliefs, and by whom in the past, as I think, all the advances in the organisation of their society have been effected. If such a momentous change to the practice of a religion had ever occurred, those men would have readily passed from being medicine-men to the office of priests." [10]

On the other hand, "the Central Australian natives, and this is true of the tribes extending from Lake Eyre in the south to the far north, and eastwards across to the Gulf of Carpentaria, have no idea whatever of the existence of any supreme being who is pleased if they follow a certain line of what we call moral conduct, and displeased if they do not do so. They have not the vaguest idea of a personal individual other than an actual living member of the tribe who approves or disapproves of their conduct, so far as anything like what we call morality is concerned. . . . It must not, however, be imagined that the Central Australian native has nothing in the nature of a moral code. As a matter of fact he has a very strict one, and during the initiation ceremonies the youth is told that there are certain things which he must do and certain others which he must not do, but he quite understands that any punishment for the infringement of these rules of conduct, which are thus laid down for him, will come from the older men, and not at all from any supreme being, of whom he hears nothing whatever. In fact, he then learns that the spirit creature, whom up to that time, as a boy, he has regarded as all-powerful, is merely a myth, and that such a being does not really exist, and is only an invention of the men to frighten the women and children." [11] The aborigines of Central Australia are not the only people who have invented bugbears for the moral edification of youth. The Ona Indians of Tierra del Fuego pretend that the natural features of their country, such as the woods and rocks, the white mists and running waters, are haunted

(10) A. W. Howitt, *The Native Tribes of South-East Australia*, pp. 500, 506 *sqq.*

(11) Spencer and Gillen, *Northern Tribes of Central Australia*, pp. 491 *sq.*

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000aa

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

by spirits of various sorts, "bogies in which they themselves do not believe, but which are a strong moral aid in dealing with refractory wives and wilful children." To impress this salutary belief on the feminine and youthful mind the men act the part of the spirits, disguised in appropriate costumes. Thus the spirit of the beech forests is represented by a man clad in moss and the bark of trees; the spirit of the lichen-grown rocks is played by an actor who is painted slate-colour, with daubs of red and yellow clay; the spirit of clouds and mist is dressed all in white, with a very long head partly made up of twigs, which are covered with skin and painted. Till they are initiated into these mysteries at the age of fourteen or so, the boys firmly believe in the bogies, and no wonder, inasmuch as they have been chased and scared by them. When the time of their initiation draws near, the lads are seriously exhorted by their elders. They must be keen hunters, and quick to avenge the spilt blood of their family. They must be careful of their own bodies, despising greed, and, above all, letting no woman share their inmost thoughts. At a series of nocturnal meetings they then learn the true nature of the "moral aid" by which their green unknowing youth has been trained in the way it should go. They are in fact introduced to the bogies, who turn out to be members of their own family. Any boy or man who betrays the secret is quietly put to death; and the same fate overtakes any woman who is suspected of knowing more than is good for her.[12]

In regard to the precepts inculcated on Central Australian boys at initiation, Messrs. Spencer and Gillen think it "most probable that they have originated in the first instance in association with the purely selfish desire of the older men to keep all the best things for themselves, and in no case whatever are they supposed to have the sanction of a superior being."[13] "As to the 'discovery' of a high ethical religion amongst the lowest savages there is not, I am convinced, any such thing in Australia. The great difficulty is that we have had statements made on the authority of men like Gason. The latter was a police-trooper, I believe, who was perfectly honest, but at the same time perfectly incapable of dealing with matters such as these. In the days when the evidence of Baiame and Daramulun was collected the importance of securing minute and detailed information was really not realised, nor was it imagined that there were men without any so-called religious ideas; and as I have endeavoured to point out in one of our chapters, it is the easiest thing possible to be

(12) W. S. Barclay, "The Land of Magellanes, with some Account of the Ona and other Indians," *The Geographical Journal*, xxiii. (1904), pp. 74 *sq.*

(13) Spencer and Gillen, *Northern Tribes*, p. 504.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

misled by what a native tells you in regard to such a point as this.'' [14]

As an example of the mistakes into which it is possible to fall on this subject, we may take Mr. S. Gason's statement that the Mura-mura of the Dieri is a Good Spirit or Deity,[15] whereas further inquiries have ascertained that the Mura-muras, male and female, young and old, are nothing more than the legendary predecessors or prototypes of the Dieri, who roamed over the country, resembling the present natives in their customs and mode of life, though they excelled them in their magical powers and the wonderful feats they performed.[16] Yet Mr. Gason was an honest man, and he enjoyed the best opportunities for making himself acquainted with the beliefs of the Dieri, for he lived among them on terms of intimacy for years, and he took a special interest in their customs and ideas, bequeathing to us accounts of them which, in spite of some grave mistakes, contain much that is valuable.[17] His error as to the supposed "Good Spirit" of the Dieri only shows how easy it is even for an honest inquirer, with the best intentions and the amplest means of ascertaining the facts, to misinterpret savage ideas in accordance with his own religious creed. Precisely the same mistake which Mr. Gason made as to the Mura-muras of the Dieri, other people have made as to the Balimo of the Basutos in South Africa. On this subject an experienced missionary writes: "The Basutos, like the Caffres in general, had no religious ideas before they came into

(14) Prof. Baldwin Spencer, in a letter to me dated 19th August, 1902. In quoting from my friend's letter I have struck out four words in accordance with a wish expressed by him in another letter of 18th March, 1904. The omission does not affect the sense of the passage.

(15) *Native Tribes of South Australia* (Adelaide, 1879), p. 260.

(16) A. W. Howitt, *Native Tribes of South-East Australia*, pp. 475-482, 644 *sqq.*, 779 *sqq.*; *id.*, "Legends of the Dieri and Kindred Tribes of Central Australia," *Journal of the Anthropological Institute*, xxxiv. (1904), pp. 100-129; Miss E. B. Howitt, in *Folklore*, xiii. (1902), pp. 403-417. Dr. Howitt's informant is the Rev. Otto Siebert, a German missionary to the aborigines at Killalpanina, on the Cooper River, in Central Australia.

(17) "The Manners and Customs of the Dieyerie Tribe of Australian Aborigines," in *Native Tribes of South Australia*, pp. 253-307; "Of the tribes Dieyerie, Auminie, Yandrawontha, Yarawuarka, Pilladapa," *Journal of the Anthropological Institute*, xxiv. (1895), pp. 167-176. Compare A. W. Howitt, "The Dieri and other Kindred Tribes of Central Australia," *Journal of the Anthropological Institute*, xx. (1891), pp. 30-104. Another grave blunder of Mr. Gason's, concerning the fundamental question of the descent of the totems (*murdus*), was corrected by Dr. A. W. Howitt many years ago. See *Journ. Anthrop. Inst.*, xvii. (1888), pp. 185 *sq.*; *id.* xix. (1890), p. 90. Further, "Gason supplied the information that only certain of the men were subincised, and that only those who were purposely left alone could beget children. . . . It is absolute nonsense, and makes me regard Gason as very unreliable, especially when taken in connection with his Mura-mura" (Prof. Baldwin Spencer, in a letter to me dated 18th March, 1904).

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000086

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

contact with the whites. It has been asked whether they knew at least the name of God. Their idea of the divinity must have been very confused, if I may judge by the heathen whom I have associated with for thirteen years. It is the missionaries, I believe, who have employed in the singular the name of God, *Molimo*, 'He who is on high,' for in the language *molimo* would mean 'ancestor,' and was not used except in the plural *Balimo* ('the ancestors'). However it may be with their vague knowledge of the name of God, it is certain that they had no worship, no prayer for the Supreme Being. No ruins of a temple have been found, no vestige of a sacrifice to God, no word designating a priest dedicated to His service. All that was found sixty or seventy years ago, when the first whites arrived in Basutoland, is to be found there to-day among the heathen; that is, the sacrifices to the ancestors."[18] Similarly, Dr. G. M'Call Theal, the learned historian of South Africa, writes of the Bantus in general, of whom the Basutos are a branch: "No man of this race, upon being told of the existence of a single supreme God, ever denies the assertion, and among many of the tribes there is even a name for such a being, as, for instance, the word Umkulunkulu, the Great Great One, used by the Hlubis and others. From this it has been assumed by some investigators that the Bantu are really monotheists, and that the spirits of their ancestors are regarded merely as mediators or intercessors. But such a conclusion is incorrect. The Great Great One was once a man, they all assert, and before our conception of a deity became known to them, he was the most powerful of the ancient chiefs, to whom tradition assigned supernatural knowledge and skill."[19]

Again, there is reason to believe that the accounts which savages give of their religious beliefs are often deliberately fabricated by them in order to deceive the white man. This source of error, though it is not limited to the religious sphere, applies especially to it, since the uncivilised, like the civilised, man is, in general, loth to reveal his most sacred beliefs to any chance inquirer. To win his confidence and elicit his inmost thoughts, it is necessary for the investigator either to have known him intimately for a long time, or to give evidence that he himself has already been initiated into mysteries of the same sort. But the deception practised by the savage sometimes springs from a different motive. In his amiable anxiety to oblige a stranger, he will often tell him whatever he imagines that the inquirer would

(18) Father Porte, "Les reminiscences d'un missionaire du Basutoland," *Missions Catholiques*, xxviii. (1896), p. 370. Compare E. S. Hartland, in *Folk-lore*, xii. (1901), pp. 24 *sqq.*

(19) G. M'Call Theal, *Records of South-Eastern Africa*, vii. (1901), p. 401.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000092

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

like to hear, without the least regard to the truth. Thus it is a custom with the Bantu "not to dispute with honoured guests, but to profess agreement with whatever is stated. This is regarded by those people as politeness, and it is carried to such an absurd extent that it is often difficult to obtain correct information from them. Thus if one asks a man, is it far to such a place? politeness requires him to reply it is far, though it may be close by. The questioner, by using the word far, is supposed to be under the impression that it is at a distance, and it would be rudeness to correct him. They express their thanks for whatever is told them, whether the intelligence is pleasing or not, and whether they believe it or not. Then, too, no one of them ever denies the existence of a Supreme Being, but admits it without hesitation as soon as he is told of it, though he may not once have thought of the subject before."[20]

In regard to the Australian aborigines, it appears that this source of error has also vitiated some of the accounts which have been given of their religious notions. "Many persons try to persuade themselves that they can detect the existence amongst these natives of a true religion and a knowledge of a Supreme Being, but they forget that these Blacks are extremely shrewd, so that when they perceive the object of the conversation, they readily adapt all that they have been taught on this subject to their replies. I have always found that the rigmarole stories which many of them have told me, and which are supposed to represent their religious belief, were founded upon the teachings of missionaries and others."[21] "I am strongly of opinion that those who have written to show that the Blacks had some knowledge of God, practised prayer, and believed in places of reward and punishment beyond the grave, have been imposed upon, and that until they had learnt something of Christianity from missionaries and others the Blacks had no beliefs and practices of the sort. Having heard the missionaries, however, they were not slow to invent what I may call kindred statements with aboriginal accessories, with a view to please and surprise the Whites."[22] In pursuing his researches in this subject, Dr. A. W. Howitt was on at least one occasion surprised, though not pleased, with "kindred statements" of this sort. Wishing to learn the native belief as to Brewin, a spirit whom the Kurnai dread, he questioned two of the most intelligent men, one of whom was a member of the Church of England. After consulting together for a few minutes, one of

(20) G. M'Call Theal, *op. cit.*, vii. 497.
(21) J. F. Mann, "Notes on the Aborigines of Australia," *Proceedings of the Geographical Society of Australasia*, i. (1885), p. 40.
(22) E. M. Curr, *The Australian Race*, i. 45.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000072

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

them said, "We think that he is Jesus Christ." When this answer proved unsatisfactory, they laid their heads together again, and after mature deliberation declared that he must be the devil.[23] The anecdote is instructive, because it illustrates the readiness with which the natives adapt their answers to the supposed taste of the inquirer, and the little dependence that can consequently be placed on their statements as to this subject.

Now it is to be observed that the reports of moral Supreme Beings among the Australian aborigines come chiefly from Victoria and New South Wales, that is, the parts of the continent where the natives have been longest under the influence of the white man. If we could deduct from these reports the elements of error and fraud, we should probably find that the residue would be small indeed; and we might acquiesce in the opinion of Professor Baldwin Spencer: "I do not think that there is really any direct evidence of any Australian native belief in a 'supreme being' in our sense of the term."[24]

But though the natives of Central Australia appear to be equally destitute of ancestor worship,[25] and of a belief in a Supreme Being, the guardian of morality, some of the tribes on the Gulf of Carpentaria have a notion of spiritual beings who can help or injure them. The Binbinga, Mara, and Anula tribes believe that the sky is inhabited by two unfriendly beings who are always anxious to come down and kill people, but are prevented from doing so by a friendly spirit who lives in the woods. When an Anula man falls ill, his friends sing to the friendly spirit in the woods to come and make him well.[26] Such beliefs and such a practice might in time develop into a regular propitiation of these spirits, that is, they might grow into a religion.

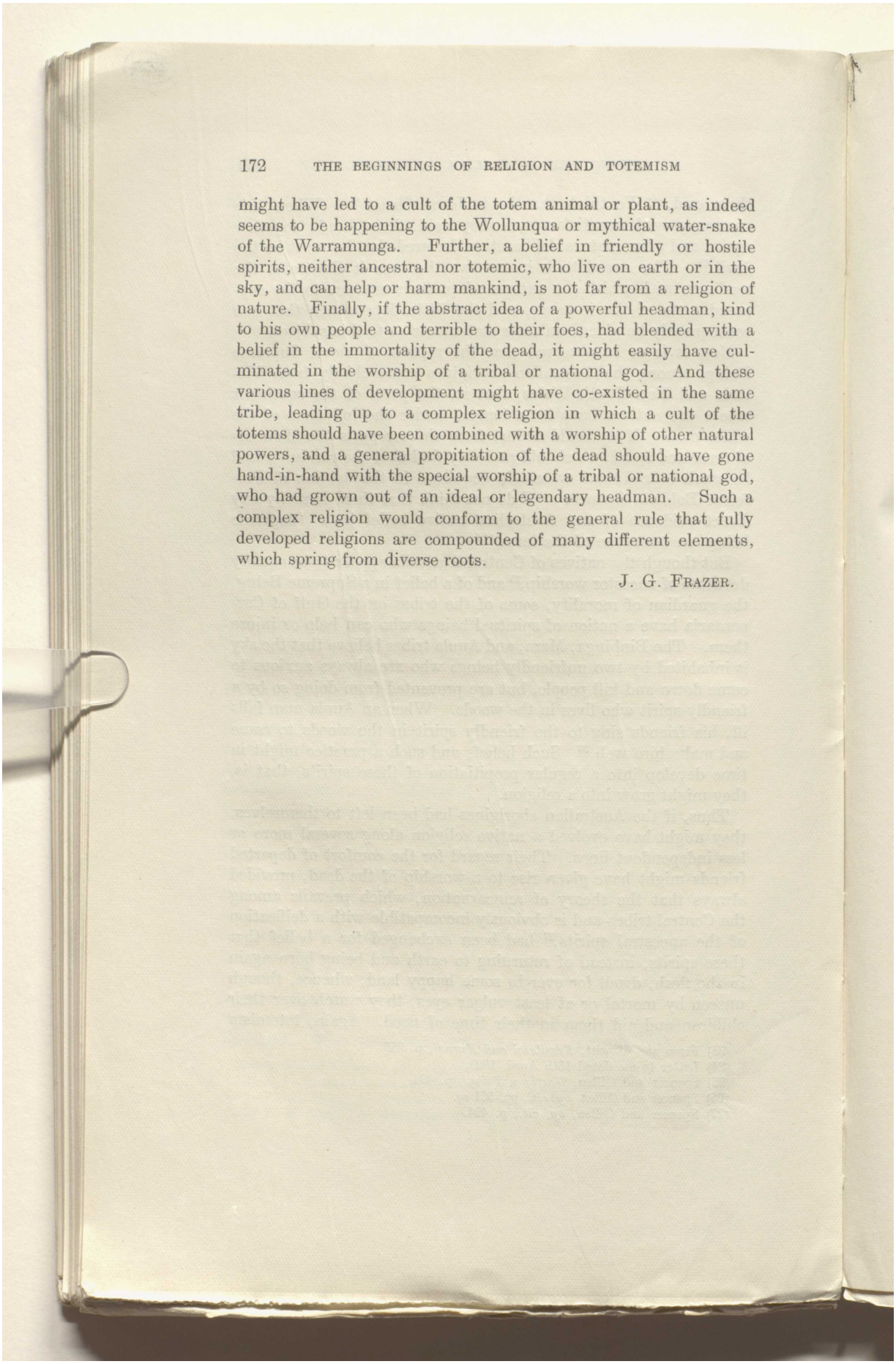
Thus, if the Australian aborigines had been left to themselves, they might have evolved a native religion along several more or less independent lines. Their regard for the comfort of departed friends might have given rise to a worship of the dead, provided always that the theory of reincarnation, which prevails among the Central tribes and is obviously incompatible with a deification of the ancestral spirits,[27] had been exchanged for a belief that these spirits, instead of returning to earth and being born again in the flesh, dwell for ever in some happy land, whence, though unseen by mortal or at least vulgar eyes, they watch over their children and aid them in their time of need. Again, totemism

(23) Fison and Howitt, *Kamilaroi and Kurnai*, p. 255.
(24) Letter to me dated 15th April, 1903.
(25) Spencer and Gillen, *Northern Tribes*, p. 494.
(26) Spencer and Gillen, *op. cit.*, pp. 501 *sq.*
(27) Spencer and Gillen, *op. cit.*, p. 494.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000027

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



might have led to a cult of the totem animal or plant, as indeed seems to be happening to the Wollunqua or mythical water-snake of the Warramunga. Further, a belief in friendly or hostile spirits, neither ancestral nor totemic, who live on earth or in the sky, and can help or harm mankind, is not far from a religion of nature. Finally, if the abstract idea of a powerful headman, kind to his own people and terrible to their foes, had blended with a belief in the immortality of the dead, it might easily have culminated in the worship of a tribal or national god. And these various lines of development might have co-existed in the same tribe, leading up to a complex religion in which a cult of the totems should have been combined with a worship of other natural powers, and a general propitiation of the dead should have gone hand-in-hand with the special worship of a tribal or national god, who had grown out of an ideal or legendary headman. Such a complex religion would conform to the general rule that fully developed religions are compounded of many different elements, which spring from diverse roots.

J. G. Frazer.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000014

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

657

NOSTALGIA.

BY

GRAZIA DELEDDA,

Author of "Cenere," &c.

Translated by HELEN HESTER COLVILL.

III.

THAT winter was cold in Rome, and the rain seemed endless. Even days which began fine grew suddenly dark; the wind rose, and down came a deluge. Luckily, the showers did not last. Soon the pavements dried, the clouds blew away, the sky became blue, as if smiling at an accomplished jest. The people, however, came home with their clothes drenched, their boots soaking, their chests racked with coughs, and their bosoms with evil temper.

"Your famous Roman sky seems to me a lunatic asylum without any warders," said Regina to her husband; "a bedlam where the raging clouds do whatever they like."

And that rainy winter proved one of the saddest in the young wife's whole life. True, she loved Antonio; the first day he left her to resume his work she felt a profound emptiness, and knew herself henceforth attached to him as firmly as the bark to the tree. But existence in the Casa Venutelli, association with her mother-in-law, the presence of Sor Gaspare, the gloomy bedroom with those immense armchairs, heavy as vulgar destiny, proved altogether unbearable.

And Rome was horrible under the continuous rain, which had something malicious and mocking about it. People hurried through the streets, their faces livid; the women showed petticoat-edges pasted with mud; the heaven itself was soiled; and Regina's soul made shipwreck amid this ocean of mud and water. She would come in drenched and exasperated; within-doors it was cold; there was no fire, and there was continual annoyance. She was uncomfortable at table in those old round chairs, opposite the sarcastic countenance of Massimo, Sor Gaspare's red visage, the enormous panting bosom of Signora Anna. At night she was worse off still on that lumpy mattress, in the cold air which was pervaded by the rumble of the trams, and the melancholy rolling of purposeless carriages.

Was this the life of Rome? Nay, was this Rome? What? This the famous Corso—this narrow, smelly, mud-splashed street, with its carriage loads of old and hideous women, its foot passengers

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000083

مكتبة قطر الوطنية
Qatar National Library

squashing and treading upon each other like flocks of stupid sheep? And was this St. Peter's? Regina had expected it larger. That the Pincio? It was not beautiful. The Colosseum? She had supposed it more sublime. Where were the grandeur and magnificence? She could discover neither; everything appeared melancholy and hollow. She felt no astonishment at anything except her own impressions, and found a dreary pleasure in the thought that among all the provincials who came to Rome to be overwhelmed, she alone saw things in their true light. Sometimes she made exaggerated display of her own superiority; but self-examination convinced her it was tainted by personal rancour, and she felt sadder than ever. What was it she wanted? What did she expect? She felt sick of some deep wound. In vain she told herself the winter would pass, she would soon leave this distasteful house where everything seemed to freeze and suffocate her. Alas! her own sweet home was never, never to be found again!

After hurried visits to monuments and museums, and a promise of more leisurely re-inspection—promise made by all who fix their dwelling in Rome, and seldom fulfilled under months and years—Regina and Antonio began the (more interesting) round of *appartamenti* to be let.

Between the salary of the one and the dowry of the other, they counted on a fixed income of 3,000 *lire*. Antonio received a small addition from the princess, who had, however, other advisers, and only consulted him in certain affairs which brought her into collision with the Treasury. The means of the young couple would not therefore allow them more than a small "apartment" at fifty or sixty *lire* a month. They began their search in Via Massimo d'Azeglio, where a possibly suitable suite of rooms was to fall vacant in January. Regina, oppressed with doubts, entered a lordly entrance hall, from which led a principal staircase of fine marble. The second stair was perfectly dark at the bottom, but got brighter and brighter as it went up. Regina began to count its steps.

"Eleven, twenty-two, thirty-three, forty-four, fifty-five, sixty-three—you don't tell me there are more?"

She stopped, her heart beating violently. Antonio smiled indulgently; he took his little queen by the arm and helped her up; the higher they went, the steeper the steps became.

"Eighty-eight; ninety-nine. Goodness! more?"

"Courage!"

"A hundred and ten!"

By the grace of God they had arrived; but before the door was opened, the trembling and panting wife had said bitterly to herself, "Is this where Regina is to live? Never! never!"

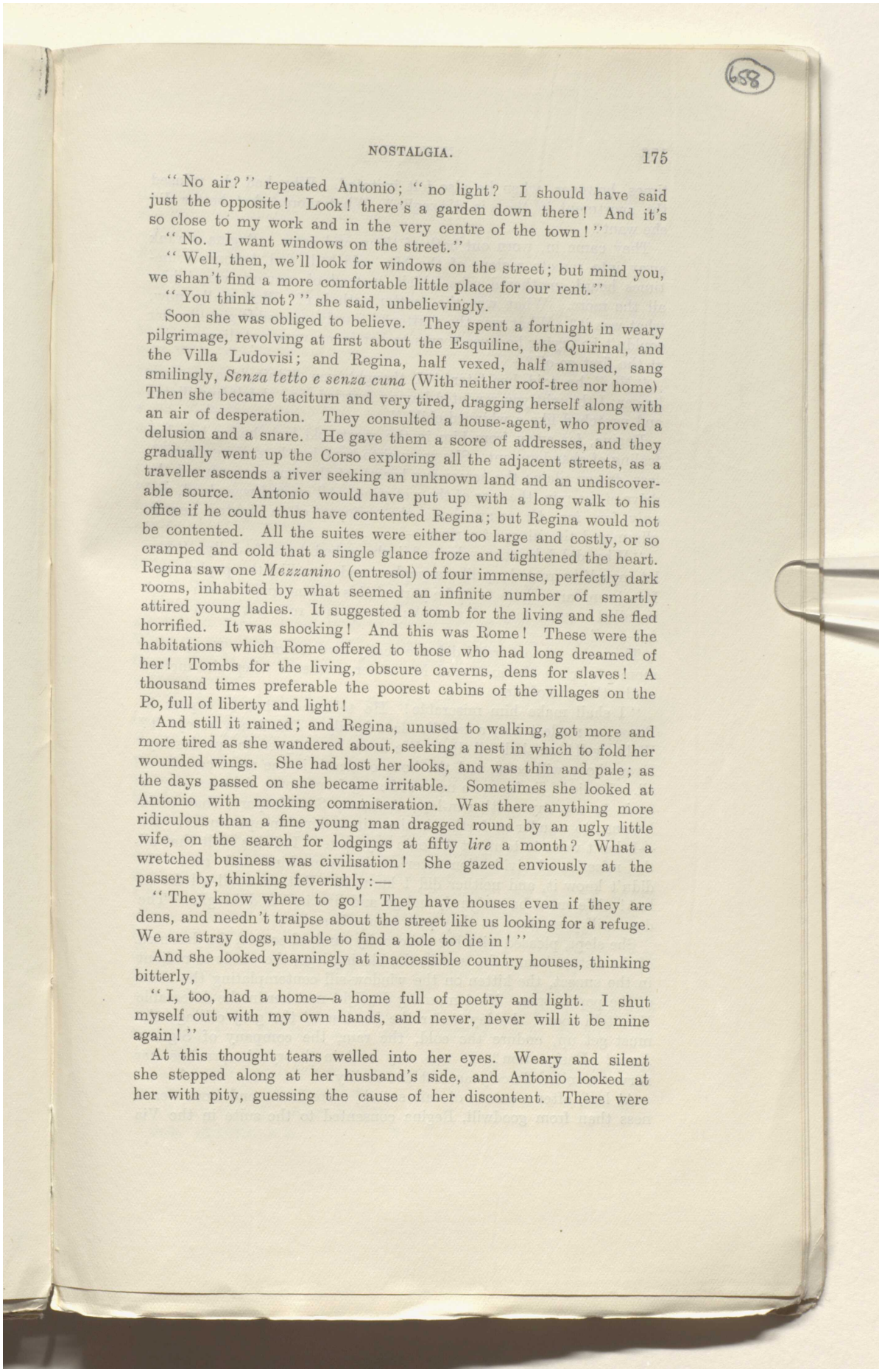
The "apartment" was suitable and pretty; a real nest in the heart of the city's great forest of stone. Two windows looked out on a garden; the rest on a court none too clean.

Regina declared at once that there was no air and no light, and in fact that the rooms would not do at all.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00005d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"No air?" repeated Antonio; "no light? I should have said just the opposite! Look! there's a garden down there! And it's so close to my work and in the very centre of the town!"

"No. I want windows on the street."

"Well, then, we'll look for windows on the street; but mind you, we shan't find a more comfortable little place for our rent."

"You think not?" she said, unbelievingly.

Soon she was obliged to believe. They spent a fortnight in weary pilgrimage, revolving at first about the Esquiline, the Quirinal, and the Villa Ludovisi; and Regina, half vexed, half amused, sang smilingly, *Senza tetto e senza cuna* (With neither roof-tree nor home) Then she became taciturn and very tired, dragging herself along with an air of desperation. They consulted a house-agent, who proved a delusion and a snare. He gave them a score of addresses, and they gradually went up the Corso exploring all the adjacent streets, as a traveller ascends a river seeking an unknown land and an undiscoverable source. Antonio would have put up with a long walk to his office if he could thus have contented Regina; but Regina would not be contented. All the suites were either too large and costly, or so cramped and cold that a single glance froze and tightened the heart. Regina saw one *Mezzanino* (entresol) of four immense, perfectly dark rooms, inhabited by what seemed an infinite number of smartly attired young ladies. It suggested a tomb for the living and she fled horrified. It was shocking! And this was Rome! These were the habitations which Rome offered to those who had long dreamed of her! Tombs for the living, obscure caverns, dens for slaves! A thousand times preferable the poorest cabins of the villages on the Po, full of liberty and light!

And still it rained; and Regina, unused to walking, got more and more tired as she wandered about, seeking a nest in which to fold her wounded wings. She had lost her looks, and was thin and pale; as the days passed on she became irritable. Sometimes she looked at Antonio with mocking commiseration. Was there anything more ridiculous than a fine young man dragged round by an ugly little wife, on the search for lodgings at fifty *lire* a month? What a wretched business was civilisation! She gazed enviously at the passers by, thinking feverishly:—

"They know where to go! They have houses even if they are dens, and needn't traipse about the street like us looking for a refuge. We are stray dogs, unable to find a hole to die in!"

And she looked yearningly at inaccessible country houses, thinking bitterly,

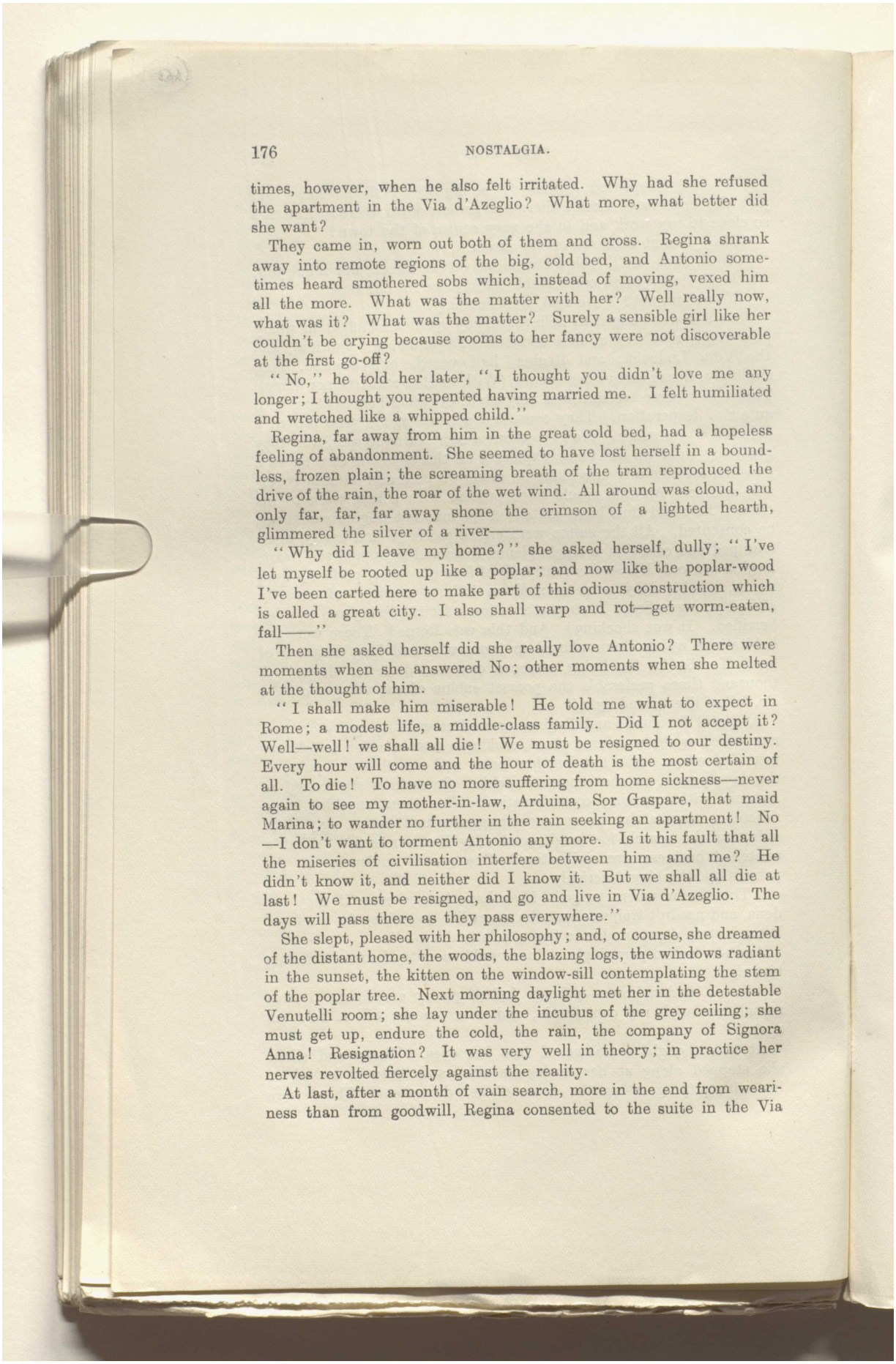
"I, too, had a home—a home full of poetry and light. I shut myself out with my own hands, and never, never will it be mine again!"

At this thought tears welled into her eyes. Weary and silent she stepped along at her husband's side, and Antonio looked at her with pity, guessing the cause of her discontent. There were

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00002d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



times, however, when he also felt irritated. Why had she refused the apartment in the Via d'Azeglio? What more, what better did she want?

They came in, worn out both of them and cross. Regina shrank away into remote regions of the big, cold bed, and Antonio sometimes heard smothered sobs which, instead of moving, vexed him all the more. What was the matter with her? Well really now, what was it? What was the matter? Surely a sensible girl like her couldn't be crying because rooms to her fancy were not discoverable at the first go-off?

"No," he told her later, "I thought you didn't love me any longer; I thought you repented having married me. I felt humiliated and wretched like a whipped child."

Regina, far away from him in the great cold bed, had a hopeless feeling of abandonment. She seemed to have lost herself in a boundless, frozen plain; the screaming breath of the tram reproduced the drive of the rain, the roar of the wet wind. All around was cloud, and only far, far, far away shone the crimson of a lighted hearth, glimmered the silver of a river——

"Why did I leave my home?" she asked herself, dully; "I've let myself be rooted up like a poplar; and now like the poplar-wood I've been carted here to make part of this odious construction which is called a great city. I also shall warp and rot—get worm-eaten, fall——"

Then she asked herself did she really love Antonio? There were moments when she answered No; other moments when she melted at the thought of him.

"I shall make him miserable! He told me what to expect in Rome; a modest life, a middle-class family. Did I not accept it? Well—well! we shall all die! We must be resigned to our destiny. Every hour will come and the hour of death is the most certain of all. To die! To have no more suffering from home sickness—never again to see my mother-in-law, Arduina, Sor Gaspare, that maid Marina; to wander no further in the rain seeking an apartment! No—I don't want to torment Antonio any more. Is it his fault that all the miseries of civilisation interfere between him and me? He didn't know it, and neither did I know it. But we shall all die at last! We must be resigned, and go and live in Via d'Azeglio. The days will pass there as they pass everywhere."

She slept, pleased with her philosophy; and, of course, she dreamed of the distant home, the woods, the blazing logs, the windows radiant in the sunset, the kitten on the window-sill contemplating the stem of the poplar tree. Next morning daylight met her in the detestable Venutelli room; she lay under the incubus of the grey ceiling; she must get up, endure the cold, the rain, the company of Signora Anna! Resignation? It was very well in theory; in practice her nerves revolted fiercely against the reality.

At last, after a month of vain search, more in the end from weariness than from goodwill, Regina consented to the suite in the Via

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

d'Azeglio for one year. Yet on the very day of signing the agreement she repented, abandoning all self-control.

"Was it worth while leaving my home and coming to Rome to live in a box? I shall be suffocated! I shall die!" she cried.

Nor could Antonio longer contain himself.

"Can't you say what it is you want?" he exclaimed in a fury. "Did you imagine you were marrying a prince? You knew all I had to offer! You told me a hundred times you hadn't corrupted your soul with vain ambitions; you said you were robust and unselfish—you said you didn't ask impossible things of life! Why don't you look back instead of always looking ahead? Didn't you say you were a bit of a Socialist? Well then, why don't you compare your condition with that of millions and millions of other women?"

She wept, leaning her forehead against the window pane. Of course it was raining, and it seemed to her that the heavens wept with her. She knew Antonio was right, although he looked at the matter merely on its material side, and did not understand the real causes of her discontent.

However, she laughed through her tears, laughed proudly and ironically.

"If you speak like that, we are done for," she said.

He moderated his voice. "I speak crossly," he said, "but I am full of hope. I am tired of seeing you so dissatisfied, Regina. What do you want me to do? What can I give you beyond what I have—that is, all my work, all my love, a good position, a morrow without cares?"

"He doesn't understand," she thought; "I shall suffer, but no one shall perceive it, he least of all. I shall be always solitary. Well? I don't need anyone, do I? I'm strong, am I not? Are you proposing to let your heart be seen, Regina, by all these odious little people?" And she shook her wings like a little bird which has tumbled into dirty water.

Antonio came nearer, and they made it up.

"You know," he said, stroking her hair, "the agreement is only for a year. Who knows what mayn't happen in a year? I shall apply for a rise, get a step; then we shall have our house rent free. I'll try to get extra work; perhaps Madame will put her whole affairs into my hands. Our position will improve. We'll take a larger flat—with a shorter stair. You'll get used to the stair. Some day you'll laugh at having cried for such trifles. Now wash your face. How ugly you are with those red eyes!"

"Ugly or pretty, I'm always myself!" she said, plunging her face into cold water; then she scrubbed it with the rough towel, powdered herself, put on the lace scarf, and consented to go up and visit Arduina.

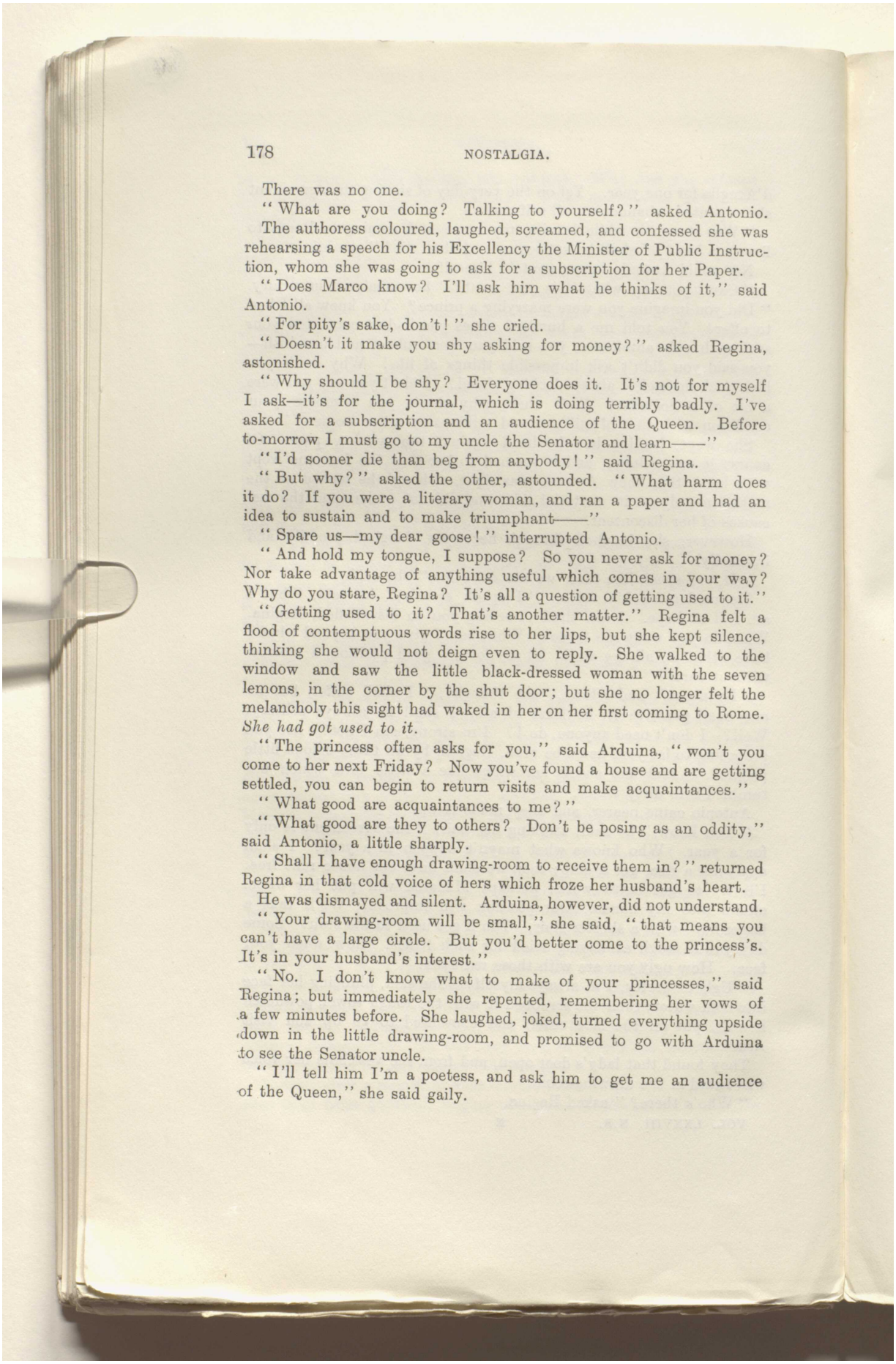
They found that lady's door open, and from the vestibule her voice was heard in the drawing-room.

"Who's there?" asked Regina.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00009d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



There was no one.

"What are you doing? Talking to yourself?" asked Antonio.

The authoress coloured, laughed, screamed, and confessed she was rehearsing a speech for his Excellency the Minister of Public Instruction, whom she was going to ask for a subscription for her Paper.

"Does Marco know? I'll ask him what he thinks of it," said Antonio.

"For pity's sake, don't!" she cried.

"Doesn't it make you shy asking for money?" asked Regina, astonished.

"Why should I be shy? Everyone does it. It's not for myself I ask—it's for the journal, which is doing terribly badly. I've asked for a subscription and an audience of the Queen. Before to-morrow I must go to my uncle the Senator and learn——"

"I'd sooner die than beg from anybody!" said Regina.

"But why?" asked the other, astounded. "What harm does it do? If you were a literary woman, and ran a paper and had an idea to sustain and to make triumphant——"

"Spare us—my dear goose!" interrupted Antonio.

"And hold my tongue, I suppose? So you never ask for money? Nor take advantage of anything useful which comes in your way? Why do you stare, Regina? It's all a question of getting used to it."

"Getting used to it? That's another matter." Regina felt a flood of contemptuous words rise to her lips, but she kept silence, thinking she would not deign even to reply. She walked to the window and saw the little black-dressed woman with the seven lemons, in the corner by the shut door; but she no longer felt the melancholy this sight had waked in her on her first coming to Rome. *She had got used to it.*

"The princess often asks for you," said Arduina, "won't you come to her next Friday? Now you've found a house and are getting settled, you can begin to return visits and make acquaintances."

"What good are acquaintances to me?"

"What good are they to others? Don't be posing as an oddity," said Antonio, a little sharply.

"Shall I have enough drawing-room to receive them in?" returned Regina in that cold voice of hers which froze her husband's heart.

He was dismayed and silent. Arduina, however, did not understand.

"Your drawing-room will be small," she said, "that means you can't have a large circle. But you'd better come to the princess's. It's in your husband's interest."

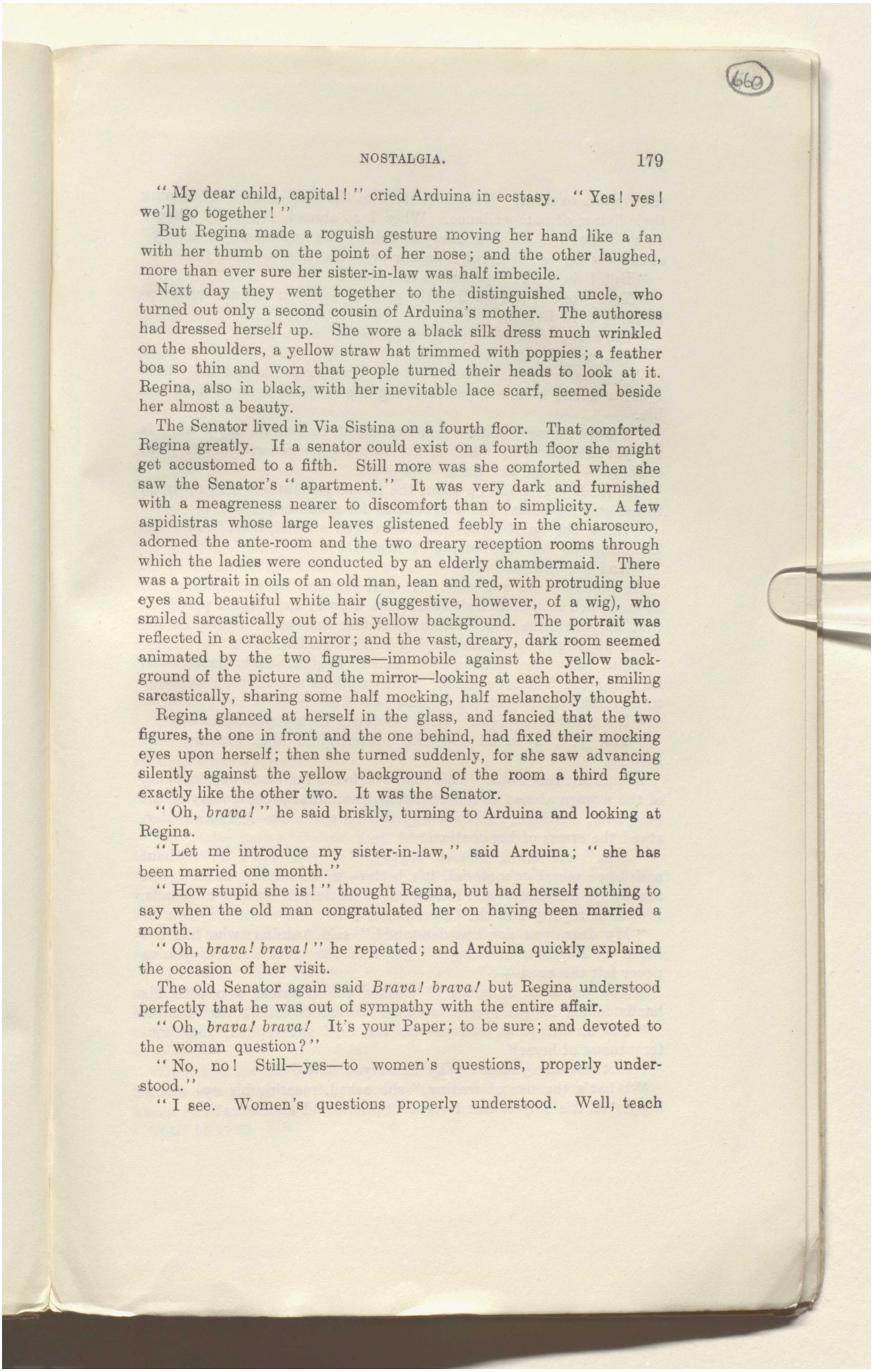
"No. I don't know what to make of your princesses," said Regina; but immediately she repented, remembering her vows of a few minutes before. She laughed, joked, turned everything upside down in the little drawing-room, and promised to go with Arduina to see the Senator uncle.

"I'll tell him I'm a poetess, and ask him to get me an audience of the Queen," she said gaily.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00005f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"My dear child, capital!" cried Arduina in ecstasy. "Yes! yes! we'll go together!"

But Regina made a roguish gesture moving her hand like a fan with her thumb on the point of her nose; and the other laughed, more than ever sure her sister-in-law was half imbecile.

Next day they went together to the distinguished uncle, who turned out only a second cousin of Arduina's mother. The authoress had dressed herself up. She wore a black silk dress much wrinkled on the shoulders, a yellow straw hat trimmed with poppies; a feather boa so thin and worn that people turned their heads to look at it. Regina, also in black, with her inevitable lace scarf, seemed beside her almost a beauty.

The Senator lived in Via Sistina on a fourth floor. That comforted Regina greatly. If a senator could exist on a fourth floor she might get accustomed to a fifth. Still more was she comforted when she saw the Senator's "apartment." It was very dark and furnished with a meagreness nearer to discomfort than to simplicity. A few aspidistras whose large leaves glistened feebly in the chiaroscuro, adorned the ante-room and the two dreary reception rooms through which the ladies were conducted by an elderly chambermaid. There was a portrait in oils of an old man, lean and red, with protruding blue eyes and beautiful white hair (suggestive, however, of a wig), who smiled sarcastically out of his yellow background. The portrait was reflected in a cracked mirror; and the vast, dreary, dark room seemed animated by the two figures—immobile against the yellow background of the picture and the mirror—looking at each other, smiling sarcastically, sharing some half mocking, half melancholy thought.

Regina glanced at herself in the glass, and fancied that the two figures, the one in front and the one behind, had fixed their mocking eyes upon herself; then she turned suddenly, for she saw advancing silently against the yellow background of the room a third figure exactly like the other two. It was the Senator.

"Oh, *brava!*" he said briskly, turning to Arduina and looking at Regina.

"Let me introduce my sister-in-law," said Arduina; "she has been married one month."

"How stupid she is!" thought Regina, but had herself nothing to say when the old man congratulated her on having been married a month.

"Oh, *brava! brava!*" he repeated; and Arduina quickly explained the occasion of her visit.

The old Senator again said *Brava! brava!* but Regina understood perfectly that he was out of sympathy with the entire affair.

"Oh, *brava! brava!* It's your Paper; to be sure; and devoted to the woman question?"

"No, no! Still—yes—to women's questions, properly understood."

"I see. Women's questions properly understood. Well, teach

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

the women to work. Habituate them to the idea of work, of earning their living, of independence. When I go abroad, especially when I go to England, I am immensely struck by the 'moral physiognomy' of the women—so different from our women at home—from you——"

"But I do work!" protested Arduina.

"Your work is not sufficiently profitable if you require subscriptions!" cried Regina.

"Oh, *brava! brava!* And you, I suppose, write too?"

"Oh, no! I don't do anything!"

The Senator looked at her with his mocking and melancholy blue eyes; and she blushed, remembering she had never worked in her life.

"I want subscriptions," said Arduina, "because in Italy work is not yet remunerative. But in the future—the generations we shall educate——" &c., &c., &c.

She made a long speech about the future generations, and returned to her starting point: the urgent need for a subscription.

"Bless the girl! She shall have the subscription!" said the Senator, who was still looking at Regina.

"And the audience also?"

He promised the audience. At that moment he was smiling just as he smiled in the portrait and in the mirror; and Regina perceived that he pitied the poor Italian journalist and was thinking of the moral physiognomy of the working Englishwomen.

"But why the audience?" asked Regina, emboldened and imitating the Senator's smile; "subscriptions are all very well—up to a certain point—but the audience——"

"It's a moral support. With reference to my principles——"

"Yes, yes; a moral support," interrupted the Senator, still smiling.

Regina felt rebellious. This man who found the moral physiognomy of the women abroad so different from the moral physiognomy of the incapable, enslaved Italians—why did he not make Arduina understand the errors of her method?

"But," she cried, almost angrily, "if you can't do without assistance moral or material, it's better—to do nothing at all! We are always despoilers; and it's all one if we despoil fathers, husbands, lovers, or royalty and the Government!"

"My dear, you don't understand!" said Arduina, who had not taken in Regina's meaning; "you talk like that because you've never felt the need——"

"You are from Lombardy?" asked the Senator, who with his hands folded on his breast, amused himself twiddling his thumbs.

"I'm an incapable and useless Italian," she replied, very contemptuous of herself.

"But you are young. Why don't you write?"

"What's the use of writing," she asked, meeting his eye mockingly, "if it's only to ask for subscriptions and audiences?"

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The old man, still twiddling his thumbs, rose and took a step towards the younger lady.

"What's your impression of Rome?"

"Bad! It bores me! Town life is so wretched and gloomy. Besides, it does nothing but rain," said Regina, and laughed.

"What makes him stare so?" she thought; "can I possibly have the moral physiognomy of the English ladies?"

The old man stood in front of her, his back to Arduina, whose presence he seemed to have forgotten.

"Town life is wretched," he said, "because it's empty. Our women are full of useless aspirations, and as you say despoil their men, who deteriorate working too hard for their families. In those societies where the woman works also, the man has a free margin for the development of his abilities. In England——"

"But what can we do," repeated Regina, "if we haven't been brought up to work?"

The Senator did not appear to hear her. He drew a picture of English society where the whole middle class, the professional, and the working classes alike kept themselves up in literature, art, politics, and promoted free discussion on all subjects; where the women were not bored, because they worked.

"They have hundreds of authoresses, translators, newspaper correspondents, who make more than 10,000 *lire* every year, some a great deal more. Mrs. H. W.—do you know how much she gets for each of her books?"

Regina did not know.

"More than seven or eight thousand pounds."

Arduina hastily made the calculation.

"More than 200,000 *lire*?" she said, awestruck. "Dear me! I shouldn't like to make all that!"

"Why not?"

"Because I should go off my head!"

"But in Italy——" began Regina.

"In Italy, too, a woman may earn a good deal. Work! work! there's the secret."

Regina left the old Senator's dark and melancholy house with a new ray of light in her mind. Work! work! Yes, she also wanted work! She would begin to write. If she was no good for anything else, at least she might make some money. She wanted work; she wanted money; above all she wanted to live.

"I'll escape from this narrow circle which is strangling me. I'll look life in the face. I'll lose myself in the great streets of Rome, feel the soul of the crowd, write descriptions of the lives of the poor, of those who are bored, of those who seem happy and are not—life as it is——"

When she got home, she looked round with pitying eyes. Yes! Signora Anna and the maid, Arduina and the brothers-in-law, the whole environment and the souls set in it, all moved her to pity.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000007

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

And this pity gave her a feeling of soft sweet warmth, of profound well-being.

Antonio had not come in, and Regina stayed in her room. She took a book and sat by the closed window. Evening came on. Little by little the warmth which had been the result of the expedition died out. The light failed. Great impalpable veils fell down round her, slowly, one after the other. The book she held in her hand was so futile that she had not been able to read two pages. She shut it up and looked at the sky. But the line of sky above the ugly opposite façade was so ashen and heavy that it gave her the impression of a sheet of metal. Only one little red cloud, a wandering flame, illuminated the ashes of this dead heaven.

Suddenly Regina felt a great emptiness, a great cold within herself. That little cloud had reminded her of the distant hearth fire in her home! of all the little, simple, voiceless things which yet were greater and brighter than all glory, all riches. She thought:—

"Work! Money making! Even if it were possible it couldn't give me back my home, my past, my atmosphere! One little reality is worth more than the greatest of ideals.

"What is the Ideal?" she thought further, still watching the slow passing of the cloud; and she copied the old Senator's smile, remembering how he also imagined he had such lofty ideals!

IV.

On Christmas Eve Regina went early to bed, complaining of an indisposition which made Signora Anna thoughtful, but was not suggestive to Antonio. He knew, or thought he knew, the subtle malady which was consuming his wife. He knew its name: Nostalgia; and he left to time the responsibility of its cure.

Regina was no sooner in bed than she began to remember and to meditate. Christmas in Rome! She saw over again the carts of live fowls being drawn through the streets; the ladies passing quickly along with parcels in their hands; the fat pork-butchers looking out from their nauseating shops with the importance of Roman emperors; his Excellency an Under-Secretary of State standing in front of Dagnino's window with a visage of terrible perplexity.

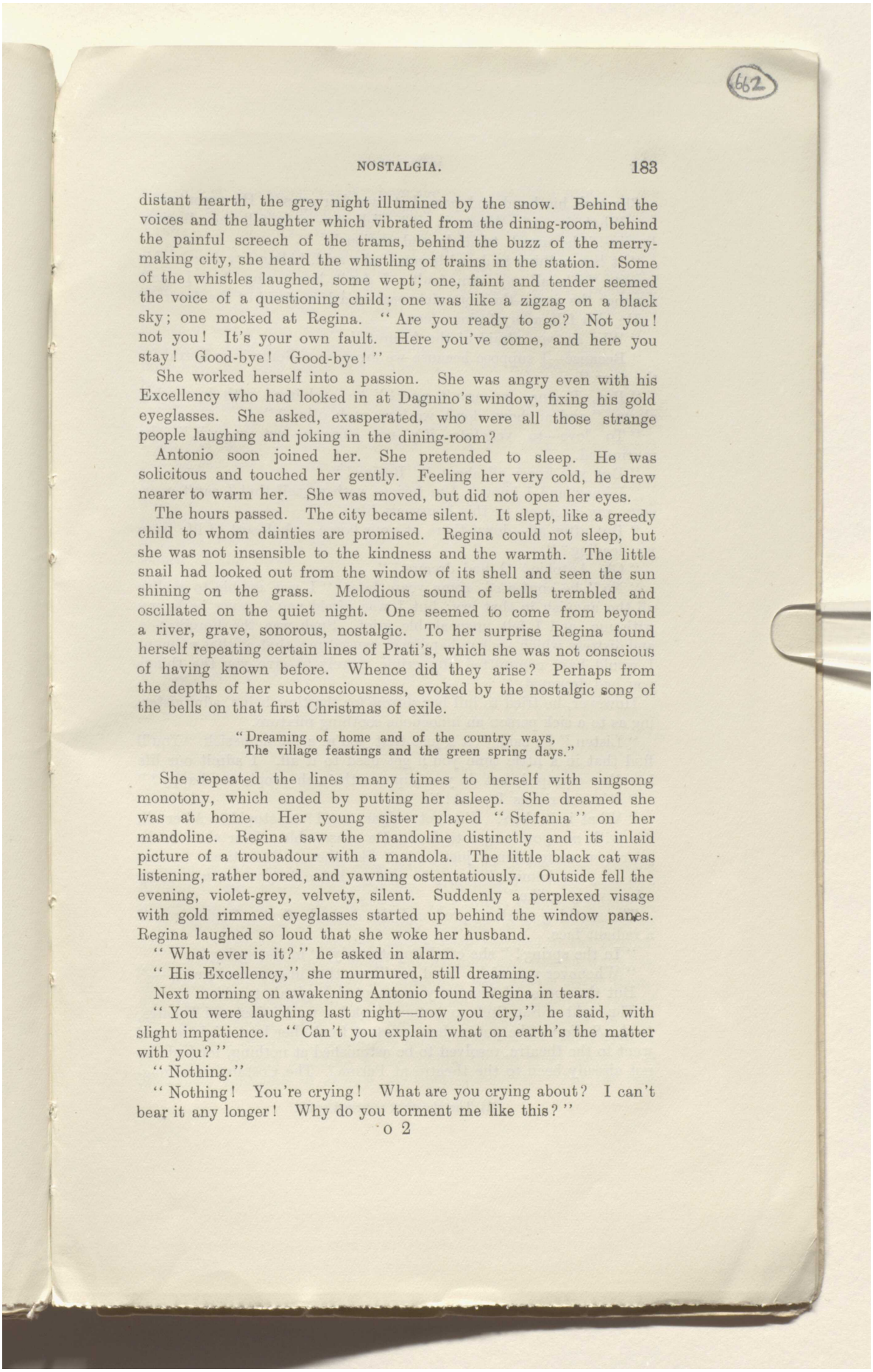
She reflected upon the quarrel which had broken out among Signora Anna, Gaspare, and the maid about wax candles. Marina had gone up and down the stair at least twenty times, each time coming back with parcels, but each time forgetting something. During the whole of lunch and the whole of dinner the brothers, their mother, and the girl had discussed the supplies of food.

Well! it had all produced in Regina a sort of spiritual indigestion. Alone in the great bed, shivering, crumpled up, she was conscious of an unspeakable depression. She felt like a little snail which hears the rain pattering on its shell. And she thought continually of the

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



distant hearth, the grey night illumined by the snow. Behind the voices and the laughter which vibrated from the dining-room, behind the painful screech of the trams, behind the buzz of the merry-making city, she heard the whistling of trains in the station. Some of the whistles laughed, some wept; one, faint and tender seemed the voice of a questioning child; one was like a zigzag on a black sky; one mocked at Regina. "Are you ready to go? Not you! not you! It's your own fault. Here you've come, and here you stay! Good-bye! Good-bye!"

She worked herself into a passion. She was angry even with his Excellency who had looked in at Dagnino's window, fixing his gold eyeglasses. She asked, exasperated, who were all those strange people laughing and joking in the dining-room?

Antonio soon joined her. She pretended to sleep. He was solicitous and touched her gently. Feeling her very cold, he drew nearer to warm her. She was moved, but did not open her eyes.

The hours passed. The city became silent. It slept, like a greedy child to whom dainties are promised. Regina could not sleep, but she was not insensible to the kindness and the warmth. The little snail had looked out from the window of its shell and seen the sun shining on the grass. Melodious sound of bells trembled and oscillated on the quiet night. One seemed to come from beyond a river, grave, sonorous, nostalgic. To her surprise Regina found herself repeating certain lines of Prati's, which she was not conscious of having known before. Whence did they arise? Perhaps from the depths of her subconsciousness, evoked by the nostalgic song of the bells on that first Christmas of exile.

"Dreaming of home and of the country ways,
The village feastings and the green spring days."

She repeated the lines many times to herself with singsong monotony, which ended by putting her asleep. She dreamed she was at home. Her young sister played "Stefania" on her mandoline. Regina saw the mandoline distinctly and its inlaid picture of a troubadour with a mandola. The little black cat was listening, rather bored, and yawning ostentatiously. Outside fell the evening, violet-grey, velvety, silent. Suddenly a perplexed visage with gold rimmed eyeglasses started up behind the window panes. Regina laughed so loud that she woke her husband.

"What ever is it?" he asked in alarm.

"His Excellency," she murmured, still dreaming.

Next morning on awakening Antonio found Regina in tears.

"You were laughing last night—now you cry," he said, with slight impatience. "Can't you explain what on earth's the matter with you?"

"Nothing."

"Nothing! You're crying! What are you crying about? I can't bear it any longer! Why do you torment me like this?"

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00004b

مكتبة قطر الوطنية
Qatar National Library

She took his hand and passed it over her eyes. He repented.

"What is it? What is it? Tell me—only tell me, Regina, Regina!" he urged, tenderly and anxiously.

"It has nothing to do with you," she said, hiding her face on his breast, "it's all my own fault. I don't know why, but I can't conquer the past—the homesickness—and I'm afraid of the future."

He also felt a mysterious fear.

"Why are you afraid of the future?"

"Because—I suppose because we are poor. Rome is so horrid for the poor."

"But, Regina, we aren't poor!" he exclaimed with increasing alarm, "and anyhow, don't we love each other?"

"To love—to vegetate—it's not enough—not enough," she murmured.

"But you knew all about it, Regina!"

"I knew and I know. I'm furious with myself that I can't overcome my aversion to this bourgeois life."

"But after all—down there at your home—what sort of life were you leading?"

"Oh, Antonio! I had dreams!"

"No," he confessed, some years later, "I was unable to realise all the anguish in that cry; but I was afraid you'd never be happy with me, and I felt unspeakable grief. Such was the humiliation and distress which your unhappiness caused me, that at that moment I would have committed any crime merely to give you the things you had dreamed."

However, he tried to lull her sorrow for the time being, administering as to a sick person an innocuous soothing mixture.

"Listen," he said, "it's just that you're a bit homesick. You'll find that in a little time you'll get used to it all. I admit our life is rather cramped, but do you suppose the rich people are happy?"

"It's not riches I want!"

"What is it then? *I*'m not vulgar, am I? or stupid? After all, it's with *me* you've got to live. Be reasonable. You shall make your own surroundings just as you like them. Meantime, to cure you of your homesickness, you can go home to your own country whenever you like."

The soothing mixture produced the desired effect. Regina raised a radiant face.

"In the spring!" she cried impetuously, "in the spring!"

"Whenever you wish. And you'll see that in course of time——"

But the course of time only augmented Regina's trouble.

The night of San-Stefano Antonio took her to the Costanzi Theatre, to the *Sedie*.[1] She put on her smartest frock, her best trinkets, and went to the theatre, resolved to be astonished at nothing, for had she not already been to the theatre at Parma? The Costanzi was mag-

(1) The cheapest reserved seats.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

nificent; an enormous casket where the most beautiful pearls in the capital shone on feminine shoulders resplendent with "*Crema Venus.*" Even the pit was splendid, a field of great flowers sprinkled with the dew of gems and gold. And in spite of her experience at the Parma theatre, Regina felt sufficiently bewildered. Her short-sighted eyes, dazzled by the brilliant light, were half shut; and it was much the same with the eyes of her soul. She raised her opera glass and looked at one of the boxes. The lady there was plain in feature but extremely fashionable; Regina thought her painted, decked with false hair, her eyes artificially darkened. None the less, she envied her.

She looked round. Little by little her envy swelled, overflowed, became hateful. She would have liked the theatre burned down. Then she perceived that a lady near her was looking at the boxes just as she was, perhaps with the same criminal envy in her heart. She felt ashamed of herself, put down the glass, and after this did not look at the seats above her again. But on her own level, in the furthest row of the *Poltrone*,[1] she saw a long row of smartly dressed men and women who always and only stared at the boxes. No one looked at the *Sedie*. The people there were an inferior race, or actually non-existent for the ladies and gentlemen in the *Poltrone*.

"We are nothing! We are the microbes which fill the void," thought Regina.

Then she perceived another strange fact, that she herself felt for the *Sedie* and the gallery the very same contempt which was felt by the people of the boxes and the stalls.

Antonio thought she was enjoying the music and the spectacle as he was himself; now and then he touched her hand and made some pleasant remark.

"You look a real queen with that necklace!" he said, for instance.

"An exiled queen!" returned Regina under her breath.

V.

Later, when she thought over that first year of marriage, Regina divided it into many little chapters. Amongst them she attached importance to the chapter of her first visit to the Princess Makuline.

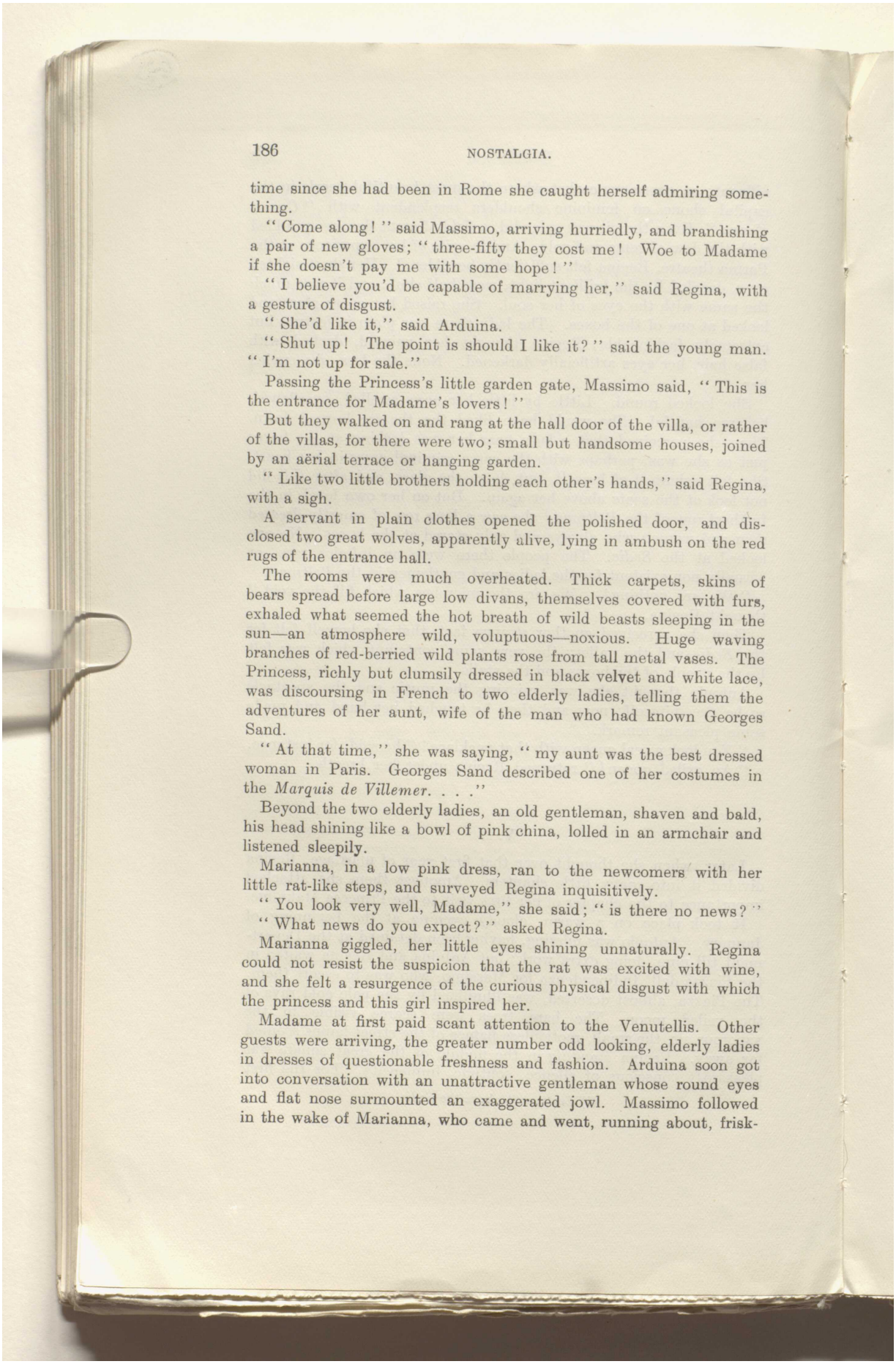
It took place on a warm, cloudy evening at the beginning of January. Antonio was missing, having been detained at the Department till nine, doing extra work; but Arduina and Regina waited in the Piazza dell' Indipendenza for Massimo, who was to escort them. The Piazza, almost deserted, was illumined by the pale gold rays of the veiled moon. The bare trees were scarce visible in the vaporous air, the small, motionless flames of the street lamps seemed far away. Regina standing in the middle of the great square was pleasantly conscious of silence, solitude, immensity. For the first

(1) Seats next above the *Sedie*.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000088

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



time since she had been in Rome she caught herself admiring something.

"Come along!" said Massimo, arriving hurriedly, and brandishing a pair of new gloves; "three-fifty they cost me! Woe to Madame if she doesn't pay me with some hope!"

"I believe you'd be capable of marrying her," said Regina, with a gesture of disgust.

"She'd like it," said Arduina.

"Shut up! The point is should I like it?" said the young man. "I'm not up for sale."

Passing the Princess's little garden gate, Massimo said, "This is the entrance for Madame's lovers!"

But they walked on and rang at the hall door of the villa, or rather of the villas, for there were two; small but handsome houses, joined by an aërial terrace or hanging garden.

"Like two little brothers holding each other's hands," said Regina, with a sigh.

A servant in plain clothes opened the polished door, and disclosed two great wolves, apparently alive, lying in ambush on the red rugs of the entrance hall.

The rooms were much overheated. Thick carpets, skins of bears spread before large low divans, themselves covered with furs, exhaled what seemed the hot breath of wild beasts sleeping in the sun—an atmosphere wild, voluptuous—noxious. Huge waving branches of red-berried wild plants rose from tall metal vases. The Princess, richly but clumsily dressed in black velvet and white lace, was discoursing in French to two elderly ladies, telling them the adventures of her aunt, wife of the man who had known Georges Sand.

"At that time," she was saying, "my aunt was the best dressed woman in Paris. Georges Sand described one of her costumes in the *Marquis de Villemer*. . . ."

Beyond the two elderly ladies, an old gentleman, shaven and bald, his head shining like a bowl of pink china, lolled in an armchair and listened sleepily.

Marianna, in a low pink dress, ran to the newcomers with her little rat-like steps, and surveyed Regina inquisitively.

"You look very well, Madame," she said; "is there no news?"

"What news do you expect?" asked Regina.

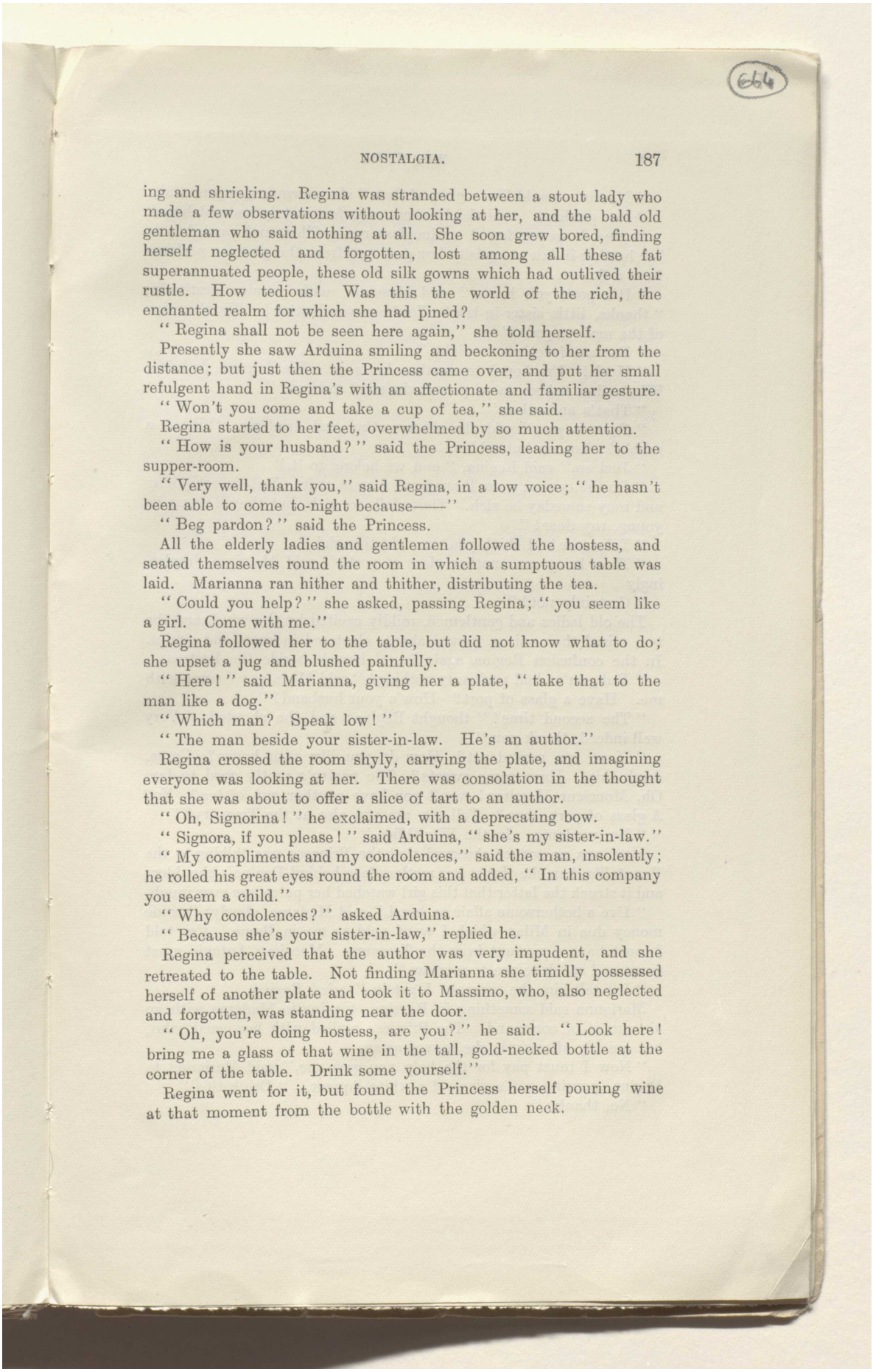
Marianna giggled, her little eyes shining unnaturally. Regina could not resist the suspicion that the rat was excited with wine, and she felt a resurgence of the curious physical disgust with which the princess and this girl inspired her.

Madame at first paid scant attention to the Venutellis. Other guests were arriving, the greater number odd looking, elderly ladies in dresses of questionable freshness and fashion. Arduina soon got into conversation with an unattractive gentleman whose round eyes and flat nose surmounted an exaggerated jowl. Massimo followed in the wake of Marianna, who came and went, running about, frisk-

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



ing and shrieking. Regina was stranded between a stout lady who made a few observations without looking at her, and the bald old gentleman who said nothing at all. She soon grew bored, finding herself neglected and forgotten, lost among all these fat superannuated people, these old silk gowns which had outlived their rustle. How tedious! Was this the world of the rich, the enchanted realm for which she had pined?

"Regina shall not be seen here again," she told herself.

Presently she saw Arduina smiling and beckoning to her from the distance; but just then the Princess came over, and put her small refulgent hand in Regina's with an affectionate and familiar gesture.

"Won't you come and take a cup of tea," she said.

Regina started to her feet, overwhelmed by so much attention.

"How is your husband?" said the Princess, leading her to the supper-room.

"Very well, thank you," said Regina, in a low voice; "he hasn't been able to come to-night because——"

"Beg pardon?" said the Princess.

All the elderly ladies and gentlemen followed the hostess, and seated themselves round the room in which a sumptuous table was laid. Marianna ran hither and thither, distributing the tea.

"Could you help?" she asked, passing Regina; "you seem like a girl. Come with me."

Regina followed her to the table, but did not know what to do; she upset a jug and blushed painfully.

"Here!" said Marianna, giving her a plate, "take that to the man like a dog."

"Which man? Speak low!"

"The man beside your sister-in-law. He's an author."

Regina crossed the room shyly, carrying the plate, and imagining everyone was looking at her. There was consolation in the thought that she was about to offer a slice of tart to an author.

"Oh, Signorina!" he exclaimed, with a deprecating bow.

"Signora, if you please!" said Arduina, "she's my sister-in-law."

"My compliments and my condolences," said the man, insolently; he rolled his great eyes round the room and added, "In this company you seem a child."

"Why condolences?" asked Arduina.

"Because she's your sister-in-law," replied he.

Regina perceived that the author was very impudent, and she retreated to the table. Not finding Marianna she timidly possessed herself of another plate and took it to Massimo, who, also neglected and forgotten, was standing near the door.

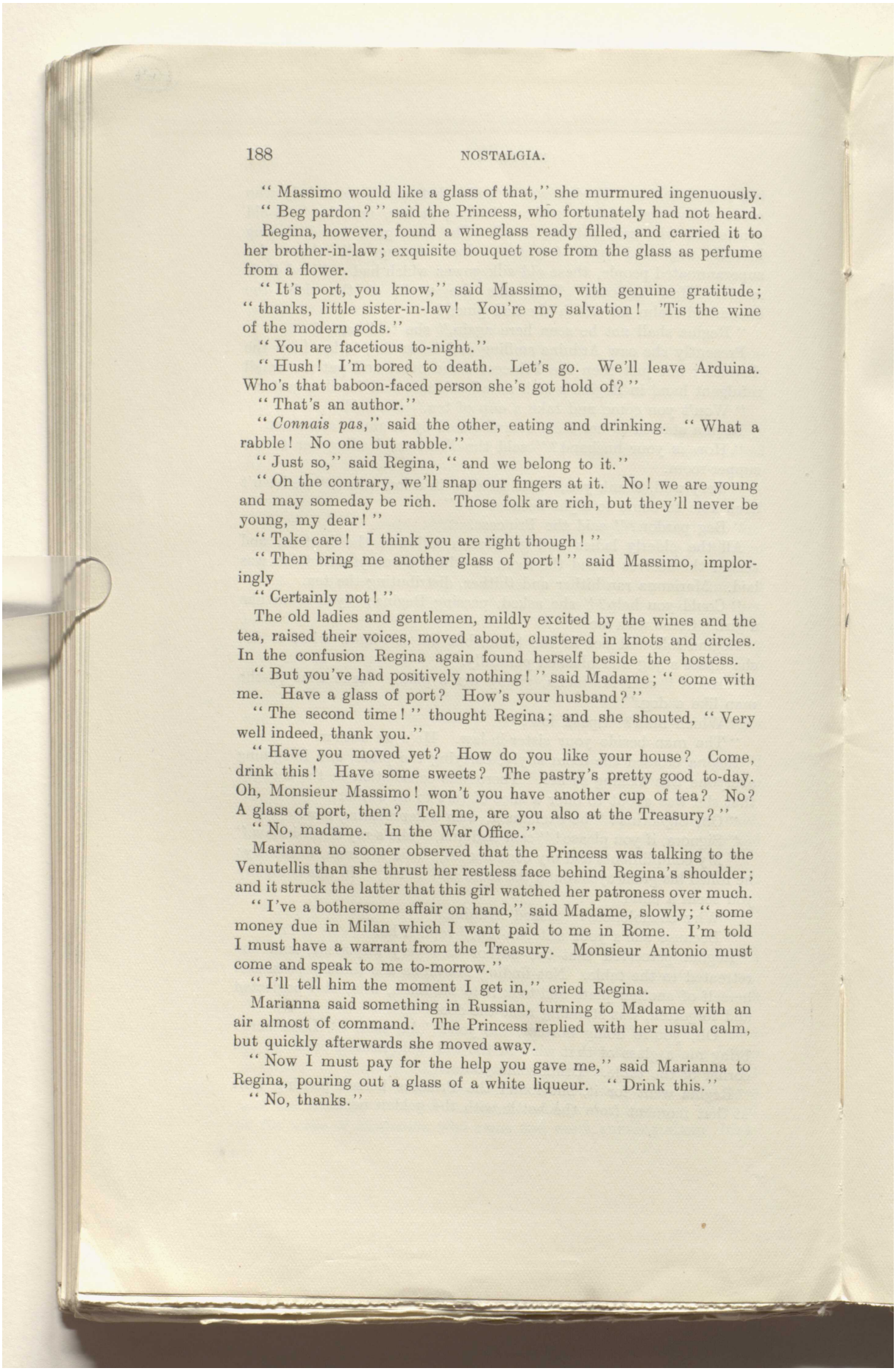
"Oh, you're doing hostess, are you?" he said. "Look here! bring me a glass of that wine in the tall, gold-necked bottle at the corner of the table. Drink some yourself."

Regina went for it, but found the Princess herself pouring wine at that moment from the bottle with the golden neck.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000039

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"Massimo would like a glass of that," she murmured ingenuously.

"Beg pardon?" said the Princess, who fortunately had not heard.

Regina, however, found a wineglass ready filled, and carried it to her brother-in-law; exquisite bouquet rose from the glass as perfume from a flower.

"It's port, you know," said Massimo, with genuine gratitude; "thanks, little sister-in-law! You're my salvation! 'Tis the wine of the modern gods."

"You are facetious to-night."

"Hush! I'm bored to death. Let's go. We'll leave Arduina. Who's that baboon-faced person she's got hold of?"

"That's an author."

"*Connais pas*," said the other, eating and drinking. "What a rabble! No one but rabble."

"Just so," said Regina, "and we belong to it."

"On the contrary, we'll snap our fingers at it. No! we are young and may someday be rich. Those folk are rich, but they'll never be young, my dear!"

"Take care! I think you are right though!"

"Then bring me another glass of port!" said Massimo, implor-ingly

"Certainly not!"

The old ladies and gentlemen, mildly excited by the wines and the tea, raised their voices, moved about, clustered in knots and circles. In the confusion Regina again found herself beside the hostess.

"But you've had positively nothing!" said Madame; "come with me. Have a glass of port? How's your husband?"

"The second time!" thought Regina; and she shouted, "Very well indeed, thank you."

"Have you moved yet? How do you like your house? Come, drink this! Have some sweets? The pastry's pretty good to-day. Oh, Monsieur Massimo! won't you have another cup of tea? No? A glass of port, then? Tell me, are you also at the Treasury?"

"No, madame. In the War Office."

Marianna no sooner observed that the Princess was talking to the Venutellis than she thrust her restless face behind Regina's shoulder; and it struck the latter that this girl watched her patroness over much.

"I've a bothersome affair on hand," said Madame, slowly; "some money due in Milan which I want paid to me in Rome. I'm told I must have a warrant from the Treasury. Monsieur Antonio must come and speak to me to-morrow."

"I'll tell him the moment I get in," cried Regina.

Marianna said something in Russian, turning to Madame with an air almost of command. The Princess replied with her usual calm, but quickly afterwards she moved away.

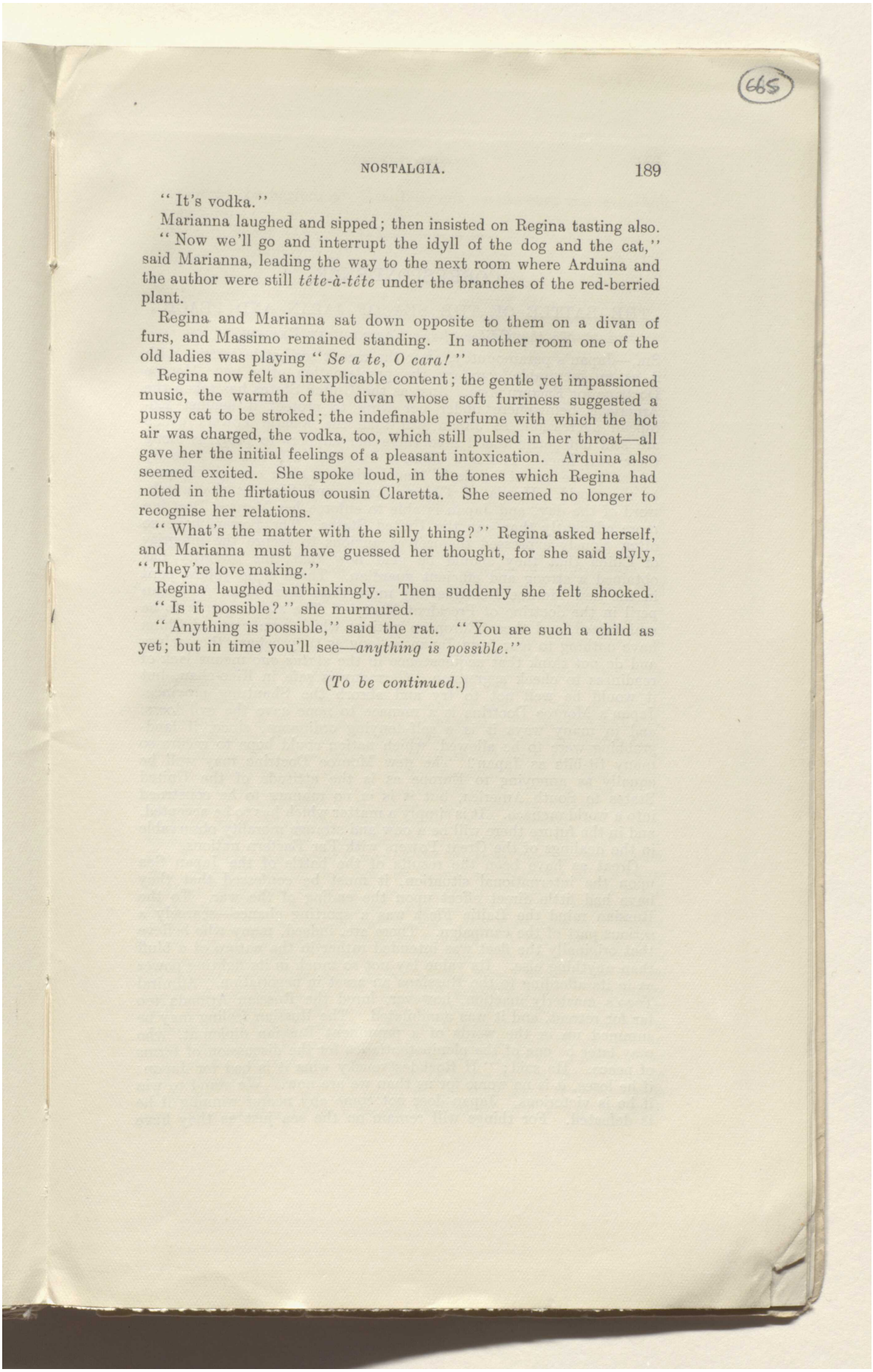
"Now I must pay for the help you gave me," said Marianna to Regina, pouring out a glass of a white liqueur. "Drink this."

"No, thanks."

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000023

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



"It's vodka."

Marianna laughed and sipped; then insisted on Regina tasting also.

"Now we'll go and interrupt the idyll of the dog and the cat," said Marianna, leading the way to the next room where Arduina and the author were still *tête-à-tête* under the branches of the red-berried plant.

Regina and Marianna sat down opposite to them on a divan of furs, and Massimo remained standing. In another room one of the old ladies was playing "*Se a te, O cara!*"

Regina now felt an inexplicable content; the gentle yet impassioned music, the warmth of the divan whose soft furriness suggested a pussy cat to be stroked; the indefinable perfume with which the hot air was charged, the vodka, too, which still pulsed in her throat—all gave her the initial feelings of a pleasant intoxication. Arduina also seemed excited. She spoke loud, in the tones which Regina had noted in the flirtatious cousin Claretta. She seemed no longer to recognise her relations.

"What's the matter with the silly thing?" Regina asked herself, and Marianna must have guessed her thought, for she said slyly, "They're love making."

Regina laughed unthinkingly. Then suddenly she felt shocked.

"Is it possible?" she murmured.

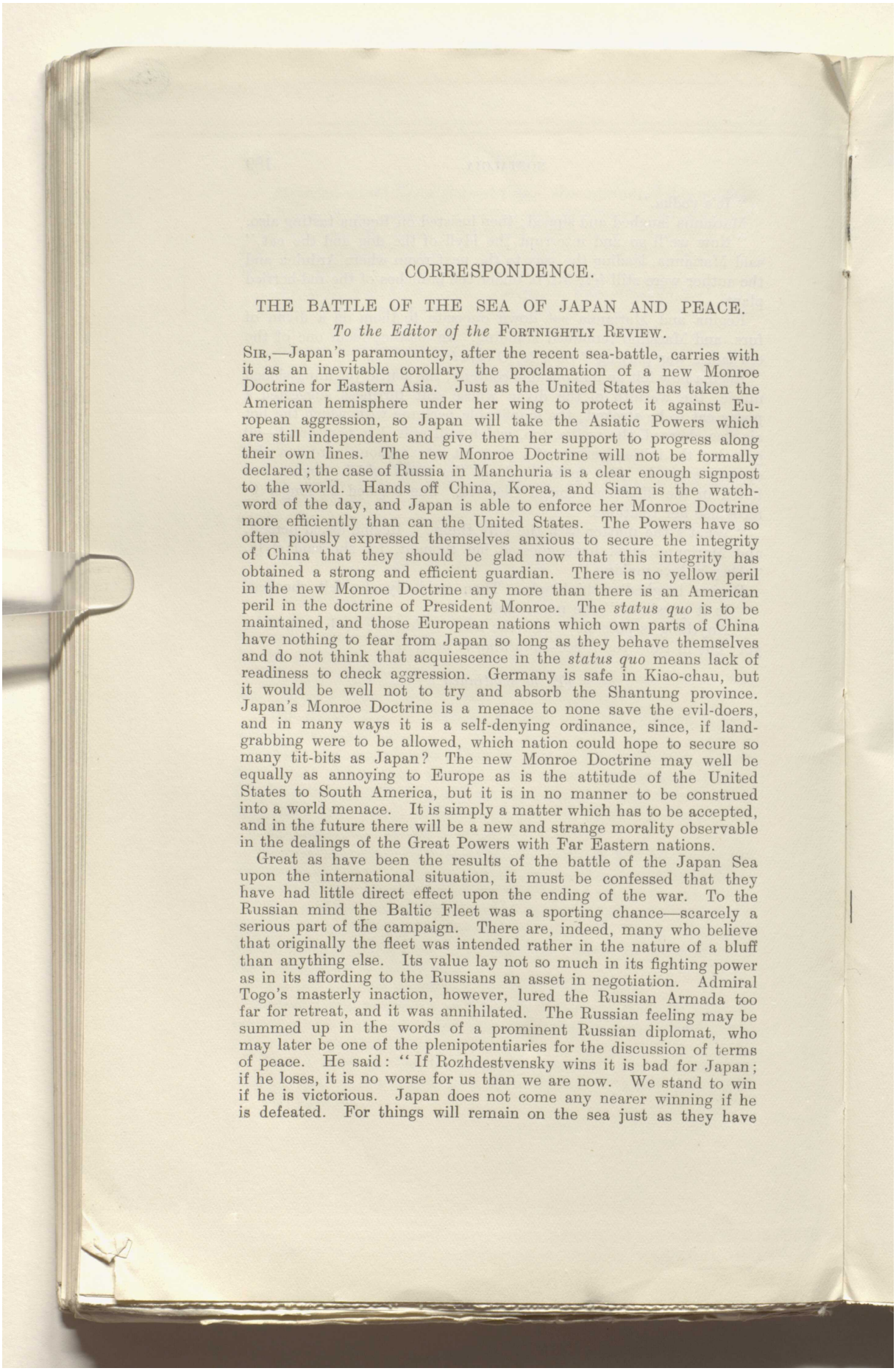
"Anything is possible," said the rat. "You are such a child as yet; but in time you'll see—*anything is possible.*"

(*To be continued.*)

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000b1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



CORRESPONDENCE.

THE BATTLE OF THE SEA OF JAPAN AND PEACE.

To the Editor of the FORTNIGHTLY REVIEW.

SIR,—Japan's paramountcy, after the recent sea-battle, carries with it as an inevitable corollary the proclamation of a new Monroe Doctrine for Eastern Asia. Just as the United States has taken the American hemisphere under her wing to protect it against European aggression, so Japan will take the Asiatic Powers which are still independent and give them her support to progress along their own lines. The new Monroe Doctrine will not be formally declared; the case of Russia in Manchuria is a clear enough signpost to the world. Hands off China, Korea, and Siam is the watchword of the day, and Japan is able to enforce her Monroe Doctrine more efficiently than can the United States. The Powers have so often piously expressed themselves anxious to secure the integrity of China that they should be glad now that this integrity has obtained a strong and efficient guardian. There is no yellow peril in the new Monroe Doctrine any more than there is an American peril in the doctrine of President Monroe. The *status quo* is to be maintained, and those European nations which own parts of China have nothing to fear from Japan so long as they behave themselves and do not think that acquiescence in the *status quo* means lack of readiness to check aggression. Germany is safe in Kiao-chau, but it would be well not to try and absorb the Shantung province. Japan's Monroe Doctrine is a menace to none save the evil-doers, and in many ways it is a self-denying ordinance, since, if land-grabbing were to be allowed, which nation could hope to secure so many tit-bits as Japan? The new Monroe Doctrine may well be equally as annoying to Europe as is the attitude of the United States to South America, but it is in no manner to be construed into a world menace. It is simply a matter which has to be accepted, and in the future there will be a new and strange morality observable in the dealings of the Great Powers with Far Eastern nations.

Great as have been the results of the battle of the Japan Sea upon the international situation, it must be confessed that they have had little direct effect upon the ending of the war. To the Russian mind the Baltic Fleet was a sporting chance—scarcely a serious part of the campaign. There are, indeed, many who believe that originally the fleet was intended rather in the nature of a bluff than anything else. Its value lay not so much in its fighting power as in its affording to the Russians an asset in negotiation. Admiral Togo's masterly inaction, however, lured the Russian Armada too far for retreat, and it was annihilated. The Russian feeling may be summed up in the words of a prominent Russian diplomat, who may later be one of the plenipotentiaries for the discussion of terms of peace. He said: "If Rozhdestvensky wins it is bad for Japan; if he loses, it is no worse for us than we are now. We stand to win if he is victorious. Japan does not come any nearer winning if he is defeated. For things will remain on the sea just as they have

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00007e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

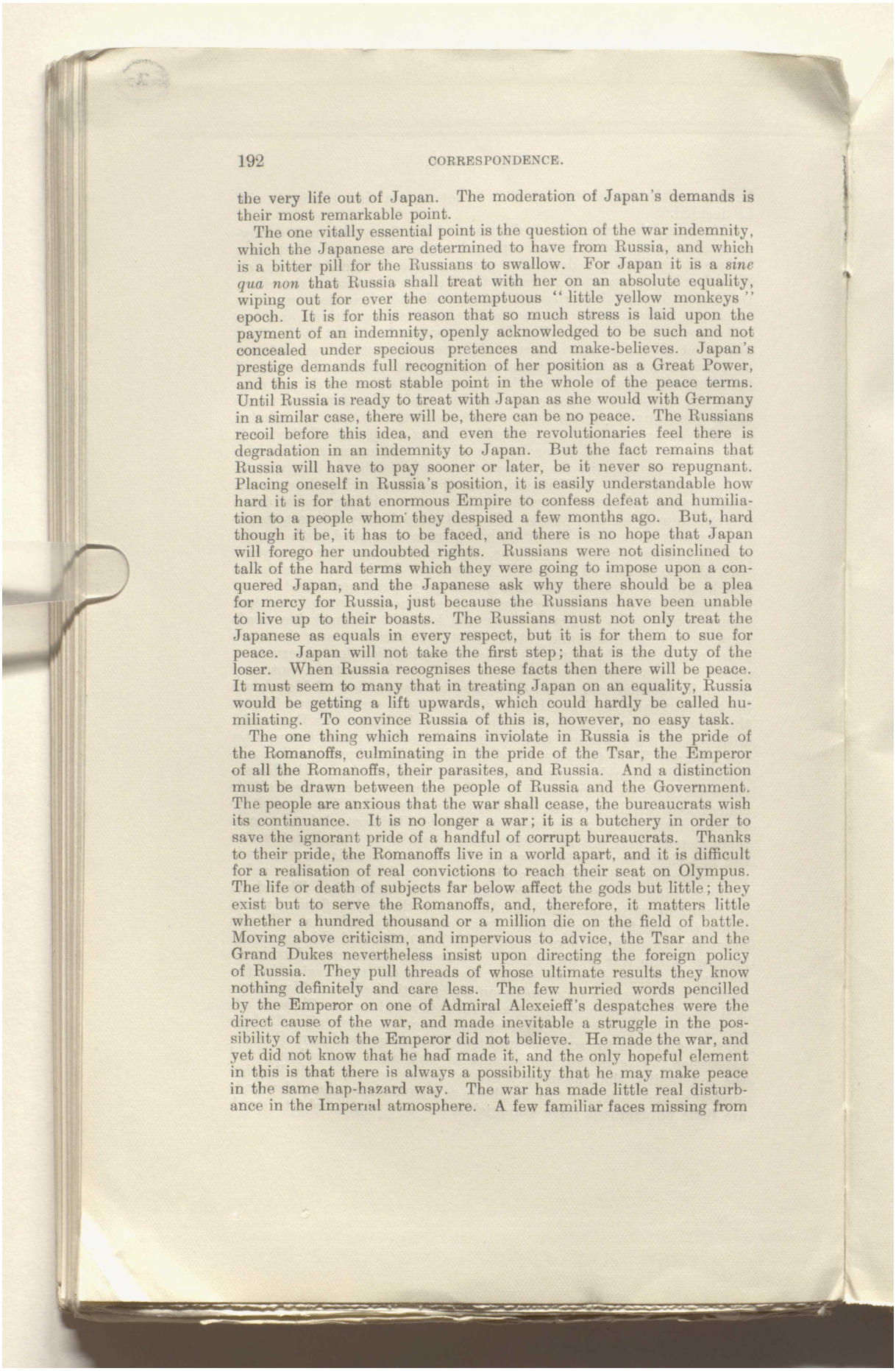
been since the beginning. And it is not on sea that the issue will be decided."

This being the case, the annihilation of the fleet, although annoying and amazing, could not be expected to exercise a great effect upon Russia in producing a desire for peace at once. The Japanese, on the other hand, expected to defeat the Russian Fleet, and, therefore, the happening of the expected has not altered their determination to secure their object. It has facilitated their operations and has laid bare all of Russia's Far Eastern possessions, but it has not altered at all the Japanese terms of peace. It must be remembered that Japan is fighting for peace and future security, and not at all for gain and annexation; therefore, continued successes do not augment the demands to be made from Russia. The Japanese terms are a fixed quantity, and do not contain clauses expressly included in order to be cut out in negotiating. It is a case of all the cards being on the table and Japan having all the winning ones. Victories make no difference in the terms; they only facilitate Japan's obtainment of them. M. Witte is reported to have told an interviewer that "Japan, of course, would not think of concluding peace unless it were assured for fifty years. She will undoubtedly refuse to begin negotiations except in Japan with a person furnished with special powers. Russia could, of course, drag on the war for five years with the possibility of success if it were not for internal events, to which the Government remains obstinately deaf and blind. And that is what I consider really terrible about Russia's present position. Every hour's delay brings us lower and lower." Remarkable words for a Russian to utter, and yet M. Witte has struck nearer the mark than many who have much better opportunities for observation. Japan's terms have been dealt with in a previous article, but may be briefly summarised here:—The absolute evacution of Manchuria by the Russians, and the handing back of the provinces to China; the cession to Japan of the Russian lease of the Kwantung Peninsula, with possibly a reversion to the conditions of the peace terms after the Chinese War; the cession of the entire Manchurian railway to Japan, and its handing over to an international company; the Russo-Chinese Bank to be regarded as a Government concern, and all its concessions disallowed; a free hand for Japan in Korea, and no Russian interference; the transformation of Vladivostock into a commercial port, and the prohibition of dockyards or Naval stations in the Far East; the handing over of the interned Russian war vessels was originally desired, but may be waived in deference of the value of there being some sort of a Russian Fleet in the Baltic. The island of Sakhalin is to be ceded to Japan together with fishing rights along the coasts of the Ussuri Province and Kamtchatka. Russia must pay an indemnity of at least £100,000,000, and this sum may increase if the war be prolonged. Theoretical or paper undertakings by Russia Japan does not desire, having tested their value in the past; all concessions have to be on the practical plane. Manchuria will be thrown open to the trade of the world under Chinese administration; indeed, it is by placing it upon an international plane that Japan hopes to secure an effective barrier against future Russian aggression. Except for the cession of Sakhalin, the railway, and the indemnity, the Japanese terms of peace do not touch Russian property, and it is not too much to say that these three demands are little punishment for a vanquished enemy, who sought to crush

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



the very life out of Japan. The moderation of Japan's demands is their most remarkable point.

The one vitally essential point is the question of the war indemnity, which the Japanese are determined to have from Russia, and which is a bitter pill for the Russians to swallow. For Japan it is a *sine qua non* that Russia shall treat with her on an absolute equality, wiping out for ever the contemptuous "little yellow monkeys" epoch. It is for this reason that so much stress is laid upon the payment of an indemnity, openly acknowledged to be such and not concealed under specious pretences and make-believes. Japan's prestige demands full recognition of her position as a Great Power, and this is the most stable point in the whole of the peace terms. Until Russia is ready to treat with Japan as she would with Germany in a similar case, there will be, there can be no peace. The Russians recoil before this idea, and even the revolutionaries feel there is degradation in an indemnity to Japan. But the fact remains that Russia will have to pay sooner or later, be it never so repugnant. Placing oneself in Russia's position, it is easily understandable how hard it is for that enormous Empire to confess defeat and humiliation to a people whom they despised a few months ago. But, hard though it be, it has to be faced, and there is no hope that Japan will forego her undoubted rights. Russians were not disinclined to talk of the hard terms which they were going to impose upon a conquered Japan, and the Japanese ask why there should be a plea for mercy for Russia, just because the Russians have been unable to live up to their boasts. The Russians must not only treat the Japanese as equals in every respect, but it is for them to sue for peace. Japan will not take the first step; that is the duty of the loser. When Russia recognises these facts then there will be peace. It must seem to many that in treating Japan on an equality, Russia would be getting a lift upwards, which could hardly be called humiliating. To convince Russia of this is, however, no easy task.

The one thing which remains inviolate in Russia is the pride of the Romanoffs, culminating in the pride of the Tsar, the Emperor of all the Romanoffs, their parasites, and Russia. And a distinction must be drawn between the people of Russia and the Government. The people are anxious that the war shall cease, the bureaucrats wish its continuance. It is no longer a war; it is a butchery in order to save the ignorant pride of a handful of corrupt bureaucrats. Thanks to their pride, the Romanoffs live in a world apart, and it is difficult for a realisation of real convictions to reach their seat on Olympus. The life or death of subjects far below affect the gods but little; they exist but to serve the Romanoffs, and, therefore, it matters little whether a hundred thousand or a million die on the field of battle. Moving above criticism, and impervious to advice, the Tsar and the Grand Dukes nevertheless insist upon directing the foreign policy of Russia. They pull threads of whose ultimate results they know nothing definitely and care less. The few hurried words pencilled by the Emperor on one of Admiral Alexeieff's despatches were the direct cause of the war, and made inevitable a struggle in the possibility of which the Emperor did not believe. He made the war, and yet did not know that he had made it, and the only hopeful element in this is that there is always a possibility that he may make peace in the same hap-hazard way. The war has made little real disturbance in the Imperial atmosphere. A few familiar faces missing from

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000006

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

the *levée* or the Court, a few added opportunities of making money by contracting or corruption, these are the principal effects upon the Romanoff family. And yet it is in the palaces of the Romanoffs that the peace will be decided upon when it comes. Not in the ministries, but in the homes of the Tsar, the Grand Dukes and their satellites must peace be sought. In these mysterious backwaters the policy of Russia is framed, and it is no exaggeration to say that often the whisper of a Grand-ducal mistress has more weight in framing Russian national policy than all the advice of Count Lamsdorff or M. Witte. The Romanoffs are not to be forced into peace; they may be cajoled or diplomatically led in that direction; otherwise, there is small chance of their arriving. The knowledge that the days of the dynasty as autocratic rulers are numbered tends to harden the heart of the Emperor and encourage him to go on with the war at all costs. This brief survey of the conditions existing in Russia is necessary to enable one to gain some adequate idea of the obstacles in the way of peace.

The battle of the Japan Sea afforded an opportunity for international action, and formed the pretext for President Roosevelt to address a note to the two combatants urging upon them the advisability of a cessation of hostilities, and the appointment of plenipotentiaries to discuss terms of peace. This humane action on the part of the President has won him many praises, some of them deserved. But to trace the origin of these peace proposals is to see that the credit is not due so much to the President of the United States as to those who induced him to speak. It is perfectly certain that he had very definite guarantees before he took upon himself a task which might otherwise have lowered his prestige at a moment when home affairs demand he should hold a maximum amount of consideration. To ascribe to Roosevelt all the credit of the proposals is like assuming that the voice which issues from the gramophone is everything. The unique position of irresponsibility in international affairs occupied by the United States marked out the President as the most effective mouth-piece for international opinion.

The reason for the peace movement is easily found. It is because of the growth of the "German Peril," or rather the "Kaiser Peril." Europe and the world is menaced by the ambitions, untrammelled by morality, of an able man, brought up on Bismarckian ideas, whose genius makes him intensely erratic. Russia's preoccupation in the Far East has given to the German Emperor an unusual opportunity to demonstrate his power. The absence of Russian troops on Germany's Eastern frontier has enabled the Kaiser to turn his whole attention to the West. Morocco afforded him an opportunity to throw a stone into the new *entente* of Western Europe, which has for object the isolation of Germany. Adequate grounds for interference were no more necessary than they were to the English kings when they claimed the throne of France. Disregard of a *fait accompli*, formerly acquiesced in, enabled the German Emperor to effectually frighten France and cause much disturbance in Downing Street. Lord Lansdowne saw the whole fabric of his diplomatic campaign threatened with destruction, and took immediate steps to co-operate with France to check the German aggression. The peace proposals of President Roosevelt are the direct outcome of Lord Lansdowne's action. To quote the able correspondent of the *Times* in Paris:—"The equilibrium of Europe is disturbed, and no Power

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00001d

مكتبة قطر الوطنية
Qatar National Library

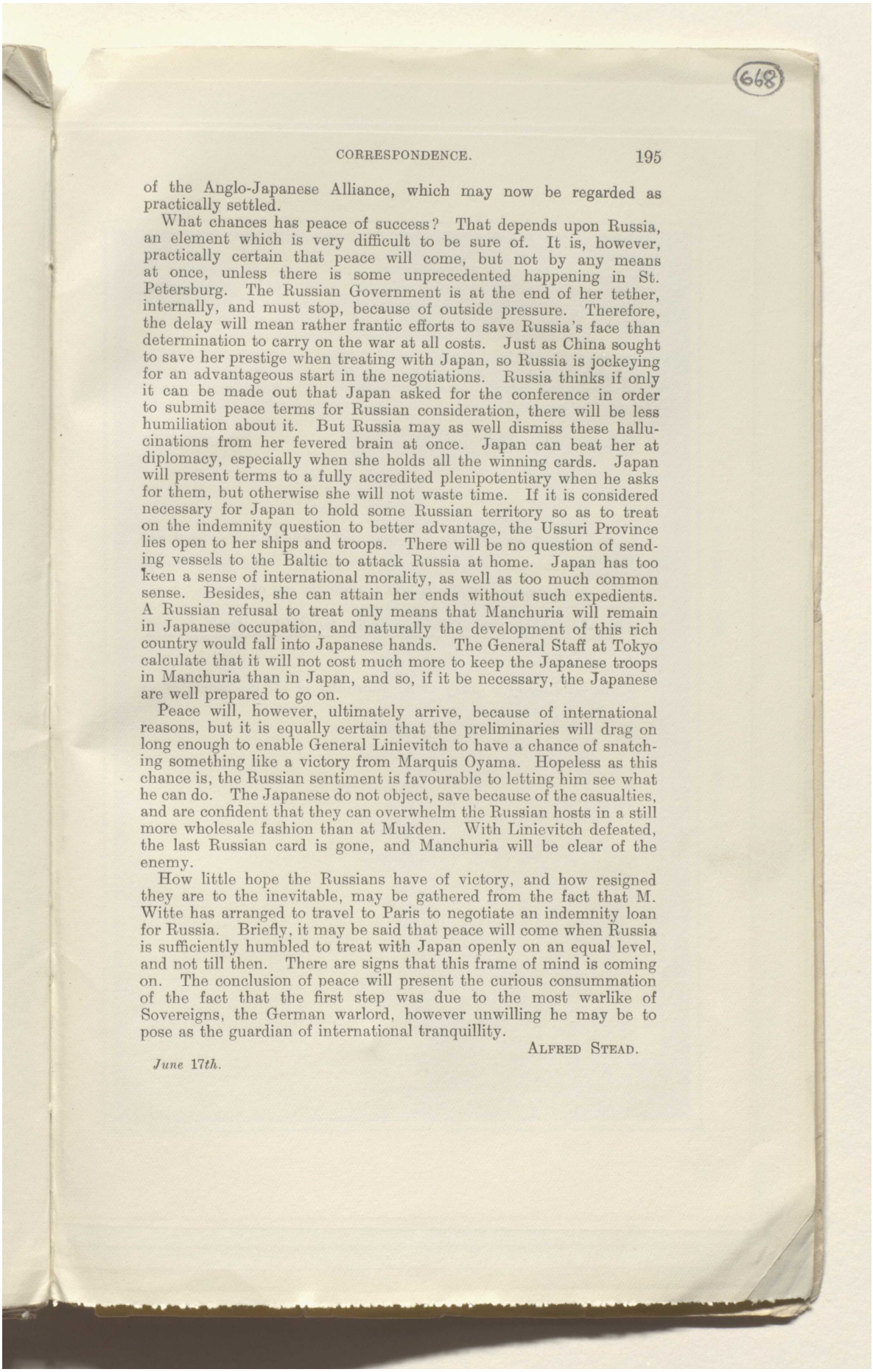
has felt the absence of Russian influence in Continental politics so much as France. The fact is that at the present moment it is at a very low ebb, and the one object of French foreign policy must necessarily be to restore it, at least in part, as speedily as possible. Otherwise, the increasingly preponderant influence of Germany must naturally damage the splendid position which of late years has been acquired by France through peaceful methods having the consolidation of peace for their object. Consequently, France not only ardently desires to see the end of the war, but also wishes for a lasting peace." That sums up the attitude of Great Britain, France, and the United States towards Germany and the war. It is essential that the war should cease and the Russian troops from the Far East come back to Germany's Eastern frontier and the Kaiser be checked. Russia's weakness as a formidable bogey has been sufficiently demonstrated, and yet she can be of value in restraining the much more pressing danger presented by the Germans. The Russian troops may not be very good, but their presence on the frontier will at once divide the German forces and reduce the German policy to saner methods. The Russian troops must come home! is the despairing cry of a badly frightened France. Great Britain alone could have done little to persuade the Russians of the urgency of the case, and, in fact, little was directly done save to point out the foolishness of throwing away the Near East as well as the Far by a futile continuance of the war with Japan. But through France plenty of pressure could be and was brought to bear. France did not even refrain from threatening her ally with a collapse of the artificially sustained Russian bonds if peace were not speedily approached. In reply to Russia's declaration that she would rather spend money on continuing the war than on the payment of an indemnity, the French informed the Russian authorities that, while they would gladly raise a Russian indemnity loan, they would not touch a war loan on any consideration whatever. The United States also put considerable pressure on Russia to induce her to accept a proposal to discuss terms with Japan. America also suffers from an untrammelled Germany, since the South American republics might in the near future well create difficulties similar to that in Morocco.

Japan offered cordial co-operation when approached on the matter by Great Britain, recognising as she does to the full the vital importance of international equilibrium. She was assured that there was no question of her giving up her essential demands, including the indemnity. "If it can be done, will you be ready to help us settle the matter up, without prejudice to yourself?" was the way the proposal was placed before Japan. Waging no war of aggression, the Japanese are quite ready to stop hostilities whenever the necessary guarantees for the preservation of peace and the maintenance of Japanese prestige can be obtained. Japan has shown her power and her accession to the paramountcy of the Far East, and fully recognises that it may be easier to obtain her terms when semi-officially supported by several Great Powers. Not that there will be any direct support, but the pressure put on to Russia to make peace on the one hand and the acknowledgment of Japanese rights on the other, tend to help along the acceptance of the necessary terms by Russia. Advantage has also been taken of the opportunity to enter thoroughly into the question of the enlargement and renewal

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000010

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



of the Anglo-Japanese Alliance, which may now be regarded as practically settled.

What chances has peace of success? That depends upon Russia, an element which is very difficult to be sure of. It is, however, practically certain that peace will come, but not by any means at once, unless there is some unprecedented happening in St. Petersburg. The Russian Government is at the end of her tether, internally, and must stop, because of outside pressure. Therefore, the delay will mean rather frantic efforts to save Russia's face than determination to carry on the war at all costs. Just as China sought to save her prestige when treating with Japan, so Russia is jockeying for an advantageous start in the negotiations. Russia thinks if only it can be made out that Japan asked for the conference in order to submit peace terms for Russian consideration, there will be less humiliation about it. But Russia may as well dismiss these hallucinations from her fevered brain at once. Japan can beat her at diplomacy, especially when she holds all the winning cards. Japan will present terms to a fully accredited plenipotentiary when he asks for them, but otherwise she will not waste time. If it is considered necessary for Japan to hold some Russian territory so as to treat on the indemnity question to better advantage, the Ussuri Province lies open to her ships and troops. There will be no question of sending vessels to the Baltic to attack Russia at home. Japan has too keen a sense of international morality, as well as too much common sense. Besides, she can attain her ends without such expedients. A Russian refusal to treat only means that Manchuria will remain in Japanese occupation, and naturally the development of this rich country would fall into Japanese hands. The General Staff at Tokyo calculate that it will not cost much more to keep the Japanese troops in Manchuria than in Japan, and so, if it be necessary, the Japanese are well prepared to go on.

Peace will, however, ultimately arrive, because of international reasons, but it is equally certain that the preliminaries will drag on long enough to enable General Linievitch to have a chance of snatching something like a victory from Marquis Oyama. Hopeless as this chance is, the Russian sentiment is favourable to letting him see what he can do. The Japanese do not object, save because of the casualties, and are confident that they can overwhelm the Russian hosts in a still more wholesale fashion than at Mukden. With Linievitch defeated, the last Russian card is gone, and Manchuria will be clear of the enemy.

How little hope the Russians have of victory, and how resigned they are to the inevitable, may be gathered from the fact that M. Witte has arranged to travel to Paris to negotiate an indemnity loan for Russia. Briefly, it may be said that peace will come when Russia is sufficiently humbled to treat with Japan openly on an equal level, and not till then. There are signs that this frame of mind is coming on. The conclusion of peace will present the curious consummation of the fact that the first step was due to the most warlike of Sovereigns, the German warlord, however unwilling he may be to pose as the guardian of international tranquillity.

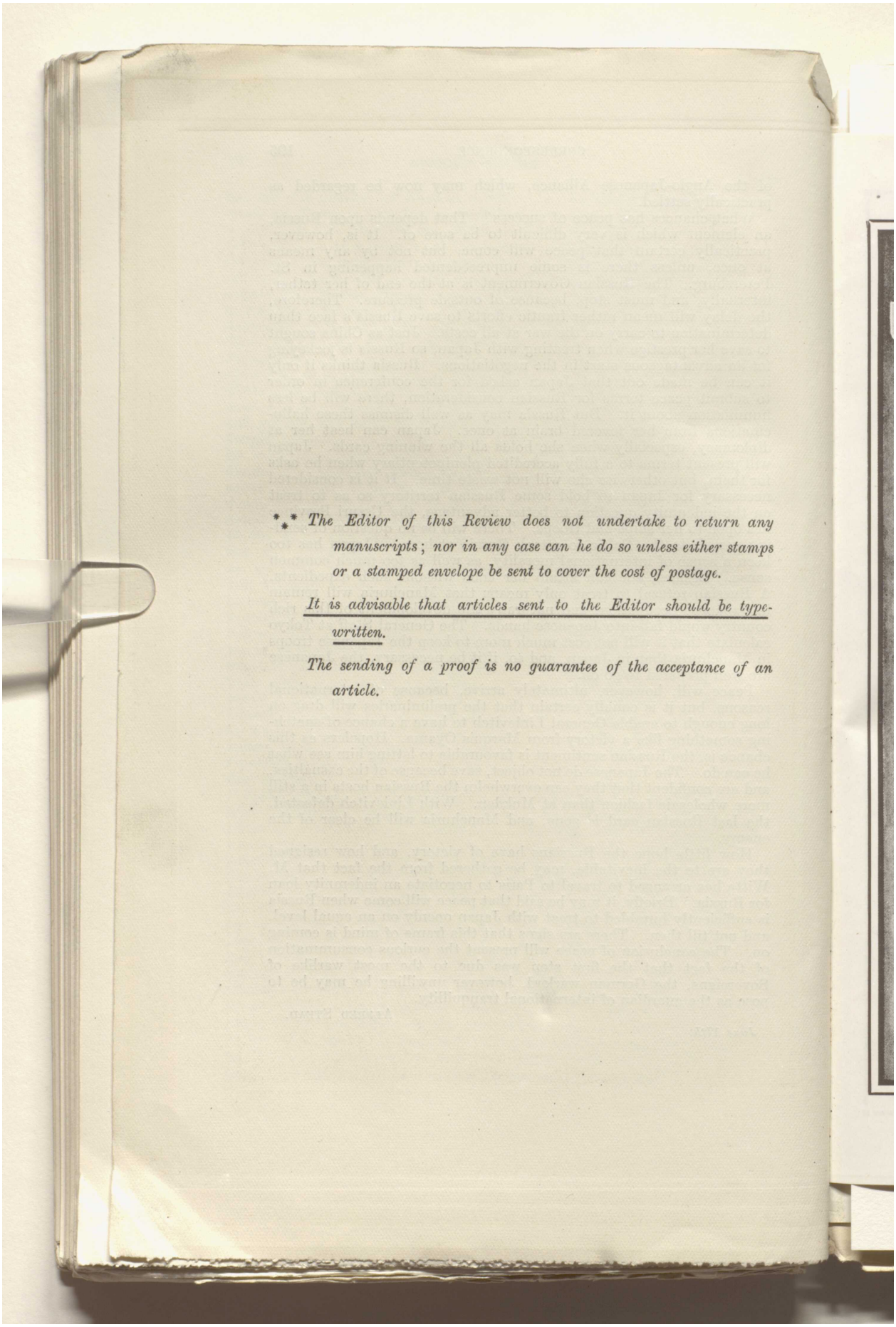
ALFRED STEAD.

June 17th.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00009d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



*** *The Editor of this Review does not undertake to return any manuscripts; nor in any case can he do so unless either stamps or a stamped envelope be sent to cover the cost of postage.*

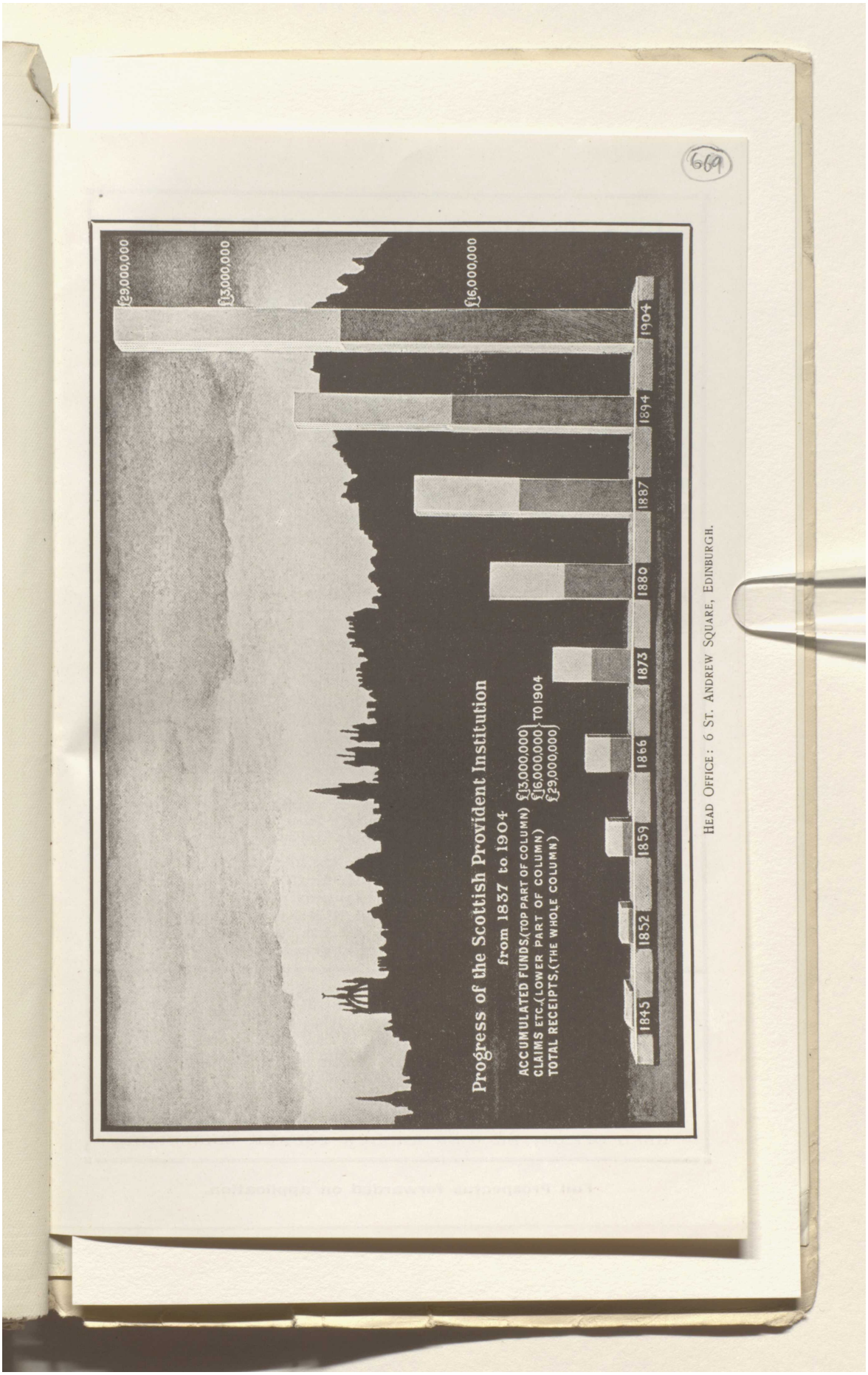
It is advisable that articles sent to the Editor should be type-written.

The sending of a proof is no guarantee of the acceptance of an article.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00009b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

DISTINCTIVE SYSTEM OF ASSURANCE

THE SOCIETY was founded in 1837, and the Accumulated Funds now exceed **Thirteen Millions Sterling.**

LIFE ASSURANCE.

Distinctive features—

Moderate Premiums.

Large Immediate Assurances.

Large Bonuses to those who prove to be good lives.

Expenses of Management are moderate; and as there are no Shareholders all Surplus goes to the Policyholders.

ENDOWMENT ASSURANCES form a Special Class by themselves, receiving the Whole Surplus arising therefrom.

EXAMPLES.

LIFE ASSURANCE. The Premiums are so moderate that the yearly sum charged by many other first-class Offices for £1000 (With Profits) will here usually secure from the commencement as much as £1200 or thereby.

A person, age 30, may secure £500 at death, with right to Bonus Additions, for an Annual Payment of £10:11:8 during life, or of £13:9:7 during 25 years only.

PROVISION FOR THE YOUNG. For £10 annually, a Parent or Guardian of a child under one year old, may secure to it an Assurance of £805, with Bonus Additions, payable at age 55, or at death if previous should that event happen after age 21.

If the Assurance were payable at death only, after 21, the amount would be £1276, with right to Bonus Additions.

All Premiums returnable should the child die before 21. Medical Examination is dispensed with in these cases, and there are no restrictions on future residence or occupation.

PENSION FOR ADVANCED AGE combined with PROVISION AT DEATH. A person, age 30, for an Annual Payment of £14:3:9, ceasing before age 65, may secure £500 at death, with right to Bonus Additions, together with an Annuity of £25 for the remainder of life, commencing at age 65.

The Assured, on attaining age 65, is possessed of a Paid-up Policy, with Bonus Additions, payable at death, and is in receipt of a fixed Income for remainder of life.

ENDOWMENT ASSURANCES receive the whole Profits arising under this Class in the form of an Annual Bonus from the commencement.

A Premium of £17:14:7, at age 30, limited to 30 payments, secures £500, with Bonuses, to the Assured at age 60, or to his representatives in event of earlier death.

THE SCOTTISH PROVIDENT INSTITUTION

LONDON: 17 KING WILLIAM STREET, E.C. WEST END: 17 PALL MALL, S.W.
DUBLIN: 36 COLLEGE GREEN.

Glasgow, 29 St. Vincent Pl.
Aberdeen, 166 Union St.
Dundee, 49 Meadowside.
Birmingham, 95 Colmore Row.
Bristol, 27 Clare St.
Cardiff, 19 High St.
Leeds, 35 Park Row.
Liverpool, 25 Castle St.
Manchester, 10 Albert Sq.
Newcastle, 1 Queen St.
Nottingham, 32 King St.
Belfast, 1 Donegall Sq., W.

HEAD OFFICE: No. 6 ST. ANDREW SQUARE, EDINBURGH

Full Prospectus forwarded on application.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000043

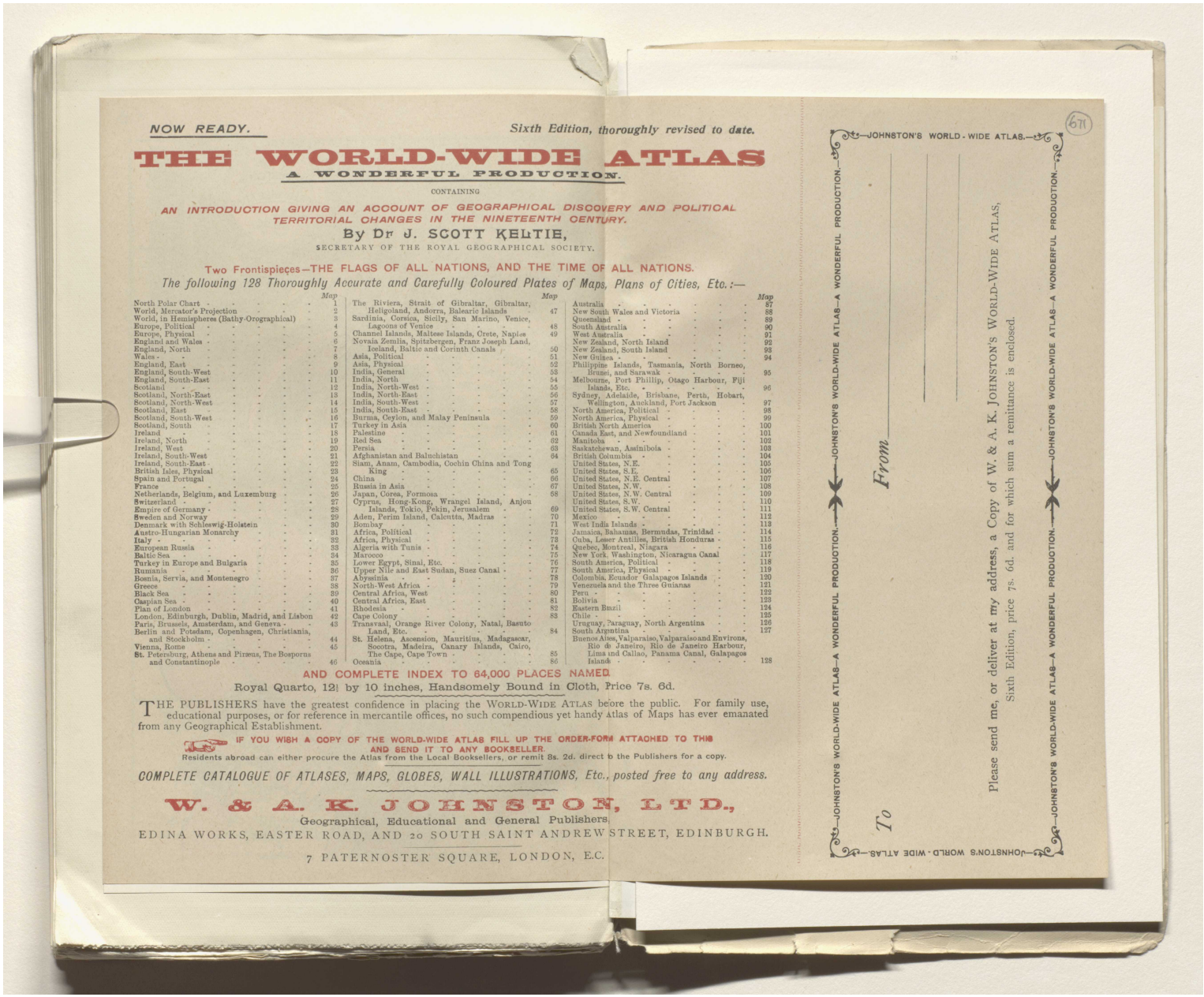
مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00002a

مكتبة قطر الوطنية
Qatar National Library



NOW READY. *Sixth Edition, thoroughly revised to date.*

THE WORLD-WIDE ATLAS

A WONDERFUL PRODUCTION.

CONTAINING

AN INTRODUCTION GIVING AN ACCOUNT OF GEOGRAPHICAL DISCOVERY AND POLITICAL TERRITORIAL CHANGES IN THE NINETEENTH CENTURY.

By Dr J. SCOTT KELTIE,

SECRETARY OF THE ROYAL GEOGRAPHICAL SOCIETY.

Two Frontispieces—THE FLAGS OF ALL NATIONS, AND THE TIME OF ALL NATIONS.

The following 128 Thoroughly Accurate and Carefully Coloured Plates of Maps, Plans of Cities, Etc.:—

	Map
North Polar Chart	1
World, Mercator's Projection	2
World, in Hemispheres (Bathy-Orographical)	3
Europe, Political	4
Europe, Physical	5
England and Wales	6
England, North	7
Wales	8
England, East	9
England, South-West	10
England, South-East	11
Scotland	12
Scotland, North-East	13
Scotland, North-West	14
Scotland, East	15
Scotland, South-West	16
Scotland, South	17
Ireland	18
Ireland, North	19
Ireland, West	20
Ireland, South-West	21
Ireland, South-East	22
British Isles, Physical	23
Spain and Portugal	24
France	25
Netherlands, Belgium, and Luxemburg	26
Switzerland	27
Empire of Germany	28
Sweden and Norway	29
Denmark with Schleswig-Holstein	30
Austro-Hungarian Monarchy	31
Italy	32
European Russia	33
Baltic Sea	34
Turkey in Europe and Bulgaria	35
Rumania	36
Bosnia, Servia, and Montenegro	37
Greece	38
Black Sea	39
Caspian Sea	40
Plan of London	41
London, Edinburgh, Dublin, Madrid, and Lisbon	42
Paris, Brussels, Amsterdam, and Geneva	43
Berlin and Potsdam, Copenhagen, Christiania, and Stockholm	44
Vienna, Rome	45
St. Petersburg, Athens and Piræus, The Bosporus and Constantinople	46
The Riviera, Strait of Gibraltar, Gibraltar, Heligoland, Andorra, Balearic Islands	47
Sardinia, Corsica, Sicily, San Marino, Venice, Lagoons of Venice	48
Channel Islands, Maltese Islands, Crete, Naples	49
Novaia Zemlia, Spitzbergen, Franz Joseph Land, Iceland, Baltic and Corinth Canals	50
Asia, Political	51
Asia, Physical	52
India, General	53
India, North	54
India, North-West	55
India, North-East	56
India, South-West	57
India, South-East	58
Burma, Ceylon, and Malay Peninsula	59
Turkey in Asia	60
Palestine	61
Red Sea	62
Persia	63
Afghanistan and Baluchistan	64
Siam, Anam, Cambodia, Cochin China and Tong King	65
China	66
Russia in Asia	67
Japan, Corea, Formosa	68
Cyprus, Hong-Kong, Wrangel Island, Anjou Islands, Tokio, Pekin, Jerusalem	69
Aden, Perim Island, Calcutta, Madras	70
Bombay	71
Africa, Political	72
Africa, Physical	73
Algeria with Tunis	74
Marocco	75
Lower Egypt, Sinai, Etc.	76
Upper Nile and East Sudan, Suez Canal	77
Abyssinia	78
North-West Africa	79
Central Africa, West	80
Central Africa, East	81
Rhodesia	82
Cape Colony	83
Transvaal, Orange River Colony, Natal, Basuto Land, Etc.	84
St. Helena, Ascension, Mauritius, Madagascar, Socotra, Madeira, Canary Islands, Cairo, The Cape, Cape Town	85
Oceania	86
Australia	87
New South Wales and Victoria	88
Queensland	89
South Australia	90
West Australia	91
New Zealand, North Island	92
New Zealand, South Island	93
New Guinea	94
Philippine Islands, Tasmania, North Borneo, Brunei, and Sarawak	95
Melbourne, Port Phillip, Otago Harbour, Fiji Islands, Etc.	96
Sydney, Adelaide, Brisbane, Perth, Hobart, Wellington, Auckland, Port Jackson	97
North America, Political	98
North America, Physical	99
British North America	100
Canada East, and Newfoundland	101
Manitoba	102
Saskatchewan, Assiniboia	103
British Columbia	104
United States, N.E.	105
United States, S.E.	106
United States, N.E. Central	107
United States, N.W.	108
United States, N.W. Central	109
United States, S.W.	110
United States, S.W. Central	111
Mexico	112
West India Islands	113
Jamaica, Bahamas, Bermudas, Trinidad	114
Cuba, Lesser Antilles, British Honduras	115
Quebec, Montreal, Niagara	116
New York, Washington, Nicaragua Canal	117
South America, Political	118
South America, Physical	119
Colombia, Ecuador Galapagos Islands	120
Venezuela and the Three Guianas	121
Peru	122
Bolivia	123
Eastern Brazil	124
Chile	125
Uruguay, Paraguay, North Argentina	126
South Argentina	127
Buenos Aires, Valparaiso, Valparaiso and Environs, Rio de Janeiro, Rio de Janeiro Harbour, Lima and Callao, Panama Canal, Galapagos Islands	128

AND COMPLETE INDEX TO 64,000 PLACES NAMED.

Royal Quarto, 12¼ by 10 inches, Handsomely Bound in Cloth, Price 7s. 6d.

THE PUBLISHERS have the greatest confidence in placing the WORLD-WIDE ATLAS before the public. For family use, educational purposes, or for reference in mercantile offices, no such compendious yet handy atlas of Maps has ever emanated from any Geographical Establishment.

IF YOU WISH A COPY OF THE WORLD-WIDE ATLAS FILL UP THE ORDER-FORM ATTACHED TO THIS AND SEND IT TO ANY BOOKSELLER.

Residents abroad can either procure the Atlas from the Local Booksellers, or remit 8s. 2d. direct to the Publishers for a copy.

COMPLETE CATALOGUE OF ATLASES, MAPS, GLOBES, WALL ILLUSTRATIONS, Etc., posted free to any address.

W. & A. K. JOHNSTON, LTD.,

Geographical, Educational and General Publishers,

EDINA WORKS, EASTER ROAD, AND 20 SOUTH SAINT ANDREW STREET, EDINBURGH.

7 PATERNOSTER SQUARE, LONDON, E.C.

JOHNSTON'S WORLD-WIDE ATLAS—A WONDERFUL PRODUCTION.

671

From

To

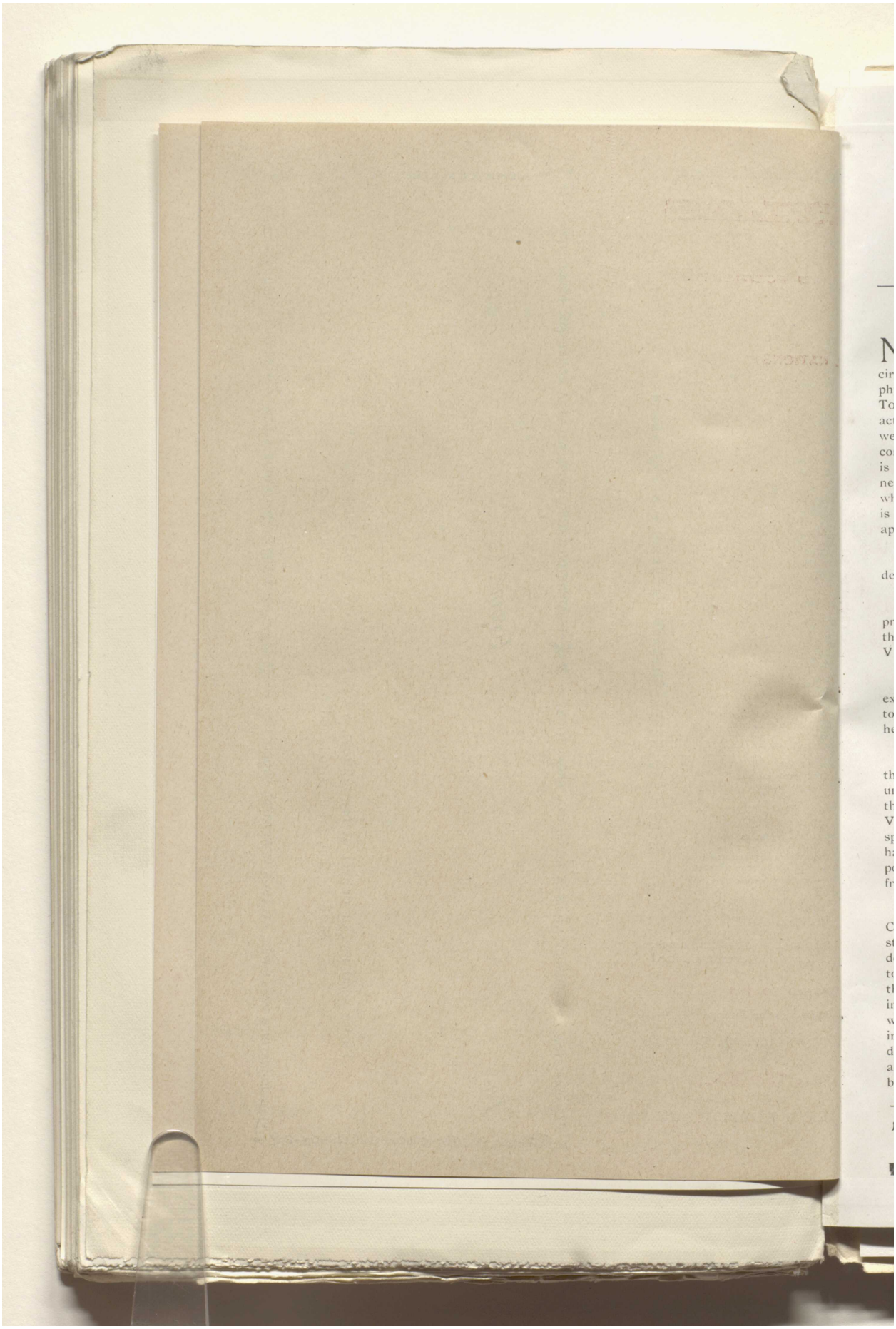
Please send me, or deliver at my address, a Copy of W. & A. K. JOHNSTON'S WORLD-WIDE ATLAS, Sixth Edition, price 7s. 6d. and for which sum a remittance is enclosed.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00007c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

672

SUPPLIED TO THE ROYAL HOUSEHOLD.

Vibrona

THE IDEAL TONIC WINE.

WHAT IT IS.

NOT only during the period of convalescence after illness but in a variety of circumstances imposing heavy strain on the physical and nervous system, the need of a TONIC is often felt. There is perhaps no actual malady, but the whole system is in a weak and debilitated condition, and the consciousness of want of strength and energy is most distressing. A TONIC is evidently necessary, but the important question arises, which of the many claimants to public favour is supported by the mature judgment and approval of the Medical Profession.

Fortunately this is a point not difficult to decide.

Medical experience has conclusively proved that the best, the most reliable and the most uniformly successful TONIC is VIBRONA.

VIBRONA is not made the subject of extravagant advertising, neither does it claim to be a panacea for all the ills which flesh is heir to.

VIBRONA has been justly described as the SUPREME TONIC and the best evidence of its unique properties is to be found in the fact that the world-wide reputation which VIBRONA enjoys is mainly due to the spontaneous personal testimony of those who having experienced its remarkable energising powers are glad to recommend it to their friends.

VIBRONA must not be confounded with Coca and other medicated wines whose stimulating properties are almost wholly dependent on the alcohol they contain. The tonic action of VIBRONA is cumulative; that is to say, it continues to exert its effect in a gradually increasing degree until the whole system feels strengthened and invigorated. The appetite improves, the digestive functions acquire a healthy activity, and both mental and physical exertion can be borne without abnormal fatigue or exhaustion.

WHAT IT DOES.

LETTERS are being constantly received from physicians in all parts of the world testifying to the splendid results which have attended the use of VIBRONA in cases of every-day occurrence in which a thoroughly trustworthy and efficient TONIC is the one thing needed. An abstract of these Reports (omitting the names and addresses of the writers) will be supplied on request. The originals are always open to the inspection of any Member of the Profession.

In depressed conditions of the system, arising from overwork, worry or sleeplessness; in convalescence from severe illness such as INFLUENZA, PNEUMONIA, or TYPHOID; in recovery from surgical operations, or to conserve the forces during any critical period, the restorative power of VIBRONA cannot be over estimated.

In NEURALGIA and INSOMNIA it is no exaggeration to say that VIBRONA acts like a charm, obstinate cases which have withstood every other form of treatment being frequently completely cured after two or three Liqueur glasses of VIBRONA have been taken at suitable intervals.

Persons residing in, or visiting localities where Malarial Fever exists should make it a rule to take at least one Liqueur glass of VIBRONA every day. This will not only materially increase the power to resist infection, but, in the event of an attack, will greatly mitigate its severity and hasten convalescence.

In all tropical climates, even where Malaria is absent, VIBRONA is indispensable to European residents. As a recuperative Tonic in depressed conditions of the system and as a restorative after Enteric Fever, Influenza, and other exhausting diseases, VIBRONA stands absolutely unrivalled.

A liqueur glass of VIBRONA acts as a prompt restorative, and its agreeable flavour is much appreciated by invalids and others to whom ordinary Tonics are distasteful.

Vibrona THE IDEAL TONIC WINE is supplied in bottles containing *40 Tonic doses* by all first-class Chemists, Wine Merchants and Stores. Price in Great Britain *3/9*.

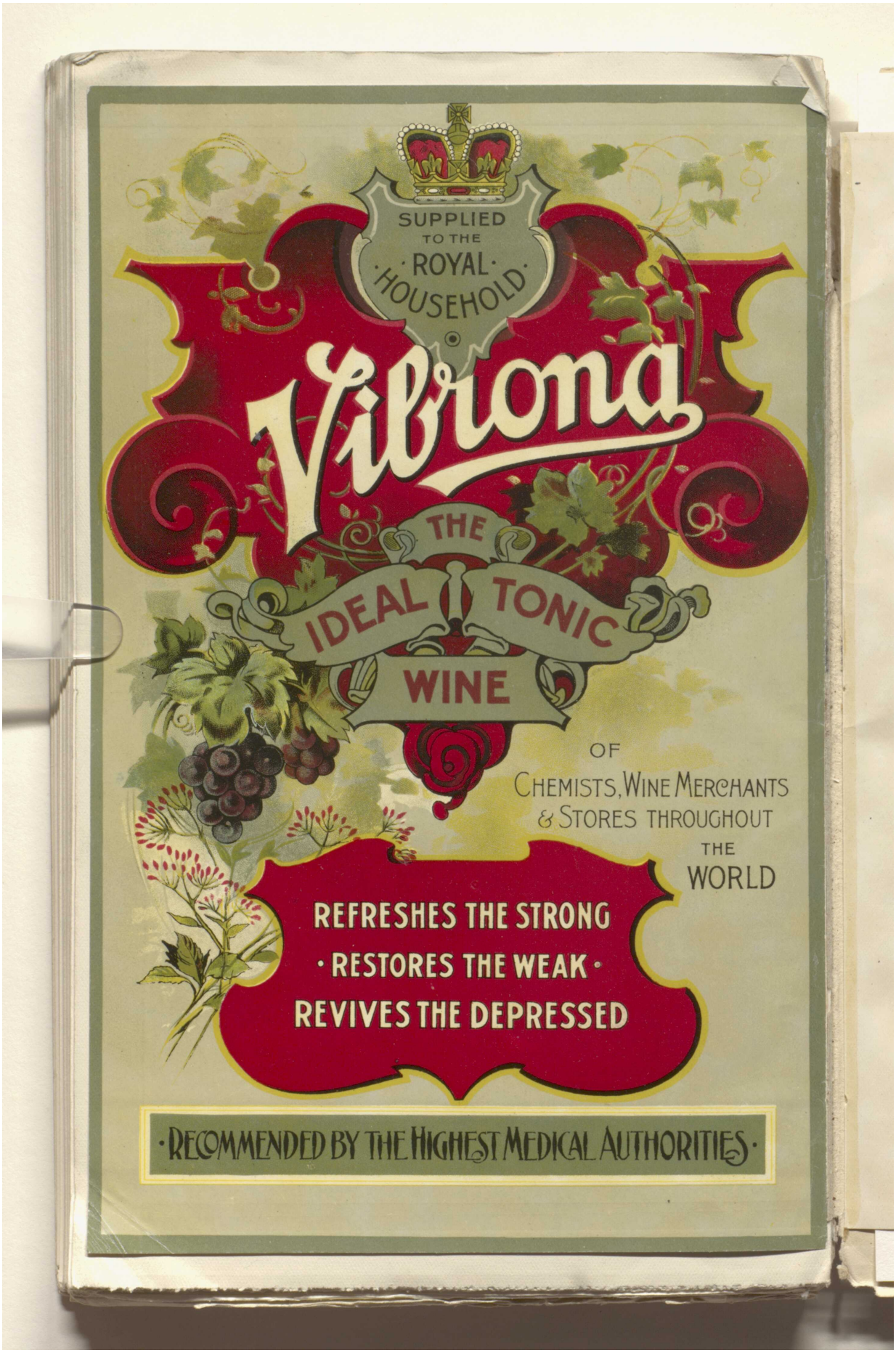
FLETCHER, FLETCHER & Co., Ld., LONDON and SYDNEY.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00004a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00000d

مكتبة قطر الوطنية
Qatar National Library

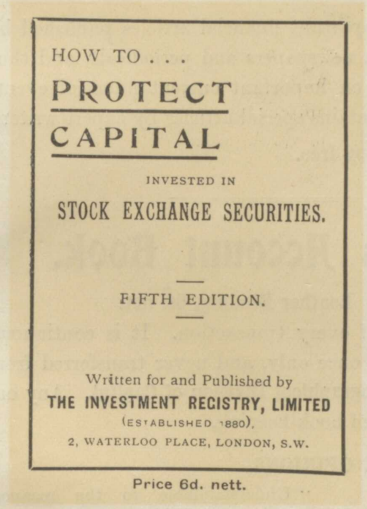
BRITISH LIBRARY

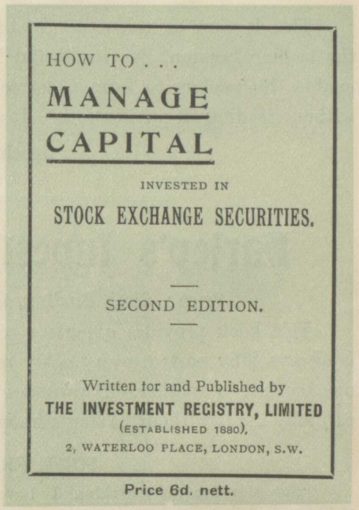
673

All Investors Please Note:

The **FINANCIAL NEWS** of March 31, 1905, explains in a long article how capital and income can be made safe by a geographical distribution of investments. **"HOW TO MANAGE CAPITAL"** and its companion volume **"HOW TO PROTECT CAPITAL,"** explains the theory of geographical distribution, and should be read by all investors interested in this subject.

The **TIMES** of September 13, 1904, deals in a leading article with the same subject of distribution, and concludes that: **"Investors may study with advantage the influence of Geography on Investment."**





Money invested in Stocks and Shares in the ordinary way is unsafe, and fluctuates considerably in capital value and income-producing power. The above two little books explain in simple language how capital spread over a wide geographical area is

STABLE IN VALUE AND REGULAR IN DIVIDENDS.

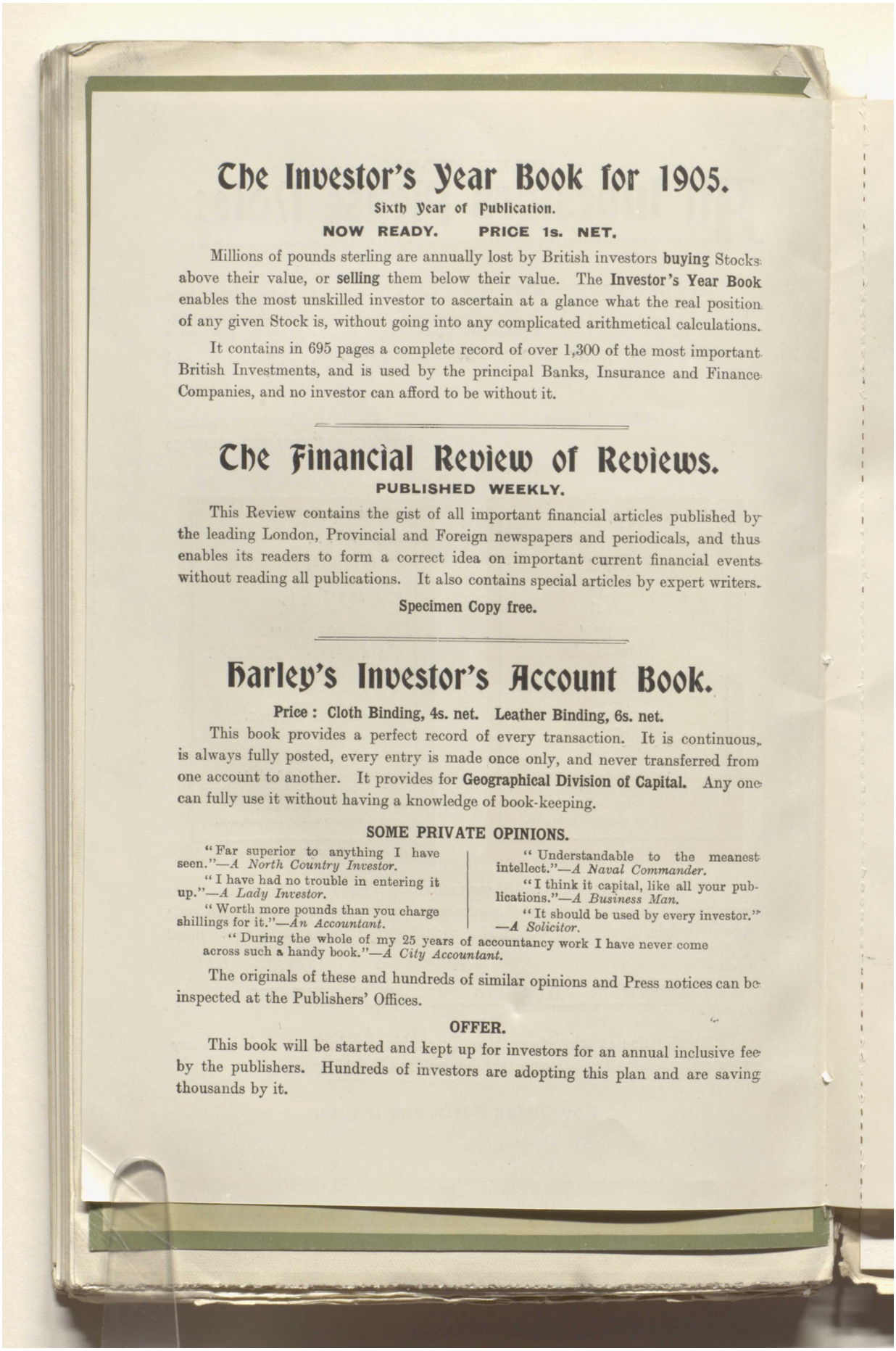
The adoption of this scheme is easily carried out, does not necessitate any cash outlay, and will more than repay the small trouble of learning it.

For Order Form see Inside.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000021

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



The Investor's Year Book for 1905.

Sixth Year of Publication.

NOW READY. PRICE 1s. NET.

Millions of pounds sterling are annually lost by British investors **buying** Stocks above their value, or **selling** them below their value. The **Investor's Year Book** enables the most unskilled investor to ascertain at a glance what the real position of any given Stock is, without going into any complicated arithmetical calculations.

It contains in 695 pages a complete record of over 1,300 of the most important British Investments, and is used by the principal Banks, Insurance and Finance Companies, and no investor can afford to be without it.

The Financial Review of Reviews.

PUBLISHED WEEKLY.

This Review contains the gist of all important financial articles published by the leading London, Provincial and Foreign newspapers and periodicals, and thus enables its readers to form a correct idea on important current financial events without reading all publications. It also contains special articles by expert writers.

Specimen Copy free.

Harley's Investor's Account Book.

Price : Cloth Binding, 4s. net. Leather Binding, 6s. net.

This book provides a perfect record of every transaction. It is continuous, is always fully posted, every entry is made once only, and never transferred from one account to another. It provides for **Geographical Division of Capital.** Any one can fully use it without having a knowledge of book-keeping.

SOME PRIVATE OPINIONS.

"Far superior to anything I have seen."—*A North Country Investor.*

"I have had no trouble in entering it up."—*A Lady Investor.*

"Worth more pounds than you charge shillings for it."—*An Accountant.*

"Understandable to the meanest intellect."—*A Naval Commander.*

"I think it capital, like all your publications."—*A Business Man.*

"It should be used by every investor."—*A Solicitor.*

"During the whole of my 25 years of accountancy work I have never come across such a handy book."—*A City Accountant.*

The originals of these and hundreds of similar opinions and Press notices can be inspected at the Publishers' Offices.

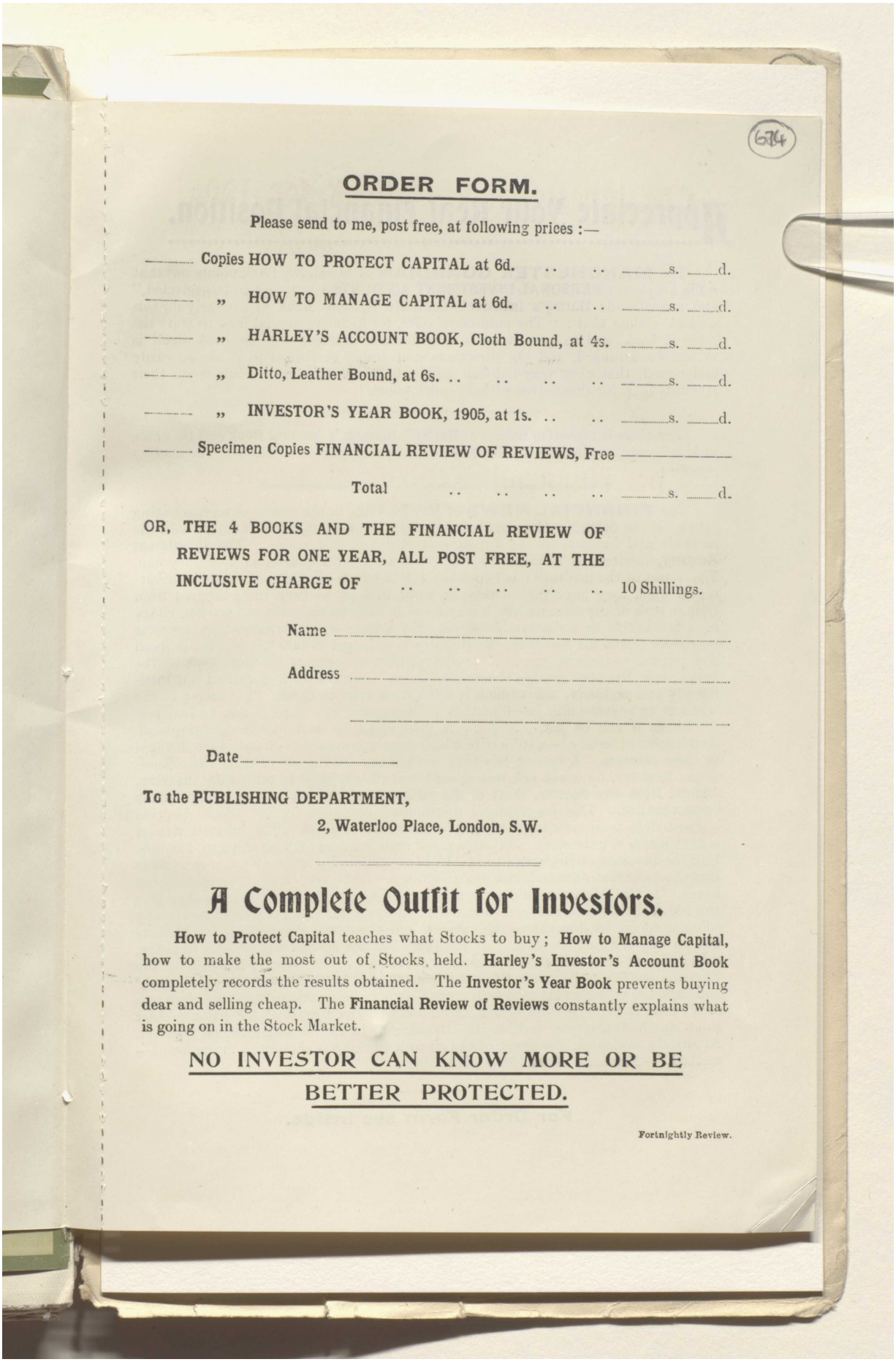
OFFER.

This book will be started and kept up for investors for an annual inclusive fee by the publishers. Hundreds of investors are adopting this plan and are saving thousands by it.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000af

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



674

ORDER FORM.

Please send to me, post free, at following prices :—

_____ Copies HOW TO PROTECT CAPITAL at 6d. .. .. _____s. _____d.

_____ „ HOW TO MANAGE CAPITAL at 6d. .. .. _____s. _____d.

_____ „ HARLEY'S ACCOUNT BOOK, Cloth Bound, at 4s. _____s. _____d.

_____ „ Ditto, Leather Bound, at 6s. .. .. _____s. _____d.

_____ „ INVESTOR'S YEAR BOOK, 1905, at 1s. .. .. _____s. _____d.

_____ Specimen Copies FINANCIAL REVIEW OF REVIEWS, Free _____

Total .. .. _____s. _____d.

OR, THE 4 BOOKS AND THE FINANCIAL REVIEW OF REVIEWS FOR ONE YEAR, ALL POST FREE, AT THE INCLUSIVE CHARGE OF .. .. 10 Shillings.

Name _____

Address _____

_____

Date _____

To the PUBLISHING DEPARTMENT,
2, Waterloo Place, London, S.W.

A Complete Outfit for Investors.

How to Protect Capital teaches what Stocks to buy; **How to Manage Capital**, how to make the most out of Stocks held. **Harley's Investor's Account Book** completely records the results obtained. The **Investor's Year Book** prevents buying dear and selling cheap. The **Financial Review of Reviews** constantly explains what is going on in the Stock Market.

NO INVESTOR CAN KNOW MORE OR BE BETTER PROTECTED.

Fortnightly Review.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Appreciate Your Real Financial Position.

The **MANCHESTER GUARDIAN** of March 30, 1905, points out that "The keeping of **PERSONAL INVESTMENT ACCOUNTS** is very apt to be neglected," and recommends **Harley's Investor's Complete Account Book** as a remedy for this neglect, adding that: "The publishers offer, for inclusive annual fees, to start the account book, and to keep it up to date for any investor, but the book itself is so simply arranged, and the directions and forms contained in it are so easily understood, that even very indolent and unbusinesslike persons could keep their accounts in it for themselves without much effort."

The above is typical of notices of **Harley's Investor's Account Book** *and the other publications of the* **Investment Registry** *which have appeared in many of the leading journals.*

The **FINANCIAL NEWS** of May 30, 1905, in the course of an interesting article on the **Scientific Management of Investor's Accounts,** deals at length with the methods and business of the Investment Registry, and says: "**The Investment Registry,** Limited, of 2, Waterloo Place, was founded a quarter of a century ago. The object of the institution is two-fold: (1) to advise clients as to suitable investments when they have their capital in hand, and (2) to keep them advised from time to time of any changes which may occur in their securities in the market, either in a favourable or unfavourable sense. No matter what securities any investor may have placed his money in, the Registry is prepared to take his account in hand and generally supervise it. . . . The number of separate accounts kept by the Investment Registry reaches several thousands, and **the work is carried out intelligently and regularly, and without a hitch from start to finish.** The secret of the whole thing is systematic co-ordination. The system, in a word, is now as near perfection as it can be got. . . . A word must be said of the 'geographical distribution of money'—a subject to which some attention has already been devoted in these columns. A system has been worked out with great care by the officials of the Registry, by which risk is so spread that **the capitalist is, practically speaking, assured from any disaster, short of the falling in of the sky or something equally comprehensive.** This geographical distribution of money is one which deserves a great deal more attention than it customarily receives. The greatest danger is that which is unforeseen, and subsequent repining does little to mitigate the loss. Had the Investment Registry's principles been universally followed out, it is possible that the Australian financial crash of a decade ago might have wrought less widespread havoc. In the brief limits of a newspaper article it is impossible to do more than give this rough sketch of so vast and so complicated a system. As a matter of fact, many columns might be devoted to the subject, and even then the layman would have but an imperfect understanding of the daily routine carried out by the Registry. Some idea of the work may be gleaned from two small books published by the Registry, entitled respectively **'How to Protect Capital'** and **'How to Manage Capital,'** and **these the investor may read with profit.** It may be mentioned that the chairman of the concern is Sir John Rolleston, M.P., and that the figures of the balance-sheet as at March 30 this year indicate the Registry to be in a strong financial position. As already explained, the secret of the smooth working is comprised in one word—method."—*Financial News, May 30th,* 1905.

For Order Form see Inside.

Reference: Mss Eur F111/393. Copyright for this page: Public Domain
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000050

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

675

THE

SIMPLEX

PIANO-PLAYER

A MARVEL OF THE 20th CENTURY.

Enquirer's First Question.

"How does the SIMPLEX differ from other Piano-Players?"

Moore and Moore's Answer.

"Essentially and vitally both in construction and musical result."

CONSTRUCTION.—In the words of the *St. James's Gazette*, it has "the clever device of a clockwork motor to move the perforated rolls in place of the now hopelessly antiquated bellows arrangement."

The pedals, therefore, are entirely relieved from winding the rolls, and only control the pneumatic fingering.

The improvement on the old style is startling. The pedalling becomes light and responsive, that all gradations of tone instantaneously follow the pressure of the feet, *without affecting time*, which is controlled by the hand independently.



Accenting levers are thus done away with, and the mechanism so simplified that derangement is practically impossible, while the working is smooth and *silent*.

No injury is done by the SIMPLEX to the finest piano.

MUSICAL RESULT.—The SIMPLEX enables the performer to play with *personal and individual sympathetic expression*, which is the vital element of true music, and totally different from machine-made music with *mechanical effects*.

PRICE: **£52** NET, OR BY DEFERRED PAYMENTS.

May be hired, and hire allowed if purchased. Terms on application.

Sole Agents (City of London):

MOORE & MOORE,

PIANOFORTE MAKERS (Founded 1838),

104 & 105 BISHOPSGATE ST. WITHIN, E.C., & 15a HANOVER SQUARE, W.

Pamphlet, Press Opinions, &c., post free; but the BEST PLAN *is to call.*

RECITALS at the Empress Tea Rooms (Tea 1s.), 27 New Bond Street (over Redfern's), daily from 4 till 6.

iii

Reference: Mss Eur F111/393. Copyright for this page: Open Government Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

No. 2,480. VOL. XLVIII.] JUNE 1, 1900. [Price 6d. To Non-Members.

JOURNAL

OF THE

SOCIETY OF ARTS

PUBLISHED EVERY FRIDAY.

CONTENTS.

Notices: — Indian Section. — Foreign and Colonial Section.—Conversazione 533
Twenty-third Ordinary Meeting: — Russian Central Asia: Countries and Peoples, by Archibald R. Colquhoun.—Discussion .. 533
Trans-Siberian Railway 568
Meetings for the Ensuing Week 568

LONDON:
PUBLISHED FOR THE SOCIETY BY GEORGE BELL AND SONS, YORK STREET, COVENT GARDEN.

1900.

Registered as a Newspaper

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001a

مكتبة قطر الوطنية
Qatar National Library

Charles Griffin & Co.'s Technical Publications.

JUST OUT. With Tables, Illustrations, &c. Price 21s.

LUBRICANTS & LUBRICATION.—A Treatise ON THE THEORY AND PRACTICE OF LUBRICATION, AND ON THE NATURE, PROPERTIES AND TESTING OF LUBRICANTS. By LEONARD ARCHBUTT, F.I.C., F.C.S., Chemist to the Midland Railway Company; and R. MOUNTFORD DEELEY, M.I.M.E., F.G.S., Midland Railway Locomotive Department.
"Destined to become a classic on the subject."—*Industries and Iron.*

DAIRY CHEMISTRY for Dairy Managers, CHEMISTS, AND ANALYSTS.—A Practical Handbook for Dairy Chemists and others having control of Dairies, with Tables and Illustrations. By H. DROOP RICHMOND, F.C.S., Chemist to the Aylesbury Dairy Company. 16s.
"The BEST CONTRIBUTION on the subject that has yet appeared."—*Lancet.*

With 144 Illustrations, handsome cloth. 28s.

OILS, FATS, WAXES, and Allied Materials, AND THE MANUFACTURE THEREFROM OF CANDLES, SOAPS, AND OTHER PRODUCTS. By C. R. ALDER WRIGHT, D.Sc., F.R.S., late Lecturer on Chemistry, St. Mary's Hospital School; Examiner in "Soap" to the City and Guilds of London Institute.
"Dr. Wright's work will be found absolutely indispensable by every Chemist. Terms with information valuable alike to the Analyst and the Technical Chemist."—*The Analyst.*

THE PRINCIPLES AND PRACTICE OF BREWING.—A Text-Book for the use of Students and practical men, by WALTER J. SYKES, M.D., D.P.H., F.I.C., Editor of *The Analyst*, with Plate and numerous Illustrations.
"A BETTER GUIDE could hardly be found."—*County Brewers' Gazette.*

LONDON: CHARLES GRIFFIN & CO., LTD., EXETER STREET, STRAND.

The Builder.
June 2, 1900.

ILLUSTRATIONS.
NEW STREET BUILDINGS, CHESTER.
Carving from Choir Stalls, Perugia.
"HOMESIDE," WIMBLEDON COMMON.
1. Exterior View. 3. The Hall.
2. The Staircase. 4. The Dining Room.
Font in Siena Cathedral.

ORIGINAL ARTICLES, REPORTS, &c.
THE ANCIENT LIGHTS QUESTION.
Strength of Timber, and how to Test it.
ARCHITECTURE AT THE ROYAL ACADEMY.—II.
Letter from Paris.
STRUCTURAL IRON AND STEEL (Student's Column).

Price FOURPENCE.
Office:—46, CATHERINE STREET, LONDON, W.C.

SPECIAL ADVANTAGES TO PRIVATE INSURERS.

THE IMPERIAL
INSURANCE COMPANY, LIMITED,
FIRE.

ESTABLISHED 1803.

1, OLD BROAD-STREET, E.C.; 22, PALL-MALL, S.W., AND 47, CHANCERY-LANE, W.C.

Moderate Rates. Undoubted security. Prompt and Liberal Settlement of Claims. Subscribed Capital, £1,200,000; Paid-up Capital, £300,000; Invested Assets (Capital and Reserves) over £1,500,000.

General Manager, E. COZENS SMITH.

TELEPHONE No. 1236 AVENUE.

ESTABLISHED 1851.
BIRKBECK BANK
Southampton Bldngs., Chancery Lane, London, W.C.
CURRENT ACCOUNTS
2% on the minimum monthly balances, 2%
when not drawn below £100.
2½% DEPOSIT ACCOUNTS 2½%
on Deposits, repayable on demand.
STOCKS AND SHARES.
Stocks and Shares purchased and sold for customers.
The BIRKBECK ALMANACK, with full particulars post free.
FRANCIS RAVENSCROFT, *Manager.*

HOWARD LECTURES.

Conversion of Heat into Useful Work.

By William Anderson, C.B., D.C.L., F.R.S.

75 pp. PRICE 2s. 6d.

INTERNATIONAL CONGRESS ON TECHNICAL EDUCATION.

THE REPORT
OF THE
PROCEEDINGS OF THE INTERNATIONAL CONGRESS ON TECHNICAL EDUCATION,
Held at the Society of Arts in June, 1897, has now been published—Price 3s. 6d., by post 3s. 10d., and can be obtained on application to THE SECRETARY, SOCIETY OF ARTS, JOHN-STREET, ADELPHI, LONDON, W.C.
The volume consists of 307 pages, and contains a report of all the papers read and the discussions, with appendixes giving lists of Officials, Delegates, and others taking part in the Congress.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

677

JOURNAL OF THE SOCIETY OF ARTS.

FRIDAY, JUNE 1, 1900.

TABLE OF CONTENTS.

PROCEEDINGS OF THE SOCIETY.
Notices:—Indian Section.—Foreign and Colonial Section.—Conversazione 533
Twenty-third Ordinary Meeting:—Russian Central Asia: Countries and Peoples, by Archibald R. Colquhoun.—Discussion 533
Trans-Siberian Railway 568
Meetings for the Ensuing Week 568

ADVERTISEMENTS.

PATENTS AND TRADE MARKS.

J. E. EVANS-JACKSON & Co.,
PATENT AGENTS & CONSULTING ENGINEERS,
19 & 20, HOLBORN VIADUCT, LONDON.

PATENTS & TRADE MARKS protected in Great Britain, the British Colonies and Dependencies, and Foreign Countries, at moderate charges. Estimates on application. Infringements of Patents and Trade Marks investigated.
Telegrams:—"JACKFISH, LONDON." Telephone:—288 HOLBORN.

GLEANINGS FROM PATENT-LAWS OF ALL COUNTRIES.
By W. LLOYD WISE, F.R.G.S., Assoc.Inst.C.E., Fellow of the Chartered Institute of Patent Agents.
The first portion (now ready, price Two Shillings) contains Information as to the Patent-laws, Practice, Area, Population, Productions, &c., of 22 Countries.
"This work gives a great deal of information likely to be useful to inventors and owners of patents in a small compass."—*The Times.*
London: F. WISE-HOWORTH, 46, Lincoln's-inn-fields, W.C.

PATENTS.

G. F. REDFERN & Co.,
GENERAL PATENT OFFICE
4, SOUTH STREET, FINSBURY, LONDON (ESTABLISHED 1880).
British, Foreign, and Colonial Patents obtained at fixed and moderate charges. Designs and Trade Marks registered at home and abroad. Circular of information forwarded free on application. Telephone No. 691. Telegraphic address, "Invention, London."

TO INVENTORS.

HARRIS & MILLS, PATENT AGENTS, 23, Southampton-buildings, London, W.C. Established 1866. Provisional protection from £3 3s. Complete Patent for four years from £9 9s. A chart of 187 mechanical motions, with description of each, price 6d. Circular of Information Gratis. Cable address, "Privilege, London."

PATENTS FOR INVENTIONS
AND REGISTRATION OF DESIGNS AND TRADE MARKS SECURED AT MODERATE CHARGES.
E. P. ALEXANDER and SON, Fel. Chartered Inst. Patent Agents, 19, SOUTHAMPTON-BUILDINGS, London, W.C. Pamphlet and general advice gratis. Established 1874. Telegrams. "Epa, London."

BARR'S SEEDS
Of Finest Selected Strains and Tested Growth.
BARR'S SEED GUIDE FOR 1900 contains a Select List of the best Vegetables and most beautiful Flowers. It is full of Practical Hints, and will be found invaluable to Gardeners, Amateurs, and Exhibitors.
Sent free on application.
BARR & SONS,
12 & 13, King Street, Covent Garden, LONDON

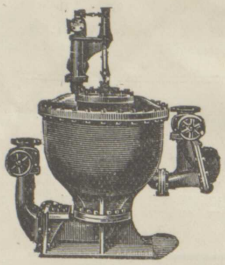
WM. & GEO. LAW.
COFFEE—SUGAR—TEA.
104, New Oxford Street, W.C.

DEVELOPMENT & TRANSMISSION OF POWER FROM CENTRAL STATIONS.
By Professor W. C. Unwin, F.R.S.
76 pp. PRICE 1s.
SOCIETY OF ARTS, ADELPHI, LONDON.

45 Pages. Fully Illustrated. Price One Shilling.
MECHANICAL ROAD CARRIAGES.
A COURSE OF
CANTOR LECTURES,
BY
W. WORBY BEAUMONT, M.Inst.C.E.
The above Lectures have now been reprinted in collective form and may be obtained on application to the Secretary of the Society of Arts, John-street, Adelphi, London, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000048

مكتبة قطر الوطنية
Qatar National Library



SHONE PNEUMATIC AUTOMATIC EJECTORS
FOR RAISING
SEWAGE, SLUDGE, WATER, &c., &c.
As adopted for RANGOON, BOMBAY, KARACHI, EASTBOURNE, SOUTHAMPTON, WELLINGTON (N.Z.), NORWICH, IPSWICH, ARAD (Hungary), &c., &c.
For pamphlets and full particulars apply to the Manufacturers,
HUGHES & LANCASTER, 47, Victoria Street, London, S.W.,
Contractors for Drainage and Water Supply Works.

1900 IMPERIAL ROVER CYCLES
EMBODY ALL THE LATEST PRACTICAL IMPROVEMENTS.
Free Wheels—Any kind of Brakes fitted to order.
LISTS FREE.
THE ROVER CYCLE CO., LTD. (late J. K. Starley & Co., Ltd.), Meteor Cycle Works, COVENTRY.
LONDON: 4 & 5, Holborn Viaduct, E.C.; 157, New Bond Street, W.; 19 & 20, Old Bailey, E.C. (Repairs Dept.)

JUST ISSUED. LARGE 8vo, PAPER COVER, 42 pp.
THE REPORT OF THE COMMITTEE
OF THE SOCIETY OF ARTS ON THE
DETERIORATION OF PAPER.
WITH TWO APPENDIXES.
1 Abstracts of Papers on German Official Tests, 1885-96. 2. Precis of Correspondence.
The above Report PRICE 1s. can be obtained on application to the Secretary of the Society of Arts, John-street, Adelphi, London, W.C.

JUST PUBLISHED. Price 2/6, by Post 2/9.
GUTTA PERCHA,
A Course of CANTOR LECTURES recently delivered before the Society by
DR. EUGENE F. A. OBACH, F.I.C., F.C.S., M.I.E.E.
Reprinted with Additional Matter and Illustrations.
Society of Arts, John Street, Adelphi, London, W.C.

DENT'S WATCHES AND CLOCKS.
TRADE MARK. DENT
NEW ILLUSTRATED CATALOGUE OF
HIGH CLASS WATCHES & CLOCKS at REDUCED PRICES,
Sent Post Free on Application to
E. DENT & CO., LTD., MAKERS TO THE QUEEN.
Makers of the Great Westminster Clock "Big Ben."
Sole Address—61, STRAND, LONDON, W.C.; or 4, ROYAL EXCHANGE, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000005

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Journal of the Society of Arts,

No. 2,480. Vol. XLVIII.

FRIDAY, JUNE 1, 1900.

All communications for the Society should be addressed to the Secretary, John-street, Adelphi, London, W.C.

Notices.

INDIAN SECTION.

Thursday, May 24; the Right Hon. Sir Francis Henry Jeune, K.C.B., D.C.L., in the chair. The paper read was "English Criminal Procedure and the Indian Code of Criminal Procedure: a Comparison." By Sir John Scott, K.C.M.G., D.C.L.

The paper and a report of the discussion will be published in a future number of the *Journal*.

FOREIGN & COLONIAL SECTION.

Monday, May 28; the Right Hon. Sir Henry H. Fowler, G.C.S.I., M.P., in the chair. The paper read was "Imperial Telegraphic Communication." By Sir Edward Sassoon, Bart., M.P.

The paper and a report of the discussion will be published in a future number of the *Journal*.

CONVERSAZIONE.

The Society's *Conversazione* will take place at the Natural History Museum, Cromwell-road, S.W. (by permission of the Trustees of the British Museum), on Wednesday Evening, the 20th June, from 9 to 12 p.m.

The following portions of the Museum will be open:—On the Ground Floor—the Central Hall, British Saloon, and the Fossil and Mammalia and Reptilia Galleries; on the First Floor—the East and West Corridors.

Each member is entitled to a card for himself (which will not be transferable), and a card for a lady. In addition to this, a limited number of tickets will be sold to members of the Society, or to persons introduced by a member, at the price of 5s. each, if purchased before the date of the *Conversazione*. On that day the price will be raised to 7s. 6d.

These tickets will only be supplied to non-members on presentation of a letter of introduction from a member.

Members can purchase these additional tickets by personal application, or by letter addressed to the Secretary. In all cases of application by letter a remittance must be enclosed. Each ticket will admit one person, either lady or gentleman.

Light refreshments (tea, coffee, ices, claret cup, &c.) will be supplied.

Proceedings of the Society.

TWENTY-THIRD ORDINARY MEETING.

Wednesday, May 30, 1900; Spencer Wilkinson in the chair.

The following candidates were proposed for election as members of the Society:—

Apcar, Apcar Alexander, 11, Russell-street, Calcutta, India.
Gladstone, Henry Neville, 4, Whitehall court, S.W.
Hayward, F. D., 9, Gracechurch-street, E.C.
Jarman, Arthur, The University, Sydney, New South Wales.
Murti, P. N. Krishna, C.I.E., Bangalore, Mysore, India.
Nixon, Major-General John Pigot, care of Messrs. Henry S. King and Co., 45, Pall-mall, S.W.
Wood, Reginald, Fen Moor, Bottisham Lode, Cambridgeshire.

The following candidates were balloted for and duly elected members of the Society:—

Bull, Henry, 1, Queen's-gate-terrace, S.W.
Dwarkadas, Naranjee, 53, Esplanade-road, Fort, Bombay, India.
Mango, A., Messrs. Foscolo, Mango and Co., Constantinople, Turkey.
Middleton, Reginald Empson, 17, Victoria-street, Westminster, S.W.
Morris, Captain R., 3rd Bengal Cavalry, Hissar, India.
Rao, Viskvanatt Patankar Madhava, C.I.E., Bangalore, India.
Rastamji, C., Rutlam, Central India.
Wheeler, Oswald, 76, Heathwood-gardens, Old Charlton, S.E.

The Chairman, in introducing Mr. Colquhoun, said his qualifications to speak on the subject of Central Asia were unique. After spending many years in the service of the Indian Government, he made a name for himself by his journeys across the great peninsula which separated India from the Chinese Empire, a country in which of late we had learned to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000053

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

take a deeper interest. After that he had a long and very interesting experience in South Africa, being the first Administrator of Mashonaland. Since then he had published a series of remarkable books, of which the first described his journey between Upper Burmah and the basin of the Yangtse. He had again visited China, and travelled extensively in the far East and in the Russian dominions, which were so rapidly increasing. He had, therefore, seen more of Asia than most Englishmen, and had enjoyed exceptional opportunities of forming an opinion on Asiatic questions, so that no doubt the paper would be of the most interesting description.

The paper read was—

RUSSIAN CENTRAL ASIA: COUNTRIES AND PEOPLES.

By Archibald R. Colquhoun.

No attempt is made, in the following paper, to deal with the political problems which arise from the presence of the Russians in Central Asia, a territory hitherto abandoned to the many tribes and peoples, some wild and uncivilised, who have inhabited the land for generations. Many of these native states were rich and prosperous, and, although Oriental, highly organised; others were mere congeries of nomad families. All present features of great interest and novelty. Of the steady progress of Russia east and southwards I have spoken elsewhere, I propose to-night to give a brief account of some of the people she has encountered in this progress and the countries which have come under her flag during the last half century. The variety of races, the differing conditions both of climate and geography which are found in these countries and peoples are not only interesting in themselves, but, when we reflect that they are already practically consolidated into well organised Russian provinces, afford an excellent illustration of the tenacity of purpose characteristic of the Slav race, and also of their power of assimilation. Their success in this direction must be largely attributed to the fact that they are themselves partly Oriental, and so akin to the people they have conquered.

The territory described as Central Asia is bounded by Siberia on the north, by the Chinese Empire on the east and south-east, Afghanistan and Persia on the south, and on the west by the Caspian Sea and European Russia. It originally consisted of three kingdoms, known as the Central Asian Khanates of Bokhara, Khokand, and Khiva, of the Khirgiz Steppes, the half desert country of the Tekkés, the oasis of Merv, and the districts of Kuldja, Ferghana, Zarafshan, and the Pamirs. These are now, roughly speaking, divided into the provinces of Orenburgh in the north (including a large slice of Siberia), Turkestan and East Turkestan central and east, and Transcaspia on the west. Bokhara retains its native ruler and form of government, but is under Russian suzerainty.

The climate of Central Asia varies considerably from north to south, and may be roughly divided into three zones. The northern zone extends as far south as latitude 45°, and includes the lower course of the Syr Daria to Fort No. 2, and the lower course of the Ili. The climate in this zone is what is known as "continental," with very hot summers and very cold winters. Snow remains on the ground for about three months, while the summer is extremely hot, and lasts from four to five months. The central zone includes the towns of Perovsky, Turkestan, Aulieata, and Vierny, with the middle course of the Syr Daria and a large portion of the Kyzyl Kum sands. Here the winter may be compared to that of Central Germany, while at Vierny grapes ripen, though not so well as further south. The southern zone is tropical, and includes Kuldja, besides those towns which lie either in the same latitude or south of Tashkent. Kuldja owes its comparatively high temperature to its sheltered position, being surrounded by high mountains, which protect it from the north-easterly winds so prevalent in the rest of the central zone. Fruits of a delicate nature flourish—peaches, apricots, pomegranates, and grapes. The winter, though cold, is short, snow seldom remaining on the ground for longer than a month. There is, however, a great deal of rain, the rainy season lasting from about March till October.

The district of Hodjent, acquired by Russia in 1874, lies south of Tashkent, and with the valley of Zarafshan is the most fertile part of Central Asia, and was for some time a disputed point between Bokhara and Khokand. The country here is better wooded than most parts of Central Asia, and also better watered; everywhere one sees the beautiful gardens which are the joy and pride of all dwellers in Central Asian towns. These gardens surround most of the cities, and are often used as summer residences, the Russians even having adopted the fashion, and camping out in roomy tents and pavilions during the hot months. Peach, cherry, and apple trees

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000c7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

679

make these gardens beautiful, and it is much to be regretted that, owing to the scarcity of coal, these orchards are being largely cut down for fuel.

With regard to mineral produce, the lack of good coal in Central Asia is likely to prove a serious drawback to its development, although the improvement in communications will largely remedy the defect. Since the acquisition of Turkestan, the Government have made great efforts to discover really productive coal-beds; but although coal exists scattered pretty widely over Central Asia, all that has been obtained hitherto is of inferior quality, and broken up into small fields. As for other minerals, it is curious, considering the trifling amount of gold found in this part of Russia's new possessions, to remember that her first step towards Asia was initiated by Peter the Great because he had heard so much of the gold to be found on the banks of the Oxus. Lead-ore is the most abundant mineral, but this cannot be mined with any great profit on account of the dearness of fuel and difficulty of transport.

There are several different races inhabiting Central Asia, but, broadly speaking, they are all of Persian or Turkish descent. A part of the country was undoubtedly inhabited in early times by the Sacæ, or Scythians, an Aryan race who were, to a large extent, dispossessed and driven out by the Turkish tribes who overran the country. The descendants of this ancient race are still found in considerable numbers, often clustered together in mountain villages, to which they have been gradually driven by the succeeding waves of Russian invasion. A curious testimony to the antiquity of the race is the fact that their language retains many words of Aryan derivation which are not known in modern Persian. The Tadjiks, as they are called, are distinguished, not only in appearance, but in character, from the tribes of Turkish descent. The typical Tadjik is large, thickly bearded, vain with the childish vanity common in primitive races, lazy, untruthful, and morally corrupt. He despises his less subtle Uzbek neighbour, who returns the sentiment, but is nevertheless compelled to make use of the sharper wit of the Tadjik. The Uzbeks, who form a large proportion of the population in Central Asia, are a tribe, or congeries of tribes, of much the same origin as the Kirghiz, being founded by Turkish immigrants who flocked into the country both before and after the time of Genghiz Khan. Unlike the Kirghiz, however, the Uzbeks have little of the Mongol element. They speak a Turkic dialect, and retain, at all events traditionally, their old division into clans or families, the names of which in some cases perpetuate long-forgotten tribes. One clan is that of the Kiptchaks, whose martial habits and traditions made them a chief factor in the army of Khokand. The most numerous race, in the western part of Central Asia at all events, is the Kirghiz, also perhaps the most interesting.

This tribe really consists of two distinct races. The true one, the *Kara* or "Black Kirghiz," is found principally in the valleys of the Thian-Shan and Altai Mountains, and is unmistakably of Turkish origin. Descriptions found in Chinese writings of a very early date show that at that time the prevailing type was characterised by light hair and fair skin, which would not apply to the average Kirghiz of the present day, although such may still be met with here and there,

The other race, which inhabits the greater part of the province of Turkestan and the steppes bordering it, called by the Russians "Kassak-Kirghiz," is more impregnated with the Mongol element than the Kara-Kirghiz. They have largely intermarried with the Kalmuks, and their aristocracy, or "white bones," claim descent from Genghiz Khan, while their various traditions describe them as being descended from a "red-haired dog," or (a more poetical story) as veritable "Children of the Mist." Both legends suggest the great antiquity of the race, as is usual with aboriginal tribes of undoubted pre-historic origin, both in America and Australia. The claim of descent from an animal is found with other Asiatic tribes, and is always supposed to denote considerable age.

Although he has now lost his independence, the Kirghiz still retains many curious and characteristic traits, one of these being an incurable contempt for a settled or town life. "Sart," the term applied to merchants and townsfolk, is used contemptuously, and would be much resented by a true Kirghiz, who has a scoffing proverb to the effect that "when a Sart becomes rich he builds a house, a Kirghiz buys more wives." When on the move they live in *kibitkas*, or field tents, stretched on light wooden frames, and resembling the Mongolian *yourtas*. These *kibitkas* are exceedingly portable, and can be packed for a journey in less than an hour. The Kirghiz, as a rule, are of swarthy complexion, and are short and sturdy in build, the men shaving the head, but

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000016

مكتبة قطر الوطنية
Qatar National Library

allowing the beard to grow, while the women wind yards of cotton stuff about their heads. The male attire consists usually of a pair of baggy leather breeches, a coarse shirt, and one or more rough coats, the head being covered with a skull-cap and a conical hood of sheepskin or felt. On special occasions a red velvet coat and a tall felt hat, with turned-up brim, are worn by the well-to-do. Polygamy was adopted by the race at the time when the Russians forced Mohammedanism upon them, and the position of their women folk is not enviable. When a man wishes to marry he buys a wife, or one is bought for him by his relations, and once the *kalym*, or purchase-money, is paid, the wife becomes the mere chattel of her husband, who generally treats her with less consideration than he does his cattle. He can divorce her with the greatest ease, and her family may then attempt to sell her again. However much she may be ill-treated she has no redress, the utmost that can happen being a remonstrance from her relations to the husband for "depreciating her market value;" whilst even if he killed her, under Kirghiz law he had no more serious penalty to encounter than a fine. "A woman has only half as much soul as a man," says a Kirghiz proverb; and the men of the tribe evidently act up to this belief. The more serious crimes are now amenable to Russian law, but smaller matters are settled before certain chosen elders, who are not paid for their services, but receive a portion of every fine they inflict. Hitherto little has been done by Russia to civilise the tribes under her dominion, and such a thing as a Kirghiz school is practically unknown. Although Mohammedanism is nominally their religion, the Kirghiz do not trouble much about doctrine, many of them still adhering to the old *Shaman*, or devil-worship, while ancestor-worship is still largely practised.

It may be said, perhaps, that the principal object of Kirghiz existence is the breeding of cattle and horses, to which nearly the whole of their time is devoted. In bartering his cattle the Kirghiz does not make a feature of honesty, and will invariably cheat whenever he gets the chance.

Fond as he is of horse-flesh, his sheep—of which he has a famous fat-tailed breed called the *Kurdiak*—are perhaps nearest to the heart of the Kirghiz. All over Central Asia and in Southern Siberia mutton is the staple food, and the nomads who inhabit the steppe regions are accustomed to eat it in tremendous quantities. The allowance for a Mongol driver of a caravan, for instance, is a leg of mutton per man per day; but it must be added that should meat fail, the Mongol is not only capable of foregoing his favourite food, but of existing on fare so coarse and scanty that no European could support life on it. The nomads, as a rule, do not take much trouble over the preparation of their food, boiling it in a pot, and taking it out in handfuls as it seems to them sufficiently cooked, or gnawing the flesh from the bones, which they return to the pot again. A very delicate dish, and one set before honoured guests, is composed of the tails of sheep; and the shin-bone of this useful animal is carried by superstitious Kirghiz as an amulet, and is also used in divination. His sheep are, indeed, so important to the Kirghiz or Uzbek, or to any native of Central Asia, that it is etiquette to suppose, for the sake of courtesy, that every man possesses flocks, and in greeting him the first inquiry must be not for *his* health but for *theirs*.

The favourite drink of the Kirghiz is made from brick-tea, but *kumis*, or mares' milk, is drunk, as among the Mongols, to produce intoxication, for which purpose also is used a kind of beer, distilled from grain, called *buza*, which has a stupefying effect.

On the whole the Kirghiz are a simple and credulous people, not particularly brave. Owing to their skill as trackers, in which they rival the Red Indians, they make excellent scouts.

The Kalmuks, with whom, as has been said, the Kirghiz have largely intermarried, are another race of Central Asian nomads, who originated in a confederacy of Mongol tribes living in Zungaria, on the north-western borders of the Chinese Empire, and combining together to resist the aggressions of another tribe of kindred origin. This confederacy, known as the Oirat, made attacks on China, and at one time took the Emperor prisoner, and marched to the walls of Peking. Internal dissensions, however, broke the power of the Oirat, and some of the tribes migrated to Siberia, probably receiving at that time the name of "Kalmuk," which in Turkic dialect means "remnant." Zungaria still remained in the possession of the same tribes, whose fratricidal wars and quarrels finally ended in their becoming vassals to China. Meanwhile, the Kalmuks had been driven further and further, till finally they crossed the Ural, and settled in the lower region of the Volga. Finding her new subjects in Zungaria inclined to rebel, China took a

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000012

مكتبة قطر الوطنية
Qatar National Library

short way of quieting them by a wholesale massacre, and as the country was left desolate, towards the middle of the 18th century, military colonies of Manchus were formed and Chinese criminals sent, while large numbers of agriculturists were deported from Eastern Turkestan. The last-named became known as *tarantchis*, and occupied a position analogous to that of Russian crown peasants. Although Mohammedans, they lived among their Buddhist neighbours quite amicably, and the only difference made by the preponderance of the Chinese element was in the unveiling of their women. Another element was added in 1771, when the Kalmuks, hearing that their mother-country had been depopulated, returned *en masse*, taking eight months on the journey, and suffering much both from want and the attacks of the Kirghiz. When they arrived they found the country occupied by the Chinese, and having no alternative, except to fall into the hands of Kirghiz or Russians, they settled down on the pasture lands, became subject to the Chinese, and devoted themselves to the breeding of cattle and horses. The Kalmuks are all Buddhists, and are completely Mongolian in type and customs. This district, known, from the name of the Manchu settlement which dominated it, as Kuldja, was annexed by Russia, but returned to China on her fulfilling certain conditions.

On the western side of Central Asia there are many different families or tribes of Turkomans, who are somewhat similar in habits to the Kirghiz, although some, like the Tekkés, live partly in villages and are agriculturists. No race offered more stubborn resistance to the Russians than the Tekkés, and none suffered more. In the Turkoman campaigns orders were given to spare neither age nor sex, and whole families were slaughtered and entire districts laid waste.

In most of the cities of Central Asia, besides these, are found many fragments of other races—Persians, originally brought as slaves; Arabs, believed by some to have been the original introducers of Mohammedanism; Hebrews, who have been settled in the country for centuries, and who have the characteristics for which their race is remarkable all over the world; Hindoos, who come and go for commercial purposes; and also many families of gipsies, known usually at Liuli, who lead a nomad life, trading in horses, while their women tell fortunes, cure the sick, and carry on a small traffic.

Theoretically nearly all the native peoples of Central Asia profess Mohammedanism, but many of the tribes know little more of it than the name of the prophet, and some not even that. The nomads retain many practices which have no connection with Islam, and it is only in the large cities that there is any attempt at ceremonial worship. Great religious laxity prevails all over Central Asia, and the fanaticism observable among the Dervishes, who gain a living by exhibiting themselves in a religious frenzy, and even torturing themselves at times, is rather a matter of business than of true devotion.

Education among the native inhabitants is in the hands of the *mullahs* or priests, and is generally limited to such matters as have a bearing on religion or law. The foundation of colleges, where the higher religion and law are taught, has for ages been a favourite form of piety, and some still exist which were founded four and five hundred years ago. Both pupils and professors are supported from the revenues of the college, the latter receiving in addition voluntary gifts from parents of the pupils. There are also primary schools, generally attached to each mosque, and here the boys from the age of five are instructed first in the alphabet, and then in the reading of the Koran and about seven other books, which they read and copy without understanding, as they are written in Persian and Turki and never translated into the dialect of the district. To know the Koran by heart confers at once rank and sanctity on the happy accomplisher of that feat. This is usually an effort entirely of memory, as few are acquainted with Arabic, though many have read illegal translations and know the substance of what they recite. Superstition is extremely rife, especially among the nomad tribes, who attach mystic meaning to such events as the appearance of crows (as in Western Europe), magpies, and other birds and beasts. A favourite method of divination is by roasting the shin bone of a sheep and watching its appearance as it burns, from which the future is predicted by certain signs.

As regards religion, the Russians have always acted with the greatest wisdom and tolerance, never in any way interfering with the worship and practice of the conquered tribes, except that they have abolished the native functionaries whose business was to compel the performance of religious rites. Missionary projects have been by no means encouraged, although in the garrisons and in one or two towns there are Christian

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

churches, and a Bishop of the province of Turkestan. The Russians have acted with less wisdom in arranging the administration of their new provinces; and, in trying to force upon the natives systems foreign to their customs and characters, they have earned a certain amount of unpopularity. One instance is the method of local government by natives elected by vote, under the surveillance of the Russian Government. This, with modifications, has been tried among Kirghiz, Uzbeks, and in the chief towns. The people left to themselves would always elect men of influence and popularity—their former leaders—who, for obvious reasons, are not acceptable to the Russians, so that the system has degenerated into mere farce, and is viewed with contempt by the natives, the men chosen being merely the tools of Government.

The advent of the Russians in Central Asia has naturally made a great difference in many of the towns which, originally entirely Oriental in character and appearance, now present the curious contrast of European streets and squares, occupied by officials and their families in the unpicturesque garb of the Western world, side by side with the native towns, old, in some cases, with an age which makes such cities as York mere infants; trodden by countless generations of conquerors,—Macedonians, Scythians, Arabs, Persians, Mongols; and which have succumbed—is it for ever?—to a greater than these, a race from the West.

The further one penetrates into the heart of Asia the less has this modernising influence made itself felt; so that between Orenburg, which is really on the borders of civilisation, and Samarkand there is a wide gulf.

Perhaps one of the most typical towns under the new *régime* is Tashkent, the capital of the province of Turkestan and a city of very ancient origin. Mention is made in the 7th century by a Chinese traveller of a city, either on the same spot, or near the site of the present one.

Briefly, its history up to a certain point is the story of the struggle between the two sovereigns of Bokhara and Samarkand, and when both were subdued by the Tartar chief, Genghiz Khan, it remained in the possession of his descendants until reconquered by a Khan who ruled over both Bokhara and Samarkand. Then came the Kirghiz, who held it for more than a hundred years, till it fell before an enterprising ruler of Zungaria, and after a short time achieved a semi-independence, being alternately overlorded by Khokand and Bokhara. It was in the struggle with Khokand that General Tchernaieff, fearing that Tashkent would fall into the hands of the hostile Amir of Bokhara, to whom the inhabitants—between Scylla and Charybdis—had appealed for help, invested the city with a comparatively small army, and being fortunate enough to kill the Regent of Khokand in the first engagement and to cut off the water supply of the city, entered by two gates simultaneously, chased the Khokandians and Bokharans out of the city, and received the unconditional surrender of the natives. The Russian rule was firmly established, and order maintained by native police, who still seem to work well under their new masters.

A Russian colony, with the Governor-General in his palace as the centre, and the usual military and civil officials and their families, has now its own quarter, side by side with the quaint Oriental town of Tashkent. The little houses of Russian merchants and officials are whitewashed, trim, and neat; the governor's palace has an ornamental garden round it, laid out in artificial lakes and little hills and dales, where a military band plays every evening. There are stiff public buildings, a wide square, an ugly little church, and a new improved bazaar has been erected at great cost, which has, however, entirely failed in its object of drawing the trade of the town from the native quarter, and so subjecting it more completely to Government influence. The natives did not take kindly to this arrangement, and the trade of Tashkent is still carried on in the old bazaar, which has probably existed in much the same form for hundreds of years.

The bazaar is a most important feature of life in all Oriental countries, and, as all bazaars in Central Asia have a family likeness, that of Tashkent will serve as a very fair type. No changes or improvements have been effected in it since the Russian occupation. The street, as the gate is neared, grows narrower, and little shops cluster on either side; in the bazaar itself it is exceedingly narrow, rough, and ill-paved. A very favourite method of paving in Central Asia is by laying large blocks of stone, between which are channels of mud in winter, and in summer of thick white dust. Over these the Kirghiz bumps along on his camel, quite unconcerned, and if the pedestrian does not keep carefully to the raised side-walk of mud he may be knocked over or jostled by these camels. The shops are small wooden huts of one or, at most, two rooms,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000bf

مكتبة قطر الوطنية
Qatar National Library

the front of which is taken down bodily to show the interior. In the centre, on a mat, the seller sits cross-legged, or perhaps it is a manufacturer with his tools in hand. Round him are displayed his wares, and there is little room for his customers, who must stand outside to do their bargaining. There is none of the hurry and bustle of European shopping; the merchant displays no undue eagerness to sell his goods, and the buyer is equally self-possessed and leisurely. Theoretically there are thirty-two different trade guilds, which must be represented in the bazaar; practically there are more. Each guild is supposed to have thirty-two branches, and each must have a different shop; thus, in brass-working (sometimes very beautifully done) one will make the bowl or ewer, another the bottom, another the lid, a fourth will solder them together, while at a fifth, with a sharp chisel, the decoration is worked out. Almost every trade has its own street, the shops on either side being devoted to shoe, or harness, or crockery-making in all their different branches.

The Kirghiz have a special quarter of their own in the great bazaar of Tashkent, and here is sold the really beautiful felt made by the women, also coarse carpets and other articles of nomad manufacture. Here and there are arched gateways, behind which are caravanserais, some used by local merchants for storing their goods, and others as hostelries for foreigners. Here the merchandise lies about in piles, the camels and horses stabled around the sides of the court, while overhead the merchants "live, move, and have their being," in an atmosphere which is, luckily, peculiar to bazaars.

Every Mussulman city, to be *en règle*, must have a "Jumma," or mosque, large enough to hold all the inhabitants on Fridays. Looking from the platform of the mosque in Tashkent (whence the mullah calls to prayers), one sees apparently nothing but a flat clay plain, beyond which rises a hill with another mosque, and the domed roof of a bath. This plain is composed of the mud roofs of the bazaar, for the streets are so narrow that one can only see them from below, and as the roofs are often overgrown with grass and poppies, this adds to the illusion. The barber's shop is also the chemist's, and here soap—very unpleasant in smell—is sold, and also the cosmetics which a good Mussulman lady is enjoined to use in order to preserve her beauty and so please her husband.

The natives of Tashkent are mostly Uzbeks, with a few Tadjiks, Tartars, Kirghiz, Hindoos, and others who come to trade. The population is difficult to gauge, but is probably over 120,000.

The Hindoos are the great money-lenders of Central Asia, and have their own caravanserais in most towns, but under Russian rule, unlike that of the English in India, land does not pass by sale or mortgage into their hands. The Jews are also numerous, and have enjoyed greater freedom (little though that be now) since the advent of the Russians. Formerly in many towns they were confined to a certain quarter and treated with much contempt, having very few civil or municipal rights, and being compelled to wear a girdle of common rope as a badge of their nationality.

Cotton and silk goods, of course, occupy a large portion of the bazaar, and in the booths one can see the men at work with their rough machines of wood, dexterously manipulating reels and turning spindles. The embroidery of robes is also done by men, and is in very great demand, the robe or material being stretched over a wooden hoop, the pattern roughly chalked, and the work executed with a kind of crochet-needle, with which the silken thread is pulled into a chain-stitch. There is no liquid measure in Central Asia, everything being reckoned by weight, and the standard varies in almost every town. The coins also, the most common of which is known as the *tenga*, have different values in different parts. The Russians have tried to regulate this, and are introducing their own money, which now passes current all over Central Asia.

The native houses of the better class in Tashkent, as in other Central Asian cities, have three, or at least two, courts. The first, if there are three, is used as a stable for the animals, which are accommodated in sheds round the sides. The second is the man's court, on two sides of which are the balconies of the house; while a third, frequently, has a sort of platform, used as a terrace, where the master and his friends sit to get the full benefit of the air. The house generally contains one large room, opening on the portico—the guest-chamber, with one or two smaller ones opening into it. The doors are often beautifully carved, and instead of hinges they hang on a sort of pivot let into the lintel and threshold. Windows, as a rule, there are none, but a small open space above the doors, with lattice-work let in, either open or covered with white paper, glass being still uncommon in the typical native house. The ceilings are very curious and

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00003f

مكتبة قطر الوطنية
Qatar National Library

sometimes strikingly pretty, being composed of small round willow boughs set in between the rafters, and picked out in colours, with an occasional touch of gold. The walls are plastered and frequently painted with pictures of fruit, flowers, or small arabesques, and there are numerous niches with arched tops which act as shelves, on which are stored books, clothes, crockery, or food. There is usually very little furniture, unless the merchant has become bitten with the craze to imitate the Russians, in which case there are cheap tables and chairs of a conventional type imported from Russia, for such things are not made in Tashkent. The truly native house, however, contains little but rugs and mattresses, with perhaps a small round table, or a carved or painted wooden cupboard. The women's quarters are very much the same in arrangement and furniture, except that they may have a broad bed—the *charpoy* of India—made of a wooden frame with a network of ropes, raised a few feet from the floor. The usual bed is merely a rug or a thin mattress stretched on the ground. In many of the rooms a small basin is let into a corner of the floor, with a jug standing by, for the numerous ablutions required by the Mussulman's religion.

The merchant who lives in this house is attired in a pair of loose white trousers made of cotton, and tied round his waist with a cord and tassels. His shirt, also of light-coloured cotton, is very long, with a small slit for the neck, and wide sleeves; over this he wears a *tchapan*, or two or three, according to the weather. This garment is a long coat, cut very sloping at the neck, and with enormous sleeves, much too long for convenience, but satisfying the Asiatic sense of propriety, which requires that the hands be covered. The *tchapan* is of cotton or silk in summer, often striped or patterned in the most gorgeous colours; in winter one gown will be made of cloth and lined with fine sheepskin or fur. A scarf or small shawl is twisted round the waist, and a turban, either of striped cotton or, if the wearer is a *mullah* or distinguished for piety, of white material is wound round the head over a little embroidered skull cap.

The dress of the women is very similar, but their gowns are more often of silk, and many strings of beads, gold, and gems are worn round the neck, with bracelets, anklets, hair ornaments, and sometimes nose-rings. Outside they wear a thick veil of woven horsehair and a dark-blue or green cloak with long sleeves. The class of women who go abroad unveiled is such that even Jewesses and others, whose religion does not demand it, cannot venture out without these hideous garments. This applies, however, only to the purely Mussulman cities. In the east, where the Buddhist element is strong, an unveiled woman is occasionally seen, while the custom has never obtained among the Kirghiz and other nomad tribes, whose Mohammedanism is even less than skin deep.

Although there are hotels in Tashkent, and in many other Central Asian towns, they are by no means according to Western ideas of comfort, resembling in arrangement the caravanserai already described. The food of the country is mutton, mutton, mutton! In the town there is some attempt to vary the method of cooking; but, as a rule, the dishes are too greasy and insipid for European palates. Wine can be got in Tashkent, imported from Russia, at fabulous prices, but the native drink is green tea, black tea having been only introduced by the Russians, and this is sometimes thickened with cream or melted tallow, and sometimes flavoured with a small dried lemon.

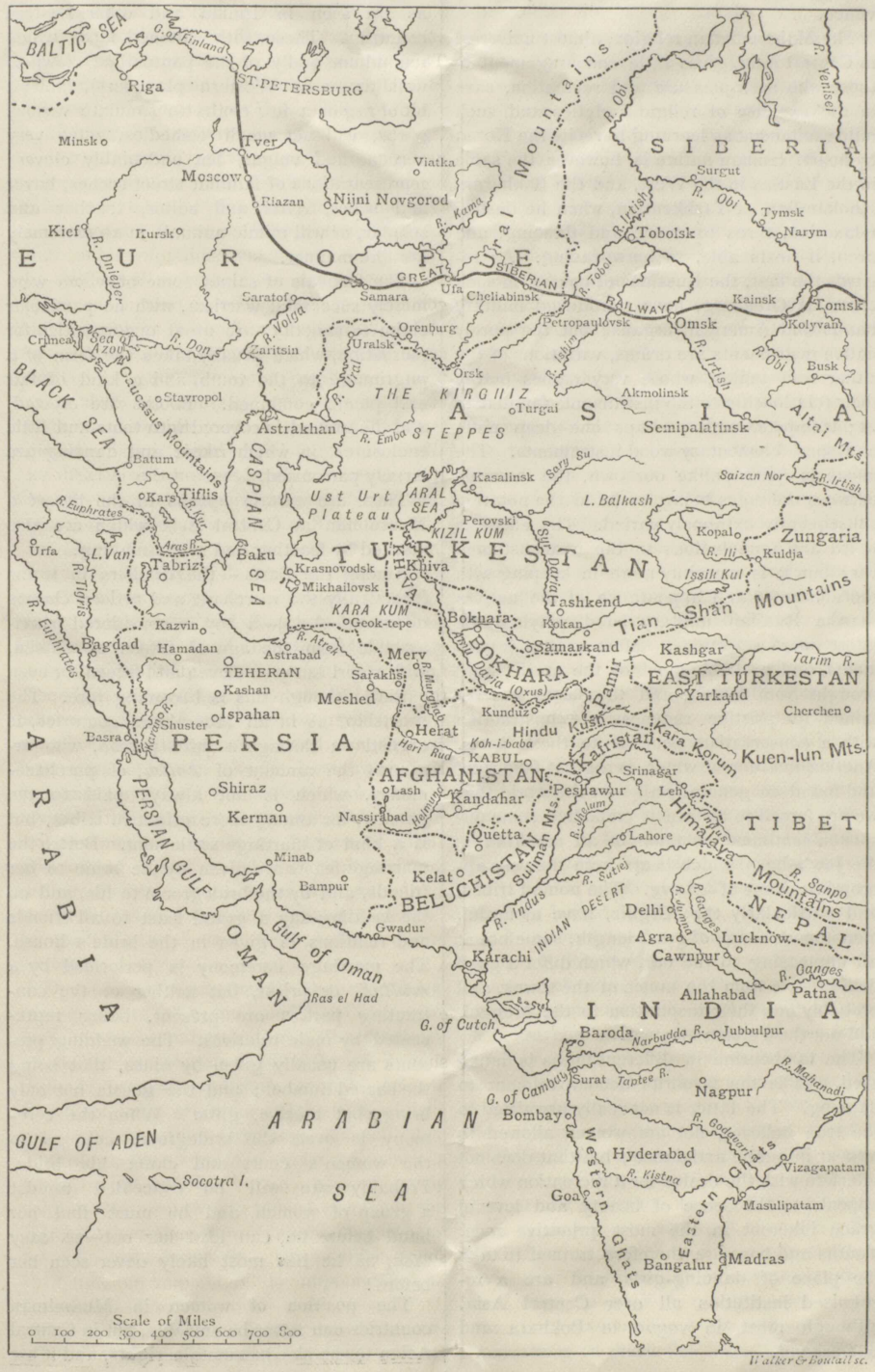
The walls of Tashkent are said to have been sixteen miles round, but were largely demolished by the Russians to make barracks and parade-grounds. Outside these walls and the gardens surrounding them is the open steppe, over which are dotted numerous villages, mostly inhabited by either Tartars or Kirghiz, the races who mingle in the city keeping apart here. One is a sort of summer residence for the governor and his little court, and at another is a large establishment for the breeding and improvement of horses, nominally a private enterprise, but in reality subsidised by Government, which realises the importance of a plentiful supply of horses from a strategical point of view.

Altogether, Tashkent is a curious and typical example of East meeting West. The modern Russian soldier and his Paris-dressed wife rub shoulders with the Usbek or Kirghiz, whose ancestors were Khans and Beks in this country at a time when Russia was a mere congeries of half-savage States; or with the Mongols, whose warrior kings in the days of old not only conquered Russia, but a great portion of the then known world; or with the Tadjiks, of almost prehistoric origin, former owners of the soil, who were dispossessed by Kirghiz and Mongol alike, but still retain their individuality. All these varying peoples have accepted the yoke of their Western conquerors. The Oriental is, above all, a fatalist, and he recog-

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000077

مكتبة قطر الوطنية
Qatar National Library

nises the inevitable wave of Russian advance.

The Mohammedan religion, almost universal in Central Asia, gives little encouragement to those who seek pleasure and recreation, save in the exercise of religious duties and such mild excitement as learning to recite the Koran by heart. Human nature is, however, the same in the East as in the West, and the Bokharan, Khokandian, or Tashkentian, when he desires relaxation, turns to music and dancing, and even, if he is able, to horse-racing. As regards the first, the Russians of course, in such cities as Orenburg, have introduced military bands and American organs; but the purely native instruments are drums, variations of the zither and guitar, whose very names betray their relationship to the instruments familiar to us; trumpets, with perhaps one deep note, and some elementary wood instruments. The music is quite unlike our own, the intervals between the notes being less, and the notation consequently extremely varied. The effect is weird and unmelodious to the unaccustomed ear; but it is certainly more in keeping with the character and appearance of the natives than a Russian military band playing the latest opera selections. Most of the instruments, and probably much of the music, were brought from Persia, and the latter has retained its pristine rudeness of construction with a conservatism peculiar to these parts. Another instrument which is a great favourite, and found so generally all over the world that we are forced to believe it embodies some unspoken sentiment common to all mankind, is the Jew's-harp, which bears here the very appropriate name of *tchang*. The nomad tribes, and particularly the Kirghiz, have mournful, monotonous songs of great length, some not at all unpleasing to the ear, which differ a good deal in style from the music of the towns, and probably owe their inspiration to the Mongol, and not the Persian element.

The tambourine in different forms is much used, and is the favourite accompaniment to dancing. The latter is not really permitted to the true believer, nor are women allowed to appear in public and dance; but that does not interfere with the desire for a recreation which appeals to the sense of beauty and love of grace inherent in the most primitive race. Youths and boys are therefore trained to take the place of dancing-girls, and are a recognised institution all over Central Asia, although most in vogue in Bokhara and Samarkand.

Besides dancers, there are comedians, such as are seen in Indian and other Eastern countries. These, with whitened faces (which remind one oddly of the pantomime clown so well known to Western playgoers), and a bit of rag or a few cloths to simulate various garbs, will act small comedies, often very obscene and vulgar, but undeniably clever; representations of familiar street scenes, buyer and seller, *Kazi* and suitor, teacher and scholar, or will mimic animals in an extremely life-like manner.

The festivals of saints, some of whom were merely successful warriors, with no particular claim to sanctity, are great opportunities for recreation, which usually takes the form of a pilgrimage to the tomb, and a kind of fair and picnic combined. Booths are erected, and the ground is covered with tents and little enclosures, in which music and dancing are largely patronised.

There are certain epochs in the life of a Mussulman in Central Asia which are also marked by feasting and merry-making.

Among the Sarts — the dwellers in towns (practically the merchant and artisan classes of Central Asia)—a boy is considered marriageable from the age of fifteen or sixteen, and a girl between eleven and fifteen, or even earlier, although this is becoming rare. The courtship, as in all Mussulman countries, is carried on through a third person, who arranges the amount of *kalim*, or purchase-money, which is not always paid to the parents, as among more primitive tribes, but is a kind of marriage settlement. Before the marriage feasts are given by the bride to her friends, and by the bridegroom to his, and on the wedding-day a grand feast to all friends and relations is given in the bride's house. The marriage ceremony is performed by a *mullah*, or priest, but neither of the contracting parties are present, being represented by male relatives. The wedding presents are usually given by nines, that being the sacred number; and the guests not only bring, but receive, gifts. When the ceremony is over, the bridegroom can go to the women's court and claim his bride. Probably she will be concealed amidst a group of women, and he must find her hand before he can lead her out—no easy task, as he has most likely never seen her before!

The position of women in Mussulman countries can never be enviable, but in Central Asian towns she has certain rights, and if her

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000079

مكتبة قطر الوطنية
Qatar National Library

husband does not provide for her in the way his means allow, or that by rank she is entitled to, she can complain to the *Kazi*, or judge, a native functionary who in many places has been allowed by the Russian conquerors to continue in his former position. The *Kazi*, if he think fit, can empower her to borrow money on her husband's account, or even sell his property to obtain what she wants. Divorce is, however, easy for the husband, who need give no reason, but must, if he parts with her, return to his wife all her belongings. She can also obtain a divorce if she can show good reason; and there is no obstacle to her re-marriage unless her husband curses her, as he may if she has been guilty of any heinous crime.

The nomads naturally cannot afford the feasts which are the great indulgence and dissipation of the Sarts. Still, they have their own idea of amusements, and foremost among these are horse-racing and a game played on horseback called *Kok-bura*, or "grey wolf." The latter reminds one of polo, if one can imagine polo played on a vast steppe, with sometimes as many as a hundred players. One man has a dead kid slung from his saddle-bow, and the object of the others is to bear away this kid and carry it safely to the judge. The skill of the Kirghiz in managing their horses, and the keen zest with which they enter into the game, make it very exciting and interesting to watch. As for horse-racing, it is a passion with all the nomads; and camel-racing is also popular, the ungainly beasts being sometimes driven by women or girls. The number of entries for a single horse-race got up at Orenburg not many years since was over a thousand. Rather a difficult post must be that of starter on a Central Asian race-course!

The Russian Government does everything in its power to foster the breeding of horses—a very important matter in such a vast territory, where the maintenance of order is largely dependent upon irregular mounted troops. There are large studs for cavalry and artillery remounts in the Orenburg district and Turkistan; but, indeed, wherever a Cossack is found, there will be horses. These hardy soldiers, themselves only second cousins to the Kirghiz whom they have subdued, are, like the nomads, born horsemen; but, unlike them, they take an interest in the improvement of their breed of horses.

Travelling in Central Asia is usually accomplished either on horseback or in a cart resembling the Russian *taratass*, and is neither comfortable nor speedy unless good animals have been procured. The Russian post-roads in Central Asia are not level *chaussées*, but merely show the direction of the track, which is marked out by post relays, and a few settlements and towns. The posting stations are generally kept by a rich Cossack, who manages this in addition to farming and keeping an inn. He has to provide by contract a certain number of post-horses and *telegas*. The postal communications are under the control of a *smoitritel*, usually an old soldier, who examines all the passports, and has also to see to the replenishing of the inevitable *samovar*, getting a few copecks for his trouble. The station has a bare whitewashed room for the convenience of travellers, containing little furniture but a table, some wooden stools, and the tea apparatus. Sometimes the posting station is a Kirghiz tent, and in past days not unfrequently consisted of nothing but a water-cask and a post besmeared with Russian colours. The *telega*, or posting car, is a small open wooden cart, scarcely five feet in length, resting on four small wooden wheels, and running on two wooden axles. In the steppes the wheels frequently have neither metal rims nor boxes, so that the axles catch fire in spite of being perpetually greased. A feather and a jar of grease are an essential part of a traveller's equipment, and he must personally and at short intervals superintend the greasing if he wishes to avoid a break-down and the serious consequences. On the front box of the *telega* the coachman, or *jemschtchik*, is perched, and the traveller must make a seat of a bundle of straw, or his bag lashed to the cart. To this he must stick as closely as he can, while the Cossack horses gallop madly with the *telega*, which is innocent of springs, across the trackless steppe, over streams and hills and trunks of trees. The traveller after a few days of this sort of journey is almost deprived of feeling, indeed of any sensation, and those unaccustomed to it require some time to recover; yet the couriers, who carry important despatches, travel so night and day for several days, only waiting at each posting-station for tea, while fresh horses are brought. Innumerable glasses of tea, a few biscuits and eggs, frequently form their diet on the journey, and sometimes not even this. The difficulty of transporting troops and arms in such a country and for such distances may readily be imagined, and it is marvellous to think that Tamerlane traversed

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003d

مكتبة قطر الوطنية
Qatar National Library

these deserts with a million men. Modern armies, with their elaborate organisation—especially intricate commissariat and ambulance—can never accomplish what has been done in the past on many occasions by hordes of nomad horsemen; subsisting like the hardy animals that carried them on what they could pick up on the almost barren steppe—roots, dried meat, or a bird shot and hastily cooked.

One of the most characteristic features of life in all parts of Central Asia is the custom of present giving, which has attained proportions undreamt of in Western lands, though even there it is still an important factor in social life. Presents in Central Asia are by no means voluntary or spontaneous, being given and received as a matter of course, and it is not customary to return thanks for gifts until one is congratulated on receiving them, when thanks must be returned — not for the gift, but for the congratulations. They would become a serious tax were it not that whoever receives a present must promptly give one in return. Among the Kirghiz (who carry the custom to great lengths, despite the fact that their only wealth consists practically of the tent they live in and their flocks), etiquette demands, for instance, that at a funeral feast every mourner that attends must receive a present; but then he must always bring one with him, and the two must be of equal value, so that the proprieties are satisfied, and no one is either loser or gainer in this game of forfeits. Amusing stories are told of gifts sent to each other by the rulers of the various Khanates, in pre-Russian days, which eventually found their way back to the original sender. This system in Central Asia is a great nuisance to a stranger, who, wishing to join at all in social life, is confronted at the outset by what seems an overwhelming tax on his resources and ingenuity. A native who offers the smallest civility or present—a bunch of grapes or flowers—will remark, as he does so, "*Sillau keryak*"—a present is necessary.

All over Central Asia we find traces of a civilisation so old that it has been entirely forgotten, and nothing remains to tell us what were the races who dwelt there, or how they fell from their high estate. On the north bank of the Syr Daria, all along the valley, are numerous ruins which mark the site of former cities; and legend says that this district, now a wilderness with an occasional Russian fort or small half-savage town, was once so densely populated that from Kashgar to the Sea of Aral "the nightingale could fly from branch to branch, and the cat walk from house-top to house-top." No investigations have as yet given a clue as to the identity of the once busy dwellers in this fertile valley, nor why their towns fell into decay. The country is quite capable of supporting a population; in summer, plants and flowers of many varieties bloom on the steppes, and the brush which grows on the river banks forms a cover for quantities of pheasants, geese, partridges, and other game.

Nearly all the tribes who, until the Russian era, possessed the soil in Central Asia, date themselves back to Genghiz Khan; but an account of his conquests, given by a Chinese statesman who accompanied that warrior during his progress West, in the early years of the 13th century, gives a description of many towns which existed then and are still standing, such as Hodjent, Samarkand, and Bokhara. It is almost certain that Central Asia was never under a homogeneous rule. Genghiz Khan, sweeping from east to west, gathered up all the little tribes, and destroyed many ancient kingdoms; but he immediately divided his immense territories between his sons, and they, when their turn came, did likewise, so that the family of Genghiz became a sort of hereditary aristocracy over the whole of Central Asia. Thus, among Kirghiz, Kara-Kirghiz, Kalmuks, Uzbeks, and all tribes which have any of the Mongol element, the "white bones" still love to boast of their descent from the conqueror.

When one considers the numbers of races which have met, amalgamated, or in many cases simply settled down side by side in Central Asia, one cannot be surprised at a certain amount of confusion in their method of reckoning time. Simplest of all, the Kirghiz, having no era from which to date their years, use a twelve-year cycle, and give to each cycle the name of an animal, the names being arranged in a certain sequence. The day of the year is not regarded at all, every one born in the same year being considered as of the same age. The Kirghiz day is divided into four parts—sunrise, eating-time, midday, and sunset. Seven days make a week, or *atna*, while the year is divided into twelve solar months, bearing names corresponding to the signs of the zodiac in Arabic. This calendar is far more complete and sensible than that now being introduced by Russia — the Julian, which is already more than twelve days out of its reckoning. Besides these zodiacal names, the Kirghiz,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000038

مكتبة قطر الوطنية
Qatar National Library

like all simple people, have given titles to the months descriptive of their occupations at different times of the year; and, much as the English labourer talks of sowing-time, harvest, and hay-harvest, the nomad speaks of lambing-time, mare-milking season, and the slaughtering season. The Kirghiz are well acquainted with the stars, by which they steer their path in the desert, as well as using them to calculate time. The same solar year, with twelve months named after the zodiacal signs, is in use among all agriculturists, the months having in Tashkent alternately thirty and thirty-one days, while the last month has in ordinary years only twenty-nine, with an extra day every four years. In other cities, another system is adopted, rather less regular, and containing one month of thirty-two days and two of twenty-nine—a method common to agriculturists in Persia as well as Central Asia, and in the former country also used by Government in the assessment of taxes. A rhyme, resembling our own "Thirty days hath September," is commonly used in both countries to keep the different days of the month in the memory. There is also the ordinary Mussulman calendar, consisting of a lunar year, used in all religious documents and by the educated classes generally, and since the Julian calendar has been introduced by the Russians, great confusion has inevitably ensued.

Such, briefly, are the conditions of life and main characteristics of the people of Russian Central Asia, who, by their incorporation into the great Russian Empire, have acquired an importance which could never have been theirs while they remained broken up into a number of petty States. Never, since the short period of the ascendency of Genghis Khan, has Central Asia been united under a homogeneous rule. I have not time to enter into details of the methods adopted by Russia in managing this vast territory, but it is sufficient to say that her rule, though quasi-military, is on the whole beneficent; and that although she makes little attempt to civilise, she partly, no doubt for that very reason, succeeds in securing the peace of her new, and at first unwilling, subjects. An unswerving policy, merciless to all signs of revolt, coupled with very little interference in their lives and habits, is the golden key of Russia in her dealings with the conquered; and with this she has not only opened the gates of Central Asia for herself, but has effectually locked them against every other Power.

The question of communications is one which is never absent from the schemes of Russia. What she has already done to link the far distant parts of her possessions to their sovereign and head cannot be recapitulated in this paper, nor have I time to describe the measures which are being taken in Central Asia itself. It is enough to say that Russian lines made by Russians for Russia now run longitudinally across Asia, from Moscow to the China sea, from Batum in Transcaspia to the western gates of the Chinese Empire, and to the Herat province, the key of Afghanistan, which is the outwork of India. New lines will soon join her present Trans-Caspian system with the European-Russian railways and thus provide alternative routes to the present inconvenient transhipment across the Caspian. The importance of these railways in a practically riverless country does not need to be emphasized, and the rate at which these lines are carried out, especially that through Kusk southwards, shows what importance Russia attaches to railway communications.

DISCUSSION.

The CHAIRMAN said Mr. Colquhoun had so closely confined himself to ethnographical and geographical information that it was rather difficult to discuss the paper, without touching upon some of those larger questions which he had judiciously avoided, though he felt sure he held very decided views upon them. He had referred in one place to a proverb which showed that at one time the country from Tashkent to the Sea of Aral was thickly inhabited, and said there was no explanation of how those towns fell into decay. It appeared to him that the greater part of Central Asia belonged to the comparatively rainless belt which stretched right across Asia and Africa, and that the secret of its fertility and prosperity was largely a matter of irrigation. He imagined that in such countries, irrigation had always been the affair of the Government, and he would ask if it was not the case that after the first prosperous period of Mussulman conquest, few Governments had been sufficiently energetic and permanent to maintain those systems of irrigation by which the country was at one time made prosperous and populous. The practical interest in the question of Central Asia arose from the necessity which was laid on Great Britain to fulfil her responsibilities and maintain her position in India, and from the probability that the constant advance of Russia across these regions, and her gradual absorption of these various tribes must, sooner or later, lead to a conflict for supremacy in Asia between Russia and England. These feelings were at the back of all their minds when these questions were discussed, and could not be suppressed. For this

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000067

مكتبة قطر الوطنية
Qatar National Library

reason he regretted to find that the paper was limited to Russian Central Asia, as there seemed a possibility of Russian expansion very much further to the East, beyond the Pamirs, towards the high tableland between the Khokandland Mountains and the Himalayas, and he wished Mr. Colquhoun had gone a little into the ethnology of that district, and shown the connection between that part which was now Russian and the region further East, to which, in all probability, Russia was directing her eyes. He had been much struck with the passages referring to the Russian administration, of which a sample was the statement that no change was to be observed in the bazaars of Tashkent since the Russian occupation. He would like to ask if that was typical of the Russian administration, for as all who had been in India were aware, the British administration could not be charged with that sort of neglect. You could not go into a bazaar in India without seeing—not great changes in the ways and customs of the natives, but the beneficent results of the British system, not merely in preserving order, but in facilitating trade and business. In another passage a contrast was drawn between the two systems, which was favourable to the Russian, which did not allow—as the English did in India—the land to pass into the hands of mere moneylenders. No greater weakness existed in the position of Great Britain in India than that due to the fact that especially in the Panjab and the north-west, owing to the introduction of the English system of law and mortgages, the Hindoo moneylenders were much strengthened in their position. Previously the country had been somewhat disturbed, and the farmers could not borrow to any serious extent. Under the protection of British law, the land became more valuable, and the farmers were able to borrow more largely; after a few years the farmer found he could not pay, and then the moneylender produced his mortgage and got possession of the land. Thus the native farmer, who was a Mussulman and an admirable soldier, was in too many cases dispossessed by the moneylender, who was not a soldier, and was not particularly attached to British rule. In some parts of India this had been the cause of widespread discontent, and many were hoping that some change would be effected during the present vice-royalty.

Mr. F. H. Skrine said he had listened to the paper with great interest, because he had travelled in Central Asia himself, and last year in collaboration with Mr. Denison Ross, wrote a book called "The Heart of Asia," in which they described the scenes related by Mr. Colquhoun. He could bear testimony to the accuracy of his description in the main, but noticed one or two minor inaccuracies. Mr. Colquhoun referred to Kuldja as being within the tropics; he was not quite sure of the latitude, but it was at a great elevation, and was as healthy as any part of Europe. The speaker had seen at Samarcand, Askabad, and other Central Asian towns, Russian colonists from Kuldja who looked the picture of health; but that did not apply to all parts of Central Asia. His friend, General Kurapatkine, the Minister of War, had founded thirteen or more military colonies towards the frontiers of Afghanistan, which had proved failures; the children were ricketty and the men took to drink, and he believed it was in contemplation to break them up or move them eastwards. Again, it was said that no good coal was found in that region, but he had seen in the museum at Samarkand lumps of coal equal to the best Welsh, and was told by a young Scotchman, who has settled there, that mountains of coal of the finest quality were to be found in the valley of the Zerafshan. There were also other minerals, and he believed there was a veritable Klondike lying buried in the mountains beyond Samarcand. They had heard a great deal about the Khirghiz, but, in his opinion, they were not nearly so interesting a race as the Turkomans, who had a nobility of character and mien which recalled their ancestors, the Parthians, who at one time set the whole empire of Rome at defiance. Amongst them women had a high position; they were treated as equals, and bore the mark of independence in their queenly gait. With the Turkomans alone in Central Asia did women take their proper place, and it would be a great loss to civilisation if a type like that were allowed to perish. The Russians had found it necessary to show great severity in putting down signs of Turkoman independence, and the result was that they were disappearing like the red men described by Fenimore Cooper. Another matter for regret was the disappearance of the Turkoman horse, which within living memory was superior to any animal ever foaled for his endurance, docility, and affection for his master. The breed was now dying out, because the raids in which it were so important a feature had been sternly repressed. The horses now bred in Central Asia were very poor creatures indeed, and, in fact, the Cossacks were mounted on ponies from the Caucasus and the Don. He was pleased to see that Mr. Colquhoun had shown an impartial spirit in dealing with the Russian administration. He (Mr. Skrine) had gone from the bottom almost to the top of the Civil Service in Bengal, and had governed millions in his time, so that he went to Central Asia with some knowledge of how to manage Oriental races; and his impression was that the Russian Government was beneficent, and sought the well-being of the subject peoples. Many mistakes, of course, had been made. With regard to the Kirghiz, it was unfortunate that the native chieftains had been superseded by a sham system of election; but those chieftains had too much power for an autocratic Government. With regard to Turkestan proper he must say the Russian administrators had shown a sympathy and consideration for the people, such as was only to be paralleled in British India, the administration of which he believed was to a great extent copied. In India

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000027

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

we still had the school of John Lawrence, Henry Montgomery, and many others; and in Russia there was a class of men of the same characteristics, called the school of Abramoff, after whom was named a boulevard in Samarcand, and who had left a grand reputation behind him in Central Asia. The district officers and subordinates were about on a par with the same class of men in India, and the people of Central Asia were, on the whole, about as happy as those in our own territory. He had no doubt that the change in climate referred to was largely due to defective irrigation. In 1780 Merv was the most glorious city in Central Asia. The stems of vines there were as thick as a man's body, they bore tons of grapes, and the fields yielded four or five crops a year—all owing to enormous irrigation works; but when the Amir of Bokhara invaded it in 1780 he destroyed the grand embankment across the river above Merv, and the whole country went out of cultivation. He had ridden over miles and miles of desert, like the Sahara, but scattered with ruins, and no doubt the same process had been at work elsewhere. About the time of our Queen Elizabeth the river Oxus suddenly changed its course, and many thousands of square miles, formerly watered by it, became a hopeless desert.

Mr. E. E. THORBURN said you could not have irrigation without water, and you could not have water without rain, and according to his reading, the reason why Central Asia was desiccated, was that owing to the cutting down of the forests and other causes, the rainfall had very much decreased. With regard to the Chairman's remark about the passing of agricultural land in the Punjab to professional moneylenders, chiefly Hindoos, he might say that there was every probability of a law being passed this summer at Simla, under which the power of alienation by agriculturists to non-agriculturists would be limited to a period of 15 years, after which the land would return to the family of the alienor.

Mr. MARTIN WOOD referring to the Chairman's remarks as to what was in everybody's mind when thinking of the advance of Russia in Central Asia, said he thought the present paper tended to confirm the opinion, now thoroughly established, that whereas Russia was impregnable to us in Central Asia, so we in India were impregnable to Russia. With regard to the aridity of the country, it was generally acknowledged that want of rain was owing to want of forests, and the origin of this desiccation must be the destruction of the forests by conquerors and the improvidence of the people. He was glad to hear from Mr. Skrine that coal existed there, and also to hear his remarks on the Turkomans. They must all regret the manner in which these were massacred by their Russian conquerors, but he thought that much the same kind of treatment was applied to the Khirghiz as early as 1870.

Mr. COLQUHOUN, in reply, said in the present paper it was not open to him to enter upon the questions of policy and politics, in which he was especially interested; and in discussing these countries and peoples, the line of demarcation was so very indistinct, that it was difficult to say where Central Asia ended and the neighbouring countries began, and one had therefore to be all the more cautious. It was very difficult not to stray into subjects of much more vital interest; and, as the Chairman had indicated, the real point of interest lay not in the countries of which he had been speaking, but in the Central Asia which was gradually approaching India, making its way steadily, year by year, down to the Persian Gulf, and which had already made its way across thousands of miles to the Far East, and had now firmly established itself in the China seas, and was driving a wedge right through the whole Chinese empire. But these questions were not within the scope of the paper; he could only indicate briefly his conviction that if Russia was as busy as she could be in pushing forward her railways, the object was not simply pacific and commercial, but strategic. No one in his sober senses who had been in those regions, or who took a map of Asia and tried to recall the stages of the Russian advance, could bring himself to believe that the object of this rapid expansion could be anything but a political one. With regard to the question of irrigation, no doubt many parts of this region were very prosperous at one time, and the Russians themselves entertained the hope that by means of irrigation they might be restored to their former fertility. Mr. Thorburn, the distinguished author of "Our Asiatic Neighbours," had rightly indicated that irrigation would be extremely difficult in Central Asia. The conditions were very similar to those in another part of the world, in which great interest was taken just now, viz., South Africa, where in the great central plateau reaching from Cape Colony to the Zambesi and again northwards, the timber which once existed had been cut down or wasted by fire, and the deficient rainfall had not enabled it to be replaced. Afghanistan and Persia were outside of his subject, but he must remind them that Russia, though not actually in occupation of Herat, was near it, and was making her way south, yet the whole of this movement did not seem to attract any attention in this country. It seemed inevitable under our political system that the country could only give its attention to one thing at one time, and while we were engaged in South Africa most important events occurred elsewhere which no one seemed to notice. Amongst these were what was now happening in the north of China, in the neighbourhood of Japan, and in Central Asia, as well as what was being accomplished by the partner of France in Morocco. He had no desire to make too much of the contrast between the Russian and British modes of administration, but there was a great difference. He did not think that

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000b8

مكتبة قطر الوطنية
Qatar National Library

Russia had done much for the education and improvement of the natives, such as Britain had done for India, but he quite agreed with the Chairman, that the English policy in the north-west provinces with regard to moneylenders had not been altogether wise, and that we had alienated to a large extent the sympathies of the people on the frontier, the real fighting backbone of India. No one who had been in India could doubt the impolicy of this. The moment we lost the confidence of the fighting races, we should find it extremely hard to hold our own; and the Hindoo moneylenders, although glib of speech and clever, had no military instinct. He was not sure that the fact of a specimen of coal being found in a museum was proof that it could be found in payable quantities in the country. Coal might exist, but so far it had not been worked, and the Russians reckoned this one of the great drawbacks to the country. Mr. Skrine's comparison of the disappearance of the Turkomans to that of the Red Indians was very apt; they were probably one of the most interesting races in that part of the world, though he was not aware that they possessed all the fine qualities Mr. Skrine had attributed to them. Russia was not the only Government which, under somewhat similar conditions, neglected to preserve a breed of horses. There was not a country in the world, except Central Asia, where horses could be bred and reared so well as in South Africa, and yet we had seen a force of 240,000 men there kept idle for weeks, if not months, for want of horseflesh. He had received great courtesy and kindness from the Russian officials, but he did not take quite the same view of them as Mr. Skrine. No doubt wherever they went they replaced the existing system by something rather better, but it was a very different system from that introduced by our countrymen into India. There was no liberty of the Press or of speech, and, however well the country might be administered it was by a despotic and autocratic Power, and under such rule you could not expect officials to be what Anglo-Indian officials were, working under a free constitution. The Government of India had made many mistakes, and was still making them, but the endeavour was always to elevate and educate the native. In Russia they did nothing of the sort; they simply ruled for their own advantage. He could not subscribe to the theory propounded by Mr. Martin Wood, for he was quite certain England was not impregnable in India, and unless measures were taken to arrest the Russian advance through Central Asia to the Persian Gulf and the Indian Ocean, there would be grave difficulties in the future. Russia might be impregnable in the heart of Central Asia, but when she came towards the Persian Gulf and to the China Seas he did not think she was at all impregnable.

The CHAIRMAN then proposed a cordial vote of thanks to Mr. Colquhoun, which was carried unanimously, and the proceedings terminated.

TRANS-SIBERIAN RAILWAY.

According to *L'Economiste Français* the length of rails laid down in nine years amounted to 3,356 miles, which gives an average of 373 miles per year. Communication will be established this year between the European continent and Vladivostock, partly by rail and partly by steamship; the time occupied for the journey will be about 17 days. The total length of the Trans-Siberian railway, including the line from Manchuria, will be 5,512 miles.

MEETINGS FOR THE ENSUING WEEK.

MONDAY, JUNE 4...Royal Institution, Albemarle-street, W., 5 p.m. General Monthly Meeting.

TUESDAY, JUNE 5...Royal Institution, Albemarle-street, W., 3 p.m. Mr. R. Warwick Bond, "Ruskin, the Servant of Art."

Anthropological, 3, Hanover-square, W., 8½ p.m. Dr. J. G. Garson, "The Metric System of Identification used in Great Britain" (illustrated with lantern slides).

WEDNESDAY, JUNE 6...Geological, Burlington-house, W., 8 p.m.

Archæological Association, 32, Sackville-street, W., 8 p.m.

Obstetrical, 20, Hanover-square, W., 8 p.m.

Archæological Institution, Oxford-mansion, Oxford-street, W., 4 p.m.

THURSDAY, JUNE 7...Linnean, Burlington-house, W., 8 p.m. 1. Mr. E. S. Goodrich, "A Viviparous Syllid Worm." 2. Dr. A. Staff, "The Genera Phæconeuron Gilg and Dicellandra Horkf." 3. Miss Embleton, "The Structure and Affinities of Echiurus Unicinctus."

Chemical, Burlington-house, W., 8½ p.m. 1. Mr. W. S. Mills, "Diphenyl and dialphyl-ethylene-diamines, their nitro-derivatives, nitrates, and mercurochlorides." 2. Dr. S. Ruhemann and Mr. H. E. Stapleton, "Condensation of ethyl acetylenedicarboxylate with bases and β-ketonic esters." 3. Dr. H. A. D. Jowett, "The constitution of pilocarpine." 4. Drs. F. D. Chattaway, K. J. P. Orton, and W. H. Hurtley, "The nitrogen chlorides derivable from m-chloroacetanilide and their transformations." 5. Dr. A. Lapworth, "Derivatives of cyanocamphor and homocamphoronic acid."

Royal Institution, Albemarle-street, W., 3 p.m. Rev. Canon Ainger, "Chaucer." (Lecture III.)

United Service Institution, Whitehall-yard, S.W., 3 p.m. Mr. A. R. Colquhoun, "The Great Trans-Siberian Railway."

FRIDAY, JUNE 8...Royal Institution, Albemarle-street, W., 8 p.m. Weekly Meeting. 9 p.m. Dr. A. Macfadyen, "The Effects of Physical Agents in Bacterial Life."

Astronomical, Burlington-house, W., 8 p.m.

Physical, Chemical Society's Rooms, Burlington-house, W., 5 p.m. 1. Dr. S. W. Richardson, "The Magnetic Properties of Iron and Aluminium Alloys" (Part II.). 2. Mr. W. Campbell, "Note on Crystallisation produced in Solid Metal by Pressure." Dr. C. H. Lees, "The Viscosity of Mixtures of Liquids and of Solutions."

SATURDAY, JUNE 9.. Botanic, Inner Circle, Regent's-park, N.W., 3¾ p.m.

Royal Institution, Albemarle-street, W., 3 p.m. Sir Frederick Bridge, "The Growth of Chamber Music." (Lecture III.)

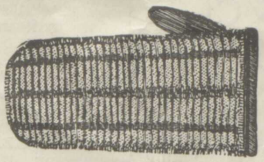
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

DINNEFORD'S FLESH GLOVES

IMPART A NATURAL VIGOUR TO THE NERVOUS SYSTEM, AND STRENGTHEN WEAK LIMBS.



PREVENT AND RELIEVE GOUT AND RHEUMATISM, WITHOUT RISK OF INJURY TO THE MOST DELICATE SKIN.

DINNEFORD & CO., 180, NEW BOND STREET, LONDON, W.

ENTERED AT STATIONERS' HALL

HALF GUINEA ALE

SOUND — NUTRITIOUS — INVIGORATING

WALTHAM BROS. LTD.

BROWN STOUT 2/6 doz & 3/- NURSING STOUT

Bottled at THE BREWERY STOCKWELL.S.W.

GUARANTEED BREWED ONLY FROM MALT & HOPS

SOCIETY OF ARTS,

JOHN STREET, ADELPHI, LONDON, W.C.

34 pages. Price One Shilling.

REPORT OF THE COMMITTEE ON THE EXHIBITION OF ACETYLENE GENERATORS,

AT THE

IMPERIAL INSTITUTE, 1898.

WITH SEVEN APPENDIXES.

Appendix A.—List of Firms to whom Certificates have been granted.
,, B.—Origin of Exhibition.
,, C.—Rules for Admission of Apparatus.
,, D.—Methods adopted for Testing Apparatus.
,, E.—Diagram of Generators with Descriptions.
,, F.—Report of Prof. Vivian Lewes on Results of Experiments.
,, G.—Legislation relating to Calcic Carbide and Acetylene.

CANTOR LECTURES.

The CANTOR LECTURES on ACETYLENE, recently delivered before the SOCIETY OF ARTS, by PROFESSOR VIVIAN B. LEWES, have been reprinted in a separate form, price One Shilling, and can be obtained from the Secretary, Society of Arts, John-street, Adelphi, London, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000013

مكتبة قطر الوطنية
Qatar National Library

WALL-PAPERS.

WM. WOOLLAMS & CO.



WALL-PAPERS,
FREE FROM ARSENIC.
SOLE ADDRESS:—
110, HIGH STREET
(near Manchester-square),
LONDON, W.

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

CANTOR LECTURES.

Dwelling-houses: their Sanitary Construction and Arrangements. Six Lectures. By Prof. W. H. CORFIELD, M.A., M.D. (1879.) Price 2s.

Recent Advances in Telegraphy. Five Lectures, By W. H. PREECE, F.R.S. (1879.) Price 2s.

Some Points of Contact between the Scientific and Artistic Aspects of Pottery and Porcelain. Five Lectures. By Prof. A. H. CHURCH, M.A., F.C.S. (1881.) Price 1s.

Watchmaking. Three Lectures. By EDWARD RIGG, M.A. (1881.) Price 1s.

Scientific Principles involved in Electric Lighting. Four Lectures. By Prof. W. GRYLLS ADAMS, F.R.S. (1881.) Price 1s.

Art of Lace-making. Four Lectures. By ALAN S. COLE. (1881.) Price 1s.

Colour Blindness. Three Lectures. By R. BRUDENELL CARTER, F.R.C.S. (1881.) Price 1s.

Some of the Industrial Uses of the Calcium Compounds. Four Lectures. By THOMAS BOLAS, F.C.S. (1882.) Price 1s.

Recent Advances in Photography. Four Lectures. By Capt. ABNEY, R.E., F.R.S. (1882.) Price 1s.

Book Illustration, Old and New. Three Lectures. By J. COMYNS CARR. (1882.) Price 1s.

Solid and Liquid Illuminating Agents. Six Lectures. By LEOPOLD FIELD, F.C.S. (1883.) Price 1s.

Decorative Treatment of Metal in Architecture. Three Lectures. By GEORGE H. BIRCH. (1883.) Price 1s.

Some New Optical Instruments. Two Lectures. By J. NORMAN LOCKYER, F.R.S. (1884.) Price 1s.

The Use of Coal Gas. Three Lectures. By HAROLD B. DIXON, M.A. (1885.) Price 1s.

Climate in its Relation to Health. Three Lectures. By G. V. POORE, M.D. (1885.) Price 1s.

Chemistry of Pigments. Two Lectures. By J. M. THOMSON, F.R.S.E., F.C.S. (1885.) Price 1s.

Carving and Furniture. Four Lectures. By J. HUNGERFORD POLLEN. (1885.) Price 1s.

Photography and the Spectroscope. Two Lectures. By Capt. ABNEY, R.E., F.R.S. (1885.) Price 1s.

Manufacture of Toilet Soap. Three Lectures. By C. R. ALDER WRIGHT, D.Sc., F.R.S. (1885.) Price 1s.

Distribution of Electricity. Three Lectures. By Prof. GEORGE FORBES, F.R.S., M.A. (1885.) Price 1s.

Science Teaching. Three Lectures. By Professor FREDERICK GUTHRIE, F.R.S. (1886.) Price 1s.

Art of Tapestry-making and Embroidery. Three Lectures. By ALAN S. COLE. (1886.) Price 1s.

Friction. Four Lectures. By Professor H. S. HELE SHAW. (1886.) Price 1s.

Disease of Plants. Six Lectures. By J. L. W. THUDICHUM, M.D. (1887.) Price 1s.

Machines for Testing Materials, especially Iron and Steel Three Lectures. By Prof. W. C. UNWIN, F.R.S. (1887.) Price 1s.

Chemistry of Substances taking part in Putrefaction. and Antisepsis. Four Lectures. By JOHN M. THOMSON, F.R.S.E. (1887.) Price 1s

Alloys. Three Lectures. By Prof. W. CHANDLER ROBERTS-AUSTEN, F.R.S. (1888.) Price 1s.

Our Milk, Butter, and Cheese Supply. Three Lectures. By RICHARD BANNISTER, F.I.C., F.C.S. (1888.) Price 1s.

Elements of Architectural Design. Four Lectures. By H. H. STATHAM. (1888.) Price 1s.

Bacterial Purification of Sewage. Four Lectures. By Dr. SAMUEL RIDEAL, F.I.C. (1889.) Price 1s.

Cycle Construction and Design. Four Lectures. By ARCHIBALD SHARP, M.Inst.C.E. (1899.) Price 1s

Leather Manufacture. Four Lectures. By Prof. HENRY R. PROCTER, F.I.C. (1899.) Price 1s.

Energies of Gravity, Vitality, Affinity, Electricity, Light, and Heat, especially with Reference to the Measurement and Utilisation of them. Seven Lectures. By the Rev. ARTHUR RIGG, M.A. (1873.) Price 2s.

PRICE ONE SHILLING.

REPORT OF THE CONFERENCE ON

CANALS AND INLAND NAVIGATION.

Held by the Society of Arts on Thursday and Friday, May 10, 11, 1888.

PRICE ONE SHILLING.

REPORT OF THE SOCIETY OF ARTS' MOTOR TRIALS

HELD IN 1889.

With a Paper by Prof. A. B. W. KENNEDY, F.R.S.,

"On the Objects and Methods of the Society of Arts' Motor Trials."

To be obtained on application to the SECRETARY, Society of Arts.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000024

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

EDUCATIONAL.

KING'S COLLEGE, LONDON.

The General Education of King's College, London, is conducted in several distinct but connected Faculties and Divisions, viz.:—

I. **THE FACULTY OF THEOLOGY.**
1. Morning Course. 2. Evening Course.

II. **THE FACULTY OF ARTS** (including General Literature, Secondary Teachers' Training Course, Day Training College, and Oriental Studies. Day and Evening Classes).

III. **THE FACULTY OF SCIENCE.**
Consisting of: A. THE DIVISION OF NATURAL SCIENCE (including the Department of Bacteriology. Day and Evening Classes). B. THE DIVISION OF ENGINEERING, ARCHITECTURE, AND APPLIED SCIENCES (Day and Evening Classes).

IV. **THE FACULTY OF MEDICINE** (including the Hospital and the Department of Public Health).

V. **THE DEPARTMENT FOR LADIES** (carried on at 13, Kensington Square).

VI. **KING'S COLLEGE SCHOOL** (established at Wimbledon Common).

VII. **THE CIVIL SERVICE & COMMERCIAL DEPARTMENT.**
1. Strand School, suitable for Commerce and the Civil Service.
2. Evening Classes for the Civil Service; Day Classes for Female Appointments in G.P.O.

A separate Prospectus is prepared for each of these Faculties and Departments, and will be forwarded on application to the SECRETARY, King's College, Strand, W.C.

THOUSANDS have Benefited by our well-known method of improving

BAD WRITING

Marvellous Changes Effected. Individual Tuition in Book-keeping, Typewriting, Shorthand, Languages, &c., for the Society of Arts Examinations.

SMITH & SMART (ESTAB. 1840), **59, Bishopsgate Within.**

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

CANTOR LECTURES.

The following Cantor Lectures, delivered before the Society of Arts, have been published separately, and may be obtained at the Society's House, John-street, Adelphi, W.C.

Photographic Chemistry. Three Lectures. By Professor R. MELDOLA, F.R.S. (1891.) Price 1s.

Pigments and Vehicles of the Old Masters. Three Lectures. By A. P. LAURIE, M.A. (1891.) Price 1s.

Mine Surveying. Three Lectures. By B. H. BROUGH, F.G.S. (1892.) Price 1s.

Developments of Electrical Distribution. Four Lectures. By Prof. GEORGE FORBES, F.R.S. (1892.) Price 1s.

Recent Contributions to the Chemistry and Bacteriology of the Fermentation Industries. Four Lectures. By Prof. PERCY F. FRANKLAND, Ph.D., F.R.S. (1892.) Price 1s.

The Practical Measurement of Alternating Currents. Four Lectures. By Prof. A. J. FLEMING, M.A., D.Sc., F.R.S. (1893.) Price 1s.

Heat Engines other than Steam. Four Lectures. By H. GRAHAM HARRIS, M.Inst.C.E. and M.E. (1889.) Price 1s. 6d.

Instruments for Measuring Radiant Heat. Four Lectures. By C. V. BOYS, A.R.S.M., F.R.S. (1889.) Price 1s.

The Decoration and Illustration of Books. Three Lectures. By WALTER CRANE. (1889.) Price 1s.

Light and Colour. Four Lectures. By Capt. W. de W. ABNEY, C.B., R.E., F.R.S. (1889.) Price 1s.

Egyptian Tapestry. Two Lectures. By ALAN S. COLE. (1889.) Price 1s.

Modern Developments of Bread-making. Three Lectures. By WILLIAM JAGO, F.C.S., F.I.C. (1890.) Price 1s.

Colour and Colouring. Three Lectures. By Prof. A. H. CHURCH, M.A., F.R.S. (1890.) Price 1s.

Design applied to Wood-carving. Three Lectures. By LEWIS FOREMAN DAY. (1890.) Price 1s.

Stereotyping. Three Lectures. By THOMAS BOLAS, F.R.S., F.I.C. (1890.) Price 1s.

Gaseous Illuminants. Three Lectures. By Professor VIVIAN B. LEWES. (1891.) Price 1s.

Electric Transmission of Power. Three Lectures. By GISBERT KAPP, C.E. (1891.) Price 1s.

Generation of Light from Coal Gas. Four Lectures. By Prof. VIVIAN B. LEWES. (1893.) Price 1s.

Mosaic: its History and Practice. Two Lectures By C. HARRISON TOWNSEND, F.R.I.B.A. (1893.) Price 1s.

Detection and Estimation of Small Quantities of Inflammable Gas or Vapour in the Air. Four Lectures. By FRANK CLOWES, D.Sc., F.I.C. (1894.) Price 1s.

Photometry. Three Lectures. By Captain W. DE W. ABNEY, C.B., F.R.S. (1894.) Price 1s.

Type-writing Machines. Two Lectures. By HENRY C. JENKINS, A.M.Inst.C.E. (1894.) Price 1s.

Explosives and their Modern Development. Four Lectures. By Professor VIVIAN B. LEWES. (1894.) Price 1s.

Means for Verifying Ancient Embroideries and Laces. Three Lectures. By ALAN S. COLE. (1895.) Price 1s.

Recent American Methods and Appliances Employed in the Metallurgy of Copper, Lead, Gold, and Silver. Four Lectures. By JAMES DOUGLAS. (1895.) Price 1s.

Commercial Fibres. Three Lectures. By Dr. D. MORRIS, C.M.G. (1895.) Price 1s.

The Arc Light. Three Lectures. By Prof. SILVANUS P. THOMPSON, D.Sc., F.R.S. (1895.) Price 1s.

Mechanical Road Carriages. Three Lectures. By W. WORBY BEAUMONT, M.Inst.C.E. (1895.) Price 1s.

Japanese Art Industries. Two Lectures. By ERNEST HART, D.C.L. (1895.) Price 1s.

The Alternate Current Transformer. Four Lectures. By Dr. J. A. FLEMING, F.R.S. (1896.) Price 1s

Precious Stones. Two Lectures. By HENRY A. MIERS, M.A., F.R.S. (1896.) Price 1s.

Applied Electro-Chemistry. Four Lectures. By JAMES SWINBURNE. (1896.) Price 1s.

Chemistry of Metals and Alloys Employed for Building and Decorative Purposes. Three Lectures. By Prof. J. M. THOMSON, F.R.S., F.C.S. (1896.) Price 1s.

Use of Gas for Domestic Lighting. Three Lectures. By Prof. VIVIAN B. LEWES. (1897.) Price 1s.

Industrial Uses of Cellulose. Three Lectures. By C. F. CROSS, F.C.S. (1897.) Price 1s.

Material and Design in Pottery. Four Lectures. By WM. BURTON, F.C.S. (1897.) Price 1s.

Alloys. Four Lectures. By Prof. W. C. ROBERTS-AUSTEN, C.B., F.R.S. Four Lectures. (1897.) Price 1s.

Design in Lettering. Four Lectures. By LEWIS F. DAY. (1897.) Price 1s.

Gutta Percha. Three Lectures, with Appendixes. By Dr. E. F. A. OBACH. (1898.) Price 2s. 6d.

Decorative Bookbinding. Three Lectures. By CYRIL DAVENPORT. (1898.) Price 1s.

The Principles of Design in Form. Four Lectures. By HUGH STANNUS. (1898.) Price 1s.

The Thermo-Chemistry of the Bessemer Process. Three Lectures. By Prof. W. NOEL HARTLEY, F.R.S. (1898.) Price 1s.

Electric Traction. Four Lectures. By Prof. C. A. CARUS WILSON. (1898.) Price 1s.

Acetylene. Four Lectures. By PROF. VIVIAN B. LEWES. (1899.) Price 1s.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000011

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

WERNER, PFLEIDERER, & PERKINS, LTD.,

(A. M. PERKINS & SON, LTD.),

ORIGINATORS OF PERKINS' WELL-KNOWN SYSTEM OF HEATING BY HOT WATER.



NEW PATENT DOWNWARD CIRCULATION

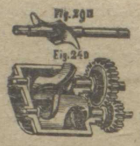
Which enables the Furnace to be placed on an Upper Floor.

IN USE AT 117, QUEEN VICTORIA STREET, E.C.

HEATING, COOLING, AND DRYING APPARATUS

FOR ALL PURPOSES.

THE "UNIVERSAL" KNEADING & MIXING MACHINE



FOR

BREAD, BISCUITS, CONFECTIONERY, MACARONI, MARZIPAN;
COLD CREAM, LANOLINE, PHARMACEUTICAL PREPARATIONS, PILL MASSES;
SMOKELESS GUNPOWDER, DYNAMITE, ELECTRIC CARBONS;
PUTTY, PAINT, GUTTA PERCHA, INDIA-RUBBER, &c., &c.

PATENT STEAM-PIPE OVENS, "DRAWPLATE" & "PEEL."

HEAD OFFICES & WORKS: REGENT SQUARE, GRAY'S INN ROAD, W.C.

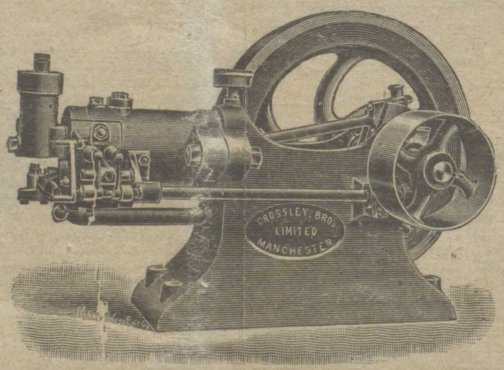
City Showroom:—117, QUEEN VICTORIA STREET, E.C.

Manchester Offices—18 Victoria Buildings, Deansgate. Bristol Offices—2, Colston Street.

Telegrams: Kneadingly," London.

CROSSLEY'S GAS ENGINES.

Recently Re-modelled.



Great Reduction in Gas Consumed.

Represents J type.

Giving 1½ effective h.p.

CROSSLEY BROS., LIMITED,

OPENSHAW, MANCHESTER.

All communications respecting Advertisements should be addressed to Messrs. Street Bros., 164, Piccadilly, London, W.

London: Printed by WILLIAM TROUNCE, at his office, No. 10, Gough-square, Fleet-street, in the Parish of St. Dunstan, in the County of Middlesex, and published for the Society of Arts, by GEORGE BELL AND SONS, York-street, in the Parish of St. Paul, Covent-garden, in the City of Westminster, June 1, 1900.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

No. 2,527. VOL. XLIX.] APRIL 26, 1901. [Price 6d. To Non-Members.

JOURNAL

OF THE

SOCIETY OF ARTS

PUBLISHED EVERY FRIDAY.

CONTENTS.

Notices:—The Council.—Cantor Lectures.—Practical Examinations in Music 417
Indian Section:—The Greek Retreat from India, by Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B.—Discussion. 417
Sixteenth Ordinary Meeting:—Patent-law Reform, by Alex. Siemens.—Discussion 431
Meetings of the Society 444
Meetings for the Ensuing Week 444

LONDON:
PUBLISHED FOR THE SOCIETY BY GEORGE BELL AND SONS, YORK STREET, COVENT GARDEN.

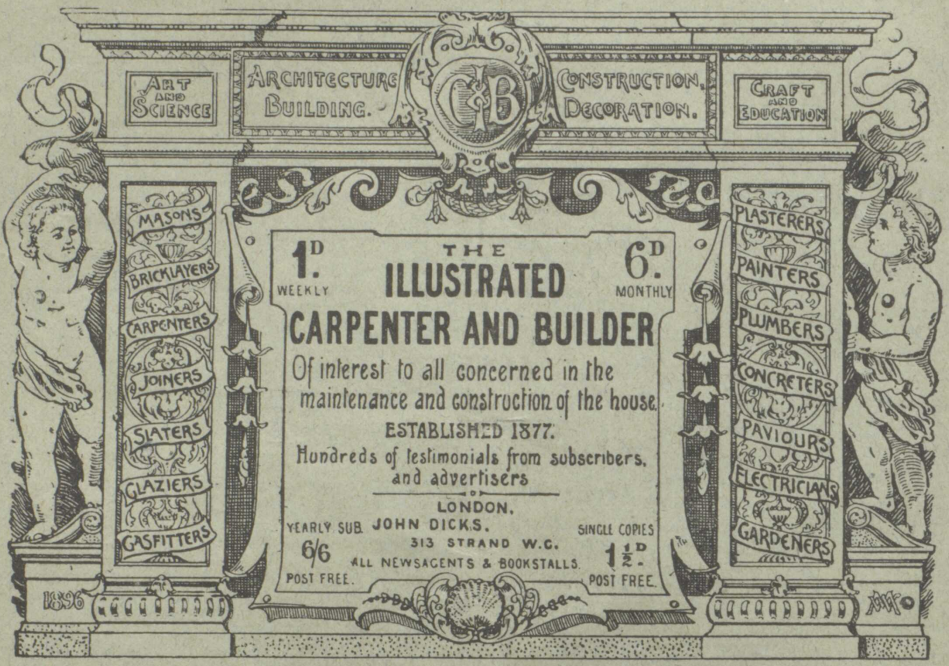
1901.

Registered as a Newspaper.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000005

مكتبة قطر الوطنية
Qatar National Library

ESTABLISHED OVER TWENTY YEARS.



BEST MEDIUM FOR ADVERTISEMENTS.

The Builder.
April 27, 1901.

ILLUSTRATIONS.
NORWICH INSURANCE OFFICES (Competition Design). Prior Park, Bath.
SKETCHES AT WHITBY. Street Architecture of Bath.

ORIGINAL ARTICLES, REPORTS, &c.
A NEW DICTIONARY OF ARCHITECTURE.
The Eighteenth Century Architecture of Bath (Architectural Association).
THE BUILDING TRADES EXHIBITION. The New Gallery.
SANITARY FITTINGS & PLUMBING (Student's Column).

Price FOURPENCE.

OFFICE:—CATHERINE STREET, LONDON, W.C.

ESTABLISHED 1851.
BIRKBECK BANK
Southampton Buildings, Chancery Lane, London, W.C.
CURRENT ACCOUNTS 2% on the minimum monthly balances, when not drawn below £100. 2%
2½% DEPOSIT ACCOUNTS on Deposits, repayable on demand. 2½%
STOCKS AND SHARES.
Stocks and Shares purchased and sold for customers.
The BIRKBECK ALMANACK, with full particulars post free
FRANCIS RAVENSCROFT, *Manager.*

HOWARD LECTURES.
Conversion of Heat into Useful Work.
BY WILLIAM ANDERSON, C.B., D.C.L., F.R.S.
75 pp. PRICE 2s. 6d.

JUST PUBLISHED. Price 2/6, by Post 2/9.

GUTTA PERCHA,
A Course of CANTOR LECTURES recently delivered before the Society by
DR. EUGENE F. A. OBACH, F.I.C., F.C.S., M.I.E.E.
Reprinted with Additional Matter and Illustrations.
Society of Arts, John Street, Adelphi, London, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00003a

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

JOURNAL OF THE SOCIETY OF ARTS.

FRIDAY, APRIL 26, 1901.

TABLE OF CONTENTS.

PROCEEDINGS OF THE SOCIETY.

Notices:—The Council.—Cantor Lectures.—Practical Examinations in Music ... 417

Indian Section:—The Greek Retreat from India, by Colonel Sir Thomas Hungerford Holdich, K.E., K.C.I.E., C.B.—Discussion ... 417

Sixteenth Ordinary Meeting:—Patent-law Reform, by Alex. Siemens.—Discussion ... 431

MISCELLANEOUS.

Meetings of the Society ... 444

Meetings for the Ensuing Week ... 444

ADVERTISEMENTS.

The Board of Trade Journal,

EDITED BY THE COMMERCIAL DEPARTMENT OF THE BOARD OF TRADE.

Chief Contents for this Week are:—
OPENINGS FOR BRITISH TRADE.
British Trade with France.
BRITISH *VERSUS* FOREIGN ROLLING STOCK ON THE EGYPTIAN RAILWAYS.
The Trade of Madagascar in 1900.
RAILWAY PROGRESS IN JAPAN.
Sugar in 1900.
CHILEAN NITRATE IN 1900.
Tea Trade of the United States.
ZINC INDUSTRY IN THE UNITED STATES.
Also Tariff Changes and Trade Notes of importance to Merchants, Manufacturers, and Shippers.

PUBLISHED WEEKLY, PRICE ONE PENNY,
By EYRE & SPOTTISWOODE, East Harding-street E.C.,
And may be obtained through any Bookseller.

GLEANINGS FROM PATENT-LAWS OF ALL COUNTRIES.

By W. LLOYD WISE, F.R.G.S., Assoc.Inst.C.E., Fellow of the Chartered Institute of Patent Agents.
The first portion (now ready, price Two Shillings) contains Information as to the Patent-laws, Practice, Area, Population, Productions, &c., of 22 Countries.
"This work gives a great deal of information likely to be useful to inventors and owners of patents in a small compass."—*The Times.*
London: F. WISE-HOWORTH, 46, Lincoln's-inn-fields, W.C.

PATENTS.

G. F. REDFERN & CO.,
GENERAL PATENT OFFICE,
4, SOUTH STREET, FINSBURY, LONDON
(ESTABLISHED 1830).
British, Foreign, and Colonial Patents obtained at fixed and moderate charges. Designs and Trade Marks registered at home and abroad. Circular of information forwarded free on application. Telephone No. 691. Telegraphic address, "Invention, London."

TO INVENTORS.

HARRIS & MILLS, PATENT AGENTS, 23, Southampton-buildings, London, W.C. Established 1866. Provisional protection from £3 3s. Complete Patent for four years from £9 9s. A chart of 187 mechanical motions, with description of each, price 6d. Circular of Information Gratis. Cable address, "Privilege, London."

BARR'S SEEDS

Of Finest Selected Strains and Tested Growth.

BARR'S SEED GUIDE FOR 1901 contains a Select List of the best Vegetables and most beautiful Flowers. It is full of Practical Hints, and will be found invaluable to Gardeners, Amateurs, and Exhibitors.

Sent free on application.

BARR & SONS,
11, 12, & 13, King Street, Covent Garden, LONDON.

WM. & GEO. LAW.

—o—

COFFEE—SUGAR—TEA.

—o—

104, New Oxford Street, W.C.

"ABYSSINIAN" and ARTESIAN TUBE WELLS.

They have been sunk for the following TOWN WATER WORKS:—Abbots Langley, Aldershot, Alnwick, Burnham, Burnham-on-Crouch, Chepstow, Essenden, Hertford, Leatherhead, Lechlade, Midhurst, Rochford, St. Albans, Skegness, Slough, Southampton, Stony Stratford, Swansea, Uxbridge, Wallingford, Watford, West Brighton, West Worthing, Wimborne, Windsor, &c.

The most economical means for obtaining large or small

PURE WATER SUPPLIES.

LE GRAND & SUTCLIFF,
MAGDALA WORKS, 125, Bunhill Row, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00001d

مكتبة قطر الوطنية
Qatar National Library

CAMERA CLUB,

28, CHARING CROSS ROAD, W.C.

PRESIDENT:—SIR WILLIAM DE W. ABNEY, K.C.B., F.R.S., &c.

This Club offers every facility to Gentlemen practising or wishing to take up Photography. It comprises large and well-equipped Studio, Enlarging Room, Daylight Room, Arc Light Printing Room, Mechanical Workshop well fitted with lathe and machine tools, and numerous Dark Rooms, also apparatus for Photogravure and "X" Ray work, and a very complete Photographic Library. There are also excellent Dining Rooms, Billiard Room and large Smoking and Lecture Room, where papers on Photography and other subjects are given twice weekly during the season. The Subscription for Town Members is **£5 5s.**, Country **£2 2s.**, and Foreign **£1 1s.**

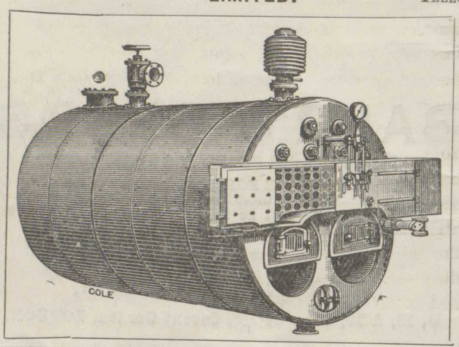
The Entance Fee is at present **£1**—but AFTER THE FIRST 100 MEMBERS ELECTED SUBSEQUENT TO THE 1st JANUARY, **1901**, IT WILL BE RAISED TO **£5.**

Every Facility is offered to Members of both Services desirous of Joining.

ADDRESS THE HON. SECRETARY, 28, CHARING CROSS ROAD, W.C.

DAVEY, PAXMAN & CO., LIMITED. ENGINEERS & BOILER MAKERS, COLCHESTER.

TELEGRAPHIC ADDRESS:—PAXMAN, COLCHESTER.



PAXMAN'S PATENT "ECONOMIC" STEAM BOILER.

THE "ECONOMIC" Boiler is one of the best Steam Generators for Efficiency, Economy, and Durability, and is being ADOPTED VERY LARGELY FOR CENTRAL ELECTRIC LIGHTING STATIONS, MILLS, AND FACTORIES, &c., WITH GREAT SUCCESS.

BOILERS MADE UP TO 200 lbs. WORKING PRESSURE.

ALL RIVET HOLES DRILLED.

Catalogues, and full particulars, with Photos and Prices, post-free on application.

London Office: 78, Queen Victoria St., E.C.

JUST ISSUED. LARGE 8vo, PAPER COVER, 42 pp.

THE REPORT OF THE COMMITTEE

OF THE SOCIETY OF ARTS ON THE

DETERIORATION OF PAPER.

WITH TWO APPENDIXES.

1. Abstracts of Papers on German Official Tests, 1885-96. 2. Precis of Correspondence.

The above Report, **PRICE 1s.**, can be obtained on application to the Secretary of the Society of Arts John-street, Adelphi, London, W.C

CHARLES FRODSHAM & Co., LTD.

Chronometers, Clocks, Watches, &c.,

Late of 84, Strand, Sole Makers of the Celebrated "CHAS. FRODSHAM" Watches. Only Address

115, NEW BOND STREET, W.,

and (Workshops) 11, Duke Street, Adelphi, W.C.
Illustrated Catalogue of Watches and Clocks Free.

—CHARLES FRODSHAM & CO.—

Beg to say that they are the only firm of the name of FRODSHAM honoured by the Royal Warrants of appointment to The Royal Family.

They have NO AGENTS.

Only Address—

115, NEW BOND STREET, W.

SPECIAL ADVANTAGES TO PRIVATE INSURERS

THE IMPERIAL

INSURANCE COMPANY, LIMITED.

FIRE.

ESTABLISHED 1803.

1, OLD BROAD-STREET, E.C.; 22, PALL-MALL, S.W., AND 47, CHANCERY-LANE, W.C.

Moderate rates. Undoubted security. Prompt and Liberal Settlement of Claims. Subscribed Capital, £1,200,000; Paid-up Capital, £300,000. Invested Assets (Capital and Reserves), over £1,500,000.

General Manager—E. COZENS SMITH.

TELEPHONE No. 1236 AVENUE.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000a8

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Journal of the Society of Arts,

No. 2,527. Vol. XLIX.

FRIDAY, APRIL 26, 1901.

All communications for the Society should be addressed to the Secretary, John-street, Adelphi, London, W.C.

Notices.

THE COUNCIL.

At their meeting on Monday, 22nd inst., the Council appointed Sir Owen Tudor Burne, G.C.I.E., K.C.S.I,, and Sir Owen Roberts, M.A., D.C.L., Treasurers of the Society, to fill the vacancies caused by the death of Mr. Francis Cobb, and the appointment of Sir Frederick Bramwell, Bart., F.R.S., as President of the Society. The Council also filled the vacancies thus caused in the Vice-Presidentships by the appointment of Sir William Abney, K.C.B., F.R.S., and Sir George Birdwood, K.C.I.E., C.S.I., M.D., as Vice-Presidents.

CANTOR LECTURES.

The first lecture of the course on "Alloys" was delivered on Monday evening, 22nd inst., by Sir William Chandler Roberts-Austen, K.C.B., F.R.S.

The second lecture, to be delivered on Monday, April 29th, will be fully illustrated by experiments on the use of metal as fuel.

The lectures will be published in the *Journal* during the autumn recess.

PRACTICAL EXAMINATIONS IN MUSIC.

The Practical Examinations in Vocal and Experimental Music will be conducted by Ernest Walker, M.A., Mus. Doc. Oxon., and Mr. Burnham Horner, Examiners, at the House of the Society, and will commence on Monday, 24th June.

The last day for receiving applications is Friday, 10th May.

Particulars can be obtained on application to the Secretary.

Proceedings of the Society.

INDIAN SECTION.

Thursday evening, March 18; Sir Dennis Fitzpatrick, K.C.S.I., in the chair.

The Secretary of the Section read a letter from the Earl of Hardwicke, expressing his regret that, owing to public business, he was unable to take the chair.

The paper read was—

THE GREEK RETREAT FROM INDIA.

By Colonel Sir Thomas Hungerford Holdich, R.E., K.C.I.E., C.B.

Early Indian history may be said to be written in a large book containing a curious intermixture of blank pages, of historical facts buried so deep under a load of mythological legend as to be beyond recognition by any but advanced Sanscrit scholars, and of very creditable and readable history, graphically and truthfully told, the style of which might well serve as a model to historians of all time. The legends are Sanscrit, the history is Greek, and the blank pages occur at uncertain intervals; but they are nowhere so blank as immediately preceding and after the most trustworthy history.

The history of Alexander's exploits, as told by several Greek historians, are those which stand out in clearest contrast to the myths of the earliest Sanscrit writings, or to the scholarly, though as yet incomplete, compilations derived from archæological or numismatic sources, which fill up uncertain intervals on the blank pages which occur between the records of Greek and Arab conquests.

It is to the Greek story that I now propose to call your attention, and it is Alexander's retreat from India that I propose to follow through districts once well known to classical and mediæval writers; but which have been buried for some centuries in geographical obscurity.

Although several Greek historians have concerned themselves with Alexander's career, it is mainly to one of them (Arrian) that for simplicity's sake I shall refer; and though many able scholarly writers in modern times have traced out his remarkable story with more or less precision through the phases of his advance into India and his conquests on the Indus, none of them have been able to account satisfactorily for the details given by Arrian of his retreat from India to Persia, for want of accurate geographical knowledge of the country he passed through.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000001

مكتبة قطر الوطنية
Qatar National Library

Several rather complicated problems in connection with that historic retreat have been unriddled in the course of surveying Makran, and much that it has been very difficult to reconcile to the general reputation for truthfulness of Arrian's history only requires a little patient examination into the inevitable physical changes of conformation which the north-western coast of India has undergone during twenty-two centuries to become explicable on fairly reasonable grounds.

We need not trouble ourselves now about the ethnographical features of Makran and Southern Baluchistan, though probably no corner of Asia presents such a focus of interest to the ethnographer as does this meeting place of almost all the representative races of the world. Aryan, Semitic, Dravidian or Turanian, Ethiopian and Negro, types of them all may here be found in close juxtaposition, and here be studied individually. These countries were well enough known to the Greeks. Herodotus writes of them 150 years before Alexander's time, including them in the 14th and 17th Satrapies of the Persian Empire, and he mentions tribes by name whose descendants may be traced under almost their old designations even to this very day. Alexander led Greeks into India, but Greeks had been at the gates of India before him; and those who have studied the manner of his entrance into the country have good grounds for conjecture that he selected an apparently haphazard route because it carried him to the north of the Hindu Kush and across the Kaoshan pass, within reach of Kyrenian settlements in Bactria.

But whilst we need not trouble ourselves with more than Arrian tells us of the people occupying the line of Alexander's retreat to Persia, we must give a little attention to the general configuration of the country, and to such changes in land and coast construction as we have been able to trace by the ordinary processes of surveying, without claiming any specially scientific basis of examination.

The difficulty of restoring to the map of India an outline of the ancient geography of Sind and the Indus delta is one which has baffled many generations of scholars. The vagaries of the river Indus, even within the limits of historic record, once flowing in a channel to the Rann of Katch, with a possible branch to the Bay of Cambay; at another time cutting its way under the frontier hills far to the west of Jacobabad; anon splitting the limestone ridges at Sukkur, with the very probable assistance of an earthquake, and taking to itself a new channel altogether; circling the walls of a great city like Hyderabad at one time, and then suddenly leaving it stranded and dry—changes such as these render this river, even before the delta is reached, a hopeless feature for reference with regard to the position of places said once to have been near its banks. Within the limits of the delta the confusion of hydrography becomes even more confounded, and until we possess a trustworthy map of the Indus riverain districts which will include some at least of the old delta channels, we must remain in the dark as to the real position of those branches of the river which Alexander explored from Patala, and of the shape and nature of those islands which were then accumulating to form the future delta. I shall follow General Haig's pamphlet in this part of my subject, believing him to have had the best opportunities for observing, as he has also the highest reputation for accuracy in recording his observations.

But when we pass beyond the limits of the plains of Sind and the Indus delta, westward, so long as we travel inland, there is not the same difficulty in deciphering ancient geography. From Alexander's days till now the "everlasting hills" have preserved their general conformation. Within these hills can we but identify certain obligatory points and the beginnings of a route, we can easily follow that route along recognised lines which have never shifted. We can trace Alexander's path with certainty if we can but identify some few landmarks here and there. It must be remembered that the Greek army which retreated from India did not all follow Alexander. The heavy baggage and the elephants, under the command of Krateros, followed an inland route from Sind to Kirman, about which we are told very little indeed. Another division of the Greek army under Nearkhos was conveyed on ships by the coast line to Persia and the Tigris, and about this voyage we are told much more than about Alexander's own movements. In spite, however, of the meagreness of information concerning the route taken by Krateros we can infer a great deal on the negative evidence that it was impossible for him to move heavy baggage or elephants except along certain lines: and again, in spite of the almost minute details with which we are favoured by Arrian about the ever-memorable voyage of Nearkhos, we find very great difficulty in identifying the exact ports, harbours, and coasting stations which he visited, on account of the shifting configuration of the coast line.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000025

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Not that the changes which have occurred on the coast line between Karachi and Persia are at all comparable to the remarkable transformation which has overtaken the Indus delta, but there are nevertheless many marked changes, especially on that part of the coast which is most subject to monsoon influences. Islands have disappeared wholesale in some parts; they are in the process of disappearing in others; here the coast has gained on the sea, whilst there the sea has appreciably deepened its soundings and lapped up the shore. On the whole, in spite of submerged islands, the land has gained on the sea. Apart from the Indus delta, which has consolidated and pushed out seaward to an extent which I believe to be greater than General Haig estimates, there has been immense land growth north of Karachi. At Karachi itself the port engineers will tell you of the difficulty that exists in keeping the harbour open; were artificial means of deepening the bar to be abandoned, four or five years of unchecked silting would destroy Karachi as an open port. Even now it is possible at low tide to walk out to the well-known Oyster rocks, once outside the harbour, and the recent lengthening of the pier opposite Clifton is quite practical testimony enough to the rapidity of shore growth at that point of the coast. I have reason to think that immediately north of Karachi the sea extended at no distant date far up the bed of the Liari stream. Following the coast westwards to Cape Monze there is probably little change in the last 2,000 years till we round that cape. Thence it is impossible to say what may have happened as far as the coast indentation at Bidok Lak. At any rate from Bidok Lak northwards there is a wide tract of very recent shore formation along which the road to Bela runs. But clearly no such road existed as late as the 10th century A.D. Sonmiani marks a sort of cul-de-sac for all monsoon currents. All about Sonmiani vast deposits of sand have accumulated which gradually, under the action of the south-west wind, have assumed the form of dunes, and have consolidated themselves along the coast (with the assistance of a scanty saline vegetation) into a natural bund or protection seawards. Only within the last few years the fishing town of Sonmiani has retired altogether from the coast. It is now impossible to approach that place except on the top of an exceptionally high tide. It is true that this is not due entirely to monsoon deposits of sand. Some ten years ago very heavy floods turned the local river, the Vindar, into a raging mud torrent, and at once there were mud deposits enough spread out in front of Sonmiani to reduce navigation to a matter of approach in shallow "dugouts." Twelve miles north of Sonmiani is a large depression (slightly under sea level) known as "Sirondha," which is usually a fresh water lake, but is occasionally quite dry. This was at no very distant date a commodious harbour, or arm of the sea, which has extended north in historic times at least as far as Liari and possibly further. South-west of Liari some of the land formation is probably very ancient as we shall see. Westwards along the Makran coast there are many indications of local changes, some of which will be noticed as we follow the course of Nearkhos in his Indus built ships. Enough has been said to justify some deviation from the track followed hitherto by Oriental scholars in tracing out the route of this memorable retreat.

About the beginning of September 326 B.C. Alexander left Patala with a part of his army to push his way through the country of the Arabii and the Oritæ to Gadrosia (or Makran) and Persia. The Arabii occupied the country between Karachi and the Purali—or river of Lus Bela—and the Oritæ and Gadrosii apparently combined with other tribes to hold the country that lay beyond the Purali—or Arabius. He had previously done all that a good general can do to ensure the success of his movements by personally reconnoitring all the approaches to the sea by the various branches of the Indus; by pacifying the people and consolidating his sovereignty at Patala so as to leave a strong position behind him entirely subject to Greek authority; and by dividing his force so as to utilise the various arms with the best possible effect. This force was comprised in three divisions, one under Krateros included the heavy transport and invalids, and this was despatched to Persia by a route which was evidently as well known in that day as it is at present. It is never contended by any historian that Alexander did not know his way out of India. On the contrary, Arrian distinctly insinuates that it was the perversity of pride, the "ambition to be doing something new and astonishing" which "prevailed over all his scruples" and decided him to send his crank Indus built galleys to the Euphrates by sea, and himself to prove that such an army led by "such a general" could force a passage through the Makran wilderness where the only previous records were those of disaster. He had heard that Cyrus and Semiramis had

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000091

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

failed, and that decided him to make the attempt.

We can follow Krateros no further than to point out that his route was probably by the Mulla (and not the Bolan) pass to Kalat and Quetta. Thence he must have taken the Kandahar route to the Helmund, and following that river down to the fertile and well-populated plains of lower Sistan (or Drangia) he crossed the Kirman desert by a well known modern caravan route, and joined Alexander at or near Kirman; for Alexander was "on his way to Karmania" at the time that Krateros joined him and not at Pura (the capital of the Gadrossii) as suggested by St. John. One interesting little relic of this march was dug up by Captain Mackenzie, R.E., during the construction of the fort on the Miri at Quetta. A small bronze figure of Hercules was brought to light, and it now rests in the Asiatic Society's museum at Calcutta, in testimony of the fact that some part of the heavy baggage was abandoned *en route*.

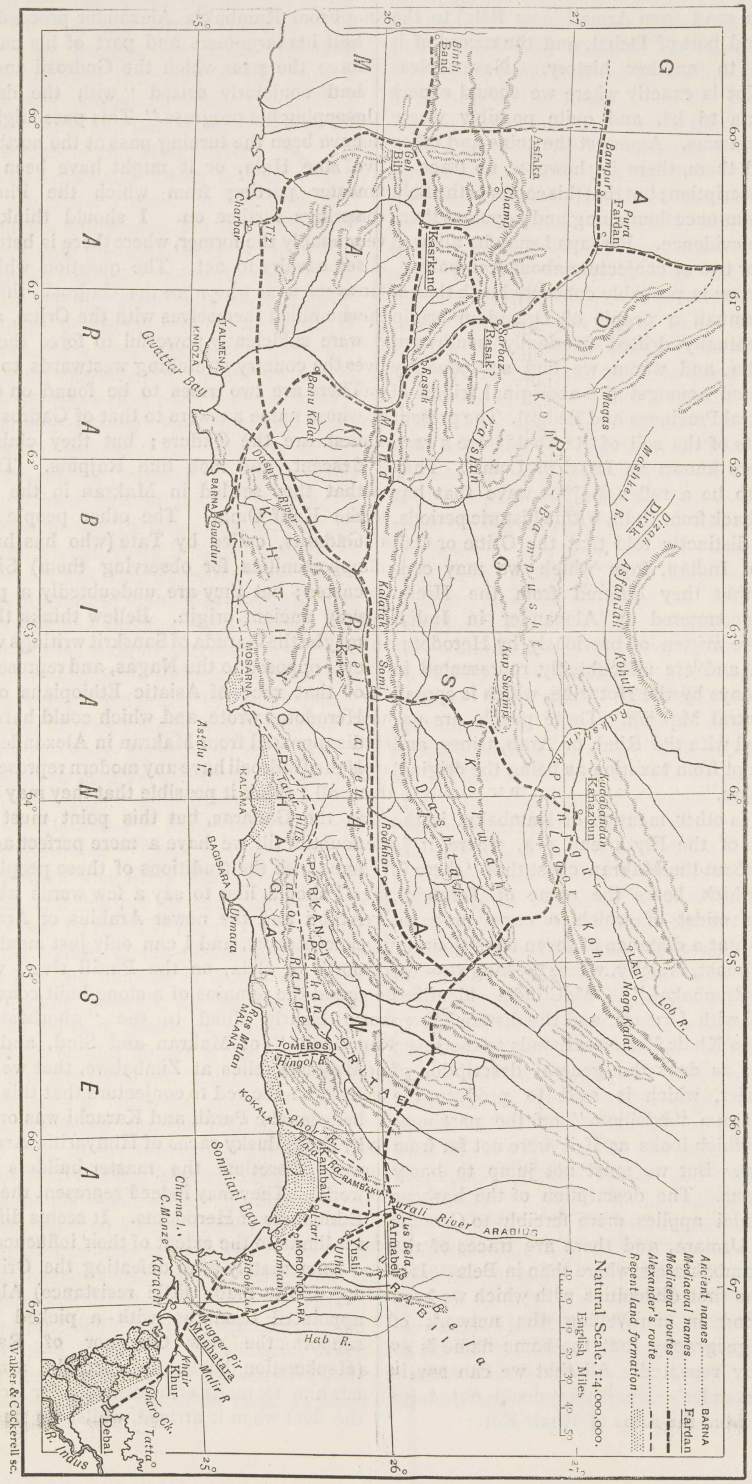
Alexander, as we have said, left Patala about the beginning of September. But where was Patala? This problem I leave to General Haig, and to Sir H. E. M. James, the late Commissioner of Sind, to decide. Probably it was neither Hyderabad (as suggested by General Cunningham) nor Tatta, as upheld by other authorities, but about thirty miles S.E. of the former and sixty miles E.N.E. of the latter, in which locality indeed there are ruins enough to satisfy any theory. From Patala we are told by Arrian that he marched with a sufficient force to the Arabius; and that is all. But from Quintus Curtius we learn that it was nine marches to Krokala (a point easier of identification than most from the preservation of the name which survived through mediæval ages in the Karak—the much-dreaded pirate of the coast—and can now be recognised in Karachi) and five marches thence to the Arabius. He started in cool moonsoon weather. His route, after leaving Krokala, is determined by the natural features of the country as then existing. There was, as I have already stated, no shore route in these days. Alexander followed the subsequent mediæval route which connected Makran with Sind in the days of Arab ascendancy, a route that has been used as a highway into India for nearly eight centuries. It is not the route which now connects Karachi and Lus Bela, but as it belongs to a later mediæval phase of history I will say no more about it than Arrian says. I have already pointed out that the sea extended at least to Liari, in the basin of the Purali or Arabius, and we are, therefore, obliged to locate the position of his crossing that river as being not far south of Bela; where in Alexander's time it was "neither wide nor deep," and in these days is almost entirely absorbed in irrigation. This does not, I admit, altogether tally with the five marches of Quintus Curtius. It would amount to over a hundred miles of marching, some of which would be heavy, though not very much of it; but the discrepancy is not a serious one. The Arabius may have been far to the east of its present channel—indeed, there are old channels which indicate that it was so, and it does not follow that the river was crossed at the point at which it was struck. The reason for placing this crossing so far north is that room is required for subsequent operations. After crossing we are told that Alexander "turned to his left towards the sea" (from which he was evidently distant some space) and with a picked force he made a sudden descent on the Oritæ. He marched one night only through desert country and in the morning came to a well-inhabited district. Pushing on with cavalry only he defeated the Oritæ, and then later joining hands with the rest of his forces he penetrated to their capital city. For these operations he must necessarily have been hedged in between the Purali and Hala range, which he clearly had not crossed as yet. Now we are expressly told by Arrian that the capital city of the Oritæ was but a village that did duty for the capital, and that the name of it was Rambakia. The care of it was committed to Hephæstion, that he might colonise it after the fashion of the Greeks. But we find that Hephæstion certainly did not stay long there—and could only have left the native village as he found it, with no very extensive improvements. It would be most interesting to decide the position of Rambakia. What we want to find is an ancient site, somewhere approaching the sea coast, say thirty or forty miles from the crossing of the Purali, in a district that might once have been cultivated and populous. We have found two such sites—one now called Khair Kot to the north-west of Liari commanding the Hala pass, and another called Kotawari south-west of Liari, and very near the sea. The latter has but recently been uncovered from the sand, but an existing mud wall, and its position on the coast indicate that it is not old enough for our purpose. The other, Khair Kot, is an undoubted relic of mediæval Arab supremacy. It is the Kambali of Edrisi on

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

692



Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000058

مكتبة قطر الوطنية
Qatar National Library

the high road from Armail (now Bela) to the great Sind port of Debal, and the record of it belongs to another history. Nevertheless Khair Kot is exactly where we should expect Rambakia to be, and quite possibly where Rambakia was. Amongst the coins and relics collected there, there is, however, no trace of Greek inscription; but that this corner of the Bela district was once flourishing and populous there is ample evidence. Perhaps I may be allowed a word or two of conjecture about Rambakia.

The name is probably connected with that of the Rhamnai, a people of Dravidian origin who eventually drifted gradually southward into India, and whom we find subsequently represented amongst the aboriginal tribes of the Central Provinces and Bengal. The present occupants of the soil of Rambakia are a race of Rajputs known as Lassi or Lumri. They appear to be a reflex Rajput wave that has washed back from India within historic periods. We are distinctly told that the Oritæ or Oxii were not Indian, from which we may conjecture that they differed from the Hindu races encountered by Alexander in India. They were written of previously by Herodotus as Utoi, and are undoubtedly represented in modern days by the Hot tribe, which is spread over Central Makran. These people are unconnected with the Rind, or Arab, tribes, and are exempt from taxation as being the original landowners.

There is other mention of Rambakia in the Periplus of the Erythræan sea, where it is written about the Makran coast that "there is a bay which bears the name of Terabdoi, from the midst of which a cape projects. Behind it, at a distance of seven days' journey from the coast, is a city, where the king resides, called Rambakai." McCrindle identifies Terabdoi with Urmara, and the distance from Urmara to Khair Kot corresponds to the seven marches, as does the general description of the district, which is said to produce the fragrant gum "bdellium" on the part near the sea, which looks as if it were not far from the coast. But we must not jump to hasty conclusions. The description of the harbour of Terabdoi applies more forcibly to Gwadur than to Urmara, and there are traces of the name Rambakia elsewhere than in Bela. It is one of the first difficulties with which we have to contend in unravelling the network of ancient geography that the same name is so constantly repeated. All that we can say is that Alexander's Rambakia could not have been far from the ruins of Khair Kot.

From Rambakia Alexander proceeded with half his targeteers and part of his cavalry to force the pass which the Godrosii and Oritæ had conjointly seized "with the design of stopping his progress." This pass might either have been the turning pass at the northern end of the Hala, or it might have been on the water parting from which the Phur river springs further on. I should think it was probably the former, where there is better room for cavalry to act. The question which now meets us is who were the Gadrosii, the people who allied themselves with the Oritæ, and who were sufficiently powerful to force their name to the country stretching westwards to Persia. There are two tribes to be found on the Bela whose name answers to that of Gadrosii. The first are the Gadurs; but they claim Arab descent, and look like Rajputs. They say that they settled in Makran in the days of the Kalif Omar. The other people are the Gadaras, called by Tate (who has had good opportunities for observing them) Sidi half-castes; but they are undoubtedly a people of very ancient origin. Bellew thinks that they may be the Garuda of Sanskrit writings who were ever opposed to the Nagas, and representatives of that race of Asiatic Ethiopians of whom Herodotus wrote, and which could hardly have disappeared from Makran in Alexander's time. If the Gadrosii have any modern representatives at all I think it possible that they may be found in the Gadaras, but this point must remain doubtful till we have a more perfect acquaintance with the traditions of these people.

I should like to say a few words about the Arabii and the newer Arabius or Arabis, but time is short, and I can only just mention that north of Bela, on the Puráli river, we have found the remains of a stone-built construction so clearly allied to the "ghorbastas" or "bunds" of Makran and Sind, and to the Mashona relics at Zimbabwe, that we may at least be allowed to conjecture that this country between the Puráli and Karachi was once held by those dusky races of Himyaritic Arabs who were aforetime the master-builders of the world. They may indeed represent the Asiatic Ethiopians of Herodotus. It seems difficult to set limits to the extent of their influence.

Immediately after defeating the Oritæ (who apparently made little resistance) Alexander appointed Leonatus with a picked force to support the new Governor of Rambakia (Hephœstion having rejoined the army) and left him to make arrangements for victualling the fleet when it arrived, whilst he pushed on

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00002d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

through desert country into the territory of the Gadrosii by "a road very dangerous," and drawing down towards the coast. He must then have followed the valley of the Phur to the coast, and pushed on along the track of the modern telegraph line till he reached the neighbourhood of the Hingol river. We are indebted to Aristobalus for an account of this track in Alexander's time. It was here that the Phœnician followers of the army gathered their myrrh from the tamarisk trees; here were the mangrove swamps; and of the euphorbias, which still dot the plains with their impenetrable clumps of prickly "shoots or stems, so thick set that if a horseman should happen to be entangled therewith he would sooner be pulled off his horse than freed from the stem," as Aristobulus tells us. Here, too, were found the roots of spikenard so precious to the greedy Phœnician followers. These same products formed part of the coast trade in the days when the Periplus was written, 400 years later, though there is little demand for them now. It was somewhere near the Hingol river that Alexander made a considerable halt to collect food and supplies for his fleet. His exertions and his want of success are all fully described by Arrian, as well as the rude class of fishing villages inhabited by Ichthyophagi, all the latter of which might well be cut out of the pages of Greek history and entered in a survey report as modern narrative. After this we have but slight indications in Arrian's history of Alexander's route to Pura, the capital of Gadrosia. Three chapters are full of most graphic and lively descriptions of the difficulties and horrors of that march. We only hear that he reached Pura sixty days after leaving the country of the Oritæ, and there is no record of the number of troops that survived. Luckily, however, the log kept by the admiral of the fleet, Nearkhos, comes into our assistance here, and though it is still Arrian's history, it is Nearkhos who speaks. We must now turn back to follow the ships. I cannot now enter in detail into the reasons given by General Haig in his interesting pamphlet on the Indus delta country for selecting the Gharo creek as the particular arm of the Indus which was finally selected for the passage of the fleet seaward. I can only remark that whilst the nature of the half-formed delta of that period is still open to conjecture, so that I see no reason why the island of Krokala, for instance, should not have been represented by a district which bears a very similar name nowadays, I fully agree that the description of the coast as given by Nearkhos can only possibly apply to that section of it which is embraced between the Gharo creek and Karachi. It is only within very recent times that the Gharo has ceased to be an arm of the Indus. For the present, at any rate, we cannot do better than follow so careful an observer as General Haig in his conclusions. There can be little doubt that Alexander's haven, into which the fleet put till the monsoon should moderate, and where it was detained for twenty days, was *somewhere near* Karachi. That it was the modern Karachi harbour seems improbable. Of all parts of the western coast of India, that about Karachi has probably changed its configuration most rapidly, and there is ample room for conjecture as to where that haven of refuge of 2,000 years ago might actually have been. Let us accept the fleet of river-built galleys, manned with oars, and open to every phase of wind and weather, as having emerged from it about the beginning of October, and as having reached the island of Domai, which I am inclined to identify with Manora. Much difficulty has been found in making the estimate of each day's run, as given in stadia, tally with the actual length of coast. I think the difficulty disappears a good deal if we consider what means there were of making such estimates. Short runs in the river between known landmarks are very fairly consistent in the Greek accounts. On the basis of such short runs, and with a very vague idea of the effect of wind and tide, the length of each day's run at sea was probably reckoned at so much per hour. There could hardly have been any other way of reckoning open to the Greeks. They recognised no landmarks after leaving Karachi. Even had they been able to use a log line it would have told them but little. Wind and current (for the currents on this part of the sea mostly follow the monsoon wind) were either against them or on their beam all the way to the Hingol, and they encountered more than one severe storm which must have broken on them with the full force of a monsoon head wind. From the point where the fleet rounded Cape Monze and followed the windings of the coast to the harbour of Morontobara the estimates, though excessive, are fairly consistent still; but from this point westward, when the full force of monsoon wind and current set against them, the estimates of distance are very largely in excess of the truth, and continue so till the pilot was shipped at Mosarna, who guided them up the coast of Persia. Thenceforward there is much more consistency in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000057

مكتبة قطر الوطنية
Qatar National Library

their log. It must not be supposed that Nearkhos was making a voyage of discovery. He was probably following a track that had often been followed before. It was clear that Alexander knew the way by sea to the coasts of Persia before he started his fleet, and it is a matter of surprise rather than otherwise that he did not find a pilot amongst the Malli who, if they are to be identified with the Meds, were one of the foremost sea-going peoples of Asia. His Phœnician and Greek sailors evidently were strangers to the coast, and some of his mixed crew of soldiers and sailors had subsequently to be changed for drafts from the land forces.

We cannot now follow the voyage in detail, nor could we, even if we would, indicate the precise position of those islands of which Arrian writes between Cape Monze and Sonmiani; some of them may now be represented by shoals known to the coasting vessels, whilst others may be connected with the main land. I have no doubt myself that Morontobara (the "woman's haven") is represented by the great depression of the Sirondha lake, to which I have already alluded. Between Morontobara and Kokala (which about answers to Ras Kachari) they touched at the mouth of the Purali, or Arabius, not far from Liari, having an island which sheltered them from the sea, to windward, which is now part of the mainland. Near by the mouth of the Arabius was another island "high and bare" with a channel between it and the mainland. This, too, has been linked up with the shore formation, and the channel no longer exists, but there is ample evidence of the ancient character of this corner of the coast. Between the Arabius and Kokala (three days' sail) very bad weather was made, and two galleys and a transport were lost. It was at Kokala that they joined hands with the army again. Here Nearkhos formed a camp, and it was "in this part of the country" that Leonatus defeated the Oritæ and their allies in a great battle wherein 6,000 were slain. Arrian adds that a full account of the action and its sequel, the crowning of Leonatus with a golden crown by Alexander, is given in his other work, but as a matter of fact the other account is so entirely different (representing the Oritæ as submitting quietly) that we can only suppose this to have been a separate and distinct action from the cavalry skirmish mentioned before.

It must be noted that the coast hereabouts has probably largely changed. A little further west it is changing rapidly even now, and it is idle to look for the names given by the Greeks as marking any positive locality known at present. Hereabouts at any rate was the spot where Alexander with such difficulty had collected ten days' supplies for the fleet. This was now put on board, and the bad or indifferent sailors exchanged for better seaman. From Kokala, a course of 500 stadia (largely over estimated) brought them to the estuary of the Hingol river (which is described as a winter torrent under the name of Tomeros), and from this point all connection between the fleet and the army appears to have been lost. It was at the mouth of the Hingol that a skirmish took place with the natives which is so vividly described by Nearkhos, when the Greeks leapt into the sea and charged home through the surf. Of all the little episodes described in the progress of the voyage this is one of the most interesting; for there is a very close description given of certain barbarians clothed in the skins of fish or animals, covered with long hair, and using their nails as we use fish knives, armed with wooden pikes hardened in the fire, and fighting more like monkeys than men. Here we have the real aboriginal inhabitants of India. Not so very many years ago, in the woods of Western India, a specimen answering to the description of Nearkhos almost literally was caught whilst we were in the process of surveying those jungles, and he furnished a useful contribution to ethnographical science at the time. Probably these barbarians of Nearkhos were incomparably older even than the Turanian races which we can recognise, and which succeeded them, and which, like them, have been gradually driven south into the fastnesses of Central and Southern India. Makran is full of Turanian relics connecting it with the Dravidian races of the south; but there is no time to follow these interesting glimpses into prehistoric ethnography opened up by the log of Nearkhos. Nor indeed can we follow the voyage in detail much further, for we have to take up the route of Alexander, about which very much less has hitherto been known than can be told about the voyage of Nearkhos. We may, however, trace the track of Nearkhos past the great rocky headland of Malan, still bearing the same name that the Greeks gave it, to the commodious harbour of Bagisara, which is likely enough the Damizar, or eastern bay, of the Urmara headland. The Padizar, or western bay, corresponds more nearly with the name Bagisara, but as they doubled a headland next day it is clear they were on the eastern

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000087

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

side of the Isthmus. The Pasiris whom he mentions have left frequent traces of their existence along the coast. Kalama, reached on the second day from Bagisara, is easily recognisable in the Khor Khalmat of modern surveys, and it is here again that we can trace a very considerable extension of the land seawards that would completely have altered the course of the fleet from the coasting track of modern days. The island of Karabine, from which they procured sheep, may very well have been the projecting headland of Giaban, now connected by a low sandy waste with the mainland. It could never have been the island of Astola as conjectured by McCrindle and others. From Kalama to Kissa (now disappeared) and Mosarna, along the coast called Karbis (now Gazban), the course would again be longer than at present, for there is much recent sand formation here; and when we come to Mosarna itself, after doubling the headland of Jebel Zarain, we find the harbour completely silted up. It may be noted that this western bay of Pasni was probably exactly similar to the Padizar of Urmara or of Gwadur, and that there is a general (but not universal) tendency to shallowing on the western sides of all the Makran headlands. Here they took the pilot on board, and after this there was little difficulty.

In three more days they made Barna (or Badara), which answers to Gwadur, where were palm trees and myrtles, and we need follow them for the present no further. Colonel Mockler who was well acquainted with the Makran coast, but hardly, perhaps, appreciated all the changes which the coast line has undergone (neither indeed did I till the surveys were complete) has traced the course of that historic fleet with great care. He has pointed out correctly that two islands (Pola and Karabia) have disappeared from the eastern neighbourhood of the Gwadur headland and one (Derenbrosa) from its western extremity; and he might have added that yet another is breaking up, and rapidly disappearing off the headland of Passabandar, near Gwadur. He has identified Kyiza (or Knidza), the small town built on an eminence not far from the shore, which was captured by stratagem, beyond doubt, and has traced the fleet from point to point with a careful analysis of all existing records that I cannot pretend to imitate. We cannot, however, leave Nearkhos without a passing reference to that island on the coast of the Ichthyophagi, which was sacred to the sun, and which was, even in those days, enveloped in such a halo of mystery and tradition that even Arrian holds Nearkhos up to contempt for expending "time and ingenuity in the not very difficult task of proving the falsehood" of these "antiquated fables." I have been to that island, the island of Astola, and the tales that were told to Nearkhos are told of it still. There off the southern face of it, is the "sail rock," the legendary relic of a lost ship which may well have been the transport which Nearkhos did undoubtedly lose off its rocky shores. There, indeed, I did not find the Nereid of such fascinating manners and questionable customs as Nearkhos describes on the authority of the inhabitants of the coast, but sea urchins and sea snakes abounded in such numbers as to make the process of exploration quite sufficiently exciting; and there were not wanting indications of those later days when the Meds (now an insignificant fish-eating people scattered in the coast hamlets) were the dreaded pirates of the Arabian sea, and used to convey the crews of the ships they captured to that island, where they were murdered wholesale. It is curious that the name given by Nearkhos is Nosala, or Nuhsala. In these days it is Astola, or more properly Hashtala, sometimes even called Haftala. I am unable to determine the meaning of the termination to which the numerals are prefixed. Another name for it is Sangadip, which is also the mediæval name for Ceylon. There can be no doubt about the identity of this island of sun worship and historic fable.

We must now turn to Alexander. We left him near the mouth of the Hingol, then probably four or five miles north of its present position, and nearer the modern telegraph line. So far he had almost step by step followed out the subsequent line of the Indo-Persian telegraph, and at the Hingol he was not very far south of it. Near here Leonatus had had his fight with the Oritæ, and Alexander had spent much time (for it must be remembered that he started a month before his fleet, and that the fleet and Leonatus at least joined hands at this point) in collecting supplies of grain from the more cultivated districts north, and was prepared to resume his march along the coast, true to his general tactical principle of keeping touch with his ships. But an obstacle presented itself that possibly he had not reckoned on. The huge barrier of the Malan range, abutting direct on the sea, stopped his way. There was no "Buzi" pass (or goat track) in those days, such as finally and after infinite difficulty helped the telegraph line over, though there

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000098

مكتبة قطر الوطنية
Qatar National Library

was indeed an ancient stronghold at the top, which must have been in existence before his time, and was likely enough the original city of Malan. He was consequently forced into the interior, and here his difficulties began.

We should be at a loss to follow him here, but for the fact that there is only one possible route. He followed up the Hingol till he could turn the Malan by an available pass westward. Nothing here has altered since his days. Those magnificent peaks and mountains which surround the sacred shrine of Hinglaz are, indeed, "everlasting hills," and it was through them that he proceeded to make his way. It would be a matter of immense interest could one trace any record of the Hinglaz shrine in classical writings, but there is none that I know of. And yet I believe that shrine which next possibly to Juggernath, draws the largest crowds of pilgrims (Hindu and Mussulman alike) of any in India, was in existence before the days of Alexander. For the shrine is sacred to the goddess Nana (now identified with Siva by Hindus) and the Assyrian or Persian goddess Nana is of such immense antiquity that she has furnished to us the key to an older chronology even than that of Egypt. The famous cylinder of Assurbanipal, king of Assyria, tells us that in the year 645 B.C., he destroyed Susa, the capital of Elam, and from its temple he carried back the Chaldean goddess Nana, and by the express command of the goddess herself, took her from whence she had dwelt in Elam, "a place not appointed her," and reinstated her in her own sanctuary at Urukh (now Warka in Mesopotamia) whence she had originally been taken 1635 years before by a conquering king of Elam, who had invaded Accad territory. Thus she was clearly a well established deity in Mesopotamia 2280 years B.C. Alexander, however, would have left that Ziarat hidden away in the folds of the Hinglaz mountain on his left, and followed the windings of the Hingol river some forty miles to its junction with a stream from the west, which would again give him the chance of striking out parallel to the coast.

We should be in some doubt at what particular point Alexander left the Hingol, but for the survival of names given in history as those of a people with whom he had to contend, viz., the Parikanoi, the Sagittæ, and the Sakæ, names not mentioned by Arrian. Now, Herodotus gives the Parikanoi and Asiatic Ethiopians as being the inhabitants of the seventeenth satrapy of the Persian Empire, and Bellew suggests that the Greek Parikanoi is a Greek transcript of the Persian form of Parikan, the plural of the Sanskrit Parvá-ka—or in other words the *Ba-rohi*—or men of the hills. However this may be, there is the bed of the stream called Parkán skirting the north of the Taloi range and leading westwards from the Hingol and we need look no further for the Parkanoi. In support of Bellew's theory it may be stated that it is not only in the heart of the Brahui country, but the Sajidi are still a tribe of Jalawan Brahuis, of which the chief family is called Sakæ, and that they occupy territory in Makran a little to the north of the Parkan. There is every reason why Alexander should have selected this route. It was his first chance of turning the Malan block, and it led most directly westwards with a trend towards the sea. But at the time of the year that he was pushing his way through this low valley flanked by the Taloi hills, which rose to a height of 2,000 feet above him on his left, there would not be a drop of water to be had, and the surrounding wilderness of sandy hillocks and scanty grass-covered waste would afford his troops no supplies and no shelter from the fierce autumn heat. All the miseries of his retreat were concentrated into the distance (about 200 miles) between the Hingol and the coast.

The story of that march is well told by Arrian. It was here that occurred that gallant episode when Alexander proudly refused to drink the small amount of water that was offered him in a helmet, because his army was perishing with thirst. It must have been near the harbour of Pasni, once again almost on the line of the present telegraph, that Alexander emerged from the sand storm with but four horsemen on to the sea coast at last, and instantly set to work to dig wells for his perishing troops. Thenceforward Arrian tells us only that he marched for seven days along the coast till he reached the well known highway to Karmania, when he turned inland, and his difficulties were at an end. Now, that well known highway was almost better known then than it is now. He could only leave the coast near the Dasht river and strike into the valley of the Bahu, which would lead him through a country subsequently great in Arabic history, over the yet unsuspected sites of many famous cities, to Bampur, the capital of Gadrosia. From leaving the coast to Bampur the duration of his march with an exhausted

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00001e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

force would be little less than a month. Working backward again from that same point (which may be regarded as an obligatory one in his route) the seven days' weary drag through the sand of the coast would carry him no further than from the neighbourhood of Pasni, and that is why I have selected that point for the historic episode of his guiding his army by chance and emerging on to the shore unexpectedly, rather than the neighbourhood of the Basol river, to which the Parkan route should naturally have led him. He clearly lost his way, as Arrian says he did, or else the estimated number of marches is wrong. We are told by Arrian that he reached Pura, the capital of Gadrosia, on the sixtieth day after leaving the country of the Oritæ. This is a little indefinite, as he may be considered to have left the country of the Oritæ when he started to collect supplies from the northern district, and we do not know how long he was on this reconnaissance. Probably, however, the date of leaving the coast and striking inland up the Hingol river is the date referred to by Arrian, in which case we may estimate that he spent about twenty-four days negotiating the fearfnl country opened up to him on the Parkan route ere he touched the sea shore again. This is by no means an exaggerated estimate if we consider the distance (something short of 200 miles) and the nature of his army. A half-armed mob, which included women and children, and of which the transport consisted of horses and mules and wooden carts dragged by men, cannot move with the facilities of a modern brigade. Nor would a modern brigade move along that line with the rapidity that has distinguished some of our late manœuvres in South Africa. On the whole, I think the estimate a probable one, and it brings us to a consideration of Bampur as the ancient capital of Gadrosia.

I am well aware that another place, Fahraj, halfway between Bampur and Kirman and on the edge of the Kirman desert, has been accepted by scholars as the ancient capital of Gadrosia ever since the late Sir O. St. John discovered it during the progress of the Sistan Commission. The name Fahraj is indifferently Fahraj, Purag, or Pura, and the ruins of it are extensive and undeniably most ancient. St. John points out that it is the probable place of junction between the forces of Alexander and of Krateros, who joined before reaching Kirman, and could only have joined about this point; and that it is about 60 days' march from the country of the Oritæ as then understood. Against this I have to urge that it is improbable that the country of Gadrosia extended so far to the north-west. Fahraj is well within the natural Kirman division of Khorasan now, and probably was always so. Although I agree that it was by the caravan. route across the desert from the great bend of the Helmund to this point that Krateros with his elephants and heavy baggage must have joined Alexander, I do not find it stated anywhere that he joined at Pura—but that he joined when Alexander was on his way from Pura to Kirman. Again I cannot agree that St. John's estimate allows sufficiently for the slow progress of the Greek force in face of such difficulties as we know of, and there is finally this great objection to Fahraj which I think is conclusive. In order to reach Fahraj Alexander must have passed Bampur. There is no other way consistent with Arrian's account. Bampur is, however, a city as ancient as Fahraj, and not far to the east of Bampur is the site of a still more ancient, though now reoccupied, city called by the very names that Fahraj is known by—viz., Purag or Pura; and Pura is the modern appellation. Thus there are two places with identically the same name, Fahraj and Pura, and as no mention is made of Alexander's passing the latter, and as the latter is within the limits of what we believe to be Gadrosia, I have, myself, no hesitation in assigning that position to the acient capital of the Gadrosians. We have now followed Alexander out of India into Persia. Thenceforward there are no great geographical questions to decipher, or knots to be untied. His progress was a progress of triumph, and the story of his retreat well ends with the thrilling tale of his meeting again with Nearkhos, after the latter had harboured his fleet at the mouth of the Minab river and set out on the search for Alexander, guided by a Greek who had strayed from Alexander's army. Blackened by exposure and clothed in rags, Nearkhos was unrecognised till he announced himself to the messenger sent to look for him. Even Alexander himself at first failed to recognise his admiral in the extraordinary apparition that was presented to him in his camp, and could only at first believe that his fleet must have perished and Nearkhos and Arkias were sole survivors. We can imagine what followed. Those were days of ready recognition of service, and no dispatches, and all Persia was open to the conquerors to choose their reward. But all history has its moral, and the moral of the story of Alexander's retreat might easily be

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000055

مكتبة قطر الوطنية
Qatar National Library

mistaken, if indeed it has not been so mistaken through all time. Arrian is not a good-natured biographer. Whilst giving to his hero all credit for his gallantry and his determination, he never forgets to sneer at his ostentation and an occasional display of what in modern slang would be termed "bad form." Other writers than Arrian have told the story of Alexander's retreat, and of the disasters that attended it, and have inferred, if not actually stated their conviction, that where so great a general as Alexander failed it would be hopeless for others to attempt to succeed. Arrian, however, very clearly points out that which is most undoubtedly true, that it was only Alexander's obstinate determination to do that which had proved so fatal to Semiramis and Cyrus that led him to select the worst possible route through Makran. It is impossible to suppose that he did not know that there were better and more open ways, even though we may credit him with the wish to support his fleet by adopting a route as near the coast as possible. The high road between west and east that lies through Makran must have been known before Alexander's time, just, indeed, as we may be certain from the course which was steered by the Mosarna pilot as soon as he took charge of the fleet that the sea route to Persia was well known. After Alexander's time many centuries elapsed before we get another clear historic view into Makran, and then what do we find? A country of great and flourishing cities, of high roads connecting them with well-known and well-marked stages; armies passing and repassing, and a trade which represented to those that held it the dominant commercial power in the world, flowing steadily century after century through that country which was fatal to Alexander, and which we are rather apt now to consider the fag-end of the Baluchistan wilderness. The history of Makran is bound up with the history of India from time immemorial. Not all the passes of all the frontiers of India put together have seen such traffic into the broad plains of Hindustan as for certainly three, and possibly for eight centuries passed through the gateways of Makran. As one by one we can now lay our finger on the sites of those historic cities, and first begin faintly to measure the importance of Makran to India ere Vasco da Gama first claimed the honour of doubling the Cape and opened up the ocean highway, we can only be astonished that for four centuries more Makran has remained a blank on the map of the world.

DISCUSSION.

Sir GEORGE BIRDWOOD, K.C.S.I., C.I.E., said the story of the *anabasis* of "striding Alexander" was as familiar to Englishmen as that of the wrath of Achilles, and of the wanderings of Ulysses. They were never tired of books on the subject, and they never would be; and it was naturally of the deepest interest to an English audience to listen to an exposition of the land routes and the sea route along which he returned from India to Susa and Babylon by a geographer of the high scientific ability and reputation of Sir Thomas Holdich, who had been able to compare many sections of those routes with the accounts of them by the surveyors, and annalists who accompanied "the youth of Pella" on his high emprise, as these have been so simply, and briefly, and lucidly, and with such honesty of purpose, compiled for us from their surviving fragments by Arrian. Sir Thomas Holdich had, indeed, afforded them a great intellectual pleasure, in which he (the speaker) had himself participated with especial zest; for during the war of 1856-7 he had twice sailed past the tranced seaboard of Persia, and had sketched the opalescent loom line of the coast the whole way from opposite Ras Mesandum to the delta of the Tigris and Euphrates; and the detailed landscape from Bushire and Karak to the delta, and above the delta, to Mohammera and Bussroah, and about Ahwaz on the Karun, the Ulai of "the Book of Daniel." It was a region of the highest natural enchantment, where on every side sense is at once spiritualised in vision, and history in its actual making becomes mythology; and to have all that rapt dreamland, trodden by Ibn Batuta and Ser Marco Polo, and the Rabi Benjamin of Tudela, and Edrisi, and traversed by Nearchus and Alexander, the scene of the tragic glories of the Achæmenian Persian Babylonian, and Assyrian Empires, and the actual site of Paradise,—to have all this shore of the oldest romance and human history conjured up before you again, was indeed delightful; and the heartiest thanks would be accorded by the meeting to Sir Thomas Holdich for a paper which was a solid and most attractive contribution to our knowledge of the historical geography of the Persian Gulf. He had only one adverse criticism to offer on the paper, and he pressed it merely to promote discussion. It was an objection to the title. He denied that there was anything like a "retreat," *i.e.* a retirement on his lines of communication, in Alexander's return expedition from India. He did not conquer in either the Asiatic sense of devastating countries and exacting tribute from them; or in the Roman sense of subjugating and annexing them, and rigidly reorganising their administration; but in the Greek sense of advancing the cause of liberty and civilisation, in a word, the Hellenisation of the world. Alexander's great personal ambition was to weld the Persians and Indians and Greeks into a united *élite* people, of one scientific, literary, artistic and religious culture, if not of one actual race; and to

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000b3

مكتبة قطر الوطنية
Qatar National Library

do this chiefly through promoting commerce between them. At every step of his so-called "conquests" the Greek language and Greek art were planted out, and took firm root and flourished; and the Greek or rather Hellenised kingdoms founded by him in every part of Anterior Asia continued to exist for centuries after his death. Before Alexander nothing was known of India but what was to be found in Herodotus and Ctesias, but after his *anabasis* the knowledge of India and intercourse with India were thrown open to the whole world of the West, and an immense extension was given to the trade of West in the productions of the East; and such an impulse to the study of geography, natural history, and other sciences, that within 500 years the Schools of Philosophy at Athens, and of Science at Alexandria were on the threshold of anticipating the great economic developments and scientific discoveries of the 17th, 18th, and 19th centuries:—when there came the cataclysm of the irruption of the barbarians, and the advance of European prosperity and civilisation was checked for more than a thousand years. The very title of Arrian's history of Alexander is a contradiction of the suggestion that he retreated from India. Even when the home-sick Greeks of the army protested against marching farther eastward into Hindustan he did not draw back, but continued his course of exploration southward, down the Indus to the Sea, undertaking some successful military campaigns by the way. In a word, *anabasis* means "ascent," "an advance from victory to victory" [compare Psalm lxviii, 18]. It is a common medical term, meaning the "aggressive" stage of a disease. The fact is that Alexander, having accomplished all that he could with the means at his command in India, deliberately returned by a new overland and a new sea route to Susa and Babylon,—there to celebrate, in flagrant view of the whole world of his time, his marvellously successful Hellenisation of all the Asiatic countries between the Mediterranean Sea and the River Indus; and he celebrated his "triumph" [the very word is derived from the *thriamboi*, or Bacchic hymns sung before him on these occasions] in such a manner as to emphatically demonstrate that his great object was to fuse European and Asiatics together, and to make the whole civilised world of antiquity drink of the same "Loving Cup," "spiced" to the brink with the toast:—Glory to God in the highest, and on earth peace, good will toward men. This tinctured all his thoughts, this was the elixir of his immortality. The Journal of Nearchus, which is almost literally reproduced by Arrian, proves that the so-called "Retreat" was a scientifically devised geographical and commercial exploration. In chapter xx., Nearchus expressly states that Alexander designed the navigation of the whole circuit of the coast from Alexander's Haven [Karachi] to Susa, to determine whether the sea that way was navigable or not. In ch. xxiv., he states that on the fleet arriving at the mouth of the Tomeros [Hingal River] the natives were astonished at the apparition of it, and assembled with long sticks to oppose the landing of the Greeks. In ch. xxvii., he states that on arriving at Mosarna [now Gazdan] he took a native pilot on board, who consented to conduct the fleet so far as the Carmanian coast; and that from that day he was able to weigh anchor at night, and so take advantage of the land breeze, and to better understand the names of harbours he entered. In ch. xxx., he states that when bearing away from Kuisa [now called Ras Gunse] his sailors were greatly alarmed by the blowing of whales about the ships, and that, even when the native pilot explained that the beasts were but disporting themselves in the sunshine, the sailors would not be quieted, but went on shouting *alala*, *alale*, to frighten them off. In ch. xxxii., we read that the fleet having reached Ras-Mesandum, [*i.e.* "the Anvil," from the incessant thundering of the surges against the base of this basaltic headland*], the gate of the Persian Gulf, Onesicritus proposed that they should double it, and follow its lead, on the westward side, into, as he hoped, the Red Sea, and so escape what remained of the distressing passage up the Persian Gulf to Susa; but Nearchus rebuked him, asking him if he did not know with what design Alexander had sent the fleet on its adventurous voyage, and that it was not because he could not have taken his whole army to Susa safely by land, but to obtain a knowledge of the coasts and of the harbours and islets—and particularly whether they were habitable or not—between India and Persia. In ch. xxv. Nearchus states that Alexander, to whom he had gone a five days' journey inland, on hearing that the fleet was safely beached at the mouth of the Anamis [now Minbar River], on the beautiful coast of Carmania, rejoiced greatly, and swore by Zeus and Ammon that he felt far happier in receiving the auspicious news than in being the conqueror of Asia. In ch. xxxvi. he states that at Organa [now Ormuz], the chief of the island consented to pilot the fleet for the remainder of the voyage to Susa. Then, after Nearchus is received, as related in ch. xlii. by Alexander at Susa, Arrian himself, in ch. xliii., adds comments on the difficulties of the navigation of the Erythræan Sea generally, and implies that the voyage from India along the shores of Gadrosia and Carmania had never been made before Nearchus, unless by some wandering phantom of the seas.† All

* Called also Salamah, "Safety," a propitiatory euphemism, employed in the hope of averting the "danger" of the headland to navigators. Compare "Euxinus" for "Axenus pontus." It is also called *Ras el Khebir Huidi*, "the Cape of the Indian's Grave." See McCrindle's "Periplus of the Erythrean Sea and Voyage of Nearchus," and Moore's "Lala Rookh"

† This is rather remarkable considering the widespread tradition of Phœnician trade and navigation in the Indian Ocean. But the great commercial route of antiquity to India was the Babylonian, through Ecbatana, the "Caspian

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000036

مكتبة قطر الوطنية
Qatar National Library

this is conclusive against the suggestion that Nearchus was but following a track known to Alexander before, and that it was followed merely to lighten the march of the army returning through Gadrosia and Carmania to Susa and Babylon. Neither return expedition was of a strictly military character—the one on foot, indeed, was for the greater part of its way but a military triumph—and both expeditions kept the scientific and commercial objects they had in view clearly before them. On this point Humboldt, as quoted by McCrindle, says:—"The Macedonian campaign which opened so large and beautiful a portion of the earth to the influence of one sole highly-gifted race, may, therefore, certainly be regarded in the strictest sense as a scientific expedition, and, moreover, as the first in which a conqueror had surrounded himself with men learned in all departments of science as naturalists, geometricians, historians, philosophers, and artists." The scientific staff of Alexander's expedition included, among those individually named, an itinerographer, who measured and recorded the distance of his marches; a stathmographer, who located and described his halting places; a journalist, who edited the *Ephemerides* of the expedition; a diarist, who recorded anecdotes of Alexander's private life; three geographers; three hydrographers; at least six general historians; and besides these there were the commercial travellers. Except journalists—who are freelances—we have no specialists of the sort with our armed levies in South Africa, or with our military force in China; but we are sending out a scientific voyage of remote discovery to the South Pole! Sir Thomas Holdich had referred to some of the geographical folk-lore of the Persian Gulf, and in this connection he (Sir George Birdwood) regretted that his paper made no mention of the island placed by Nearchus about 1,000 stadia beyond Kishm, and named by him Kataia. It is usually identified with the modern Kish or Kais, which, between the decline of Siraf and the rise of Ormuz, was the great emporium of the trade through Anterior Asia between the West and East. The Persian tradition, according to Sir William Ouseley, is that the island derived its name from one Kais, the son of a poor widow of Siraf, who going on a voyage in the 10th century to India, made a fortune there by selling his favourite cat to a raja whose palace was so overrun with rats that they snatched the food from him before he could carry it to his mouth. [See Asher's "Itinerary of Rabbi Benjamin of Tudela," vol. ii., pp. 175–8; also Lyson's "Story of Whittington and his Cat."] If this is an authentic 10th century legend, it is the original story of "Dick Whittington and his Cat," and many here present would be interested to know whether Sir Thomas Holdich heard anything of it locally, and whether he identifies Kaish, Keish, Kyes, Qas—however it should be spelt or pronounced—with Kataia. In conclusion, he would only beg to repeat the expression of his grateful sense of the deep obligation they were all under to Sir Thomas Holdich for his valuable and most interesting paper, which as a weighty piece of scientific geographical criticism was as appropriate and fine a tribute as could possibly have been offered to "the noble dust of Alexander."

Gates," Herat ["Alexandria in Aria"], and the Cabul Valley to Taxila on the Indus; and thence either across into the valley of the Ganges, and by Patna ["Palimbethra"] to the Bay of Bengal, or down the Indus to the sea. The special Phœnician route, was from Petra, across the Arabian desert to Gherra, at the back of the bay which shelters the pearl fisheries of the palm-tufted islands of Bahrein.

Mr. B. T. Ffinch, C.I.E., referred to the telegraph line along the Makran coast. In 1863, when that line was built, the officers, finding, as they approached the Hara range of mountains, that it was impossible to continue inland, approached the sea nearer and nearer until they came to that part where the mountain dipped into the sea, with cliffs 2,000 feet high. There being no way of crossing the mountain from the east, it was decided to lay a cable round the mountain. That was done, but the cable was very quickly destroyed through rubbing on the rocks. It was then found that there was a goat path from the west which led to the top of the mountain, and the telegraph material was carried up, and eventually the line was constructed across the mountain. The cliff on the east side being 2,000 feet high, a post was placed horizontally on the top of the mountain, and a wire dropped to a post at the base. A guard was stationed at the foot of the mountain, and another guard at the top, and the only way in which they could communicate with each other, whether the line was in order or not, was by the firing of their guns. It took a clever Beluch-man seven days to go from the post at the bottom to the post at the top, because they had to traverse a roundabout route in order to get there. After passing the mountain, the posts were erected on the sea beach, and during the monsoon months especially, the line worked very unsatisfactorily, as it was extremely damp. In addition to this, it was constantly being interrupted by the falling rock. The result was that some other way had to be found for the telegraph line. He said to the assistant that he believed there was a way inland up the bed of a river, but, of course, that was useless for a telegraph line. He had also been informed that there was another pass—the Asses Pass, there being a legend that an ass had been ass enough to go that way. Eventually, however, the line was carried through that pass. A camel track was cut on the side of the mountain, and, after three years, they were able to move the line. He wished to correct what Sir Thomas Holdich had said by stating that the track along which the telegraph now went was really the route of the country. It was universally used for going to Ormara from Sonnaiani and other parts of the coast. Sir Thomas Holdich had not mentioned in his paper the mud volcano which existed near Ras Kachari. It was quite possible that that was not in existence 3,000

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000003

مكتبة قطر الوطنية
Qatar National Library

years ago, but, at the prescnt time, it was a very high and noticeable hill, and pilgrims going to the Hinglaj shrine invariably visited that active mud volcano on their way there.

Sir HENRY MANCE, C.I.E., said it would be very interesting to know whether Alexander and Nearchus were in touch with one another during the retreat from India. He had seen it stated in an old record that Alexander signalled from the hills to Nearchus by means of steel mirrors. It was somewhat remarkable that 2,000 years afterwards the very first experiments which led to the development of the heliograph, and its introduction into the armies of the world, were conducted on the same ground.

The CHAIRMAN moved a hearty vote of thanks to Sir Thomas Holdich for his exceedingly interesting paper, which was carried unanimously.

Sir THOMAS HOLDICH, in reply, said that with regard to Sir George Birdwood's criticism of the title of the paper, in calling it "A Retreat from India" he was under the impression that Alexander had to go. He believed the army mutinied and declined to go further. As far as he knew, Alexander's idea was not to halt where he did in India, but extend his conquests as far as the Ganges. The line of the Indus gave him a most acceptable route for further exploration. That Alexander originally contemplated when he went to India to return by the Indus and the Persian coast he certainly was not aware of. He thought it was beyond doubt that Alexander knew his way, that the country had been explored beforehand, and that the sea coast was known, because the Phœnicians must have sailed in the Persian Gulf, certainly as far east as India, before Alexander's time. The very fact of Alexander taking a pilot on board proved that conclusion. He had never heard of the legend attaching to the Island of Kais. He had heard innumerable legends in his journeys up and down the Persian coast, but he had never heard that particular one of the original story of Dick Whittington. He believed his friend, Mr. Ffinch, would bear him out that it was the rats which were the nuisance of the Persian Gulf.

SIXTEENTH ORDINARY MEETING.

Wednesday, April 24th, 1901; the Right Honourable the LORD CHIEF JUSTICE, G.C.M.G., Vice-President of the Society, in the chair.

The following candidates were proposed for election as members of the Society:—

Andrew, George Edward, H.M.S. *Resolution*, Channel Squadron.
Dobbing, Frederic C., J.P., Calderwood, Chislehurst, Kent.
Donkin, D., Albemarle, Wimbledon-common, S.W.
Harrowby, Earl of, 9, Grosvenor-gardens, S.W.
Miles, William, 114, Melody-road, Wandsworth-common, S.W.
Roe, Captain B. O., Kulu, Punjab, India.
Snell, Charles Scott, 51, Victoria-street, S.W.
Swarup, Bishan, Jenapur, Orissa, India.
Williams, Rose Lilian, 2, Royal York-villas, Clifton, Bristol.

The following candidates were balloted for and duly elected members of the Society:—

Biddulph, Mrs. John, 20, Onslow-square, S.W.
Downes, James Rathbone, East Surrey Water Company, Redhill.
Duncan, J. H., 39, Coleman-street, E.C.
Holland, Commander G. E., R.I.M., D.S.O., Port Officer, Rangoon, Burma.
Johnson, Wallace C., M.Amer.S.C.E., Niagara Falls, New York, U.S.A.
Nicoll, John, Adderley, Monifieth, Scotland, and Calcutta, India.
Oliver, James William, Dehra Dun, N.W.P., India.
Savill, Howard S., Northumberland and Northern Counties Club, Whitehall-court, S.W.
Wray, P. Remus, 42, Tollington-road, Holloway, N.

The paper read was

PATENT-LAW REFORM.

By ALEX. SIEMENS.

During the last few years a growing dissatisfaction has manifested itself with the working of the Patent-laws in this country, and various suggestions have been made as to how they could be improved, most of which advocate a strict preliminary examination.

As the Society of Arts initiated the agitation which led to the "Patents Act, 1883," it may not be out of place to raise the question again before its members, and this paper is intended to start a discussion on the subject by making suggestions how alterations of the present law might be made to the advantage of the public as well as of the inventor.

In order fully to appreciate the present position of the Patent-laws, it will be useful to give a brief outline of their historical development, and also to indicate a few of the characteristic points of foreign Patent-laws by way of comparison.

The earliest grant of a monopoly appears to have been made by Edward III. in 1331 when he granted letters of protection to John Kempe, a native of Flanders, to enable him to set up the industry of cloth-making in England;* but this Royal prerogative was not often exercised until the reigns of Henry VIII. and

* Wallace and Williamson, the Law of Letters Patent for Inventions, page 3.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00008e

مكتبة قطر الوطنية
Qatar National Library

of Elizabeth. During the latter's reign serious complaints were raised in the House of Commons in reference to abuses of this privilege.*

It is significant that the Queen did not pretend that she could create monopolies at her pleasure, but the preambles to the instruments conveying the grants always set forth some public benefit to be derived from their action. Towards the end of her reign the incidents of a valid monopoly patent were stated by Fuller, one of the counsel for the defendant in the case of Darcy v. Allin, in the following passage, which has been frequently quoted as a correct exposition of the law:—†

"Now therefore, I will shew you how the Judges have heretofore allowed of monopoly patents, which is that where any man of his own charge and industry or of his own wit and invention doth bring any trade into the Realm, or any engine tending to the furtherance of trade that never was used before, and that for the good of the Realm: that in such cases the King may grant him a monopoly patent for some reasonable time until the subjects may learn the same, in consideration of the good that he does bring by his invention to the commonwealth; otherwise not."

In spite of promises to the contrary, the abuses in granting monopolies continued, until, during the first Parliament of James I., a "Committee of Grievances" was appointed to investigate the whole subject.‡

As a result, after a protracted struggle with the King, the "Statute of Monopolies (1623)" was passed, by which all monopolies were abolished with a few exceptions of a temporary character, and the most important exception set out in Section 6:—§

"Provided also . . . . . that any declaration before mentioned shall not extend to any letters patent and grants of privilege for the term of 14 years or under, hereafter to be made, of the sole working or making of any manner of new manufactures within this Realm to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law nor mischievous to the State by raising prices of commodities at home, or hurt of trade, or generally inconvenient . . . . . ."

On the limiting words, "within this Realm," the interpretation has been based, which Lord Brougham expressed in the following terms:—‖

"The Patent-law is framed in a way to include two species of public benefactors; they are those who benefit the public by their ingenuity, industry, and science and invention and personal capability; the other those who benefit the public without any ingenuity or invention of their own, by the importation of the results of foreign inventions. Now the latter is a benefit to the public incontestably, and therefore they render themselves entitled to be put upon somewhat, if not entirely the same footing as inventors."

On these principles the whole patent legislation of the United Kingdom has been founded, but as Sections 10, 11, and 12 of the "Statute of Monopolies (1623)" and all subsequent Acts or sections of Acts referring to patents were revoked* by the "Patents Act (1883)" and its amending Acts (1885-88), it would be superfluous to enter into the details of the various stages of its development, and it is sufficient to give a succinct statement of the law as it now stands.

Monopolies for a limited period are granted to such persons who invent or import useful novelties, provided they describe in their specification the invention or importation in such a manner that a skilled person can carry out the manufacture after the patent has expired.

Every application for provisional protection and every complete specification is submitted to the Examiner, who has to consider and report to the Comptroller on the following points:—†

1. Whether the applicant has fairly described the nature of the invention.

2. Whether the specifications and drawings (if any) have been prepared in the prescribed manner.

3. Whether the title sufficiently indicates the subject matter.

4. Whether the invention particularly described in the complete specification is substantially the same as that described in the provisional specification.

Where the Comptroller, after receiving the report of the examiner, refuses to accept a specification, or requires an amendment, the applicant may appeal from him to the law officer, whose decision is final.

The acceptance of the complete specification is advertised, and any person may give notice of opposition, within two months, to the grant of the patent on certain very limited grounds; if there is no opposition, or if it fails, the patent is sealed.

Simple as this procedure is, the Patent-law

* Ency. Brit., vol. xvi., page 757.
† W. and W., page 7.
‡ Ency. Brit., vol. xvi., page 757.
§ W. and W., page 608.
‖ W. and W., page 32.

* W. and W., page 645.
† W. and W., pages 286 and 288; also Section 6, 7 and 9 of "Patents Act, 1883."

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000a9

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

of France, passed 5th July, 1844, is still less exacting. An inventor or his assignee may obtain a patent for 15 years for a useful and novel invention provided the application is made before the filing of the complete specification in foreign countries with certain exceptions, and provided that the invention is worked in France within two years of the date of the grant, and the working does not cease for any two consecutive years afterwards. In addition, the importation of the patented article invalidates the grant, except from a country belonging to the Union for the Protection of Industrial Property.

The French law stipulates further, that all articles labelled "patented" must bear in addition the letters "S.G.D.G." signifying "not guaranteed by Government," and the questions, whether a patented invention is really useful and novel, are only investigated in case of litigation.

In strong contrast to Great Britain and France, there is a very strict preliminary examination in the United States and also in Germany.

A highly-trained staff of experts examine into the novelty of each application, calling the attention of the inventor to any prior publication that they may discover in any country.

In the United States the practice is to put the application in interference with any other application or patent already granted relating, in the opinion of the examiner, to the same subject, and a regular lawsuit follows to deter- the priority of the inventions.

After one interference has been disposed of another may be discovered by the examiner and the whole procedure of hearing evidence of both sides has to be repeated, so that it happens not infrequently that a patent application is kept for years before the examiners.

In Germany the specifications and drawings, after they have passed the official examiner, are open to public inspection, and any objection raised by a member of the public will be considered by the examiners.

The object in both these countries is to give the inventor an opportunity of eliminating from his specification anything that may clash with prior rights, and to make his patent, after it has passed through the ordeal of severe examination, practically unassailable.

As already stated, this system has many admirers in this country, and lately the grievances of inventors relating to the preliminary examination of applications for patents have been exhaustively treated by Mr. Lloyd Wise in a paper read before the London Section of the Society of Chemical Industry. The remedies suggested by him were summarised in *Engineering* of the 23rd November, 1900, as follows:

"The scheme is based upon the lines that:—

"1. It is desirable as far as practicable to afford to applicants for patents and to the public full information concerning the novelty of inventions in respect of which patents are sought.

"2. As, however, patents have sometimes been ultimately supported in respect of inventions which even eminent judges have regarded as non-patentable, it is not advisable in any unopposed case that a patent should be refused on the ground that the invention or alleged invention is obviously old or has been previously patented in this country, provided the applicant (if required) so amends his specification as to indicate what was previously known, thus protecting the public against being misled.

"3. Furthermore (provided that, if necessary, the applicant suitably amends his specification), it is not advisable either to make it publicly known that the specification has been amended at the instance of the Patent-office authorities or to give publicity to any official communication of any kind (whether by endorsement on the specification or otherwise), implying doubt as to the novelty of the subject matter in respect of which the patent is granted; because such publicity would obviously create prejudice against the patent, and where based upon erroneous opinion, would operate unjustly."

For the present purpose it is not necessary to enter upon the considerations which led Mr. Lloyd Wise to propound this scheme, as the summary clearly shows that he is in favour of making the examination for novelty much more exhaustive than it is at present in this country.

Before discussing this view further, it is very instructive to observe the trend of public opinion in a country where the examination is as strict as it can be made, viz., in Germany.

The position of affairs is very clearly explained in a paper read by M. von Hefner Alteneck before the Elektr. Techn. Verein, in Berlin, on the 27th March, 1900, in which he made certain proposals to alter the German Patent-law.*

In his opinion the examination system has serious drawbacks, which he summarises as follows:—

1. Important patents are not secured thereby against litigation.

2. Very heavy cost has to be incurred before the true value of an application is ascertained.

3. After a long examination the invention

* E.T.Z. 5.4.00—p. 278.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000050

مكتبة قطر الوطنية
Qatar National Library

may become valueless through something better being found out in the meantime.

As M. von Hefner Alteneck expresses it: "At the time of application the invention is at such a tender age that it is unable to sustain the burden of a severe examination. All the same the inventor is forced to apply for a patent to secure his rights against other people whom he has to employ to work out the details of his invention."

As a remedy for these evils M. von Hefner Alteneck recommends that the inventor should have the option at the time of making his application, either to demand a patent in accordance with the present (German) practice, viz., strictly examined for novelty and utility, or to have the invention merely registered, in which case it would be examined somewhat in the same way as English patents are.

A registered patent should be convertible into an examined patent at any subsequent time whenever the inventor desires it. Should the registered patent fail to pass the examination, or if the examination is stopped before it is concluded, the patent becomes void altogether. It should also be competent for anybody to petition the Patent Office to annul a registered patent for specified reasons, but even if such a petition were successfully resisted the patent would remain a registered one. Any attempt to pass off a registered patent as an examined patent should be punishable.

M. von Hefner Alteneck mentioned in the paper that he had for a long time considered the American system greatly superior to the German system of examination until his faith was shaken by hearing an American inventor of great experience in patent matters express the fervent conviction that the German system was ever so much better than the American one.

During the discussion of that paper,* Mr. West defended the strict examination on the plea that a patent should be considered to be of the nature of a contract by which the Government for the valuable consideration of the invention, granted a monopoly which the Government should guarantee by establishing the novelty and utility of the invention at the time of granting the patent, and to meet M. von Hefner Alteneck's objection, Mr. West suggested the introduction of the American system of "caveat," to give the inventor time to develop his invention.

He further approved of the system of placing an application "in interference" with an existing patent for a similar invention, as this tended to diminish the necessity for large firms to have their own patent staff looking out for applications that might interfere with their rights.

Lastly, he suggested that no patent or publication more than 15 years old at the time of application should be available for proving want of novelty, as he considered that an invention which has failed to find favour for 15 years should not stand in the way of an inventor who may have hit upon an old idea which has become practicable through the general progress since it was abandoned. It may be added that the present practice in Germany is to preclude publications more than 100 years old from being used as anticipations.

On the other hand, Mr. Stort considered the existing patent system of Germany as inherently faulty, pointing out that none of the most important inventions had been successful in passing the ordeal, *e.g.*, in electrical engineering, no general patents had been granted for telephones, glow lamps, arc lamps, differential regulations of arc lamps, core carbons and wireless telegraphy; and that the master patent for three-phrase currents had been declared void on account of not being worked.

He, therefore, supported M. von Hefner Alteneck's proposal, with the modification that anybody might ask the Patent Office to examine strictly a registered patent. He felt sure that by the system of merely registering patents in the first instance the work of the Patent Office would be greatly reduced, and, therefore, much improved.

The Chairman of the German Society for the Legal Protection of Industrial Property also spoke in the dicussion and invited the Elektr. Techn. Verein to take part in a Congress of his society at Frankfurt, where the subject would be further discussed, intimating that their proposal would include the recommendation to divide the examination, so that an application should at once be tested for novelty and only later on for utility and ingenuity.

The proposals of M. von Hefner Alteneck were laid before the Frankfurt Congress by the delegation of the Elektr. Techn. Verein with the additional recommendation that the rule of the German Patent-law, limiting the right of the public to demand the revocation of a patent to five years from the date of the grant, should be abolished.

In the report* at the Kiel meeting of the

* E.T.Z., 10.5.00, page 380.

* E.T.Z., 2.8.00.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000059

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Verband Deutscher Elektrotechniker, on the 18th June, 1900, it was stated that these proposals had not been accepted by the Frankfurt Congress, and in the discussion the fact was mentioned that at the end of five years three-quarters of the number of patents granted in Germany are void or have been dropped. As a result another Committee was appointed to report on the advisability of advocating the establishment of registered patents in the sense explained in M. von Hefner Alteneck's paper. All these proceedings clearly demonstrate that the strict preliminary examination does not fulfil its object; nor is this to be wondered at, for no staff of examiners can possess the latest information in every branch of invention; moreover, such an enquiry is really an attempt at proving a negative. In addition, the improved means of communication place all civilised countries on such a footing of equality, that each phrase of development in technical matters is known and studied in many countries at the same time. Hence it frequently happens that patents are applied for in several countries for similar inventions about the same time by different inventors. To minimise the difficulty arising therefrom a Union for the Protection of Industrial Property was founded in Paris in 1883* between the Governments of a number of countries, which Great Britain joined in 1884, as foreshadowed in Section 103 of the Patent Act (1883),† and the International Convention for the Protection of Industrial Property lays down the principles on which inventors are to be treated in the States belonging to the Union.

The most important articles of this Convention‡ are :—

"Art. IV. Any person who has duly applied for a patent, industrial design or model, or trade mark in one of the contracting States shall enjoy, as regards registration in the other States, and reserving the rights of third parties, a right of priority during the periods hereinafter stated.

"Consequently, subsequent registration in any of the other States of the Union before expiry of these periods shall not be invalidated through any acts accomplished in the interval, either, for instance, by another registration, by publication of the invention, or by the working of it by a third party, by the sale of copies of the design or model, or by use of the trade mark.

"The above-mentioned terms of priority shall be six months for patents, and three months for industrial designs and models, and trade marks. A month longer is allowed for countries beyond sea."

"Art. V. The introduction by the patentee into the country where the patent has been granted of objects manufactured in any of the States of the Union shall not entail forfeiture. Nevertheless, the patentee shall remain bound to work his patent in conformity with the laws of the country into which he introduces the patented objects."

"Art. XII. Each of the high contracting parties agrees to establish a special Government department for industrial property, and a central office for communication to the public of patents, industrial designs or models, and trade marks."

Since this paper was first drafted the report of the Committee has been published which was appointed on the 24th May, 1900, by the Board of Trade to enquire—

1. Whether any additional powers should be given to the Patent-office to prevent the issue of patents for inventions either obviously old or previously protected by Letters Patent in this country.

2. Whether any amendments are necessary respecting the granting of compulsory licenses (Section 22 of the Patents Act, 1883).

3. Whether the period of seven months allowed by Section 103 of the Patents Act, 1883, may properly be extended.

This last period refers really to the International Convention, and the Committee recommends the extension of the time to twelve months, subject to certain conditions, which do not concern this paper.

The subject of "strict preliminary examination" was very fully treated in the Presidential Address of Mr. J. D. Abel which he delivered to the Chartered Institute of Patent Agents on the 15th December, 1897.

Among other objections he more particularly proved by the actual outcome of patent lawsuits in the various countries, that examined patents are by no means more secure against being declared invalid on litigation, than registered patents.

All this evidence clearly shows that a strict preliminary examination is not the final solution of the problem, and the dissatisfaction which exists at the same time regarding the mere registration of patents leads to the conviction that the modern efforts at legislation in patent matters must be based on faulty principles.

From the short historical summary given above it would appear that under both systems reformers and legislators have endeavoured to secure for the inventor a valuable monopoly as

* W. and W., page 718.
† W. and W., page 637.
‡ W. and W., page 718, &c.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000038

مكتبة قطر الوطنية
Qatar National Library

a reward for his ingenuity, and have lost sight of the considerations for which originally monopolies were to be allowed, in accordance with the wording of the Statute of Monopolies which permits "grants of privilege . . . . of the sole working or making of any manner of new manufactures . . . . . which others at the time . . . . . shall not use . . . . . ." In other words, the privilege may be granted to inventors who "work" and "make," and it is made invalid only by prior "user." This view has been the keynote underlying the interpretation of the English law by the Judges, who have held that the merit, which is rewarded by a monopoly, lies not in the invention of a new manufacture, but in the introduction of such a new manufacture to the public, so that the public derive a benefit from it.

In addition to the quotations given above, the words of Bacon may be cited in further support of this view, who says: * "All prerogatives must be for the advantage and good of the people, otherwise they ought not to be allowed by law." Rewarding the inventor is, in short, a means to attain this end, but it should not be the ultimate object of the law. Mr. Abel expresses the same idea in a different way by the following words:—

"The patent should be granted to him (the inventor), first, as an incentive to him to use his best endeavours to practically carry out his invention, and to get it taken up by the industrial world; and secondly, as a reward, not for his ingenuity, but for having produced something that will advance manufactures or otherwise benefit the community."

A reformed Patent-law should, therefore, have for its principal object the introduction of new inventions to the general use of the public, and while the interest of the inventor should not be entirely neglected, it should be subordinate to the "advantage and good of the people." To carry out this object, information about new inventions should be made readily accessible to the public, and every facility should be given to persons desiring to utilise an invention to obtain licenses from the patentee, and to overcome vexatious obstruction of any kind. As a matter of fact, a good deal has already been done to make information about novelties easily accessible to the public.

In accordance with Article XII. of the International Convention, the Governments belonging to the Union are exchanging their published patents, and exhibit them in their Patent-offices. Moreover, of late years, careful indexes have been drawn up at the Patent offices, divided into classes, according to the subject-matter of patents, and abstracts of the patents are published, greatly facilitating research.

In addition to these official steps, an International Society has been founded for the Protection of Industrial Property, with a central office in Berne and an official organ, "La Propriété Industrielle." The aims and the work of this society were explained to the members of the Society of Arts, by Mr. J. F. Iselin, in a paper read on the 18th February, 1898.

Last, but not least, the technical press describes every novelty at the earliest possible moment, so that there is ample material for the searcher after novelties, in the "patent" sense. All the same, great improvements can still be effected by collecting all these sources of information at the Patent-office, and indexing the contents, in a systematic way, according to their subject-matter. A manufacturer could then send, from time to time, to this office and ascertain what the latest discoveries in his particular branch were, and where he could communicate with the patentee, if a novelty is announced that appears useful to him. It is quite clear that for this part of the subject the provisions of Section 101 of the Patents Act, 1883, are sufficient, and that the actual steps already taken indicate that the demand for quick and complete information about useful novelties has made itself felt, and has been acknowledged to be a just one.

In reporting on the first point submitted to them, the Board of Trade Committee recommends that the staff of the Patent-office be considerably increased so as to be capable of examining every application whether it had been anticipated by any claims or descriptions in specifications of Letters Patent granted not more than fifty years before the date of the application under examination. If any such specifications are found, the inventor has to amend his specification, or a list is appended to it of prior patents which in the opinion of the examiner anticipate the claims. This recommendation agrees to a certain extent with the view expressed above, but the suggestion of Col. Harding, supported by Mr. Spring-Rice, would exactly carry out the idea of making the Patent-office really useful for imparting information. This is practically that an inventor should not have the right of requiring the officials to make a search for him, but they should assist him, as they are in the habit of doing now, by

* W. and W., page 2.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000068

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

pointing out to him how and where he can find information about the particular branch of industry to which his invention refers. A search among complete specifications only, as contemplated by the Minute of the Board of Trade appointing the Committee, is not satisfactory, as a negative result would tend to mislead the public and the inventor by inspiring a sense of security as to the validity of the patent; and the experience of other countries has abundantly shown that even the strictest preliminary examination fails to make a patent secure.

Instead of making a search, after the application for a patent has been drawn up, an inventor should be induced to study what has been done before at the time when he first thinks of a new device, and every assistance should be given him to make himself thoroughly acquainted with his subject. In most cases he is sure to find anticipations, which will modify his views, shorten the experiments necessary for developing his ideas, or possibly induce him to abandon his intention of filing an application. Making information accessible to the public would therefore contribute to the desirable result of lessening the number of invalid patents.

To a certain extent the other requirements, to give facilities for obtaining licenses and for overcoming obstruction, are not neglected in the existing procedure, but they have not the consideration they deserve, nor is sufficient stress laid on introducing a new manufacture as distinguished from inventing the same.

Some alterations of the law would have to be effected to give these considerations their due weight, and the following suggestions will explain what changes might be introduced. The procedure for obtaining patents would remain exactly as it is now according to the English law, so that both the public and the patentee fully understand that the validity of a patent is not established by the mere fact of its having been granted. In this way the inventor would be saved the immense worry and expense inseparable from a strict examination, while the preliminary examination would secure a moderate restriction in the number of applications as it does at present.

For the purpose of further diminishing the number of patents and of preventing patentees delaying the introduction of the patented manufacture, it should not be possible to keep up a patent for more than four years, unless it can be shewn to the satisfaction of the examiner that the invention, as set out in the claims, has been worked for more than one year on a commercial scale before the fifth year's tax becomes payable. Such a rule would be beneficial in many ways, and among other things, give effect to the opinion expressed by Chief Baron Pollock* "... a patent, the object of which is not to benefit the world by its communication, but to obstruct by the very general character of its claims, made for conferring peculiar priviliges on the patentee; such a patent as that, in my judgment, cannot be supported." If several methods of carrying out the same manufacture are described in one patent, the satisfactory working of one modification should be sufficient to keep up the whole patent; for it would not be fair to the inventor, either to expect him to work all possible modifications of his invention on a commercial scale, or to allow the public the free use of the modifications described in the specification, but not worked by the inventor or his licensees.

The examiner should, however, be careful to distinguish between the cases referred to by Chief Baron Pollock in which the claims are too wide, and the cases in which various means are set forth for obtaining the same result. The procedure would be similar to that of the examination when the patent is first applied for, the examiner reporting to the Comptroller, from whom an appeal would be allowed to the law officer, whose decision would be final.

With the object of facilitating the introduction of new manufactures, the system of compulsory licenses should be extended so that anybody who is prepared to carry out an invention or adopt a novel device, but has been refused a license by the patentee, should be able to obtain one from the Patent-office.

This is the second point on which the Committee reports, and they are of opinion† that "the machinery as to the actual grant of the license is needlessly complicated."

They therefore recommend‡ that the jurisdiction be transferred to the High Court, "subject to the same rights of appeal and to the same regulation as to general orders as are in force in respect of its existing business, except that no appeal to the House of Lords shall be brought without the leave of the Court of Appeal or of the House of Lords."

Further, "that the respondents in any proceedings under this jurisdiction shall include (1) the patentee and (2) any person claiming

* W. and W., page 56.
† Report: Section 22.
‡ Report: Section 26.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b2

مكتبة قطر الوطنية
Qatar National Library

an interest in the patent as exclusive licensee or otherwise. In addition, the Attorney-General in England or Ireland, or the Lord Advocate in Scotland, or any person authorised by them respectively, shall have the right of appearing."

The leading article of *The Times* of the 18th March last observes on this proposal to transfer the granting of compulsory licenses from the Board of Trade to the High Court:—"Is the procedure there all that parties interested could desire? For a wealthy patentee or a wealthy infringer it is; for anybody else it is not."

As the law at present stands an interested person has to prove to the Board of Trade (1) "that by reason of the default of a patentee to grant licences on reasonable terms, (*a*) the patent is not being worked in the United Kingdom, or (*b*) the reasonable requirements of the public with respect to the invention cannot be supplied, or (*c*) any person is prevented from working or using to the best advantage an invention of which he is possessed." The Board of Trade may then order the patentee to grant a license.

It will be noticed that the alternatives *a* and *b*, which have to be proved by the interested persons, are really incapable of being proved, and even the third reason is extremely difficult to establish, and in case the patentee lives abroad the Board of Trade cannot grant a license at all.

Altogether the Section as it stands and also the recommendation of the Committee are drawn to protect the interest of the inventor and of the patentee respectively, which, as explained above, appears to be the wrong principle to follow.

If, however, the patent legislation is to carry out the original object for which it was established, viz., to facilitate the introduction of new maufactures, the procedure for obtaining compulsory licences should be made simple and expeditious.

It should be sufficient for the applicant for a compulsory license to show to the satisfaction of the Comptroller:—(*a*) That he is prepared to carry out the invention on a commercial scale; (*b*) that the patentee has refused him a license on reasonable terms, or has taken no notice of his request. On receiving such an application the Comptroller would send an official enquiry to patentee at his registered address, asking for an explanation within a reasonable time, say a fortnight, if the registered address be in the United Kingdom.

If the patentee does not answer within the prescribed time, or still persists in refusing a license on reasonable terms to the particular applicant, the Comptroller would be empowered to grant the license asked for, on such conditions as he may deem just, sending a copy of the license to the patentee.

As all licenses have to be filed at the Patent-office, the Comptroller would in most cases be able to ascertain for his guidance in settling the compulsory licenses on what terms licenses to use the patent in question have been granted to other parties by the patentee, and in other cases a royalty of 5 per cent. on the selling price, or of 10 per cent. on the saving effected by the adoption of the invention might be considered to be fair and reasonable.

All royalties under compulsory licenses should be paid into the Patent-office in the same way as the fees are now paid, and the Patent-office would hand them over to the patentee, less a sum equal to 10 per cent. of the gross receipts to cover expenses, if applied for within 10 years of the date of payment to the Patent-office. After that time unclaimed royalties would become the property of the Patent-office.

The essence of this suggestion is that the applicant must prove his ability and his willingness to work or make the invention on a commercial scale, and this should entitle him to a license on the most favoured nation clause, whether the patentee consents or not.

It is not to be anticipated that many compulsory licenses would have to be granted under such provisions, as inventors would soon realise that it was more to their interest to grant licenses on reasonable terms when asked for by *bonâ-fide* manufacturers, than to refuse them.

A further rule should be established that any licensee who has been using a patented invention on a commercial scale, for more than one year, should have the right to bring a suit for infringement, as long as he himself continues to work his license.

If the patentee does not carry out the invention himself on a commercial scale, he should not be entitled to prosecute for infringement, unless the invention has not yet been worked by any of his licensees, or unless one of his licensees, who is carrying on the manufacture on a commercial scale, is made a party to the suit. In no case should an action for infringement be allowed to proceed, where the defendant can prove that the plaintiff knew of the infringement for six months before he commenced the action.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000093

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

These rules are to prevent men of straw or speculators, who buy up patents, from black-mailing the public, and to enable licensees to protect their interests in cases where they cannot induce the patentee to prosecute third parties for infringement.

On the other hand, it should not be possible to invalidate a patent which has been worked for more than two years on a commercial scale by the patentee or his licensees, except by proving that the invention was in use on a commercial scale for a reasonable time before the first application for the patent was made. It is a matter for discussion whether such prior user ought to have taken place in the country where the patent in question has been granted, or in any country belonging to the International Union. In the latter case the inventor would have the advantage of the earliest date of application in any one of the countries.

What is a "reasonable time" depends so much on the nature of the invention that it seems preferable to leave its determination entirely to the Court before whom each individual case is tried, and not to attempt to define precisely for what length of time a process should have been worked to become a valid anticipation.

The effect of this provision would be to make a patent almost indefeasible during the remainder of its term after the invention has been worked or made on a commercial scale for two years. Until that time the patent would fall under the provisions of the present law. It stands to reason that each patentee would use his best efforts to obtain the powerful protection of this provision for his invention; and this would place him in a position to make extortionate demands for the use of his invention were it not for the system of easily obtained compulsory licenses.

It is very essential that "use on a commercial scale" be proved to avoid the failure that has invariably attended the "working" clauses of some Patent-laws, where it is sufficient to manufacture once every year or once in every two years in the presence of a public notary.

As alluded to in the discussion of M. von Hefner Alteneck's paper, most of the large firms have a special department for watching the progress of their particular branch of industry and for investigating all the complaints about technical deficiences, which the customers of the firm may make from time to time.

If necessary, this department conducts a series of experiments on the lines indicated by the wishes of customers, and the usual practice is to patent all modifications that may suggest themselves to the trained staff working in the department.

It is also undeniable that the introduction of a modification depends only on its commercial value, so that it may easily happen that a firm, after taking out a patent for a modification, does not find it advantageous to adopt the same for its own use, or some unexpected difficulties present themselves, which, for the time, make the modification impracticable. Under modern conditions it is quite possible that another firm might discover the same modification, or a very similar one, and succeed in overcoming the difficulties which deterred the first firm from proceeding with the modification.

In such cases, the second patent should not be invalidated by the publication of the first patent, unless the first patent was valid when the second patent was applied for, or unless it can be proved that the second inventor was acquainted with the first patent before he applied for a patent himself. A similar rule should apply to other publications, so that they should not be available as proof of anticipation, when they are more than fifteen years old at the time the patent is applied for.

By the adoption of these rules actions for infringement would be considerably simplified both for the plaintiff and for the defendant, as it would not be necessary as at present to search far back for publications, which might be interpreted as being anticipations; but the commercial use of the invention would have to be proved, which is more a question of fact than one of opinion. The questions of ingenuity or of usefulness would not be raised at all in such a suit, so that the difficulty of exactly defining what really constitutes an invention would be altogether eliminated. This view is endorsed by Mr. Abel, who in discussing what is a patentable invention, says, "that it is the result that one should look to before all else, and that an advantageous result should be held to infer an exercise of ingenuity worthy of being rewarded by a patent."

An ideal state of affairs would be reached if the Patent-laws of all civilised countries were made identical, on the lines sketched out in this paper, so that a patent taken out in one country could be registered, at the option of the inventor, in all the others, without any further examination of any kind, and in the case of litigation the commercial use in one

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000011

مكتبة قطر الوطنية
Qatar National Library

country would be recognised by all the Courts.

In considering these suggestions the following points should not be lost sight of:—

1. Patents, taken out under the present English law, have as often been upheld in Courts of Law as patents granted after a strict examination in other countries.

2. Inventions are not so much matters of sudden inspiration as the result of patient investigation of what has been done before in the same subject, and of careful experimenting based on a sound knowledge of natural laws, combined with a common sense imagination.

3. Improvements very rarely imply radical alterations in existing methods or apparatus; they generally proceed by small steps, most of which are soon superseded.

4. The real value of an invention can only be ascertained by its practical commercial application; and it is for this that the Crown originally exercised the prerogative of granting monopolies by Letters Patent.

DISCUSSION.

Mr. JOHN IMRAY said that one point connected with the preliminary examination for the granting of patents had never been put properly before the public, viz., the abuse of the system as practised by the examiners in Germany, the United States, and other countries. If the examinations were confined to a simple question of novelty no great harm might be done and good might result, but, unfortunately, nine-tenths of the objections were not of that character. Not a week passed but twelve or twenty such objections came before him from America, Germany, Sweden, Norway, Denmark, and Austria. In all these countries the examiners, instead of confining themselves to questions of novelty or anticipation, looked almost entirely to the question of invention to settle in their own minds whether the subject involved invention or not. In his mind, a judgment as to an invention was the same thing as a judgment on the flavour of a wine or anything else. Perhaps the greatest abuse of all was that the examiners, when they could not find any direct anticipation, searched through possibly a dozen patents, taking out one feature from one and another from another, and saying that the invention was not a combination, but a mere aggregation of all the things, and on that ground refused it. Although there might be many old things, the man that put them together in such a way as to make them useful was certainly entitled to be considered an inventor. Another serious difficulty was that out of all the prior specifications which were quoted as anticipations, more than three-fourths were utterly useless, and had never been worked. Many patents were refused on the ground of prior specifications, which described utterly useless things. He had several such instances before him at the present moment. If a set of examiners could be obtained who were free from the inclination to form their own judgment as to questions of invention or non-invention, free from the tendency to pile together things picked out from different sources, and free also to judge of the merit of the prior anticipations brought forward, some such sort of examination would be of great use not only to inventors, but to the public at large, but until a scheme could be formed by which examiners could be prevented from launching out into devious paths examination was of no use.

Mr. LLOYD WISE said Mr. Siemens had referred to his (Mr. Wise's) scheme for preliminary examination of applications for patents. He first mentioned that scheme 30 years ago to that most distinguished patent lawyer, the father of the Chairman, by whom he was invited to co-operate in promoting changes in the Patent-law, the result being seen in the Select Committee's Reports of 1871-2 and in the Act of 1883. If he did not misunderstand the recommendations of the Departmental Committee, that committee approved of his scheme. He had discussed it with many men who were qualified to form an opinion, and where the scheme had been objected to, he had generally found that the objections had arisen from some misapprehension. Mr. Imray had pointed out the difficulties which arose under examination systems, owing to the examiners citing things which were practically unworkable. No objection could arise under that head in the proposed scheme, because the examiner would not have the power of refusing the patent, and if the applicant, after considering what was cited, thought fit to ignore it, the worst that could happen would be an endorsement on the specification. He was afraid the reader of the paper viewed the question of Patent-law reform from a manufacturer's point of view. A man of small means who went with a patent specification in his hands, bearing an official endorsement, as distinguished from an embodiment in the specification itself of a statement in his own language of the state of the art, to a capitalist or a manufacturer would have a very poor chance of coming to satisfactory terms. An official endorsement would be liable to be regarded as a blot. What did Mr. Siemens do when he took out a patent under the advice of Messrs. Abel and Imray? He, in his specification stated generally, according to his knowledge at the time, what had been proposed more or less in the same direction, aud then he set forth wherein what he sought to claim differed from what had been proposed. Even when that was done, occasionally he found that there was something more previously known which involved a further disclaiming statement in order to to obtain a clear patent. That was exactly the practice he suggested—that a man, having applied for a patent more or less in the dark, should be informed by the Patent-office of anything that was found, and should then be allowed

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000ba

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

702

to put his specification into shape so as not to cover too much; if he were unwilling to do that then he should suffer an endorsement. That scheme was very favourably spoken of by the late Sir William Siemens, and had lately been recommended to the Departmental Committee by many very eminent men. He took very strong exception to the suggestion that a patent should not be renewable unless it had been practically worked during the first four years. Many excellent and useful inventions were brought out by men which it was not in their power to introduce commercially.

Mr. P. M. JUSTICE thought the reader of the paper had not considered the entire effect of his proposition in regard to the compulsory working clause. Did he suggest that he was willing that every one of his many inventions, as specified in each particular specification at the present time, which was not in full work, might be cancelled? There was always a series of steps in building up a new industry, but Mr. Siemens went outside those steps, and suggested that each thing must be worked which was patented. The original Edison telephone was a huge instrument which one had to grind like a coffee mill when speaking and listening. Did Mr. Siemens suggest that the patent was not valid, on the ground that the particular instrument was not in use after the improvement came into force? A large German aniline dye factory employed over 30 chemists, who did nothing toward practical manufacture, and he had been informed that out of over 100 products made in the works there was not more than two products in which the process by which they were produced was more than three years' old, every process having been improved. Were all the early patents to be annulled, on the ground that they were not commercially worked? If it were so the field of invention would be thrown open so that no capitalist would be prepared to risk his money in any enterprise under patents.

Mr. EDWARD CARPMAEL agreed with Mr. Siemens that the object of Patent-law was to encourage the starting of new industries in the country, but he entirely disagreed with him in thinking that the means he proposed would succeed in attaining that end. He thought the advocates of compulsory working laboured under two delusions. First, they appeared to think that everybody in the trade was most anxious to take up and work untried inventions, and that it was the patentee who was the dog-in-the-manger, who would not work himself or allow other people to do so; and, secondly, that an unpatented invention was more likely to be worked than a patented one. In his experience, extending over more than 30 years, he had always found that patentees and inventors were most anxious and willing to carry out their inventions, that being the only way in which they could make money out of them. In 99 cases out of 100 the reason why a valuable invention was not carried out was not the unwillingness of the inventor, but the obstinacy and resistance of the trade. A very striking illustration of the fact that manufacturers were not very willing to take up untried inventions was that for 12 years after the passing of the Act of 1883 not a single application was made for a compulsory license. He was quite aware that at present, owing to the regulations of the Board of Trade, there were great difficulties and expenses involved in obtaining a compulsory license; but when the Act was passed no one could have foreseen this; on paper nothing could be more simple and inexpensive. Even up to the present time he believed he was right in saying that no *bonâ-fide* application had been made for a compulsory license under a patent which had not been worked. In all cases the patent had been worked to a very large extent, and it was because it was profitable that the compulsory license was wanted. He thought a few examples would show the difficulties meritorious inventors experienced in getting their patents taken up. Messrs. Thomas and Gilchrist had to assign one-third of their patent and grant a free license before a manufacturer could be found to undertake their process, and although that was done immediately the patent was granted it was not commercially worked till more than three years had elapsed from the date of the patent. In the case of Watt's steam engine and Lister's (Lord Masham) inventions of wool and silk combing and velvet weaving fortunes had to be spent and years wasted before the inventions were commercially adopted. In more recent times, it was eight years after the date of the patent before Hopkinson's three-wire system was adopted at all, and years before Parsons's turbine was used commercially. Did Mr. Siemens seriously contend that all those inventors should be deprived of the profits of their inventions, or did he contend that England would have been benefited if these industries had been stifled at their birth? Were either Siemens's regenerative furnace or the Siemens-Martin process for the production of steel, worked within three years of the date of the patents? If they were, it was only because they belonged to a rich and powerful company, and not to a poor inventor. In his opinion, Mr. Siemens's proposition, so far from encouraging the introduction of new manufactures, would have an entirely opposite effect, in many cases stifling them altogether.

Mr. JOHN I. THORNYCROFT, F.R.S., thought there was more difficulty in getting an invention worked than was generally supposed. If compulsory working within a limited time was necessary he thought Mr. Siemens should extend the time he had mentioned. Legislation, so far as it had been altered in recent years, had been improved, but the main intention of patents by the Crown, that they should be a benefit to the community at large, must be kept in view. A preliminary examination, which would help the inventor by giving him detailed information of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00004f

مكتبة قطر الوطنية
Qatar National Library

what had been done before, would be of great benefit, and the suggestion that patents should be limited to those of a more valuable character was also worthy of consideration.

Mr. GEORGE B. ELLIS said that in America and Germany persons practising in the Patent-office were under control, an entirely different state of affairs to those existing in England, where there was absolutely no control, which led to a great deal of cheating. If a test was to be imposed on the novelty of the invention, at the same time the various people practising in the Patent-office should be controlled.

Prof. AYRTON, F.R.S., said the reader of the paper, in his proposed improvements, had suggested that unless a patent had been worked on a commercial scale before the end of the fourth year it should be void. No doubt such a recommendation would be of value if patentees were obstructionists. In his opinion there was a class of patents which were not utilised because the world was not ready to take advantage of them. It would be very hard that although in such a case a patentee was quite willing to enter into any arrangement to enable his patent to be utilised he should lose it. It was even harder still that he should be called upon to pay, year after year, an increasing sum to maintain a patent which returned him absolutely nothing. In such a case it was worth while considering whether a steadily increasing fee was desirable. He had not been able to discover the advantage of the regulation which said, "The acceptance of the complete specification is advertised, and any person may give notice of opposition, within two months, to the grant of the patent on certain very limited grounds." What was the advantage of objecting to anybody's patent? He was told that the granting of the patent gave no particular advantage, and by objecting one was placed at a disadvantage because one had to bear the expenses. No advantage was gained if one won, and the granting of a patent could not be objected to unless the objector was in possession of a prior patent for the same thing. In his opinion, the American system of interference was a very disadvantageous arrangement. If a patent was taken out, the patentee was called upon to defend it, not because he was claiming any royalty, but simply because, unless he did so, as somebody else had lodged an interference, he would lose it altogether. He was thoroughly in accord with Mr. Imray, that the examination of patents in Germany and the States was very unsatisfactory and of comparatively little use. Not very long ago an objection was raised to a patent of his own for a transparent varnish which, unlike ordinary transparent varnishes, was conductive, on the ground that he had not given a drawing. He pointed out to the American Patent-office that it was impossible to draw a varnish, but they said that they must have a diagram. Eventually he drew three vertical lines, which he said represented a coating of varnish on a plate of glass, and got his patent.

Mr. FLETCHER MOULTON, K.C., M.P., said he wished to deal with Mr. Siemens's views on the rights of a patentee *versus* the manufacturer. Mr. Siemens, in his plan for the protection of inventors, said that anybody who was willing to make an invention should have a right at once, after the courtesy of writing to the inventor, of applying to the Patent-office for a license to make it as much as he like for, say, 10 per cent. of the saving—nay, on the most favoured nation clause, if he was only willing to manufacture it. A man gave his time, thought, and brains to make a saving for the world, and the manufacturer, who did not spend a penny, stood by watching with grim satisfaction the 99 failures out of 100 inventions, but when one did emerge successfully, he said, "Thank you; I will take 9-10ths of the saving, and you may have as your reward 1-10th." But it was worse than that. The patent would be invalidated unless it was worked promptly. In order to get it worked promptly the inventor might have to go to some powerful manufacturers and say that if they would work it he would grant them a license on very favourable terms. The poor inventor was then lost, because although in this way he got his patent worked and saved it from extinction, if it proved successful any other manufacturer who was willing to undertake to manufacture the patent on a commercial scale was (on the proposals in Mr. Siemens's paper) entitled to a license on the very same terms that the patentee had to make in order to keep his patent from dying out. He had been brought very much in contact with the real inventor, and usually he was by no means a rich man. Their ancestors were very wise in saying that if advance in arts and science was desired, it was not the capitalist who should be favoured, but the man who brought invention and thought to work. They further realised that it was no use devising a system of rewards which would depend on the appreciation which some body of men might have of the value of his invention, but that the right way was to make the reward automatic—to say, If you have struck a new thing you shall be undisturbed in the working of it for a certain number of years, and thus if it is valuable you will have rich reward; if it is not you will have a poor reward. They realised that the only way adequately to reward invention in proportion to its merit was the patent monopoly, and he had never yet heard anything proposed which could take its place. That right ought never to be invaded unless the patentee abused the patent rights by refusing either to work himself or to allow other people to work.

The CHAIRMAN, in proposing a vote of thanks to Mr. Siemens, said he entirely agreed with Mr. Moulton that the only proper reward for invention

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000077

مكتبة قطر الوطنية
Qatar National Library

was to give the inventor a proper enjoyment of his own invention, and that any question of compulsory license should only arise when it was shown that the monopoly had not been wisely and properly exercised. He did not think any Patent-law reformers ought to work, as far as the British Patent-law was concerned, for a guarantee from the Government as to the validity of their patents. Such a step was in the wrong direction, whether there was examination or no examination. It would tend to a number of good and useful patents being stopped from mere nervousness. He was strongly of opinion, that anything like an examination for subject-matter or novelty would be a retrograde step. He wished to enter a protest against the idea that an anticipation 15 years old should not be allowed to invalidate. If 50 or 60 years were given different considerations would arise, but the fact that even in the term of 14 years good inventions frequently were not brought into effective operation showed that it would be unwise to limit a real anticipation by such a measure of time as 15 years. It would be far too much in the interests of people who would endeavour to pick up patents, repatent them in 15 years, and attempt to prevent people engaged in commerce using them. In regard to the kind of examination which the inventor and the public were entitled to have, he thought that when in the Patent-office there was a mass of information, carefully digested and indexed, it was very hard indeed upon inventors if the Patent-office knew that they had been travelling along a road which had been already traversed not to tell them so, especially when they were paying a large revenue to the country, there being a surplus at the present time of about £100,000 a year from patent fees. He thought the public in the same way were entitled to information. He thought Mr. Wise hit the right nail on the head when he said that no real harm would be done by endorsement, because it was only when an inventor obstinately refused to alter his specification that the Patent-office exercised any compulsion. A great deal had been said in the Press about an endorsement upon specifications being a great hardship to inventors. After considerable experience he could say deliberately that in 99 cases out of 100 it was a bugbear, and an honest inventor was only too glad to have his attention called to possible anticipations. In sitting as law officer, some hundreds of *bonâ-fide* oppositions, by persons having an interest in a previous patent had been brought before him, and these were met by the applicant abandoning any claim to the points described in the previous specifications. It was only people who wished to use patents in a way they should not be used who raised such objections. He joined in the chorus of disapprobation of Mr. Siemens' suggestion that a patent should be invalid if it was not worked in four years. That was introducing in the most aggravated form some of the abuses of the foreign system. He thoroughly agreed with what Mr. Carpmael had said. He could produce to Mr. Siemens more than one specification of his distinguished uncle, who came to England because of the protection afforded to invention by the British Patent-laws, which was never worked for anything like three years from the date when it was taken out. The same remark applied to the patents of Lord Kelvin and Prof. Hughes, and was the common feature of some of the most meritorious inventions; so meritorious that they had been extended by the favour of the Crown, because they had not been placed before the public until the last two or three years of the term. He hoped the Report of the Committee upon which he served with Mr. Moulton and Mr. Carpmael, would be found to embody, at any rate, improvements in the Patent-law founded upon experience, properly regarding the interests both of inventors and patentees, and he hoped the Government would be able to give practical effect to the recommendation.

Mr. SIEMENS, in reply, after acknowledging the vote of thanks, said that it was his intention all through to speak from the point of view of the manufacturer. On looking into the historical portion of the subject it was seen that the object of the first granting of monopolies was to encourage manufacturers and not inventors. Useful inventions had only in most exceptional cases been made by outsiders; they were usually discovered by people who had studied the subject in all its branches and made careful experiments. He thought that if a patent was not commercially taken up it should be dropped; only those patents were of value which were taken up. Professor Ayrton had said that it was a great hardship if an inventor was before his time, but he could not see why that should prevent people from reaping the benefit who came at the right moment. It was quite possible that four years was not sufficient for compulsory working, and that some modification would have to be made by which the examiner had the right to grant extension. The general idea he wished to bring forward was that the man who worked, the manufacturer, was a worthy person who ought to be supported, and not the man who went about with stray ideas without knowing what he was really offering.

Mr. SIEMENS writes:—

Owing to the lateness of the hour I could not reply very fully to the various points discussed, and I should like, therefore, to add the following observations:—

1. *Search for Novelty.*—There was a general concurrence that such a search should be made as complete as possible; and my contention is, that this search should be made at the time, when the invention is first thought of, so as to save the inventor the time, trouble, and expense of drawing up a useless specification.

I also think that the self-reliance of the inventor

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000056

مكتبة قطر الوطنية
Qatar National Library

should be encouraged by letting him make the search himself, but assisting him by providing indexes and all other information.

2. *Compulsory Working*, or as I prefer calling it, "introducing an invention on a commercial scale," is the turning point of my system, as experience has amply proved that only such inventions can be introduced as have real value. The fact of an invention not being taken up is in itself sufficient proof of its want of merit. On the other hand, if an inventor succeeds in introducing his invention, he receives under the proposed rules automatically a valid monopoly, which under the present systems he can only obtain through costly litigation.

3. *Compulsory Licenses* are necessary to keep the inventor in check, and the proposition was strongly objected to by Mr. Moulton, who declares that the inventor is injured thereby.

Mr. Moulton ignored in his remarks the provision that an applicant for a compulsory license must prove to the satisfaction of the Comptroller that he has the means of carrying out the invention on a commercial scale, and the inventor suffers no great hardship in case such licenses are granted.

Another function of the compulsory license is to prevent foreign inventors from refusing licenses to British manufacturers, and importing the patented article into the United Kingdom to the detriment of the industries of the country.

MEETINGS OF THE SOCIETY.

ORDINARY MEETINGS.

Wednesday evening, at Eight o'clock :—

MAY 1.—"Thames Steamboat Service." By ARNOLD F. HILLS. SIR FREDERICK BRAMWELL, Bart., D.C.L., F.R.S., President of the Society, will preside.

COLONIAL SECTION.

Tuesday afternoon, at 4.30 o'clock :—

APRIL 30.—"The British West Indies." By SIR NEVILE LUBBOCK, K.C.M.G., Chairman West India Committee. GENERAL SIR HENRY WYLIE NORMAN, G.C.B., G.C.M.G., will preside.

CANTOR LECTURES.

Monday evening, at 8 o'clock :—

SIR WILLIAM CHANDLER ROBERTS-AUSTEN, K.C.B., F.R.S., and T. KIRKE ROSE, D.Sc., "Alloys." Lecture 2, April 22.

HOWARD LECTURES.

Friday evening, at 8 o'clock :—

ALFRED C. EBORALL, M.I.E.E., "Polyphase Electric Working." Lecture 2, May 3.

MEETINGS FOR THE ENSUING WEEK.

MONDAY, APRIL 22...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. (Cantor Lectures.) Sir W. C. Roberts-Austen, "Alloys." (Lecture II.)
Farmers' Club, Salisbury-square Hotel, Fleet-street, E.C., 4 p.m. Mr. A. E. Mansele, "Sheep and Sheep Breeding."
Surveyors, 12, Great George-street, S.W., 8 p.m. Mr. A. C. Salter, "Ownership of the Highways."
Geographical, University of London, Burlington-gardens, W., 8½ p.m.
Actuaries, Staples-inn Hall, Holborn, 5½ p.m.
Camera Club, Charing-cross-road, W.C., 8¼ p.m. Rev. F. C. Lambert, "The Fixing Bath."
Zoological, 3, Hanover-square, W., 4 p.m. Annual meeting.

TUESDAY, APRIL 30...SOCIETY OF ARTS, John-street, Adelphi, W.C., 4½ p.m. (Colonial Section.) Sir Nevile Lubbock, "The British West Indies."
Royal Institution, Albemarle-street, W., 3 p.m. Dr. Allan Macfadyen, "Cellular Physiology, with Special Reference to the Enzymes and Ferments." (Lecture III.)
Central Chamber of Agriculture (at the HOUSE OF THE SOCIETY OF ARTS), 11 a.m.
Civil Engineers, 25, Great George-street, S.W., 8 p.m. Annual General Meeting.

WEDNESDAY, MAY 1...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. Mr. Arnold F. Hills, "Thames Steamboat Service."
Archæological Assoc., 32, Sackville-street, W, 8 p.m.
Obstetrical, 20, Hanover-square, W., 8 p.m.
British Astronomical, Sion College, Victoria-embankment, E.C., 5 p.m.
Royal Institution, Albemarle-street, W., 5 p.m. Annual Meeting.
Archæological Institution, Oxford Mansion, Oxford-street, W., 4 p.m.

THURSDAY, MAY 2...Royal, Burlington-house, W., 4½ p.m.
Antiquaries, Burlington-house, W., 8½ p.m.
Linnean, Burlington-house, W., 8 p.m. Professor H. C. Bastian, "Studies in Heterogenesi."
Chemical, Burlington-house, W., 8 p.m. Professor W. H. Perkin, jun., and Dr. J. F. Thorpe, "The Synthetical Formation of Bridged-Rings. (Part I.) "Some Derivatives of Bicyclopentane."
Society for the Encouragement of Fine Arts, 9, Conduit-street, 8 p.m. Mrs. Ernest Hart, "Stencil Painting as an Art."
Royal Institution, Albemarle-street, W., 3 p.m. Sir Alexander C. Mackenzie, "Arthur Sullivan." (Lecture II.)
Electrical Engineers, 25, Great George-street, S.W., 8 p.m. 1. Messrs. C. G. Lamb and Miles Walker, "An Instrument for Measuring the Permeability of Iron and Steel." 2. Mr. Frank Holden, "A Watt-Hour Meter."
Camera Club, Charing-cross-road, W.C., 8¼ p.m. Dr. T. Anderson, "The Grand Canyon."
Civil and Mechanical Engineers, Hotel Victoria, Northumberland-avenue, S.W., 8 p.m. Mr. A. H. Allen, "The Storage of Electricity."

FRIDAY, MAY 3...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. (Howard Lectures.) Mr. Alfred C. Eborall, "Polyphase Electric Working."
Royal Institution, Albemarle-street, W., 8 p.m. Weekly Meeting. Mr. C. Mercier, "Memory."
Geologists' Association, University College, W.C., 8 p.m.
Junior Engineers, Westminster Palace Hotel, S.W., 8 p.m. Mr. William Powrie, "Employers and Employed."
Philological, University College, W.C., 8 p.m. Annual Meeting.
Quekett Microscopical Club, 20, Hanover-square, W.C., 8 p.m.

SATURDAY, MAY 4...Botanic, Inner Circle, Regent's-park, N.W., 3½ p.m.
Royal Institution, Albemarle-street, W., 3 p.m. Mr. J. Y. Buchanan, "Climate: its Causes and Effects." (Lecture III.)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00008f

مكتبة قطر الوطنية
Qatar National Library

DINNEFORD'S MAGNESIA.

The best remedy for Acidity of the Stomach, Heartburn, Headache. Gout, and Indigestion; and safest aperient for delicate Constitutions, Ladies, Children, and Infants.

SOLD THROUGHOUT THE WORLD.

CAUTION.—See that "DINNEFORD and CO." is on every Bottle and Label.



SHONE PNEUMATIC AUTOMATIC EJECTORS

FOR RAISING

SEWAGE, SLUDGE, WATER, &c., &c.

As adopted for RANGOON, BOMBAY, KARACHI, EASTBOURNE, SOUTHAMPTON, WELLINGTON (N.Z.), NORWICH, IPSWICH, ARAD (Hungary), &c., &c.

For pamphlets and full particulars apply to the Manufacturers,

HUGHES & LANCASTER, 47, Victoria Street, London, S.W.,

Contractors for Drainage and Water Supply Works.

ENTERED AT STATIONERS' HALL

SOUND — NUTRITIOUS — INVIGORATING

WALTHAM BROS. LTD

BROWN STOUT 2/6 doz & 3/- NURSING STOUT

Bottled at THE BREWERY STOCKWELL.S.W.

GUARANTEED BREWED ONLY FROM MALT & HOPS

INTERNATIONAL CONGRESS ON TECHNICAL EDUCATION.

The Report of the Proceedings of the

INTERNATIONAL CONGRESS ON TECHNICAL EDUCATION,

Held at the SOCIETY OF ARTS in June, 1897. PRICE 3s. 6d., by post 3s. 10d.

Can be obtained on application to

THE SECRETARY, SOCIETY OF ARTS, JOHN-STREET, ADELPHI, LONDON, W.C.

The volume consists of 307 pages, and contains a report of all the papers read and the discussions, with appendixes giving lists of Officials, Delegates, and others taking part in the Congress.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000014

مكتبة قطر الوطنية
Qatar National Library

THE
CUSACK INSTITUTE
White St., Finsbury St., and Ropemaker St.,
Finsbury-pavement, London, E.C.

The most successful, commodious, and convenient Commercial College in London. Close to Moorgate-street, Broad-street, and Liverpool-street Stations. Over 3,000 successes annually at all public examinations. Painstaking individual tuition in all subjects by specialists. A unique system of training for commercial life.

During the last four years, 97 per cent. of pupils have passed at Commercial and Civil Service Examinations, including —

FIRST PLACE.—London Chamber of Commerce Examination (with Prize) 1896

FIRST PLACE.—London Chamber of Commerce Examination (with Prize) 1897

FIRST PLACE.—In all England—Society of Arts Examination (with Medal)..... 1897

FIRST PLACE.—In all England—Society of Arts Examination (with Medal)..... 1899

MEDAL AND DISTINCTION.—College of Preceptors 1899

Situations readily obtained for all Proficient Students.
EMPLOYERS PROMPTLY SUITED WITH COMPETENT CLERKS.
No charge is made to either Employer or Employed.

All communications to be addressed to—
THE PRINCIPAL, PROFESSOR CUSACK.

SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

CANTOR LECTURES.

The following Cantor Lectures, delivered before the Society of Arts, have been published separately, and may be obtained at the Society's House, John-street, Adelphi, W.C.

Distribution of Electricity. Three Lectures. By Prof. GEORGE FORBES, F.R.S., M.A. (1885.) Price 1s.

Science Teaching. Three Lectures. By Professor FREDERICK GUTHRIE, F.R.S. (1886.) Price 1s.

Art of Tapestry-making and Embroidery. Three Lectures. By ALAN S. COLE. (1886.) Price 1s.

Friction. Four Lectures. By Professor H. S. HELE SHAW. (1886.) Price 1s.

Disease of Plants. Six Lectures. By J. L. W. THUDICHUM, M.D. (1887.) Price 1s.

Machines for Testing Materials, especially Iron and Steel Three Lectures. By Prof. W. C. UNWIN, F.R.S. (1887.) Price 1s.

Chemistry of Substances taking part in Putrefaction. and Antisepsis. Four Lectures. By JOHN M. THOMSON, F.R.S.E. (1887.) Price 1s

Alloys. Three Lectures. By Prof. W. CHANDLER ROBERTS-AUSTEN, F.R.S. (1888.) Price 1s.

Our Milk, Butter, and Cheese Supply. Three Lectures. By RICHARD BANNISTER, F.I.C., F.C.S. (1888.) Price 1s.

Elements of Architectural Design. Four Lectures. By H. H. STATHAM. (1888.) Price 1s.

Bacterial Purification of Sewage. Four Lectures. By Dr. SAMUEL RIDEAL, F.I.C. (1889.) Price 1s.

Cycle Construction and Design. Four Lectures. By ARCHIBALD SHARP, M.Inst.C.E. (1899.) Price 1s

Leather Manufacture. Four Lectures. By Prof. HENRY R. PROCTER, F.I.C. (1890.) Price 1s.

Heat Engines other than Steam. Four Lectures. By H. GRAHAM HARRIS, M.Inst.C.E. and M.E. (1889.) Price 1s. 6d.

Egyptian Tapestry. Two Lectures. By ALAN S. COLE. (1889.) Price 1s.

Modern Developments of Bread-making. Three Lectures. By WILLIAM JAGO, F.C.S., F.I.C. (1890.) Price 1s.

Colour and Colouring. Three Lectures. By Prof. A. H. CHURCH, M.A., F.R.S. (1890.) Price 1s.

Design applied to Wood-carving. Three Lectures. By LEWIS FOREMAN DAY. (1890.) Price 1s.

Stereotyping. Three Lectures. By THOMAS BOLAS, F.R.S., F.I.C. (1890.) Price 1s.

Gaseous Illuminants. Three Lectures. By Professor VIVIAN B. LEWES. (1891.) Price 1s.

Electric Transmission of Power. Three Lectures. By GISBERT KAPP, C.E. (1891.) Price 1s.

Photographic Chemistry. Three Lectures. By Professor R. MELDOLA, F.R.S. (1891.) Price 1s.

Pigments and Vehicles of the Old Masters. Three Lectures. By A. P. LAURIE, M.A. (1891.) Price 1s.

Mine Surveying. Three Lectures. By B. H. BROUGH, F.G.S. (1892.) Price 1s.

Developments of Electrical Distribution. Four Lectures. By Prof. GEORGE FORBES, F.R.S. (1892.) Price 1s.

Recent Contributions to the Chemistry and Bacteriology of the Fermentation Industries. Four Lectures. By Prof. PERCY F. FRANKLAND, Ph.D., F.R.S. (1892.) Price 1s.

The Practical Measurement of Alternating Currents. Four Lectures. By Prof. A. J. FLEMING, M.A., D.Sc., F.R.S. (1893.) Price 1s.

Generation of Light from Coal Gas. Four Lectures. By Prof. VIVIAN B. LEWES. (1893.) Price 1s.

Mosaic: its History and Practice. Two Lectures. By C. HARRISON TOWNSEND, F.R.I.B.A. (1893.) Price 1s.

Detection and Estimation of Small Quantities of Inflammable Gas or Vapour in the Air. Four Lectures. By FRANK CLOWES, D.Sc., F.I.C. (1894.) Price 1s.

Photometry. Three Lectures. By Captain W. DE W. ABNEY, C.B., F.R.S. (1894.) Price 1s.

Type-writing Machines. Two Lectures. By HENRY C. JENKINS, A.M.Inst.C.E. (1894.) Price 1s.

Explosives and their Modern Development. Four Lectures. By Professor VIVIAN B. LEWES. (1894.) Price 1s.

Means for Verifying Ancient Embroideries and Laces. Three Lectures. By ALAN S. COLE. (1895.) Price 1s.

Recent American Methods and Appliances Employed in the Metallurgy of Copper, Lead, Gold, and Silver. Four Lectures. By JAMES DOUGLAS. (1895.) Price 1s.

The Arc Light. Three Lectures. By Prof. SILVANUS P. THOMPSON, D.Sc., F.R.S. (1895.) Price 1s.

Mechanical Road Carriages. Three Lectures. By W. WORBY BEAUMONT, M.Inst.C.E. (1895.) Price 1s.

Japanese Art Industries. Two Lectures. By ERNEST HART, D.C.L. (1895.) Price 1s.

The Alternate Current Transformer. Four Lectures. By Dr. J. A. FLEMING, F.R.S. (1896.) Price 1s

Precious Stones. Two Lectures. By HENRY A. MIERS, M.A., F.R.S. (1896.) Price 1s.

Applied Electro-Chemistry. Four Lectures. By JAMES SWINBURNE. (1896.) Price 1s.

Chemistry of Metals and Alloys Employed for Building and Decorative Purposes. Three Lectures. By Prof. J. M. THOMSON, F.R.S., F.C.S. (1896.) Price 1s.

Use of Gas for Domestic Lighting. Three Lectures. By Prof. VIVIAN B. LEWES. (1897.) Price 1s.

Industrial Uses of Cellulose. Three Lectures. By C. F. CROSS, F.C.S. (1897.) Price 1s.

Material and Design in Pottery. Four Lectures. By WM. BURTON, F.C.S. (1897.) Price 1s.

Alloys. Four Lectures. By Prof. W. C. ROBERTS-AUSTEN, C.B., F.R.S. Four Lectures. (1897.) Price 1s.

Design in Lettering. Four Lectures. By LEWIS F. DAY. (1897.) Price 1s.

Gutta Percha. Three Lectures, with Appendixes. By Dr. E. F. A. OBACH. (1898.) Price 2s. 6d.

Decorative Bookbinding. Three Lectures. By CYRIL DAVENPORT. (1898.) Price 1s.

The Principles of Design in Form. Four Lectures. By HUGH STANNUS. (1898.) Price 1s.

The Thermo-Chemistry of the Bessemer Process. Three Lectures. By Prof. W. NOEL HARTLEY, F.R.S. (1898.) Price 1s

Electric Traction. Four Lectures. By Prof. C. A. CARUS WILSON. (1898.) Price 1s.

Acetylene. Four Lectures. By PROF. VIVIAN B. LEWES. (1899.) Price 1s.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000069

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

45 Pages. Fully Illustrated. Price One Shilling.

MECHANICAL ROAD CARRIAGES.

A COURSE OF

CANTOR LECTURES,

BY

W. WORBY BEAUMONT, M.Inst.C.E.

The above Lectures have now been reprinted in collective form and may be obtained on application to the Secretary, of the Society of Arts, John-street, Adelphi, London, W.C.

EDUCATIONAL.

BIRKBECK INSTITUTION,

BREAMS BUILDINGS, CHANCERY LANE, E.C.

PRINCIPAL - - - G. ARMITAGE-SMITH, M.A.

DAY AND EVENING CLASSES.

UNIVERSITY OF LONDON—Complete Courses of Study for the Examinations for Science, Arts, and Law Degrees.

SCIENCE CLASSES in every Branch, with Practical Work. Well equipped Laboratories for Chemistry, Physics, Zoology, Botany, and Metallurgy.

LECTURES on Political Economy, Commercial Geography, Commercial Law, Bankruptcy, Equity and Conveyancing, Logic, Psychology, and Ethics.

CLASSES in Latin, Greek, Modern Languages, Literature, English and Commercial Subjects, and for Civil Service.

SCHOOL OF ART—Drawing, Painting, Designing, Modelling, Life Classes, Wood Carving, &c.

Prospectus Free. Calendar **6d.** *(by Post* **8d.***) on application to Secretary.*

SOCIETY OF ARTS,

JOHN STREET, ADELPHI, LONDON, W.C.

34 pages. Price One Shilling.

REPORT OF THE COMMITTEE ON THE EXHIBITION OF ACETYLENE GENERATORS,

AT THE

IMPERIAL INSTITUTE, 1898.

WITH SEVEN APPENDIXES.

Appendix A.—List of Firms to whom Certificates have been granted.
,, B.—Origin of Exhibition.
,, C.—Rules for Admission of Apparatus.
,, D.—Methods adopted for Testing Apparatus.
,, E.—Diagram of Generators with Descriptions.
,, F.—Report of Prof. Vivian Lewes on Results of Experiments.
,, G.—Legislation relating to Calcic Carbide and Acetylene.

CANTOR LECTURES.

The CANTOR LECTURES on ACETYLENE, recently delivered before the SOCIETY OF ARTS, by PROFESSOR VIVIAN B. LEWES, have been reprinted in a separate form, price One Shilling, and can be obtained from the Secretary, Society of Arts, John-street, Adelphi London, W.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000095

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

CHLORIDE ACCUMULATORS.

GOLD MEDAL, PARIS, 1900.
HIGHEST AWARD
FOR
ACCUMULATORS.

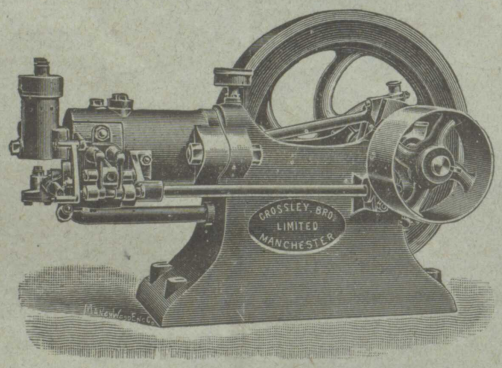
THE MOST RELIABLE FOR
ELECTRIC LIGHTING
OF
MANSIONS, STEAM YACHTS, &c.
AS USED ON THE ROYAL YACHTS.

MANUFACTURERS
The CHLORIDE ELECTRICAL
STORAGE SYNDICATE, Ltd.

REGISTERED OFFICE AND WORKS—
CLIFTON JUNCTION,
Near MANCHESTER.
LONDON OFFICE—
39, VICTORIA STREET, S.W.

CROSSLEY'S GAS ENGINES.

Recently
Remodelled.



Great
Reduction in
Gas
Consumed.

Represents J type.
Giving 1½ effective h.p.

Large number of Second-hand Engines always in Stock.

CROSSLEY BROS., LIMITED,
OPENSHAW, MANCHESTER.

All communications respecting Advertisements should be addressed to Messrs. G. Street & Co., Ltd., 164, Piccadilly, London, W.
London: Printed by WILLIAM TROUNCE, at his office, No. 10, Gough-square, Fleet-street, in the Parish of St. Dunstan, in the County of Middlesex, and published for the Society of Arts, by GEORGE BELL AND SONS, York-street, in the Parish of St. Paul, Covent-garden, in the City of Westminster, April 26, 1901.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

No. 2,623. VOL. LI. | FEBRUARY 27, 1903. | Price 6d. To Non-Members.

THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES & COMMERCE · INSTITUTED AT LONDON 1754 · INCORPORATED BY ROYAL CHARTER 1847

JOURNAL

OF THE

SOCIETY OF ARTS

PUBLISHED EVERY FRIDAY.

CONTENTS.

Notices :—Next Week.—Fire Prevention Prizes.—Cantor Lectures.—Indian Section 305
Applied Art Section :—Heraldry in Decoration, by George W. Eve.—Discussion 305
Twelfth Ordinary Meeting : — Tonkin, Yunnan and Burma, by Fred. W. Carey, F.R.G.S.—Discussion 313
Obituary :—Thomas Ward, J.P. 323
Meetings of the Society 323
Meetings for the Ensuing Week 324

LONDON:
PUBLISHED FOR THE SOCIETY BY GEORGE BELL AND SONS, YORK STREET, COVENT GARDEN.

1903.

Registered as a Newspaper.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

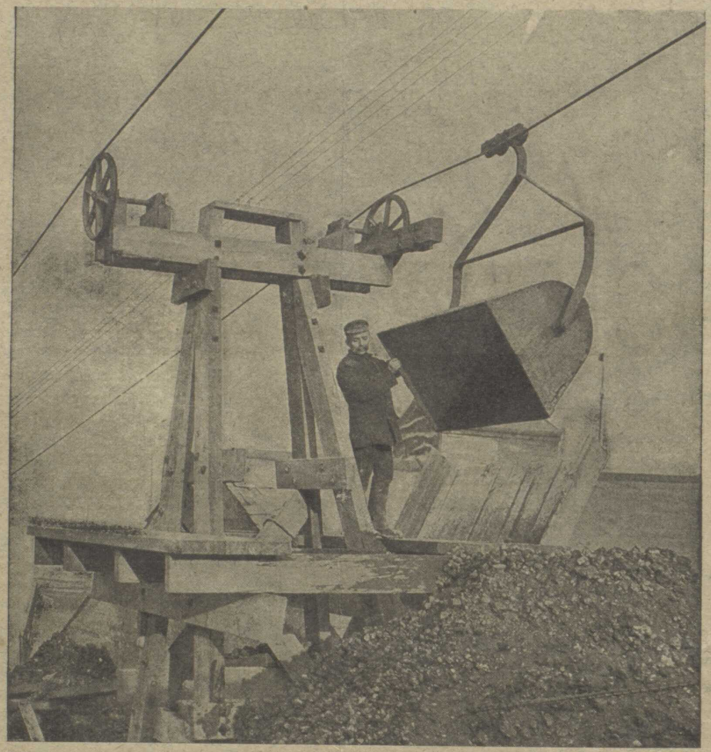
AËRIAL ROPEWAYS

On ALL SYSTEMS constructed by

Bullivant & Co., Ltd.

(From designs by W. T. H. CARRINGTON, M.Inst.C.E.)

EXAMPLES AT WORK ALL OVER THE WORLD.



WIRE ROPEWAY ON THE THAMES CONSTRUCTED BY BULLIVANT & CO., LTD.

MAKERS OF

FLEXIBLE STEEL WIRE ROPES

For Cranes, Lifts, Hoists, Suspension Bridges, &c. Hauling and Winding Gear, Pulleys, Clamps, &c.

Illustrated Pamphlets may be had on Application.

Registered Office, **72, Mark Lane, LONDON, E.C.** Works— MILLWALL.

TO ADVERTISERS—All communications respecting Advertisements to be sent to Walter Judd, Ltd., 5, Queen Victoria Street, Mansion House, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000060

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Electric Cables.

W. T. HENLEY'S TELEGRAPH WORKS CO.
LIMITED,
27, Martin's Lane, Cannon Street, London, E.C.

Telephone: 5781 BANK. Telegrams: "HENLEY'S WORKS, LONDON."

MANUFACTURERS OF . . .

HENLEY'S
CABLES

FOR . . .

ELECTRIC LIGHT AND TRACTION,
TELEGRAPHS AND TELEPHONES.

With Vulcanised India-rubber, Jute, Gutta Percha,
or Paper Insulation.

WE MAKE A SPECIALITY OF ALL KINDS OF

Lead-Covered Cables.

Works—NORTH WOOLWICH.

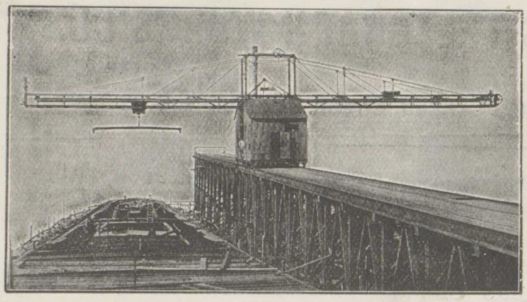
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000084

مكتبة قطر الوطنية
Qatar National Library

Engineering.

MACHINERY

For Economic Handling of Materials.

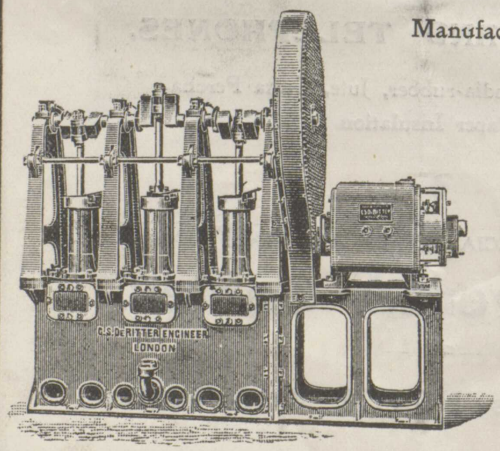


10-TON SHIPBUILDING CRANE (200 FEET LONG).

SHIPBUILDING CRANES.
FURNACE HOISTS.
COAL & ORE-HANDLING MACHINERY.

THE
Brown Hoisting Machinery Co.
39, VICTORIA STREET, LONDON, S.W.
Main Office Works: Cleveland, Ohio, U.S.A. New York Office: 26, Cortland St.

G. S. De Ritter,



ELECTRICALLY DRIVEN SET OF 3-THROW AIR PUMPS.

Manufacturer of
CONDENSING PLANT
With the Latest Improved
AIR PUMPS,
Driven either Electrically by Steam or by Belt.

Three Colt Street, Limehouse, London, E.

ON ADMIRALTY LIST.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x00000e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Mond Gas.

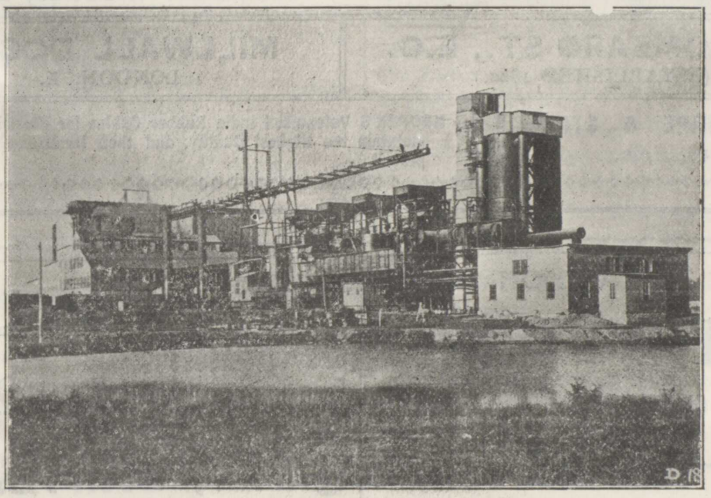
THE CHEAPEST FUEL FOR

POWER AND HEATING.

Plant capable of producing **170,000 H.P.** already sold.

MOND GAS is generated from Bituminous Slack. It is the most suitable for GAS ENGINES.

Complete **MOND GAS INSTALLATIONS** from 250 to 25,000 H.P. started to work in any part of the World with or without Ammonia Recovery.



12,000 H.P. MOND GAS PLANT, WITH AMMONIA RECOVERY.

MOND GAS,

The Power-Gas Corporation, LTD.,

39, VICTORIA STREET, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00000b

مكتبة قطر الوطنية
Qatar National Library

Engineering.

PATENT

BROCKIE-PELL ARC LAMPS.

TRAMWAY LIGHTING. Any Circuit.

Open and Enclosed Types.

STREET LIGHTING. 30,000 in Use.

BROCKIE-PELL ARC LAMP, Limited,

WRITE FOR REDUCED PRICES.

OFFICES & WORKS: 60, WORSHIP ST., LONDON, E.C.

Telegrams—"LINEAR, London. Telephones, 1169 Avenue and 84 Eastern.

HOOPER'S TELEGRAPH AND INDIA RUBBER WORKS, Ltd.

31, LOMBARD ST., E.C. (ESTABLISHED 1860.)

MILLWALL DOCKS, LONDON, E.

PURE TAPE & STRIP, etc., etc.

HOOPER'S Vulcanised India Rubber Cables for Electrical Work maintain the Highest Quality, and their Durability has been proved.

THE WILSON GAS PRODUCER AND

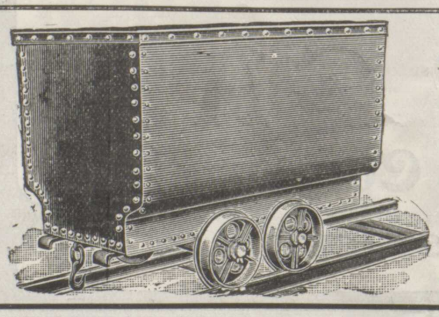
Wilson's Power Gas Plant.

The Cheapest means of Producing Power for any purpose From 100 H.P. upwards.

Simplest and Most Efficient.

Uses any Ordinary Slack Coal.

ALFRED WILSON, Engineer, STAFFORD.



Telegrams: "TRICHORDS, LONDON."

Dolberg-Griffin,

PORTABLE RAILWAYS, TIPPING-WAGONS, CONTRACTORS' WAGONS, SWITCHES, AND TURNTABLES.

42, Southwark Bridge Road, London, S.E.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00003e

مكتبة قطر الوطنية
Qatar National Library

Journal of the Society of Arts,

No. 2,623. Vol. LI.

FRIDAY, FEBRUARY 27, 1903.

All communications for the Society should be addressed to the Secretary, John-street, Adelphi, London, W.C.

Notices.

NEXT WEEK.

Monday, March 2, 8 p.m. (Cantor Lectures.) Professor J. A. Fleming, M.A., D.Sc., F.R.S., "Hertzian Wave Telegraphy in Theory and Practice." (Lecture I.)

Tuesday, March 3, 4.30 p.m. (Colonial Section.) Herbert Samuel, M.P., "The Uganda of To-day."

Wednesday, March 4, 8 p.m. (Ordinary Meeting.) J. C. Medd, "Education in Holland."

Further details of the Society's meetings will be found at the end of this number.

FIRE PREVENTION PRIZES.

The Council of the Society of Arts, at the request of the Executive Committee of the International Fire Prevention Exhibition, have decided to offer, out of the funds of the Fothergill Trust, the following prizes at the Exhibition which is to be held at Earl's Court during the current year:—

For the best chemical fire engines for town use shown at the Exhibition:—One gold medal, two silver medals, and two bronze medals.

For the most easily worked long ladders, to reach the sill of a window 80 feet above the level of the pavement, which shall also be capable of being rapidly transported over roads of not more than 25 feet wide, shown at the Exhibition:—One gold medal, two silver medals, and two bronze medals.

The medals will be awarded by the Council on the report of the judges appointed by the Executive of the Exhibition.

The Council reserve the right of withholding any of the medals, or of awarding medals of lesser value, if in their opinion the exhibits should not be deserving of any, or all, of the medals offered.

CANTOR LECTURES.

On Monday evening, 23rd inst., Mr. Julius Hübner delivered the fourth and concluding lecture of his course on "Paper Manufacture."

A vote of thanks to the lecturer for his course of lectures was passed on the motion of the Chairman.

The Lectures will be printed in the *Journal* during the summer recess.

INDIAN SECTION.

Thursday afternoon, February 26, 1903; Sir Robert J. C. Mowbray, Bart., M.P., in the chair. The paper read was "Gleanings from the Indian Census." By Jervoise Athelstane Baines, C.S.I.

The paper and report of the discussion will be published in next week's number of the *Journal*.

Proceedings of the Society.

APPLIED ART SECTION.

On Tuesday evening, February 17, 1903; Lewis Foreman Day, Vice-President of the Society, in the chair.

The paper read was—

HERALDRY IN DECORATION.

By George W. Eve.

The choice of heraldry in decoration as a subject on which to offer suggestions to the Applied Art Section of the Society of Arts is influenced (apart from the necessity of limiting in some measure the scope of heraldic art in general) by the consideration that, as it was in decoration that heraldry found admirable expression from a very early period, its decorative use in the past is now worth study with a view to the satisfactory execution of modern work.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003c

مكتبة قطر الوطنية
Qatar National Library

Primarily heraldry, no doubt, consisted of the devices which distinguished leaders in the field, but its close connection with the personality of its bearer, whom it represented in a very intimate way, also led to its use in every conceivable form of decoration. In costume, ornament, and furniture, as well as in the hangings of tapestry and in other mural adornments, it became a striking and universal feature of the art work of its time. Owing to this strong personal and allusive quality, the employment of heraldic motives in the decoration of buildings has continued, even down to our own time, to show a more marked degree of excellence than was for a long period present in other forms of heraldic expression.

Decorative work was also the direction in which the revival of heraldry, which accompanied the Gothic revival, first showed itself. Perhaps the inherent difficulties of the materials may have suggested the sincerity of the effort to properly employ them.

It will not be necessary (even if time allowed) to go very far into the origin of heraldry. For our purpose it began about the 11th century—that is to say, it began to be used and systematised, more or less, as we know it, but in its essence it must always have existed.

The desire to distinguish himself by some visible means seems to have characterised man ever since we know anything about him. Badges are mentioned as the ornaments of kings and chiefs from the earliest historic times, from that of the Chaldean King, 4000 B.C., onwards. Some of these early personal devices were strangely similar to those with which we are familiar in later times. The figures on the sculptures at Persepolis, for example, have veritable crests on their heads, and these also occur on the heads of the king and his heir apparent in contemporary coins. There may even have been some sort of regulations controlling the use of the various devices, but we may at least be sure that the powers that were took good care that others did not use their badges if they could help it.

Artistically, our heraldry from its rise in the 11th century quickly developed a high standard of decorative excellence, flourishing exceedingly, with certain changes of style and method, for three hundred years until the middle of the 16th century, when its period of greatest strength and beauty ended, and its decadence began. As a system it seems to have developed in a natural way on the lines of its own necessities, as did its artistic expression in a great measure, but the latter owed much to previous design, and, mainly through the influence of the textiles and other importations (sometimes brought by returning crusaders), helped to perpetuate in the Western world the lions, eagles, and strange and characteristic composite animals of the East. These ancient prototypes of heraldic forms are singularly interesting, and concern us here because they sometimes possess in a marked degree qualities which teach valuable lessons that are applicable to present use. This will be discussed presently.

Although at first the mediæval draughtsman followed the drawing of his imported or traditional motives with considerable closeness (as in the lions of one of the 13th century MSS. in the British Museum), he soon began to treat them in the way that came to be considered peculiarly heraldic. In thus handling his motives he was entirely himself, and the outcome was the natural result of that splendid sense of design which distinguished him. The style is rightly considered purely heraldic, because it arose from its own heraldic conditions, and was the result of the very sane intention that the thing done should be suited to the use to which it was to be put, viz., to serve as a distinctive badge, which could be seen and easily read at a distance, and, in many cases, when in motion. To this end the object was drawn as large as the containing space would fairly admit, and its form was attenuated so as to allow the ground colour to show through in due proportion, and so effect clearness of definition. Vigorous draughtsmanship also contributed to the splendidly decorative effect that was due to good distribution, and the fine balance of colour that results from it. Thus the treatment which was suggested by reasons of practical convenience, resulted in an effect of great decorative value which also afforded opportunity for the use of expressive line. It is interesting to contrast this treatment with that of the later renaissance, such as the naturalistic lion by Della Robbia, which would have become an undistinguishable blob at a distance at which the attenuated form would have been quite effective. In a similar way an eagle drawn in the ancient way, with the wing-feathers strongly divided, was at once more distinct and more decorative than its renaissance successor.

Another practical consideration, the need of readily repairing the damage caused in action to the actual shield, dictated the flat and simple treatment of much of the painted decoration. A similar simplicity occurs in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00004c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

710

some of the MSS., especially in such as are of large extent or of frequent repetition when economy of time and labour was desired. When, however, circumstances allowed, time and skill were not spared in the elaboration of the work. It is of course for this reason that the heraldry in architectural decoration is generally found to be among the best work of its period.

In the ceremonial shields, this elaboration is very great. They were made of layers of various materials, such as canvas, stretched on wooden frames, and the changes were then modelled in gesso, and afterwards gilt and painted, or were fashioned in stamped leather and pinned down to the surface. The spaces were diversified with the beautiful tracery known as diapering, and the whole result was rich and beautiful in the extreme. Large numbers of these shields were made in Italy down to a late period. A most admirable English example is the shield at Canterbury Cathedral, said to be that of the Black Prince. Here the lions are admirably distributed, full of power and life, and less extravagantly drawn than those of John of Eltham at Westminster Abbey, but they lack something of leonine character. The *fleur de lis* of France are beautifully free and graceful, and though so dissimilar in shape to the lions, are equally well designed to occupy their spaces and equally well proportioned to them. The whole work, which is so excellent an example now of some of the best qualities of heraldic design, has suffered from the wear of the centuries, but when it was uninjured must have been superb. The lack of leonine character in the lions might naturally be expected when it is remembered that they were the descendants of generations of copies and, therefore, were not consciously generalised from objects seen by the artist. Even when he did see a lion his acquired ideas were too strong for him, so that one in a 13th century book of sketches, though noted in the margin as "drawn from the quick," is very like its patternlike fellows.

Whether the treatment was simple or elaborate, however, its breadth of effect and decorative quality were nearly always conspicuous. These various methods, both satisfactory in their way, are of special interest to those who require historic sanction to a choice of treatment, in opposition to the opinion that, as certain methods of work, or works of a certain period are good, they are, in addition, perfect and everything else is wrong. So, when a flat treatment, in harmony or contrast with surrounding decoration seems desirable, the armorials may be done flatly, and when on the other hand a more elaborate treatment seems fit, modelling in relief or any other suitable means of decorative effect may be employed. The old work itself, full of variety and freedom, teaches us how to look at the subject without pedantry, but not without knowledge. It teaches the right of individual treatment combined with selection, and illustrates in a measure the essentially artistic principles taught to Kipling's primæval ballad-maker by his totem,

> "There are nine and sixty ways of composing tribal lays,
> And every single one of them is right."

It is not meant, however, that ignorant and reckless scribbling is right. Order as well as freedom is necessary, and this can only be secured by a study of the subject from all points of view.

The early treatment of the crest, helm, and mantling will also amply repay study. Being made of light material, and having its weight, which was still considerable, supported by the shoulders on which the helm rested, the crest was of conspicuous size and is so represented. In early times it is said to have been one of the privileges of knighthood, and this would additionally explain its emphasis. The helm was usually that known as the great helm, to distinguish it from the helmet, basinet or other form of head armour. The latter, having a visor or front which opened, and a movable neck, came into use in the 15th century to meet the desire for lightness and mobility in actual battle, and thenceforward crests and the great helms that bore them were reserved for the tournament and other military solemnities. There was another especially practical reason for this disuse. It had been found that a crest was a dangerous ornament in actual battle, for at close quarters it served as an excellent handle by which to pull down the wearer's head. King Stephen is said to have been taken prisoner in this manner. The mantling, which was at first quite simple, soon became of the greatest value as an element of composition, and the importance of its free possibilities of line was quickly recognised. From a mere representation of the helm drapery, it thenceforth developed through various forms until it became in many instances similar to the contemporary architectural tracery, when, as in the 15th century carvings, it surrounded the shield and ornamented the surface of the panel in a very complete and beautiful way.

By the Tudor time heraldry had ceased to be

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00001c

مكتبة قطر الوطنية
Qatar National Library

used in war in the old way, with such exceptions as banners and the decorative and emblematic shields on ships of war, and it, of course, remained an essential part of the tournaments, while they continued to exist, but heraldry in the main became merely decorative thenceforward, retaining, of course, its allusive and symbolic qualities. In this way it greatly increased, thus sharing in the impetus given to the arts by the end of the Wars of the Roses. At this time a remarkable number of simple flowers came into heraldic use, columbine, gilly-flowers, marigolds, honeysuckle, and many more appearing not only as arms but in garlands as decorative accessories.

By this time also the shield shapes had become less simple, following in their cuspings the fluted armour of which they formed part, and others of which large numbers were designed by the little masters were frank applications of the decorative scrolls of the time. The concave shield whose raised edges took the light and helped to define the form, while assisting, together with the shadow within it, the distribution of light and shade, became much in use.

Some of the early renaissance heraldry retained much of the excellence of the preceding Gothic as regards the pose of the figures and the general composition, and it attempted, in addition, the characterisation that was wanting in the earlier work. In many respects it was very admirable, and seems, in its individual thought working on some of the suggestions or traditions of the older style, to suggest the lines on which modern heraldry might develop. At the same time there was a more naturalistic school, of which the heraldry in Della Robbia's work may be taken as the expression, and this also is interesting, *but as a warning*. It most unfortunately overpowered the more decorative style, and ultimately developed into the feebleness which characterised the heraldry that preceded the revival in the last century.

A well-known example of the better renaissance is the plate by Albert Dürer, of a shield bearing a rampant lion. In this plate there is also evident a desire to render the mantling more cloth-like, though still complicated. Mantling afterwards followed the influence of the conventional leaf forms of the renaissance.

I have ventured to give you this slight sketch of the development of the artistic side of heraldry, not as a mere historic retrospect, but because it is in the study of old work that guidance is to be found for present requirements. But in this connection, a word of warning may perhaps be permitted against making a fetish of the work of any period, however good. Another is against mere copying of old examples however excellent, except, of course, for purposes of study. Merely to copy bits of heraldic precedent and to piece them together is not the way to make an artistic thing at all. A copy has no vitality of its own, and cannot even reproduce that of its original, for it is more than doubtful if it is possible to reproduce the spirit of work done under other conditions and modes of thought. Even Pugin, to whom the revival of decorative heraldry owes so much, with all his sympathy, and with all his powers of draughtsmanship, cannot be said to have altogether caught the intense vigour of his originals.

Again, hardly anything possesses, at the same time, all the good qualities that it might have, and we sometimes excuse the absence of one because of the supreme way in which another is expressed. In doing new work a broader view is necessary if it is to result in anything but a shadow of a former style. Heraldry should be expressive, interesting, and decorative. Original in treatment, and exhibiting the qualities that the best of the old work teaches us to desire, rather than being a copy of it. The term "original" here does not mean expression by means of wild arrangements of weird lines, which are perhaps original in the sense that there is nothing like them on earth, but rather the originality, or, perhaps I should say, individuality, which comes from serious attempts to express qualities rather than to copy styles.

The artistic expression of heraldry may be regarded in two ways; as a representation of an actual shield, crest, helm, and so forth, as they would be represented in a picture, of a tournament for instance, or as a presentation of the essential heraldic facts, in the way that is thought most expressive but without too much regard to preceding styles. The former seems more suitable to ancient and historic arms, and the latter to be more likely to harmonise with modern decorative surroundings, as well as to possess more vitality and variety in itself.

This harmony with surrounding decoration, is one of the essentials of design that should be continually kept in mind. Another condition, equally important, is suitability to the materials and methods by which the design is expressed. The two very obvious points cannot be too often insisted on, however wearisome the reiteration, for they are even now frequently ignored. One hears of shields

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000b5

مكتبة قطر الوطنية
Qatar National Library

painted on vellum (with all the detail and finish to which that beautiful material lends itself), sent as a substitute for a working drawing for large embroidery or carving, and accompanied by instructions that they must be *strictly* followed. Or of friezes and panels, of which the different parts, heraldic and ornamental, have been done by different designers working in ignorance of each other's design. The general design is made, perhaps of well drawn and graceful lines, with spaces where it is thought, probably correctly, that the shields would tell. Then a sketch, perhaps a mere diagrammatic note of the arms, is procured, enlarged to the right size, and blindly copied. Of course the result is patchwork. Careless treatment of heraldry seems to pervade applied art, and so to spoil what is otherwise meritorious work. Much incongruity arises from fear lest improving the drawing or composition may violate heraldic rules, and this brings us to the necessity for acquiring such a knowledge of the subject as will enable the designer to know what points are really essential, and therefore to be carefully retained and accentuated where accent is proper, and what, on the other hand, may be modified or ignored. A knowledge of the system of heraldic description, called blazon, will be absolutely necessary to this end. Pedantry in non-essential matters is of course absurd, and artistic freedom is always to be desired, but there must first of all be a basis of knowledge on which to work.

It will be necessary to study the subject sufficiently to distinguish between the essential principles (such as underlaid the old good work) and the later amplifications of rules, full of pedantic insistence on regulating every detail however unimportant, which were made when the legal mode of thought had displaced the artistic one. The rules that are necessary to prevent confusion will be found sufficiently elastic to allow variety of treatment.

Among the qualities that it will be desired to express are just proportion, distinct definition, good distribution in filling spaces, strongly characterised and well accented forms, and vigorous pose.

The proportion of the parts of a usual form of heraldic group of shield, crest, helm and mantling, to each other remained fairly constant from the end of the 13th century to Tudor times, and may be taken (roughly) to be two-fifths of the whole height for the shield and three-fifths for the helmet and crest. This merely as a practical guide. I need hardly say that it is not to be taken as actual measurement, but only as suggesting the relative weights in the design. The character of the crest, whether broad and solid, or tall and slight, would affect this. The result of these proportions is to bring the helm a little above the actual centre of the design, where it forms a satisfactory point on which the other objects group themselves.

With regard to the proportions of ordinaries to their fields, many rules to be found in treatises may be safely ignored. In good work the ordinaries vary in size with the requirements of distinctness in respect to the other charges, and their variation in this way has no other significance. I do not, of course, deny the usefulness of points of proportion, they may be useful so long as it is recognised that they are approximate and variable guides instead of dogmatic inflexible rules. With regard to charges, it is equally impossible to say what exact proportion they should bear to the field, nor in most cases could we measure it if we did. It must be a matter of artistic perception which decides whether a space is properly filled. In any case the proportion would be an apparent rather than scientific one, and would be greatly modified by circumstances, colour for instance. I need hardly point out that the actual measurements would not be the same for a white object on black as for a black one on white. It is curious how prevalent the desire has always been to reduce to exact rules matters that are insusceptible of that kind of control. The 16th century efforts at a geometric way of drawing letters and the attempt to regulate minutely heraldic drawing are instances of a peculiarly wrongheaded way of approaching matters essentially æsthetic.

As to the animal forms, vigour is of the utmost importance, together with strong characterisation. In this connection the lions of the Assyrian reliefs are very suggestive. The expression of strong, leonine character by means of the accentuation of the muscular masses is a method that lends itself well to heraldic design. The composite figures are also well worthy of study in relation to the griffins and other monsters of later times. Gerard Leigh, writing in the middle of the 16th century, has something to say about griffins; they are, as you know, half eagle and half lion, which students of natural history may like to know, thus: "Griffins bear great enmity to man and horse; though the man be armed and on horseback, yet they take the one with the other quite from the ground and carry them clean away. I think they are of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000019

مكتبة قطر الوطنية
Qatar National Library

great hugeness," he goes on "for I have a claw of one of their paws which should show them to be as big as two lyons." In another place Leigh refuses to believe something because "he had not seen the proof thereof."

It will be well to consider animal pose in relation to the anatomical possibilities, and the qualities of dignity, strength, or grace which are associated with certain charges should also find due expression.

The schemes of arrangement that suggest themselves as suitable to decorative purposes, are very various. Complete series of family arms and those of alliances, together with the honours conferred on individuals; arms of successive owners; shields marking the visits of distinguished guests, and so forth.

Unity of plan, such as when the arms are arranged in relation to some central object as the altar in a church or the fireplace in a room, for example, is, of course, desirable. In the latter case the central position would be appropriately occupied by the entire armorials.

The employment of Badges in decoration opens up a large and interesting field of design from their value as decoration in places where shields of arms are not so suitable. Though not subject to the same rules as the regular arms they were still regarded as of great though secondary importance, and became practically hereditary in many cases. Time, however, will not permit of their adequate treatment here. A kind of badge, more ephemeral in character, called an impress, was a fashion that came to us from Italy, as many other heraldic fashions did. They were devised from mere fancy, and consisted of a device with an explanatory motto. Henry VIII. and his knights at the Field of the Cloth of Gold bore a series of devices, of which they wore part each day until the whole was complete. Cosmo de Medici had a tortoise with a sail attached and the motto "Festina lente," and there were others innumerable. Like other heraldic matters, they sometimes led to quarrels. A knight who strutted up and down at the court of King James, had a falcon embroidered on his sleeve, and the motto, "I bear a raven, fearless in flight, who checks at him his death is dight." Then a Scottish knight saw the device, and after a while appeared with another. His was a raven with a piece of meat, and its motto said, "I bear a raven picking at a piece, who pecks at him, I'll peck at his nese." The story goes on, that in the arrangements for the consequent fight, the Scottish knight, who had but one eye, demanded that his opponent should lose one of his, in order to be on an equality.

There will not be time to do more than briefly allude to colour treatment. It will suffice to say that it is not at all desirable that heraldry should *scream* in mural decoration however necessary it may have been to do so in the field. So long as the tinctures are distinguishable with sufficient clearness any modification of tint may be used, and the colour may be broken by means of diaper or other surface treatment that may be desirable in order to make the heraldry take its appointed place. Always avoiding, however, any interference with the clear statement of the heraldric facts. The decoration may be modelled in gesso and treated with monochrome, so as to emphasize the modelling, or in many another way that practice will suggest.

The revival of the art of enamel also offers a splendid material for heraldic work. The series of works in enamel on the monuments, and above all, the early Stall Plates of the Knights of the Garter at Windsor, are too well known to need more than an allusion to the magnificent field of study they afford; but it may perhaps be permitted to hope that the beautiful art of enamelling which (though its revival is less than 20 years old) is fully capable of worthily following its long ago predecessors, may have, some day, an opportunity of doing so.

The value of heraldry in domestic decoration is also obvious. One can hardly imagine anything to excel the gemlike effect of armorial enamels on the dark panels of a library, for example.

Whatever be the material in which heraldry finds its means of expression, it is permitted confidently to hope that the wide and increasing interest that is being extended to the subject may result in the production of work that is not unworthy to follow the best of its predecessors.

DISCUSSION.

Mr. Charles Chadwyck-Healey, K.C., said that he had listened with great interest to Mr. Eve's remarks, and he wished to express his appreciation of the work that Mr. Eve had been doing for some time in developing the art of heraldry in this country. There was very great need for such work, for the country had been in a lamentable condition in this

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00000c

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

matter for a great number of years, and it was so still, in spite of everything that had been done to bring about improvement. One need only to look, for instance, at the miserable way in which heraldry was impressed upon silver plate by the silversmith, by means of engraving. An instance came under his personal observation a year or two ago. It was desired to put a shield of arms upon a piece of old plate, and one of the leading silversmiths in London was invited to engrave it. A preliminary sketch was made, but a more pitiable thing was never turned out. The charges were reduced to the very smallest possible dimensions, so that they could hardly be recognised. The artist seemed to desire to display as much as possible the colour of the shield. The ordinary was also of the smallest dimensions. He hoped that the time was not very far distant when heraldry as a means of decoration might be developed, and that the practice of it would permeate through every class of artificer. But that could only be brought about by conscientious work, and by the example of men who had made the subject their study. He believed that a great deal was being done on the Continent in developing heraldry in design. Probably continental design would prove to be in the end rather more florid than English people cared to see, but, as an illustration of continental work he might refer to the Munich almanack, which was published every year, and which could be bought for a shilling. It was full of heraldic designs. The publication of a work of similar character was one of the ways in which heraldic design might be popularised in this country.

Mr. R. Garraway Rice agreed that the subject was of great interest. It was noticeable how much better the earlier heraldry was than the later. If he understood Mr. Eve's work aright, it had gone on the principle of trying to bring back that simplicity which was true decoration, and to avoid excessive ornament. In the 18th century, when classical forms prevailed in architecture, heraldry, which was essentially mediæval, was out of place, and it was very difficult to introduce it, hence architecture and heraldry seemed to have fallen apart. At the present day one had the advantage of being able to study the various periods, but it seemed to him that the difficulty which a modern designer had to contend with was that having at his finger-ends practically everything that had gone before, it was extremely difficult to avoid a kind of mixture. The difficulty of modern artists was to give something pure and to avoid introducing features which were out of place.

Mr. R. Phillips said that heraldry was a great aid in ornament, but no doubt those interested in the subject would agree that it had not retained the dignity and importance which properly belonged to it. He remembered in his wanderings in the New Forest coming upon a perfect mine of heraldry in the old Abbey Church at Christchurch. One point which had occurred to him, was the greater beauty of heraldic designs on buildings than in other things. He thought that the chief reason of this was, that in buildings, heraldic designs were always executed in higher relief.

Mr. George Clulow said that Mr. Eve had put before them, in a very interesting way, examples of the decorative use of heraldic design in England and other countries, but had omitted Germany. He regretted this, because there were, in Germany, numerous examples of the 16th century which abounded in the vigorous and decorative character on which Mr. Eve had properly laid much stress. As to the way in which heraldry is often expressed on plate, they must look at the subject from the point of view of the ability of the person called in to do the work. The incident of which Mr. Chadwyck-Healey had told them, displayed, of course, great ignorance on the part of the designer and engraver. It seemed to him that attention ought to be called to the fact that there were among them gentlemen who were capable of supplying heraldry in scientific form, and according to the proper heraldic use. The value of a paper, such as had been read, was that it would call attention to that fact.

Mr. Frank Frederick, in reply to the Chairman, said that the whole subject was absolutely new to him, as he came from a country where heraldry was not regarded, and where it was only seen in decoration and design. Only that day, in walking in the South Kensington Museum, he was struck with the fact that there was such a mine of wealth of design there.

Mr. Alexander Millar said that he had derived extreme pleasure from Mr. Eve's book. That was a work which everyone interested in the subject ought to possess. But, like another speaker, he had been a little disappointed not to find more reference to German heraldry. He possessed a book of which an English edition was about to be published, which appeared to him to be the fullest and finest work on German heraldic design, so far as ancient examples were concerned. In that book, the crest appeared to be composed, in many cases, of enormous horns, taking a sort of lyre shape, and ending in a kind of trumpet mouth. He did not think that he had seen anything like it in English heraldry, though it was extremely common in Germany. He should like very much to ask whether Mr. Eve could explain what the purport of that design was. Reference had been made to a German almanack, which had been published for seven or eight years; something of the same kind appeared in this country this year and last year, and he had copies of it. This book gave the English coats of arms in precisely the same style that coats of arms were given in the German almanack, but the design was less extravagant, and had a more chastened method of expression. Mr. Eve referred in his book to the origin of the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000081

مكتبة قطر الوطنية
Qatar National Library

fleur-de-lis, and he spoke of it as probably derived from the iris or the flag. He had the strongest possible belief that it was so derived, and he did not think that it could have been adopted from the lily, however much the lily might have been conventionalised.

The CHAIRMAN regretted that he was not so entirely in sympathy with heraldry as a chairman ought to be. He looked upon it rather as an art of the past, chiefly of antiquarian interest. The shield of arms borne by a man's ancestors in battle interested him; but not the arms granted in recent years to a civilian—what had he to do with a shield at all? He (the Chairman) was interested in heraldry mainly because it was decorative. He regarded it as the type of what symbolic design should be, and of treatment of such design. But symbolism itself might become tiresome; the "rathe primrose" had not gained in poetry since it became a badge of party politics. The decorator had much to learn from heraldry—especially as to readable expression, and as to the logical use of colour—a mercy to those who had not very acute colour sense. Another lesson to be learnt from heraldry was as to the treatment of animal form in decoration, and especially in ornament, by no means an easy matter. As to the Sicilian silks to which the reader of the paper had alluded, possibly the weavers learnt from the heralds, or each might have learnt from the other. What Mr. Eve had said about proportion in heraldry would be helpful to designers and practical decorators; and it would be encouraging to them to be told that they might treat heraldry very freely, so long as they used their common sense. The pedantry connected with heraldry was one reason why artists "fought shy" of it. And the persons who hampered the artist did not always know. He had himself been called to order for introducing a diaper of grass as a background to the crest of a mower—that was not his crest said the worthy gentleman. In the decoration of a façade of a railway station not a hundred miles from Snow-hill the arms of the counties through which the line passed were on shields of all shapes and periods, according to the notepaper heading or other such "authority" from which the sculptor worked—plainly, he was of opinion that the shape of the shield was a matter with which he had no right to tamper. The result was hopeless incongruity. Apropos of silversmith's work, he agreed with Mr. Chadwyck-Healey. Presumably it was on account of cheapness that silversmiths resorted so enormously to engraving as a means of heraldic expression. But if heraldry was worth introducing at all, it was worth treating in a more dignified manner, and should not be introduced in the shamefaced manner which was usual. The "Münchener Kalendar," he might mention, were designed by Otto Hupp, an artist imbued with the mediæval spirit. Mr. Eve had mentioned Pugin. He might have mentioned also Clement Heaton, who in his day did most vigorous heraldic work. Referring to an illustration shown by the author, the Chairman protested against angel shield-bearers—there was authority for it in old work; but we knew better, or ought to. To make an angel hold the shield even of a great "swell," seemed to him playing it rather "low down" on the angel. Why did not we have heraldry on our stamps? It would at least prevent the necessity of changing them with each new reign. After referring to Mr. Eve's own excellent work in heraldic design, the Chairman concluded by proposing a hearty vote of thanks to him for his excellent paper.

The proposal was carried unanimously.

Mr. EVE, in reply, thanked the meeting for the attention which had been given to him, and also thanked the various speakers for their interesting remarks. The reason that he had not dwelt on German heraldry, was that it was a large subject, and he could not include it within the limits alloted to him. He was a great admirer of German heraldry, and he regarded it as extremely fine and vigorous. As to the Munich almanac, of course they all knew it. He should have dwelt upon heraldic ornament in iron work, but through an accident, he was unable to have the slides ready. They would have been useful as showing how heraldic design should be adapted to the material used. He could not give any information as to the German horns, about which a question had been asked. He had always understood that the horns were due to early decoration of the helmet, and that the crest was a perpetuation and a derivation of them. He had referred to Pugin, as a representative name in the gothic revival. His son-in-law Powell, Burges, and West, among others, had also done admirable work. The Chairman had objected that heraldry was a thing of the past, and he assumed that all heraldry was of a battle origin. But that was not the case. In mediæval times, many people who never fought if they could help it used heraldic arms; and even if such arms were of battle origin, he did not see why civilians should dispense with the opportunity of using a personal emblem because they did not use it for fighting purposes. The silks which he had referred to were the early textiles which came from the East through Sicily, or were those copied from oriental examples. If the animals in those early silks were compared with the earliest illuminated manuscripts the resemblance would be found to be most marked. With regard to the mower, he sympathised with the Chairman in the circumstances he had described. He agreed that correctness of expression should be insisted upon. If a thing was written in heraldry it ought to be written in such a way that its meaning should not be misunderstood. The accuracy of the heraldic statement being thus safe-guarded, ts decorative treatment could then take the course that seemed fit.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000009

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

713

TWELFTH ORDINARY MEETING.

Wednesday, February 25, 1903; Sir STEUART COLVIN BAYLEY, K.C.S.I., C.I.E., Vice-President of the Society, in the chair.

The following candidates were proposed for election as members of the Society:—

Anderson, Sir R. Rowand, LL.D., F.R.S.E., 16, Rutland-square, Edinburgh.

Baker, Charles Edmund, 54, Parliament-street, S.W., and Park Hill-lodge, Shortlands, Kent.

Calderwood, James Macdonald, M.Am.I.M.E., M.Inst.M.M., Messrs. Symons and Moses, P O. Box 469, Johannesburg, Transvaal, South Africa.

Fraser, A. Brodie, Roddach Bow, Denton-road, Canton, Cardiff.

Grenfell, General Lord, G.C.B., G.C.M.G., The Palace, Valetta, Malta.

McLaughlin, Miss M. Louise, 2558, Eden-avenue, Mount Auburn, Cincinnati, Ohio, U.S.A.

Matland, George Read, 1, Finsbury-pavement, E.C.

Oelsner, Isidor, 31, Holland-villas-road, Kensington, W.

Quin, William James, J.P., Bishops Glen (P.O. Box 58), Bloemfontein, Orange River Colony, South Africa.

Rank, Joseph, Willersley-house, The Park, Hull.

The following candidates were balloted for and duly elected members of the Society: —

Ferguson, James, 4, Warltersville-road, Crouch-hill, N., and 91, Fore-street, E.C.

Hamilton, W. L. H., 16, St. Helens-place, E.C.

Hume, John, 18, Chapter-road, Willesden-green, N.W.

Lowry, George A., Board of Trade-buildings, Boston, Massachusetts, U.S.A.

Mackinlay, James W., Chumleigh, Finchley, N., and 85, London-wall, E.C.

Mossop, T., Bond-street-chambers, Bradford, Yorks.

Moysey, Frank Lindsey, 78, Wellmeadow-road, Catford, S.E.

Pyper, William James Stanton, Hollywood, St. Lawrence-road, Clontarf, Dublin.

Riley, Henry Lindon, LL.B., Court-chambers, St. Helens, Lancashire.

Scarborough, Prof. W. S., LL.D., Ph.D., Wilberforce University, Wilberforce, Ohio, U.S.A.

The paper read was—

TONKIN, YUNNAN, AND BURMA.

BY FRED. W. CAREY, F.R.G.S.
(Late H.B.M.'s Acting-Consul at Szemao, China.)

The title of my paper is somewhat of a misnomer. I could not hope to give you, in the time at my disposal this evening, a comprehensive description of Tonkin, Yunnan, and Burma. What I want to do is to treat, in a brief fashion, of these three countries in their relation to each other commercially; to describe two of the ways of penetration into South-West China; and to illustrate a journey from Haiphong up the Red River, through Yunnan and the Shan States into Burma. I trust that my illustrations will make up for any deficiency of matter in the paper itself.

Tonkin is the northern half of the kingdom, or empire of Annam, and was for many hundreds of years a tributary state of the Chinese empire. Little need be said of its history previous to the appearance of the French on the scene, towards the end of the 18th century. In 1799 they assisted their *protégé*, Ghia Lung, to the throne of Annam, but it was not until 50 years later that they began to take an interest in the government of that kingdom, an interest which did not cease until in 1885, as a result of the Franco-Chinese difficulty, Tonkin became a French colony.

Tonkin is divided naturally into two parts, the Delta, which is the low-lying and fertile southern portion, and the hilly country, commencing a little to the north of Hanoi, and extending north and east in both directions to the Chinese frontier. The mountainous portion is densely wooded, and very sparsely populated: minerals are said to exist in places. The Delta is simply one huge rice-plain, watered by the Red River and its numerous affluents. Generally speaking the climate of Tonkin is hot and unhealthy.

Haiphong, the principal port of Tonkin, is situated on the right bank of the CuaCam, one of the numerous mouths of the Red River, 12 miles from the sea. It is 48 hours from Hongkong by mail steamer. On account of the double bar at the entrance, the CuaCam is only navigable to steamers drawing less than 19 feet of water: and approach to the port of Haiphong is rendered still more difficul. from the fact that the tides in the Gulf of Tonkin are diurnal, *i.e.*, there is only one rise and fall during 24 hours, instead of every 12 as on our own coasts.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x0000a4

مكتبة قطر الوطنية
Qatar National Library

The CuaCam at Haiphong is connected with the Red River by the "Canal des Bambous," a narrow waterway lying right through the middle of rice-fields. Communication with Hanoi is kept up by steamers of some 180 tons burden. Passage through the canal is very uninteresting, only one elevation, known as "Elephant Mountain," because that is the animal it least resembles, breaks the monotony of the plain. Around this hill the steamer seems to be constantly circling owing to the windings of the canal. There are a few villages near the banks and as the steamer passes bands of naked little boys—regular pirates in embryo—issue, and solicit alms as they run along, after the manner of the "have-a-dive" boys at Aden. Six hours passage through the canal brings the steamer out into the rapid waters of the Red River, and ten hours later the boat generally announces its arrival at Hanoi by running on a sand-bank. The Red River is of a most treacherous nature as regards the rapid formation of sand-shoals. During the rainy season (corresponding to the Indian monsoons) it is subject to rapid changes, rising from 16 to 18 feet in as many hours: so that what one day is a broad tract of dry sand covered with traffic becomes the next a wide expanse of clay-coloured water, on which float hundreds of bamboo houses; for the Annamese fisherfolk prepare themselves for such emergencies by constructing their dwellings on a raft-like principle, so that they buoy up as the river rises.

Hanoi lies on the right bank of the Red River, a fine bridge, completed only last year, connecting it with the opposite bank. It is now recognised as the official capital of Tonkin, although until a year or two ago Hué, the residence of the Emperor of Annam, bore that title. History records that Hanoi was founded in the 8th century by a Chinese Mandarin. Its original Chinese appellation (Tungking—"Capital of the East") is now perpetuated in the name of the country itself.

The European portion of the town of Hanoi is splendidly laid out. The public buildings and the Cathedral are very fine, and the lakes and open spaces about the town admirably kept. Altogether Hanoi is one of the brightest and most picturesque cities of the Far East.

At Hanoi we came into closer touch with the natives of the country, who belong to the common Indo-Chinese stock. The Annamese, both morally and physically, are one of the inferior races. The men are undersized, but active, good-tempered, and tractable. They have not the commercial instinct of their neighbours, and, as in Penang and Singapore, all trade is practically in the hands of Chinese merchants. The women have rather nice figures, and they would be considered good-looking but for their mouths, which are spoilt by the custom of covering the teeth with a layer of black lacquer. Their beauty is not enhanced, either, by the unpleasant habit of chewing betel. Equality of the sexes, so far as hard work is concerned, applies in Tonkin. We noticed many women employed in gangs, carrying timber for building, &c.

Hanoi is connected by railway with Langson, on the Kwangsi frontier. This line was a most costly one to the colony, and although it is intended to carry it on to Lungohow, and eventually to Nanning Fu on the West River, it is highly improbable that it will ever pay its working expenses. A railway to Viétri is also under construction, and will be carried on to Laokay in time. This is the line which is eventually to enter Yunnan, and I shall refer to it again in the course of my paper.

The steamer into which we changed at Hanoi, to continue our way up the Red River, belongs to the "Compagnie des Correspondances fluviales," who enjoy a monopoly of the river navigation in Tonkin. Our boat was a stern-wheeler, drawing five feet of water, yet able to run up as far as Yenbay, *only when the river is in flood*. We left Hanoi at noon. During the evening we passed Sontay (scene of a sanguinary battle between the French and Chinese in '85) on our left, and anchored soon afterwards for the night at Viétri, a small military post at the junction of the Clear and Red Rivers. The Clear River rises near Kaihua Fu in Yunnan, and has been suggested as an alternative route for a railway into that province. It is navigable for small steamers to Tu Yen-kwang, 40 miles or so up from Viétri.

During the forenoon of the next day we passed, on our left, the Black River, by far the most important tributary of the Red River. Steamers run regularly up to Chobo, but beyond that navigation is difficult and even dangerous at all times of the year, the river being very swift and rocky. Small narrow boats of half-ton capacity, carry goods during the dry season up to Laichow, near the Yunnan frontier; but when the river is in flood communication is impossible, and nothing is more dreary than life in some of the military posts on the Black River of Tonkin.

Three days out from Hanoi we reached Yenbay, a growing garrison town on the left

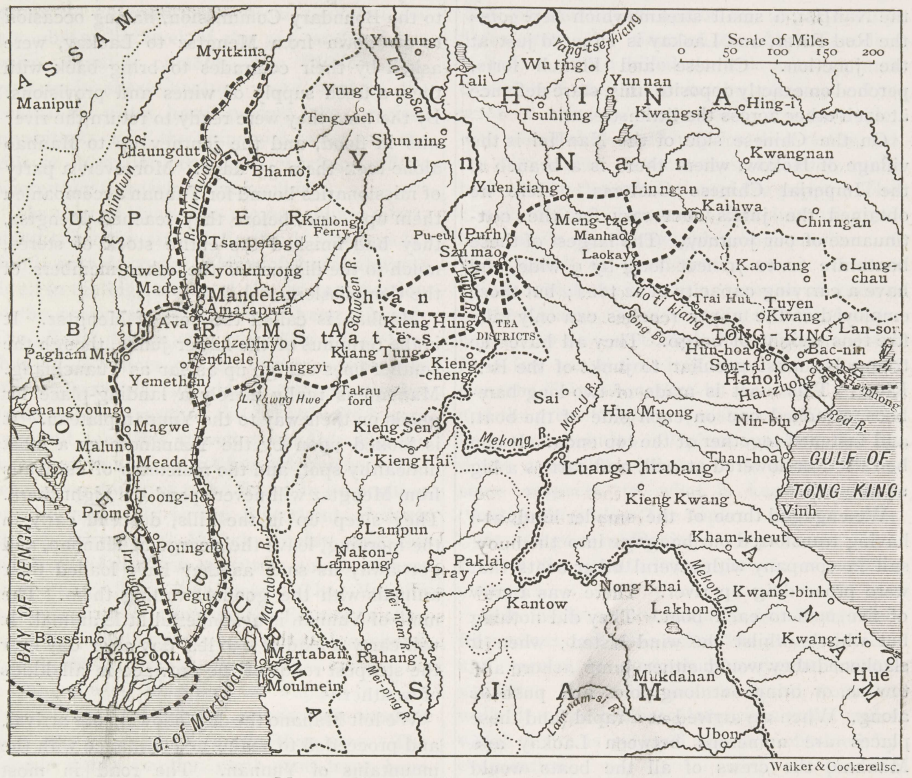
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000037

مكتبة قطر الوطنية
Qatar National Library

bank. There we changed into a small stern-wheel steamer of a newer type—the *Baoha* This boat runs between Yenbay and Laokay during the rainy season. Although only of light draught, and 40 tons burden, it cannot get up so far during the dry season. In fact the Red River is only navigable to small steamers, *all the year*, to Viétri. Native craft, on the contrary, are busiest when the river is low, and the current not quite so strong.

inch of space outside the cabin was occupied by soldiers of the Foreign Legion. Most of these men were Alsatians or Norwegians; but at different posts on the way up I met three Englishmen, who gave me plausible reasons to account for their enlistment in the Legion,—the real one being, I suspect, a desire to keep as far away as possible from the Scotland Yard authorities.

The great feature, and at the same time the



MAP OF TONKIN, YUNNAN, AND BURMA.

Accommodation for passengers on board the *Baoha* was limited. There were twelve of us, and only one small cabin; and in this we had to eat, amuse ourselves during the day, and sleep—the settees being hooked up in sleeping-car fashion at night. Those who occupied the upper berths were comfortable enough; but those underneath suffered from the heat, and from fear of the dreadful consequences should the bars holding up the berth and the 200 lb. gentleman above give way.

The company is subsidized for military purposes by the Government, and every square

drawback, of the Red River are its numerous rapids, which add an element of danger to the difficulties of navigation. There are no less than sixteen of these places between Yenbay and Laokay, where the current rushes down over rocks with great velocity. The worst rapid is the "Ta Kai," just below the post of Traihut. As the little steamer forged its way slowly up against the strong current, the Annamese crew threw "joss-paper" overboard in handfuls to propitiate the river gods, and they attributed our safe passage to this sacrifice. We were at all events luckier than

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00009e

مكتبة قطر الوطنية
Qatar National Library

the Commercial Mission sent out in 1896 by the French Chambers of Commerce to study the trade of Tonkin and China. They came to grief at the "Ta Kai," and had to continue their journey in junks. Perhaps the supply of "joss-paper" had given out!

The journey from Yenbay to Laokay usually occupies three days. Laokay is only a small place, but it is important as being the steamer terminus, and a frontier post. On the left bank the Tonkin-Yunnan frontier is marked by the NanHsi, a small stream which here joins the Red River, and Laokay is situated just at the junction. Chinese and French forts, perched on exactly opposite hills, stare defiance at each other across the little stream.

On the Chinese side of the NanHsi is the village of Hokow, where there is a branch of the Imperial Chinese Customs. Here we obtained the junks necessary for the continuance of our journey. The largest of these boats are 60 to 70 feet long by 9 wide, and have a carrying capacity of 12 tons; but those employed on the upper reaches can only take five tons weight of cargo. They all have the triangular mast peculiar to junks of the Red River. This mast is made of two long bamboos, attached one on each side of the boat, and fastened together at the top ends. It can be raised or lowered at will, and carries a big square sail.

We engaged three of the smaller kind, and having transferred our baggage into them, set sail in company with several other boats that were proceeding up river. There was a crew of five men to each boat. They did nothing but whistle whilst the wind lasted; when it slackened they would either jump ashore and tow us, or bring out long poles and push us along. When we arrived at a rapid (and these places are numerous between Laokay and Manhao) the crews of all the boats would combine to help each other over, and these were times of much hard work and fearful gesticulation. At critical moments recourse was had to the river gods, whose effigies are stuck up in rocky niches near the most dangerous rapids.

Proceeding up river from Laokay, we had Chinese territory on our right and French on our left, for the right bank is French up to the Lungpo stream, where the frontier turns at right angles and runs west.

About half-way up between Laokay and Manhao, on the left bank, is the small village of Hsinkai, from which place there is a road that runs by fairly easy gradients up to the Mengtsz plain and so on to the Yunnan plateau. Up this road the French intend to carry their railway, and a lot of levelling work has already been done on this portion of the line.

When the river is low, and with a favourable wind, junks accomplish the journey up to Manhao in four or five days, but under adverse circumstances they sometimes take a month. Rather a funny thing happened during the delimitation of the Tonkin-Yunnan frontier a few years ago. Two French officers, attached to the Boundary Commission, having occasion to go down from Mengtsz to Laokay, were asked by their comrades to bring back with them a fresh supply of wines and provisions. By the time they were ready to return the river was in flood, and the journey up to Manhao alone took them 35 days. Moreover, a party of missionaries bound for Yunnan accompanied them up; and, before they reached Mengtsz, they had finished the entire stock of stores, much to the disgust of the other members of the Commission.

Manhao is called the port of Mengtsz. It is the terminus of the larger junks, though the smaller ones can go up as far as Yuanchiang. Manhao is really merely a landing-place for goods on their way to the Yunnan plateau. It is looked upon by the Yunnanese as a most unhealthy spot, and the muleteers of caravans from Mengtsz will never spend the night there. They sleep up in the hills, descend early in the morning, leave their cargo at Manhao, and get away as soon as they have loaded their animals with the goods awaiting them. The mule of Yunnan is a wonderful little animal. It will carry a load of 150 lbs. day after day over the steepest roads of the province in all kinds of weather.

We left Mahano the day following our arrival, and proceeded to make acquaintance with the mountains of Yunnan. The road in most places was simply a series of stone steps, and one's first experience of riding up these, though amusing to the onlooker, is unpleasant, the stones are so very, very hard. After crossing the first range above the Red River, we felt that we had earned a good night's rest. This, however, we did not get, as the inns between Manhao and Mengtsz are mere hovels, meant as shelter more for passing pack-animals than travellers. The noise made by the mules, and the chattering of their drivers disturbed us; but the worst enemy to slumber in all Chinese inns is the "chamois"—Mark Twain's variety.

Next day, after crossing a second range of mountains, 6,000 to 7,000 feet above sea-level,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000079

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

we followed a spur down into the plain of Mengtsz. This place, opened by the French to frontier trade in 1889, is the principal port of entry for foreign goods into south and eastern Yunnan. I note, in passing, that 72 per cent. of the whole Import trade into Yunnan, *viâ* Mengtsz, is indisputably British, and 79 per cent. of the total Export trade.

Yunnan has been aptly described as a mountainous desert, with here and there an oasis in the shape of a fertile plain. Most of these plains lie at elevation of from 4,500 to 6,000 feet above the level of the sea, and enjoy a warm, equable climate. The Chinese congregate in these healthy spots, and in the course of years have pushed the original inhabitants, *e.g.*, the Sians and Lolos, into the hills or down into the fever-stricken valleys where they themselves cannot live.

The area of Yunnan is 110,000 square miles, about twice the size of England. Its population is only 8,000,000. Most of the inhabitants dwell in the big centres of the eastern portion of the province—Yunnan Fu, Cheng Chiang, Chao Tung, Linan, &c. It follows, therefore, that large tracts of the province are very sparsely peopled, and almost entirely uncultivated. The poverty of the inhabitants is very apparent, and the traveller wonders why the wealth of Yunnan is so often referred to. The reason, no doubt, is to be found in its position on the map. It is the hinterland of both British Burma and French Tonkin, and the highway from these countries to the richest province of China—Szechwan. That Yunnan is also a part of the Chinese Empire is often forgotten, China being considered, I suppose, a negligible quantity.

The mineral resources of Yunnan are no doubt large, though the mines were worked to a greater extent formerly than now. The copper mines to the north-east have been exploited for centuries: deposits of silver and lead occur in places. Near Mengtsz there are important tin mines; and iron and coal exist in large quantities in the neighbourhood of Tunghai. Zinc and mercury have been found, I believe, by French prospectors. Gold is worked at Talang, and one or two other places; but Yunnan includes no Klondyke within its borders. The situation of most of these mines, however, is unfavourable from a commercial point of view. Heavy cost of transport and distance from the world's markets are factors that have to be reckoned with. I know that the Mengtsz merchants make very little profit on the *tin* they export to Hongkong, but it happens to be for them the most convenient way of paying for some of the goods they import.

As the most valuable article of commercial exchange, however, *opium* has superseded everything for the last 30 years. The cultivation of the poppy in Yunnan can be traced back to the year 1760—eighty years before our so-called Opium War with China—and the Yunnanese are further credited with having discovered the way of smoking the drug. The production of opium in any quantity dates from the time of the Mahommedan Rebellion, which killed the silk industry, and closed half the mines in the province. The want of some product, easily transportable, with which they could pay for their needs, led the Yunnanese to turn their attention more and more to the cultivation of the poppy. The annual output is now not far short of 5,500 tons, whils in the neighbouring province of Szechwan it is considerably more. Indian opium, which the sophist accuses us of forcing on the Chinese, is, on entry into China, handicapped by an exceedingly heavy import duty. In a few years' time it is bound to be ousted from the Chinese market by the native article, and the great "Opium Question" will then no longer concern us. Opium smoking is, no doubt, a terrible vice, but it is preferable, in some respects, to what is known as *our* "national sin." The opium smoker never wants to go "mafficking," or paint the town red, to the great discomfort of respectable citizens!

Salt for local consumption is all obtained from mines and brine wells within the province, and carried by pack-animals to the various markets. When the brine is drawn from the wells, it is poured into large iron pans, under which a fire is set, and the salt obtained by evaporation.

With the exception of the minerals referred to, Yunnan possesses no product suitable for exportation, and possible goods for carriage by projected Burma-Yunnan or Tonkin-Yunnan railways are hard to think of. The trade that might eventually arise in live stock has been made much of, and certainly many parts of the Yunnan plateau are particularly suited to the breeding of sheep, oxen and ponies.

This question of railways into Yunnan is one on which there exists considerable differences of opinion. It can be viewed from the commercial or political aspect, and may briefly be summed up as follows:—The French have obtained a concession to extend their railway

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000061

مكتبة قطر الوطنية
Qatar National Library

from Laokay to Yunnan Fu. The construction of this line, it is thought by some, will "interpose an insurmountable barrier of French influence between Burma and Western China" to the prejudice of British trade. The Indian Government is, therefore, urged to construct an opposition line from the Kunlung Ferry to Tali Fu. The distances as the crow flies are about equal, but it is not denied that the engineering difficulties of the British line are far greater than those to be overcome by the French.

The French are greatly favoured in two respects. Tonkin is much nearer than Burma to the richest and most populous portions of the province; and, owing to the trend of the country, the approaches to Yunnan from Tonkin run parallel with the mountain ranges. Situated thus, the French are bound to extend their influence in Yunnan, but the statistics of the trade of Mengtsz prove, I think, that commercially, we have no cause to fear their rivalry.

From Burma the railways suggested would have to traverse, or *dodge*, the chains of mountains which divide the Mekong and Salween Rivers and their numerous affluents. I am aware that, thanks to the action of the Yunnan Company, and the help accorded them by the Indian Government, a route has been found from Kunlung which avoids the steeper gradients; but the railway proposed could be built only at an immense cost, and even then as the Western portion of the province is wretchedly poor, to compete with the French railway it would have to be carried on over most difficult country to Yunnan Fu. The trade possibilities of the province, viewed ever so optimistically, do not, I think, warrant such a huge undertaking; and I see in the passive attitude of the Indian Government, not blindness to the political importance of such railway schemes, but merely a hesitation to burden themselves with the financial responsility.

A line that could be built at a comparatively small cost, and that would pay, is one from Bhamo, our trade mart on the Irrawaddy, to Tengyueh, the port of Western Yunnan.

The hostility of the population to railway schemes was shown in the riots which broke out at Mengtsz, in June, 1899. A mob attacked the foreign settlement there in the middle of the night, and burnt two houses occupied by the Commissioner and members of my own service.

For many years to come the Yunnanese will have to depend on their present means of transport. Besides the mule, there is the bullock, also used as a pack animal. The water buffalo, though strictly speaking an agricultural animal, is sometimes harnessed to a rough cart used, equally, to carry stones, or to take a party of Yunnanese ladies to some temple on the hills. In it they also visit their family graves, an act of piety that more often develops into a happy picnic.

Reference to family graves brings us to funerals. The three important occasions of a Chinaman's life are his birth, his marriage, and his death. In Yunnan the last is the event which calls for most display. On the death of a relative even the poorest family gives a feast to which all their friends are invited. The funeral car used has a paper Stork on top. It is the emblem of immortality. The Goose is, similarly, the symbol of conjugal felicity. A paper one is always stuck up on a pole outside the house of a newly-wedded couple in Yunnan. So that the rich man may have every comfort when he wakes in the Buddhist purgatory, paper images of what he will most need are made, and after being carried in his funeral procession are burnt at his graveside. There is for instance his horse, with groom in charge. Four paper bearers also carry his sedan chair, ready for him to step into when he lands on the other side of the Styx. The mourners at a Yunnanese funeral wear white, not black, another instance of their topsy-turvydom. To the principal guests at the funeral two pieces of white cloth are given, one for the head, the other for the waist.

From funerals I turn for a moment to other examples of Yunnanese customs, in which a procession forms the distinctive feature. There is the "Ying Chun" Festival or ceremony of meeting the Spring. The chief official of the place is then borne on a special car to a small temple marking the eastern boundary of his town. There he meets the plaster figure of a buffalo, supposed to represent the Spring, with which after worshipping at the temple he returns in state to his residence.

At another procession during the year, an idol (that is presumably in need of an airing) is borne round the town on the shoulders of respectable shopkeepers.

But the prettiest processions take place every spring and autumn to mark the season's changes. Then the people make what they call "Flower Cars." Little boys, dressed to represent the heroes and heroines of antiquity, are perched up aloft on iron bars, and as the cars move along, borne on men's shoulders,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000008

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

they wave their fans and nod their heads. The whole effect is very picturesque and pleasing.

The Chinese are past masters in the art of irrigating their fields. Their staple food, rice, must be grown in water until it ripens, and in Yunnan they have all kinds of ingenious ways of carrying water on to their farms. One method is the wheel that is turned by a stream, and to which is attached hollow pieces of bamboo. These fill and empty themselves automatically into a wooden shoot leading into the fields.

After the rice is harvested, it has to be hulled or skinned before it can be eaten, and this labour calls for a further display of ingenuity. The apparatus used in many villages consists of a wooden log, hollowed at one end, and with a piece of hard wood fastened through the other. The log is evenly balanced, and a stream of water is directed on to the hollow end, which sinks down under the weight of water, empties itself, and rises again. The other end falls continually on to the grain, and loosens the husk.

The Yunnanese live almost entirely on rice and vegetables. When they can afford it they buy some pork, or kill a fowl, but meat to the majority of the inhabitants is a luxury. Only the Mahommedans eat beef, and where they live beef can usually be purchased daily in the market. The Mahommedans in Yunnan are probably descended from the soldiers stationed there by the Great Mongol Emperor, Ghenghis Khan, when he invaded Burma and India in the 13th century. In 1855 occurred their terrible rebellion, and the Mahommedans kept the field against the Imperialist troops till 1873. The Chinese eventually gained the ascendency, but not before the population of the province had been reduced by many millions.

The first Chinese settlers intermarried freely with the native tribes around them, and the result is that the beliefs and customs of their descendants, the Yunnanese of the present day, differ in many respects from those common to other parts of China. They are intensely superstitious, and believe in divination of all kinds. They would even have faith, I believe, in the weather forecasts of our Meteorological Department. The local diviner is usually a blind man. When a young man wishes to start a home of his own, he does not go on his knees and ask some sweet maid to be his everlasting cook and stocking darner. He obtains instead her "card of nativity" through one of the recognised match-makers of the place, and sends it with his own to a diviner. If the "stars are in conjunction" negotiations can continue, but if they don't agree all is at an end! At least he must seek elsewhere.

Phrenology is not practised, so far as I am aware, but physiognomists get a good living amongst the Yunnanese. A Chinaman is not supposed to grow a moustache until he is at least 30 years of age. He makes a virtue of necessity in this case. However, when he does want to increase his attractions, the Yunnanese applies to a physiognomist, who will discover for him a lucky day on which to start growing a moustache.

In Yunnan the "five senses of man" are said to be the ears, eyes, mouth, nose, and eyebrows. Blue or grey eyes are rarely met with amongst the Chinese, the prevailing colour being black. The consequence is that the Yunnanese attribute extraordinary powers to our eyes. According to them we can see the precious minerals in the earth. I have even been asked by some country people to aid them to find the silver supposed to have been hidden by their parents in their garden during the Mahommedan rebellion.

The Yunnanese lady is fond of dressing herself and her children in bright colours. The most favoured material is Szechwan flowered silk; but for ordinary wear coloured cotton cloth, made and dyed locally, is in general use. Woollen cloth is much appreciated, but is very dear, all on the market being of British or German manufacture. As jewellery—earrings, bracelets, rings, necklaces, and hair ornaments are worn. These are generally made of silver, but the very poor classes manage with brass or pewter.

In India the would-be beauty must imitate the waddle of an elephant. In China the "waving willow" walk is held up as the acme of perfect progression for women. To obtain this walk mothers bind the feet of their girl-babies in rather a cruel fashion, so as to make them small and pointed. In Yunnan it is only the girls of the richer classes whose feet are permanently deformed. It is a silly custom, of course; but one thing may be said in its favour, and it is probably why the women have so long permitted themselves to be the victims of such a fashion. On account of their bound feet the Chinese women are not compelled to slave in the fields like the women of every other Eastern race, whilst their husbands loaf at home. To be in the fashion, the Yunnanese women of the poorer classes bind their feet

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00000d

مكتبة قطر الوطنية
Qatar National Library

with cotton bandages, so as to make them appear smaller, but beyond giving them the necessary willowy step, it does not seem to hurt them in any way.

To turn once more from frivolous to serious consideration of our subject. It is 18 days journey by mule caravan from Mengtsz to Szemao. The main road leads through Linan, Shihping, noted for its lovely lake, Yuanchiang, a small, fever-stricken, walled city, on the Red River, Talang, and Pu-Erh. The road lies over mountain ranges, down the beds of streams, and up wooded valleys, never monotonous, but often difficult. Just east of Yuanchiang the road crosses a range 8,000 feet high, descending immediately after the Red River, only 1,500 feet above the sea at that place. The climb on the opposite side is a very stiff one, and the best way is to cling on to your pony's tail and let him pull you up.

The roads in Yunnan, generally, are in a deplorable condition. The bridges, however, are a noticeable feature of the province. The curve of the ordinary stone ones is unnecessarily high in proportion to the width of the streams they span. Between Yuanchiang and Talang, there are two rather fine chain suspension bridges. They span the Papien and the Homa rivers, which unite further south, and enter Tonkin as the Black River. The planking in the centre of these bridges is purposely left loose, and is, in fact, very unsafe. This is to prevent caravans of pack animals from passing over in a body, and causing too great a strain on the structure. At preseut only two or three can cross at a time, and they have to pick their steps most carefully.

The scenery on the road was most superb, and the vegetation most varied, the flowers at different elevations corresponding to those of the Tropics, and the Temperate and Frigid zones respectively. In fact Yunnan is the botanist's paradise.

Szemao is a busy town of 10,000 inhabitants, healthily situated on a little rising in the centre of a typical Yunnan plain. It was opened to frontier trade in 1896, and Consuls for both Great Britain and France appointed there. It was found, however, that the commercial importance of the place had been over-estimated and both Consulates have lately been suppressed. In return, a Consulate General has been established at Yunnan Fu, the capital of the province.

The trade of Szemao is principally in the famous Pu-Erh tea, that is held in such great esteem by the Chinese of other provinces. Raw cotton is imported from the British Shan States; but other necessaries of life, *e.g.*, matches, woollen cloth, lamps, &c., are supplied from Mengtsz.

The architecture of Yunnan has characteristics of its own, notably so in the pointed gables that adorn the houses and temples. The walls, though built of sun-dried and burnt bricks, form no part of the structure of a house, and might fall down without causing a general collapse. The woodwork in all cases supports the roof, and is the solid portion of their buildings. The "guardian" figures outside their temples are rather quaint, their conception of a "lion" being particularly funny.

The animals best known to the Yunnanese are the elephant, tiger, panther, bear, wild boar, sambhur, or big deer, several varieties of small deer—including the musk deer, the fox, wolf, monkey, and wild cat. There are others, but this will suffice to show the variety existing in the province. The panthers at Szemao are rather a nuisance. On three occasions whilst I was out riding on the hills my dog was attacked by a panther. Young bears are sometimes brought into the market for sale. Elephants are found in a wild state in the Chinese Shan States. Some of the Shan chiefs own tame ones, and at rare intervals these are sent into Szemao, as a mark of respect to the Chinese officials.

In the neighbourhood of Szemao live many of the aboriginal tribes, whom the Chinese, in their gradual march westwards, have ousted from their former homes in the plains. The Lolos, so often referred to by travellers, are scattered all over Yunnan. Only in one place, in the north of the province, do they exist as a separate and independent community. They possess a language and literature of their own, though very few of them can now write and read their own characters. Their religion is a form of spirit worship, and consists chiefly in propitiating the evil spirits, so that no harm may come to the inmates of the house. The religion of all these native tribes is a simple one, based on old legends, and arising in the first instance from an attempt to account for the three inexplicable mysteries — Dreams, Disease, and Death.

The Lolos are fond of music and dancing, amusements they indulge in on moonlight nights. Their dancing is not quite like ours. Although both sexes take part in it, they evince no desire to hug each other. They simply move around in a circle, and stamp their feet in time with the music.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000020

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Woni race are supposed to be the oldest inhabitants of Yunnan. They are divided into numerous clans, each wearing different dresses, with as much variety of colour and detail as in the tartans of the Scottish clans. The men, as a rule, wear the blue cotton jacket and trousers common to the poorer classes throughout China; but the women retain the picturesque costume of their tribe. The Akka of the Shan States belong to the Woni race, as do also the Putu and the Mahê. The Mahê lead a wretched existence. They dwell in tiny little bamboo and mud hovels on the outskirts of Szemao and Pu Erh, and act as "hewers of wood and drawers of water" to the Chinese. Every day they go out, young and old, to the neighbouring hills in search of firewood, which they bring into the town toward evening. They sell as much as they can carry for 75 cash, equivalent to 2d. in our money. They never grow rich!

I shall not have time this evening to describe any more of these hill tribes, but I should like to mention, in passing, the interesting "Wa" tribes, wild and tame, of the Meng Lem district.

My homeward journey led me through the Shan States and Burma. The healthy portion of the Yunnan plateau terminates in most abrupt fashion a few miles beyond Szemao, and one literally tumbles off the edge, down into the lower plains and valleys inhabited by the Shans. Szemao is the last town, and I may add the last centre of civilisation in this direction, until British territory is reached; for south or west beyond Szemao there doesn't exist a single inn for the convenience of travellers. The only way is to camp out, or sleep in the Shan temples *en route*. Except in bad weather, a tent is preferable, and even the muleteers either sleep under a piece of stout cloth held off the ground by sticks, or erect a shelter of branches, roofed with grass. I have stayed in Shan temples, and slept very comfortably under the shadow of the great gilt Buddha, but the awakening was always somewhat of a shock, as it is the practice for the priests and the boy novices to kneel down every day at dawn, and yell their morning orisons.

The capital of the Chinese Shan States is Kenghung, on the Mekong, the residence of the Saw Bwa, or Hereditary Chieftain, who is the nominal ruler of the "Sip Song Panna," *i.e.*, the "Twelve States." From Szemao to this place it is six days' journey. Though the plain of Kenghung lies at an elevation of 2,100 feet above the sea, it is considered by the Chinese to be a most unhealthy spot. Through it runs the Mekong, here nearly 200 yards wide, and crossed by a rude ferry.

The houses of the Shans are usually constructed on piles, their living apartments being thus well off the ground. They do not copy the architecture of the Chinese, and the few bridges that one meets with are of wood or bamboo, and very frail.

One custom of the Chinese Shans is worth noting. At the New Year the young girls provide themselves with balls, like a small pincushion in shape, filled with cotton seed, and covered with pieces of coloured cloth. To one side is attached a long string with streamers. These are thrown by the girls from a certain distance to the young men. By catching or missing them the youths show their preference, and marriage engagements are the result. To obtain some photographs I joined in the game, but I was careful to show no preference.

From Kenghung to Kengtung it is another ten days by caravan. There is nothing to be said in connection with our journey thither, except that the roads were worse if anything than any I have yet seen. Plains give way to mountains, mountains to valleys, and valleys to plains; rarely did we get any level road. Occasionally we came to a river, which the animals had to swim, whilst the baggage was carried across in clumsy boats.

Twelve days out from Szemao we crossed the Burma frontier, marked by a wooden post and a heap of stones. As we neared Kengtung we found evidence of British influence in the roads; they were wider and better kept than those we had been traversing. The country around produces cotton, tea, and a little opium.

Four days later, after negotiating the usual mountain barrier, we descended into the fine plain of Kengtung. This place is one of the outposts of our Empire. It is the residence of a political officer, who, whilst subordinate to the Superintendent of the Southern Shan States, is in charge of the Kengtung State, extending from the Chinese frontier on the north, to Siam on the south. Kengtung is garrisoned by Indian troops, and possesses a post and telegraph office.

Big forests of teak exist in Kengtung territory, near the Siamese frontier, and are worked by the Sawbwa under British supervision.

The Bazaar at Kengtung is one of the sights of British Burma. On market day it is thronged

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000b6

مكتبة قطر الوطنية
Qatar National Library

with people dressed in every conceivable colour, and the scene is most animated. Lightly clad Siamese, natives of Laos, swarthy Indians, stolid Cantonese pedlars, Burmese, Shans, and numerous hill tribes jostle each other, and the babel of languages once heard is not easily forgotten.

The Shan, or "Tai" race is divided into many clans. The inhabitants of Kengtung are known as "Kuns," those of the Chinese Shan States, as "Lü," of Meng Lem as "Lem," &c.

There is a good mule-track between Kengtung and the Salween. Two very high mountain ranges have nevertheless to be negotiated, but a new route has lately been surveyed that avoids the steeper hills, and a big cart road will shortly be ready for caravans. After leaving Kengtung one travels in comparative comfort. At most of the stages along the road bungalows have been built for the traveller. Seven days' travelling brought us to the Salween, at a place called Takaw. We crossed the river by a ferry boat similar to the one at Kenghung. The ferry system in the Shan States certainly needs amelioration.

Two days later we reached the pretty Namkham River, one of the tributaries of the Salween, and the following day arrived at Hsai-Kao, where there is a post and telegraph office. From Hsai-Kao, a good, wide road led us across undulating plains, resembling the downs of Wiltshire. Water in many places is rather scarce; but with this defect remedied no country would be better suited for colonisation. Like Yunnan, the Shan States could well support a larger population. Amongst the present inhabitants are the "Red Yang" tribe whose dress is very curious. I was glad to add a photo of them to my collection.

Seventeen days out from the Kengtung we arrived at Taunggyi, the capital of the Southern Shan States. It is a prosperous, and growing British settlement, situated in a splendidly chosen spot in a plain 4,600 feet above the sea. This place was only a tiny hamlet twelve years ago. About that time, Mr. Hildebrand, until last year Superintendent of the Southern Shan States, happily selected Taunggyi as his official residence, and it now bids fair to rival that well-known sanatorium of Burma—Maymyo. Trade is thriving, thanks to the construction of good cart roads, and we are bound to hear more of Taunggyi as a commercial centre in the future.

From Taunggyi we turned south to the older military settlement, Fort Stedman, distant one day's march only. Fort Stedman is situated on the eastern shore of Lake Yawng Hwe. The place is much lower and hotter than Taunggyi. Proximity to water could have been the only reason for choosing it as a residence for troops.

Sending my caravan round the lake, I crossed myself in a small dug-out. The shores and islands of the lake are inhabited by the Inthas—a hybrid tribe of Burmese origin. Their method of paddling with their legs is, I believe, absolutely unique. Standing on the gunwale of the boat, they balance themselves on one leg, and twisting the other round the long paddle force the blade back through the water. In this way they send the boat along at a great speed.

The third morning after quitting Lake Yawng Hwe, we finally left the hills behind us, and descended into the hot plains of Lower Burma. For the next two days the roads, though wide and level, were horribly dusty, and the heat and glare intense. We struck the Rangoon-Mandalay railway at Thazi, a small junction town, where I paid off my caravan. We had taken 48 days in coming from Szemao, and in spite of the different altitudes traversed, none of us were ill on the way, a result, I expect, of the quinine that I occasionally dispensed to all.

From Thazi I went down to Rangoon; then wishing to see a little more of Burma, I took the night mail up to Mandalay. A large proportion of the Chinese population of Mandalay are natives of Yunnan, who have, in most cases, taken Chinese wives, and settled there. Continuing my railway journey I went right up to the northern terminus, Myitkina, a settlement on the upper reaches of the Irrawaddy, quite close to the Chinese frontier. Some speculators are dredging for gold in that river, just above Myitkina.

From Myitkina, I went down on a Government launch, kindly placed at my disposal by Sir Frederic Fryer, through the wonderful gorges of the Irrawaddy, rarely visited by travellers, though well worth seeing. At Sinbo, just above the first defile, the river, at the commencement of the rains, rises sometimes as much as 84 feet, owing to the narrowness of the passage lower down. We went down with the current, at a good pace, to Bhamo, a trade-mart and military station—also the terminus of the Irrawaddy steamers. Bhamo is growing wonderfully, and trade with Yunnan across the frontier steadily increasing.

From Bhamo, I continued my way down the river on one of the Irrawaddy Flotilla Com-

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000077

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

pany's well-appointed steamers. I enjoyed this part of my trip immensely, and am only surprised that the lovely scenery of the Upper Irrawaddy, with its pagoda-lined banks, does not attract more travellers.

It is getting late, however, so with a passing reference to the "Shwe Dagon," or Golden Pagoda of Rangoon, I bring my paper to a conclusion.

DISCUSSION.

The CHAIRMAN, in thanking Mr. Carey, said that that gentleman had served in China, first under the Imperial Customs Department, with Sir Robert Hart, and had spent seven years of his life in Yunnan. So that no man was able to give a better account of the countries with which his paper dealt, than he. During the last two years he had served in the British Consular service in Yunnan, and while there, being a most expert photographer, he had taken the large number of excellent pictures which he had shown on the screen that evening. He, himself, saw enough to recognise how exceedingly good the pictures were. It had been the hope of the authorities of the Society of Arts to have had as chairman that evening Sir Hugh Barnes, the Lieutenant-Governor designate of Burma. Unfortunately, however, Sir Hugh had to be in the country. To him (the Chairman) the paper was particularly interesting, for, although he had never set foot in the actual territories which Mr. Carey had traversed, he recognised so many traits in regard to scenery, custom, and the appearance of the people, like those with which he had been familiar among the Indo-Chinese tribes all along our Eastern frontier. For instance, one picture showed the use of the solid wheel, another the mode of irrigation, while yet another exhibited huts built upon piles. Still further he recognised the similarity in the native dances, and the plaids which designated the different tribes. All that kind of thing one met among the tribes to the east of Assam, Manipur, and right down to the frontier. The only point in the paper upon which he had anything serious to say, was with regard to the railway from Burma to Yunnan. Upon that he entirely agreed with Mr. Carey. Lord Curzon, when at Rangoon a year or so ago, expressed his opinion in very plain terms, saying that if there was any money to spend, the communications in Burma had the first call upon it. But there was a great deal to do in the interior, said Lord Curzon, before it would be just to spend any of the Indian taxpayers' money upon what was a doubtful thing, commercially and politically, in regard to Yunnan. He (the Chairman) concluded that Lord Curzon was right in saying that he would hold his hand.

Obituary.

THOMAS WARD, J.P.—Mr. Ward, of Wadebrook-house, Northwich, whose death occurred on Wednesday evening, 18th inst., at the age of 68, had been for some years a member of the Society of Arts. He was Managing Director of the Salt Union and Chairman of the British Salt Association. In December, 1894, he read a paper before the Society on "The Manufacture of Salt," for which he received a silver medal. At the general election of 1895 Mr. Ward contested the Northwich Division in the Unionist interest, but was defeated by Sir John Brunner.

MEETINGS OF THE SOCIETY.

ORDINARY MEETINGS.

Wednesday evenings, at Eight o'clock :—

MARCH 4.—"Education in Holland." By J. C. MEDD. The HON. LYULPH STANLEY, M.A., will preside.

MARCH 11.—"Existing Laws, By-laws, and Regulations relating to Protection from Fire, with Criticisms and Suggestions." By T. BRICE PHILLIPS. (Fothergill Prize Essay.) SIR WILLIAM H. PREECE, K.C.B., F.R.S., will preside.

MARCH 18.—"New Aspects of Life Assurance." By WILLIAM SCHOOLING.

MARCH 25.—"Oil Lighting by Incandescence." By ARTHUR KITSON.

INDIAN SECTION.

Thursday Afternoons, at 4.30 o'clock :—

MARCH 12.—"The Currency Policy of India." By J. BARR ROBERTSON. SIR EDWARD A. SASSOON, Bart., M.P., will preside.

APRIL 23.—"The Province of Sind." By HERBERT MILLS BIRDWOOD, C.S.I., M.A., LL.D. The EARL OF LYTTON will preside.

MAY 14.—"The Province of Assam." By SIR CHARLES JAMES LYALL, K.C.S.I., M.A., LL.D.

COLONIAL SECTION.

Tuesday Afternoons, at 4.30 or 5 o'clock :—

MARCH 3, at 4.30 p.m.—"The Uganda of To-day." By HERBERT SAMUEL, M.P. Sir HARRY H. JOHNSTON, G.C.M.G., K.C.B., will preside.

MARCH 31, at 4.30 p.m.—"British North Borneo." By HENRY WALKER, Commissioner of Lands, British North Borneo. The RIGHT HON. SIR GEORGE TAUBMAN GOLDIE, K.C.M.G., will preside.

MAY 5, at 4.30 p.m.—"The Lagos Hinterland: its People and its Products." By MAJOR J. H. EWART.

APPLIED ART SECTION.

Tuesdays, at 4.30 or 8 o'clock.

MARCH 17. 4.30 p.m.—"Artistic Fans." By MISS HANNAH FALCKE. SIR GEORGE BIRDWOOD, K.C.I.E., C.S.I., will preside.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000008

مكتبة قطر الوطنية
Qatar National Library

CANTOR LECTURES.

Monday Evenings, at Eight o'clock:—

PROF. J. A. FLEMING, M.A., D.Sc., F.R.S., "Hertzian Wave Telegraphy in Theory and Practice." Four Lectures.

LECTURE I.—MARCH 2.—*General Principles. The Theory of the Radiator or Aerial.*—Introductory remarks—The production of an electric wave—The theory of the aerial or radiator—Comparison between organ pipes and Hertzian wave radiators—The propagation of an electric wave over earth or water surface—Fundamental and harmonic electrical oscillations in radiators—The Marconi radiator—The Braun radiator—The Slaby radiator—Oscillation transformers and multiplicators.

MEETINGS FOR THE ENSUING WEEK.

MONDAY, MARCH 2...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. (Cantor Lectures.) Prof. J. A. Fleming, "Hertzian Wave Telegraphy in Theory and Practice." (Lecture I.)

Farmers' Club, Salisbury-square Hotel, Fleet-street, E.C., 4 p.m. Mr. Edwin Clements, "Railway Rates for the Carriage of Agricultural Produce."

Royal Institution, Albemarle-street, W., 5 p.m. General Monthly Meeting.

Engineers, in the Theatre of the United Service Institution, Whitehall, S.W., 7½ p.m. Mr. W. Worby Beaumont, "Road Traffic in and near Large Cities."

Chemical Industry (London Section), Burlington-house, W., 8 p.m. Mr. Thomas Tyrer, "The need of a Duty-Free Alcohol for Industrial Purposes."

Camera Club, Charing-cross-road, W.C., 8¼ p.m. Mr. E. W. Pulling, "A Tour round the World. No. II.: The Malay States, China, and Japan."

Medical, 11, Chandos-street, W., 8½ p.m.

Victoria Institute, 8, Adelphi-terrace, W.C., 4½ p.m. Paper by Cavaliere W. P. Jervis.

Medical and Chirurgical, 20, Hanover-square, W., 5 p.m. Annual Meeting.

TUESDAY, MARCH 3...SOCIETY OF ARTS, John-street, Adelphi, W.C., 4½ p.m. (Colonial Section.) Mr. Herbert Samuel, M.P., "The Uganda of To-day."

Alpine Club, Savile-row, W., 3½ p.m. Mr. H. Woolley, "The Canadian Rockies."

Royal Institution, Albemarle-street, W., 5 p.m. Sir William Abney, "Recent Advances in Photographic Science." (Lecture II.)

Central Chamber of Agriculture (at the HOUSE OF THE SOCIETY OF ARTS), 11 a.m.

Civil Engineers, 25, Great George-street, S.W., 8 p.m. Mr. George Frederick Zimmer, "Mechanical Handling of Material."

Pathological, 20, Hanover-square, W., 8½ p.m.

Anglo-Russian Literary Society, Imperial Institute, South Kensington, S.W., 3 p.m. Mr. F. H. Skrine, "Some Phases of Russian History."

Zoological, 3, Hanover-square, W., 8½ p.m. 1. Mr. J. T. Cunningham, "Observations and Experiments on Japanese Long-tailed Fowls." 2. Mr. E. R. Sykes, "The Land Operculate Mollusca collected during the 'Skeat Expedition' to the Malay Peninsula." 3. Mr. R. Lydekker, "The Significance of the Callosities on the Limbs of the *Equidæ*."

WEDNESDAY, MARCH 4...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. Mr. J. C. Medd, "Education in Holland."

United Service Institution, Whitehall, S.W., 3 p.m. Major-General C. E. Webber, "An Organisation of the Nation for Defence."

Entomological, 11, Chandos-street, W., 8 p.m. 1. Mr. G. A. James Rothney, "The Aculeate Hymenoptera of Barrackpore, Bengal." 2. Mr. Charles Owen Waterhouse, "Notes on the Nests of Bees of the Genus 'Trigona.'" 3. Colonel Charles Swinhoe, "The Aganiidæ in the British Museum, with descriptions of some New Species."

Archæological Association, 32, Sackville-street, W. 8 p.m.

Obstetrical, 20, Hanover-square, W., 8 p.m.

Royal Archæological Institution, 20, Hanover-square, W., 4 p.m. Viscount Dillon, "Armour Notes."

THURSDAY, MARCH 5...Royal, Burlington-house, W., 4½ p.m.

Antiquaries, Burlington-house, W., 8½ p.m.

Linnean, Burlington-house, W., 8 p.m. 1. Mr. W. S. Rowntree, "Some Points in the Visceral Anatomy of the Characinidæ." 2. Mr. F. G. Parsons, "The Anatomy of the Pig-footed Bandicoot *Chæropus Castanotis*." 3. Dr. Elliot-Smith, "Furthur Notes on Lemurs."

Chemical, Burlington-house, W., 8 p.m. 1. Mr. H. Bassett, "The mechanism of the reduction of potassium bichromate by sulphurous acid." 2. Mr. H. A. D. Jowett, "The constitution of pilocarpine, Part IV." 3. Messrs. H. A. D. Jowett and C. E. Potter, "Preparation and properties of 1,4 (or 1,5) dimethyl glyoxaline and 1,3 dimethyl pyrazole." 4. Mr. R. G. Hill, "Some analyses of 'Reh,' or the alkaline salts in Indian Usar land." 5. Messrs. W. H. Perkin and J. F. Thorpe, "Experiments on the synthesis of camphoric acid. Part III. Synthesis of isolauronolic acid." 6. Messrs. T. M. Lowry and G. C. Dorrington, "Camphor-β-thiol." 7. Mr. F. D. Chattaway, "Isomeric change of dibenzanilide into benzoylorthoamino- and benzoylparaamino-benzophenone." 8. Messrs. J. C. Cain and F. Nicoll, "The rate of decomposition of diazo-compounds. Part. III.: The temperature co-efficient."

Royal Institution, Albemarle-street, W., 5 p.m. Prof. L. C. Miall, "Insect Contrivances." (Lecture II.)

National Indian Association, Jehanghir Hall, Imperial Institute-road, S.W. Mr. R. Masujima, "The Japanese Code regarding Family Law."

Junior Art Workers' Guild, Clifford's-inn, Fleet-street, E.C., 8 p.m. Mr. Cyril Davenport, "Bookbinding."

Civil and Mechanical Engineers, Caxton-hall, Westminster, S.W., 8 p.m. Mr. R. W. A. Brewer, "The Production of Power by means of Gas Producers and Engines."

FRIDAY, MARCH 6...Art Workers' Guild, Clifford's-inn, Fleet-street, E.C., 8 p.m. Lecture on "Carpaccio."

Royal Institution, Albemarle-street, W., 8 p.m. Weekly Meeting. 9 p.m. Dr. J. G. McKendrick, "Studies in Experimental Phonetics."

Geologists' Association, University College, W.C., 8 p.m.

Philological, University College, W.C., 8 p.m.

Quekett Microscopical Club, 20, Hanover-square, W.C., 8 p.m.

SATURDAY, MARCH 7...Royal Institution, Albemarle-street, W., 3 p.m. Lord Rayleigh, "Light: its Origin and Nature." (Lecture III.)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000c6

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

719

Engineering.

Johnson & Phillips,

Victoria Works, Old Charlton, Kent.

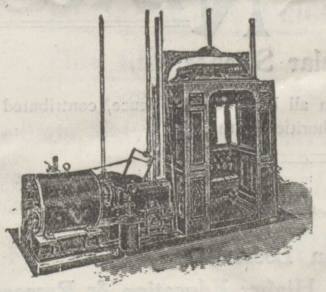
Manufacturers of . DYNAMOS & MOTORS . . . .
ALTERNATORS & TRANSFORMERS
SWITCHBOARDS . . . . . .
MEASURING INSTRUMENTS, &c., &c.

Sole Makers of . . **The 'ARK' Enclosed Long Burning Arc Lamp.**
'JOHNSON & PHILLIPS' Open Arc Lamps.

Manufacturers of every Description of Machinery for
MAKING, LAYING, & REPAIRING CABLES.

WAYGOOD & OTIS LTD.

To H. M. The King.



Lifts & Cranes

FALMOUTH ROAD, LONDON, S.E.,
and 4, QUEEN VICTORIA STREET, E.C.

Abyssinian & Artesian TUBE WELLS.

Le Grand and Sutcliff,

ARTESIAN WELL & WATER WORKS ENGINEERS.

Contractors to the Admiralty, War Office, India Office, Trinity House. Crown Agents for the Colonies, &c.

Improved Patent Economical System for Raising Water by Compressed Air.

MAGDALA WORKS, 125, Bunhill Row, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x00008e

مكتبة قطر الوطنية
Qatar National Library

Miscellaneous.

Society of Arts Examinations, 1903.

MONDAY, MARCH 30th, to THURSDAY, APRIL 2nd.

Grade I. Preliminary or Junior. Grade II. General or Intermediate.

In Grade II. First, Second, and Third-class Certificates will be granted in each subject.
In Grade I. Certificates will be given in each of the subjects enumerated. These will be of one class only.
In Rudiments of Music Higher and Elementary Certificates are given. In Harmony Higher, Intermediate, and Elementary Certificates will be granted.

A Fee of 2s. 6d. will be required by the Society from each Candidate in each subject in Grade II., and in Grade I. a fee of 2s. for one subject, and 1s. for each additional subject taken up by the same Candidate. The fees for Harmony and Rudiments of Music are the same as for Grade II.

MEDALS AND MONEY PRIZES are awarded in all the subjects of Examination. Full Particulars of these will be found in the Programme.
There will be no Prizes or Medals in Grade I.

The Examinations are under the control of Local Committees. No application can be recognised unless sent through a Committee.

The last day for receiving applications is WEDNESDAY, the 4th March, 1903, and after that date none will be received under any circumstances whatever. Application forms from the Provinces should therefore be posted not later than TUESDAY, the 3rd MARCH. Committees may, however, close their entry lists at an earlier date, if found desirable.

Copies of the Programme for 1903, with full details, together with the questions for 1902, and reports by the Examiners, can be had, Price 3d., on application to the Secretary, SIR HENRY TRUEMAN WOOD, Society of Arts, Adelphi, London, W.C.

The questions for the years 1896 to 1902 inclusive can also be obtained (price 3d. each year), on application as above.

6d. Monthly.

The ILLUSTRATED

SCIENTIFIC NEWS,

A New Journal of Popular Science,

Containing Original Articles and Up-to-Date Intelligence in all branches of Science, contributed by many of the leading Scientific Authorities of the day.

The March Number contains:

Coherers: Some Experiments on Loose Contacts.
The Barmen-Elberfeld Suspended Railway. Higher Education & Research.
Nernst and the Cooper-Hewitt Electric Lamps.
The Pendulum Propeller.
The Splash of a Projectile. The "Piano Player Parodox."
Constituents of the Atom. The Fate of the Oyster, &c., &c.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x0000a7

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Engineering.

ESTABLISHED 1810. ON ADMIRALTY LIST.

JOHN SPENCER & SONS, Ltd.

OFFICES:—NEWCASTLE-ON-TYNE: 27, Westgate Road.
LONDON: Cannon Street Buildings, 139, Cannon Street.

WORKS: At Newburn and Ouseburn, NEWCASTLE-ON-TYNE.

MANUFACTURERS OF STEEL By the Siemens, Cementation, and Crucible Processes.

SHIP AND BOILER PLATES UP TO 12 FEET WIDE.

INGOTS, SLABS, BLOOMS, BILLETS, and BARS of all Sizes.

RIVET STEEL. SPECIAL MILD STEEL for Boiler Flues.

STEEL FORGINGS. STEEL CASTINGS, of all Descriptions, to any Weight, Rough or Machined.

CRANK AXLES and SHAFTING Hydraulic Pressed.

SPRINGS.—Laminated, Volute, Patent Improved Volute, Conical, Spiral (Original Manufacturers of Volute Springs).

BUFFERS—of Wrought and Cast Iron—of all Descriptions. Best Cast Steel for Tools from finest Dannemora Brands. Best Cast Steel Files.

Iron Forgings of all Kinds. Foster's and Fownes' Patent Crank Shafts.

WASTENEYS SMITH'S PATENT STOCKLESS ANCHORS.

Newburn Steel Works, NEWCASTLE-ON-TYNE.

Telephone No. 719 Eastern. *Telegrams:* "Sankey, Canning Town."

SANKEY'S

FIRE-RESISTING BRICKS, FIRE CEMENT, etc.

should be used by

Scientists, Metallurgists, Assayers, Manufacturers, and others dealing with intense heats, continuous or intermittent.

J. H. SANKEY & SON,

Manufacturers, Merchants, and Shippers.

EST. 1857. Contractors to H.M. Government.

Head Office and Stores:

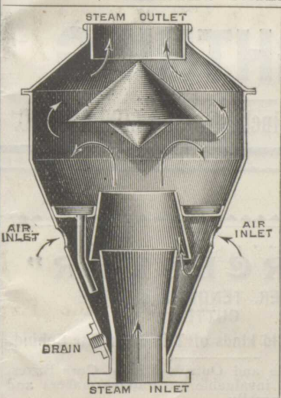
ESSEX WHARF, CANNING TOWN, E.

Superior qualities of Cements, Limes, Bricks, Tiles, Slates, Glazed Bricks, Sanitary and Fire Clay Goods.

Best Stock in the Kingdom.

EXHAUST HEAD

(FLETCHER'S PATENT).



Prevents the Ejection of Oil and Water.

Reduces the Noise.

Guaranteed Effective.

Saves the Grease.

Prevents Damage to Property.

No Back Pressure

SOLE LICENSEES.

The FRICTIONLESS ENGINE PACKING CO., Ltd., Hendham Vale, Manchester.

Specialities—"Karmal" Packing. Roko-edge Belting.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00002c

مكتبة قطر الوطنية
Qatar National Library

Engineering.

FREDK. SMITH
& CO.,
Wire Manufacturers, Limited,
Anaconda Works, SALFORD, MANCHESTER.
Contractors to H.M. Government and Railway Companies.
ALSO AT HALIFAX. . . .

Patent Galvanised Telegraph Wire (100-lb. coils) to all Specifications.
COPPER WIRE (100 per cent. Conductivity.)
Plain Soft. Hard drawn for Telephone Lines.
Special Tinned Wire. Silicium Bronze Wire.
COPPER TROLLEY WIRE.
Specially Prepared, Half-mile and Mile Lengths, Tested, Guaranteed.
SPECIAL BRONZE TROLLEY WIRE.

THE NATIONAL ELECTRIC WIRING CO., LTD.,
Electric Light, Power and Traction Engineers.
CONTRACTORS TO . . .
H.M. WAR OFFICE, OFFICE OF WORKS, Etc., Etc.
Head Office: 34, VICTORIA STREET, LONDON, S.W.
BRANCHES: *Liverpool, Greenock, Bangor, Northampton, Dublin, Belfast.*
TOWN LIGHTING,
TRAMWAY OVERHEAD EQUIPMENT,
COUNTRY AND TOWN HOUSE LIGHTING,
etc., etc., etc.

Telegrams—"WEATHERVANE, LONDON."
Telephone—No. 3,053 Central
JOSEPH LEWIS.
Admiralty Contractor.
WORK ON LOFTY BUILDINGS WITHOUT EXPENSE OF SCAFFOLDING.
LIGHTNING CONDUCTORS
AND EVERY WORK IN CONNECTION WITH THEM.
5 & 6, Gt. Winchester St., LONDON, E.C.

THE NEW . . .
"WORCESTER"
TRIMMER, TENON, and MITRE CUTTER
Leaves all the old kinds of Trimmers Far Behind.
It makes Inside and Outside Mitres, Core Boxes, Tenons, and is invaluable to Pattern-makers and Woodworkers generally.
Write for List and Sample of Work.
J. W. & C. J. PHILLIPS,
23, College Hill, London, Eng.

PATENTS. G. F. REDFERN & CO.,
ESTABLISHED 1830. General Patent Office,
4, SOUTH STREET, FINSBURY, LONDON.
British, Foreign, and Colonial Patents obtained at fixed and moderate charges. Designs and Trade Marks registered at home and abroad. Circular of information forwarded free on application. Telephone No. 4492 Central. Telegraphic address, "Invention, London."

JOURNAL OF THE SOCIETY OF ARTS.
COPY for Advertisements must reach the Office NOT LATER than the MONDAY preceding date of Publication.
5, QUEEN VICTORIA STREET, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000004

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

TRADE MARK

W. T. GLOVER & Co., Ltd.,

TRAFFORD PARK, MANCHESTER,

Makers of all descriptions of VULCANISED RUBBER and PAPER

INSULATED WIRES and CABLES.

Telegraphic Address: "CABLES, MANCHESTER." Telephone Nos.: 1187, 3049, and
London Address: 2, QUEEN ANNE'S GATE, S.W. 4927, MANCHESTER.
Telephone No.: 191, WESTMINSTER. Telegraphic Address: "PHONOSCOPE, LONDON."



THE SHANNON FILING CABINET
For Correspondence, Invoices, etc.

The "SHANNON" SYSTEM.

File Letters and Answers
together by using the

Shannon Letter Filing Cabinet

In conjunction with the Rapid

Roller Copier.



THE RAPID ROLLER COPIER.

INSTANT REFERENCE!!!

PERFECT SYSTEM!!!

Write for Catalogues to **The SHANNON Ltd.,** Ropemaker Street, LONDON.

F. W. SCHAFER—Managing Director.

All communications respecting Advertisements should be addressed to Walter Judd, Ltd., 5, Queen Victoria st, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000007

مكتبة قطر الوطنية
Qatar National Library

THE
India Rubber, Gutta Percha, and Telegraph Works Co., Ltd.,

Works . . .
SILVERTOWN, LONDON, E., and
PERSAN (Seine-et-Oise), FRANCE.

Foreign Branches . . .
MELBOURNE—274, Flinders Street.
PERTH (W.A.)—131, Queen's Buildings, William St.
CALCUTTA—1—1, Fairlie Place.
SYDNEY—279, George Street.
BRISBANE—Edward Street.
BUENOS AYRES—Calle Reconquista 140 & 142.
CHRISTCHURCH (NEW ZEALAND)—234, Cashel Street.
SOUTH AFRICA—213, West St., Durban, NATAL; Willoughby Bldgs., Bulawayo, MATABELELAND.

Electrical Engineers,
100–106, CANNON ST.,
LONDON, E.C.
DYNAMOS, MOTORS, CABLES.

THE CHLORIDE
STORAGE BATTERY
Contains all
THE LATEST IMPROVEMENTS
TO ENSURE
DURABILITY, EFFICIENCY,
AND
SIMPLICITY OF WORKING.

For Full Particulars and Prices apply to
The CHLORIDE ELECTRICAL STORAGE COMPANY LIMITED.
London Office: 39, VICTORIA ST., S.W.
CLIFTON JUNCTION, near MANCHESTER.

London: Printed by WILLIAM TROUNCE, at his office, No. 10, Gough-square, Fleet-street, in the Parish of St. Dunstan, in the County of Middlesex, and published for the Society of Arts, by GEORGE BELL AND SONS, York-street, in the Parish of St. Paul, Covent-garden, in the City of Westminster, February 27, 1903.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00008d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

No. 2,623. VOL. LI.] FEBRUARY 27, 1903. [Price 6d. To Non-Members.

THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES & COMMERCE · INSTITUTED AT LONDON 1754 · INCORPORATED BY ROYAL CHARTER 1847

JOURNAL

OF THE

SOCIETY OF ARTS

PUBLISHED EVERY FRIDAY.

CONTENTS.

Notices :—Next Week.—Fire Prevention Prizes.—Cantor Lectures.—Indian Section 305
Applied Art Section :—Heraldry in Decoration, by George W. Eve.—Discussion 305
Twelfth Ordinary Meeting : — Tonkin, Yunnan and Burma, by Fred. W. Carey, F.R.G.S.—Discussion 313
Obituary :—Thomas Ward, J.P. 323
Meetings of the Society 323
Meetings for the Ensuing Week 324

LONDON:
PUBLISHED FOR THE SOCIETY BY GEORGE BELL AND SONS, YORK STREET, COVENT GARDEN.

1903.

Registered as a Newspaper.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000028

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

AËRIAL ROPEWAYS

On ALL SYSTEMS constructed by

Bullivant & Co., Ltd.

(From designs by W. T. H. CARRINGTON, M.Inst.C.E.)

EXAMPLES AT WORK ALL OVER THE WORLD.



WIRE ROPEWAY ON THE THAMES CONSTRUCTED BY BULLIVANT & CO., LTD.

MAKERS OF

FLEXIBLE STEEL WIRE ROPES

For Cranes, Lifts, Hoists, Suspension Bridges, &c. Hauling and Winding Gear, Pulleys, Clamps, &c.

Illustrated Pamphlets may be had on Application.

Registered Office, **72, Mark Lane, LONDON, E.C.** Works— **MILLWALL.**

TO ADVERTISERS—All communications respecting Advertisements to be sent to Walter Judd, Ltd., 5, Queen Victoria Street, Mansion House, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence

View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000049

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

723

Electric Cables.

W. T. HENLEY'S TELEGRAPH WORKS CO.
LIMITED,
27, Martin's Lane, Cannon Street, London, E.C.

Telephone: 5781 BANK. Telegrams: "HENLEY'S WORKS, LONDON."

MANUFACTURERS OF ...

HENLEY'S CABLES

FOR ...

ELECTRIC LIGHT AND TRACTION,
TELEGRAPHS AND TELEPHONES.

With Vulcanised India-rubber, Jute, Gutta Percha,
or Paper Insulation.

WE MAKE A SPECIALITY OF ALL KINDS OF

Lead-Covered Cables.

Works—NORTH WOOLWICH.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000027

مكتبة قطر الوطنية
Qatar National Library

Engineering.

MACHINERY

For Economic Handling of Materials.

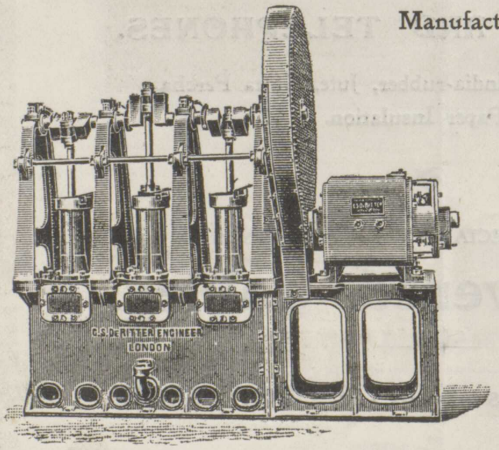


10-TON SHIPBUILDING CRANE (200 FEET LONG).

SHIPBUILDING CRANES.
FURNACE HOISTS.
COAL & ORE-HANDLING MACHINERY.

THE
Brown Hoisting Machinery Co.
39, VICTORIA STREET, LONDON, S.W.
Main Office Works: Cleveland, Ohio, U.S.A. New York Office: 26, Cortland St.

G. S. De Ritter,



ELECTRICALLY DRIVEN SET OF 3-THROW AIR PUMPS.

Manufacturer of
CONDENSING PLANT
With the Latest Improved
AIR PUMPS,
Driven either Electrically by Steam or by Belt.

Three Colt Street, Limehouse, London, E.

ON ADMIRALTY LIST.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000052

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

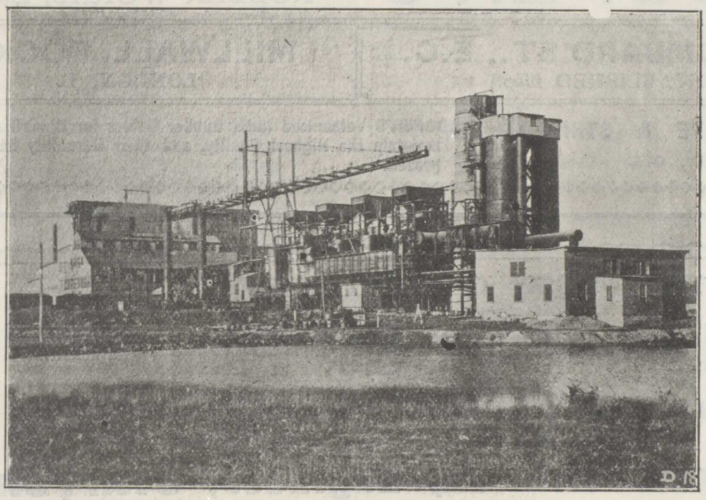
Mond Gas.

THE CHEAPEST FUEL FOR
POWER AND HEATING.

Plant capable of producing
170,000 H.P. already sold.

MOND GAS is generated from Bituminous Slack. It is the most suitable for GAS ENGINES.

Complete MOND GAS INSTALLATIONS from 250 to 25,000 H.P.
started to work in any part of the World with or without Ammonia Recovery.



12,000 H.P. MOND GAS PLANT, WITH AMMONIA RECOVERY.

MOND GAS,
The Power-Gas Corporation, LTD.,
39, VICTORIA STREET, S.W.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000089

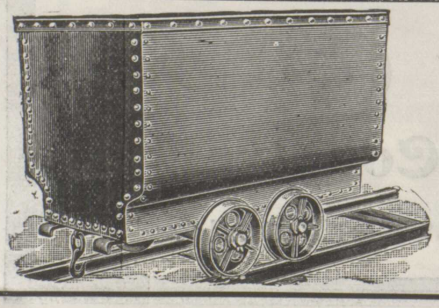
مكتبة قطر الوطنية
Qatar National Library

Engineering.

PATENT
BROCKIE-PELL ARC LAMPS.
TRAMWAY LIGHTING. Any Circuit.
Open and Enclosed Types.
STREET LIGHTING. 30,000 in Use.
BROCKIE-PELL ARC LAMP, Limited,
WRITE FOR REDUCED PRICES.
OFFICES & WORKS:
60, WORSHIP ST., LONDON, E.C.

Telegrams—"LINEAR, London. Telephones, 1169 Avenue and 84 Eastern.
HOOPER'S TELEGRAPH AND INDIA RUBBER WORKS, Ltd.
31, LOMBARD ST., E.C. (ESTABLISHED 1860.)
MILLWALL DOCKS, LONDON, E.
PURE TAPE & STRIP, etc., etc.
HOOPER'S Vulcanised India Rubber Cables for Electrical Work maintain the Highest Quality, and their Durability has been proved.

THE WILSON GAS PRODUCER AND
Wilson's Power Gas Plant.
The Cheapest means of Producing Power for any purpose From 100 H.P. upwards.
Simplest and Most Efficient.
Uses any Ordinary Slack Coal.
ALFRED WILSON, Engineer, STAFFORD.


Telegrams: "TRICHORDS, LONDON."
Dolberg-Griffin,
PORTABLE RAILWAYS, TIPPING-WAGONS, CONTRACTORS' WAGONS, SWITCHES, AND TURNTABLES.
42, Southwark Bridge Road, London, S.E.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000c1

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Journal of the Society of Arts,

No. 2,623. Vol. LI.

FRIDAY, FEBRUARY 27, 1903.

All communications for the Society should be addressed to the Secretary, John-street, Adelphi, London, W.C.

Notices.

NEXT WEEK.

MONDAY, MARCH 2, 8 p.m. (Cantor Lectures.) PROFESSOR J. A. FLEMING, M.A., D.Sc., F.R.S., "Hertzian Wave Telegraphy in Theory and Practice." (Lecture I.)

TUESDAY, MARCH 3, 4.30 p.m. (Colonial Section.) HERBERT SAMUEL, M.P., "The Uganda of To-day."

WEDNESDAY, MARCH 4, 8 p.m. (Ordinary Meeting.) J. C. MEDD, "Education in Holland."

Further details of the Society's meetings will be found at the end of this number.

FIRE PREVENTION PRIZES.

The Council of the Society of Arts, at the request of the Executive Committee of the International Fire Prevention Exhibition, have decided to offer, out of the funds of the Fothergill Trust, the following prizes at the Exhibition which is to be held at Earl's Court during the current year:—

For the best chemical fire engines for town use shown at the Exhibition:—One gold medal, two silver medals, and two bronze medals.

For the most easily worked long ladders, to reach the sill of a window 80 feet above the level of the pavement, which shall also be capable of being rapidly transported over roads of not more than 25 feet wide, shown at the Exhibition:—One gold medal, two silver medals, and two bronze medals.

The medals will be awarded by the Council on the report of the judges appointed by the Executive of the Exhibition.

The Council reserve the right of withholding any of the medals, or of awarding medals of lesser value, if in their opinion the exhibits should not be deserving of any, or all, of the medals offered.

CANTOR LECTURES.

On Monday evening, 23rd inst., Mr. JULIUS HÜBNER delivered the fourth and concluding lecture of his course on "Paper Manufacture."

A vote of thanks to the lecturer for his course of lectures was passed on the motion of the CHAIRMAN.

The Lectures will be printed in the *Journal* during the summer recess.

INDIAN SECTION.

Thursday afternoon, February 26, 1903; SIR ROBERT J. C. MOWBRAY, Bart., M.P., in the chair. The paper read was "Gleanings from the Indian Census." By JERVOISE ATHELSTANE BAINES, C.S.I.

The paper and report of the discussion will be published in next week's number of the *Journal*.

Proceedings of the Society.

APPLIED ART SECTION.

On Tuesday evening, February 17, 1903; LEWIS FOREMAN DAY, Vice-President of the Society, in the chair.

The paper read was—

HERALDRY IN DECORATION.

By GEORGE W. EVE.

The choice of heraldry in decoration as a subject on which to offer suggestions to the Applied Art Section of the Society of Arts is influenced (apart from the necessity of limiting in some measure the scope of heraldic art in general) by the consideration that, as it was in decoration that heraldry found admirable expression from a very early period, its decorative use in the past is now worth study with a view to the satisfactory execution of modern work.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x000024

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Primarily heraldry, no doubt, consisted of the devices which distinguished leaders in the field, but its close connection with the personality of its bearer, whom it represented in a very intimate way, also led to its use in every conceivable form of decoration. In costume, ornament, and furniture, as well as in the hangings of tapestry and in other mural adornments, it became a striking and universal feature of the art work of its time. Owing to this strong personal and allusive quality, the employment of heraldic motives in the decoration of buildings has continued, even down to our own time, to show a more marked degree of excellence than was for a long period present in other forms of heraldic expression.

Decorative work was also the direction in which the revival of heraldry, which accompanied the Gothic revival, first showed itself. Perhaps the inherent difficulties of the materials may have suggested the sincerity of the effort to properly employ them.

It will not be necessary (even if time allowed) to go very far into the origin of heraldry. For our purpose it began about the 11th century—that is to say, it began to be used and systematised, more or less, as we know it, but in its essence it must always have existed.

The desire to distinguish himself by some visible means seems to have characterised man ever since we know anything about him. Badges are mentioned as the ornaments of kings and chiefs from the earliest historic times, from that of the Chaldean King, 4000 B.C., onwards. Some of these early personal devices were strangely similar to those with which we are familiar in later times. The figures on the sculptures at Persepolis, for example, have veritable crests on their heads, and these also occur on the heads of the king and his heir apparent in contemporary coins. There may even have been some sort of regulations controlling the use of the various devices, but we may at least be sure that the powers that were took good care that others did not use their badges if they could help it.

Artistically, our heraldry from its rise in the 11th century quickly developed a high standard of decorative excellence, flourishing exceedingly, with certain changes of style and method, for three hundred years until the middle of the 16th century, when its period of greatest strength and beauty ended, and its decadence began. As a system it seems to have developed in a natural way on the lines of its own necessities, as did its artistic expression in a great measure, but the latter owed much to previous design, and, mainly through the influence of the textiles and other importations (sometimes brought by returning crusaders), helped to perpetuate in the Western world the lions, eagles, and strange and characteristic composite animals of the East. These ancient prototypes of heraldic forms are singularly interesting, and concern us here because they sometimes possess in a marked degree qualities which teach valuable lessons that are applicable to present use. This will be discussed presently.

Although at first the mediæval draughtsman followed the drawing of his imported or traditional motives with considerable closeness (as in the lions of one of the 13th century MSS. in the British Museum), he soon began to treat them in the way that came to be considered peculiarly heraldic. In thus handling his motives he was entirely himself, and the outcome was the natural result of that splendid sense of design which distinguished him. The style is rightly considered purely heraldic, because it arose from its own heraldic conditions, and was the result of the very sane intention that the thing done should be suited to the use to which it was to be put, viz., to serve as a distinctive badge, which could be seen and easily read at a distance, and, in many cases, when in motion. To this end the object was drawn as large as the containing space would fairly admit, and its form was attenuated so as to allow the ground colour to show through in due proportion, and so effect clearness of definition. Vigorous draughtsmanship also contributed to the splendidly decorative effect that was due to good distribution, and the fine balance of colour that results from it. Thus the treatment which was suggested by reasons of practical convenience, resulted in an effect of great decorative value which also afforded opportunity for the use of expressive line. It is interesting to contrast this treatment with that of the later renaissance, such as the naturalistic lion by Della Robbia, which would have become an undistinguishable blob at a distance at which the attenuated form would have been quite effective. In a similar way an eagle drawn in the ancient way, with the wing-feathers strongly divided, was at once more distinct and more decorative than its renaissance successor.

Another practical consideration, the need of readily repairing the damage caused in action to the actual shield, dictated the flat and simple treatment of much of the painted decoration. A similar simplicity occurs in

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000073

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

some of the MSS., especially in such as are of large extent or of frequent repetition when economy of time and labour was desired. When, however, circumstances allowed, time and skill were not spared in the elaboration of the work. It is of course for this reason that the heraldry in architectural decoration is generally found to be among the best work of its period.

In the ceremonial shields, this elaboration is very great. They were made of layers of various materials, such as canvas, stretched on wooden frames, and the changes were then modelled in gesso, and afterwards gilt and painted, or were fashioned in stamped leather and pinned down to the surface. The spaces were diversified with the beautiful tracery known as diapering, and the whole result was rich and beautiful in the extreme. Large numbers of these shields were made in Italy down to a late period. A most admirable English example is the shield at Canterbury Cathedral, said to be that of the Black Prince. Here the lions are admirably distributed, full of power and life, and less extravagantly drawn than those of John of Eltham at Westminster Abbey, but they lack something of leonine character. The *fleur de lis* of France are beautifully free and graceful, and though so dissimilar in shape to the lions, are equally well designed to occupy their spaces and equally well proportioned to them. The whole work, which is so excellent an example now of some of the best qualities of heraldic design, has suffered from the wear of the centuries, but when it was uninjured must have been superb. The lack of leonine character in the lions might naturally be expected when it is remembered that they were the descendants of generations of copies and, therefore, were not consciously generalised from objects seen by the artist. Even when he did see a lion his acquired ideas were too strong for him, so that one in a 13th century book of sketches, though noted in the margin as "drawn from the quick," is very like its patternlike fellows.

Whether the treatment was simple or elaborate, however, its breadth of effect and decorative quality were nearly always conspicuous. These various methods, both satisfactory in their way, are of special interest to those who require historic sanction to a choice of treatment, in opposition to the opinion that, as certain methods of work, or works of a certain period are good, they are, in addition, perfect and everything else is wrong. So, when a flat treatment, in harmony or contrast with surrounding decoration seems desirable, the armorials may be done flatly, and when on the other hand a more elaborate treatment seems fit, modelling in relief or any other suitable means of decorative effect may be employed. The old work itself, full of variety and freedom, teaches us how to look at the subject without pedantry, but not without knowledge. It teaches the right of individual treatment combined with selection, and illustrates in a measure the essentially artistic principles taught to Kipling's primæval ballad-maker by his totem,

> "There are nine and sixty ways of composing tribal lays,
> And every single one of them is right."

It is not meant, however, that ignorant and reckless scribbling is right. Order as well as freedom is necessary, and this can only be secured by a study of the subject from all points of view.

The early treatment of the crest, helm, and mantling will also amply repay study. Being made of light material, and having its weight, which was still considerable, supported by the shoulders on which the helm rested, the crest was of conspicuous size and is so represented. In early times it is said to have been one of the privileges of knighthood, and this would additionally explain its emphasis. The helm was usually that known as the great helm, to distinguish it from the helmet, basinet or other form of head armour. The latter, having a visor or front which opened, and a movable neck, came into use in the 15th century to meet the desire for lightness and mobility in actual battle, and thenceforward crests and the great helms that bore them were reserved for the tournament and other military solemnities. There was another especially practical reason for this disuse. It had been found that a crest was a dangerous ornament in actual battle, for at close quarters it served as an excellent handle by which to pull down the wearer's head. King Stephen is said to have been taken prisoner in this manner. The mantling, which was at first quite simple, soon became of the greatest value as an element of composition, and the importance of its free possibilities of line was quickly recognised. From a mere representation of the helm drapery, it thenceforth developed through various forms until it became in many instances similar to the contemporary architectural tracery, when, as in the 15th century carvings, it surrounded the shield and ornamented the surface of the panel in a very complete and beautiful way.

By the Tudor time heraldry had ceased to be

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x0000b4

مكتبة قطر الوطنية
Qatar National Library

used in war in the old way, with such exceptions as banners and the decorative and emblematic shields on ships of war, and it, of course, remained an essential part of the tournaments, while they continued to exist, but heraldry in the main became merely decorative thenceforward, retaining, of course, its allusive and symbolic qualities. In this way it greatly increased, thus sharing in the impetus given to the arts by the end of the Wars of the Roses. At this time a remarkable number of simple flowers came into heraldic use, columbine, gilly-flowers, marigolds, honeysuckle, and many more appearing not only as arms but in garlands as decorative accessories.

By this time also the shield shapes had become less simple, following in their cuspings the fluted armour of which they formed part, and others of which large numbers were designed by the little masters were frank applications of the decorative scrolls of the time. The concave shield whose raised edges took the light and helped to define the form, while assisting, together with the shadow within it, the distribution of light and shade, became much in use.

Some of the early renaissance heraldry retained much of the excellence of the preceding Gothic as regards the pose of the figures and the general composition, and it attempted, in addition, the characterisation that was wanting in the earlier work. In many respects it was very admirable, and seems, in its individual thought working on some of the suggestions or traditions of the older style, to suggest the lines on which modern heraldry might develop. At the same time there was a more naturalistic school, of which the heraldry in Della Robbia's work may be taken as the expression, and this also is interesting, *but as a warning*. It most unfortunately overpowered the more decorative style, and ultimately developed into the feebleness which characterised the heraldry that preceded the revival in the last century.

A well-known example of the better renaissance is the plate by Albert Dürer, of a shield bearing a rampant lion. In this plate there is also evident a desire to render the mantling more cloth-like, though still complicated. Mantling afterwards followed the influence of the conventional leaf forms of the renaissance.

I have ventured to give you this slight sketch of the development of the artistic side of heraldry, not as a mere historic retrospect, but because it is in the study of old work that guidance is to be found for present requirements. But in this connection, a word of warning may perhaps be permitted against making a fetish of the work of any period, however good. Another is against mere copying of old examples however excellent, except, of course, for purposes of study. Merely to copy bits of heraldic precedent and to piece them together is not the way to make an artistic thing at all. A copy has no vitality of its own, and cannot even reproduce that of its original, for it is more than doubtful if it is possible to reproduce the spirit of work done under other conditions and modes of thought. Even Pugin, to whom the revival of decorative heraldry owes so much, with all his sympathy, and with all his powers of draughtsmanship, cannot be said to have altogether caught the intense vigour of his originals.

Again, hardly anything possesses, at the same time, all the good qualities that it might have, and we sometimes excuse the absence of one because of the supreme way in which another is expressed. In doing new work a broader view is necessary if it is to result in anything but a shadow of a former style. Heraldry should be expressive, interesting, and decorative. Original in treatment, and exhibiting the qualities that the best of the old work teaches us to desire, rather than being a copy of it. The term "original" here does not mean expression by means of wild arrangements of weird lines, which are perhaps original in the sense that there is nothing like them on earth, but rather the originality, or, perhaps I should say, individuality, which comes from serious attempts to express qualities rather than to copy styles.

The artistic expression of heraldry may be regarded in two ways; as a representation of an actual shield, crest, helm, and so forth, as they would be represented in a picture, of a tournament for instance, or as a presentation of the essential heraldic facts, in the way that is thought most expressive but without too much regard to preceding styles. The former seems more suitable to ancient and historic arms, and the latter to be more likely to harmonise with modern decorative surroundings, as well as to possess more vitality and variety in itself.

This harmony with surrounding decoration, is one of the essentials of design that should be continually kept in mind. Another condition, equally important, is suitability to the materials and methods by which the design is expressed. The two very obvious points cannot be too often insisted on, however wearisome the reiteration, for they are even now frequently ignored. One hears of shields

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984186.0x000031

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

painted on vellum (with all the detail and finish to which that beautiful material lends itself), sent as a substitute for a working drawing for large embroidery or carving, and accompanied by instructions that they must be *strictly* followed. Or of friezes and panels, of which the different parts, heraldic and ornamental, have been done by different designers working in ignorance of each other's design. The general design is made, perhaps of well drawn and graceful lines, with spaces where it is thought, probably correctly, that the shields would tell. Then a sketch, perhaps a mere diagrammatic note of the arms, is procured, enlarged to the right size, and blindly copied. Of course the result is patchwork. Careless treatment of heraldry seems to pervade applied art, and so to spoil what is otherwise meritorious work. Much incongruity arises from fear lest improving the drawing or composition may violate heraldic rules, and this brings us to the necessity for acquiring such a knowledge of the subject as will enable the designer to know what points are really essential, and therefore to be carefully retained and accentuated where accent is proper, and what, on the other hand, may be modified or ignored. A knowledge of the system of heraldic description, called blazon, will be absolutely necessary to this end. Pedantry in non-essential matters is of course absurd, and artistic freedom is always to be desired, but there must first of all be a basis of knowledge on which to work.

It will be necessary to study the subject sufficiently to distinguish between the essential principles (such as underlaid the old good work) and the later amplifications of rules, full of pedantic insistence on regulating every detail however unimportant, which were made when the legal mode of thought had displaced the artistic one. The rules that are necessary to prevent confusion will be found sufficiently elastic to allow variety of treatment.

Among the qualities that it will be desired to express are just proportion, distinct definition, good distribution in filling spaces, strongly characterised and well accented forms, and vigorous pose.

The proportion of the parts of a usual form of heraldic group of shield, crest, helm and mantling, to each other remained fairly constant from the end of the 13th century to Tudor times, and may be taken (roughly) to be two-fifths of the whole height for the shield and three-fifths for the helmet and crest. This merely as a practical guide. I need hardly say that it is not to be taken as actual measurement, but only as suggesting the relative weights in the design. The character of the crest, whether broad and solid, or tall and slight, would affect this. The result of these proportions is to bring the helm a little above the actual centre of the design, where it forms a satisfactory point on which the other objects group themselves.

With regard to the proportions of ordinaries to their fields, many rules to be found in treatises may be safely ignored. In good work the ordinaries vary in size with the requirements of distinctness in respect to the other charges, and their variation in this way has no other significance. I do not, of course, deny the usefulness of points of proportion, they may be useful so long as it is recognised that they are approximate and variable guides instead of dogmatic inflexible rules. With regard to charges, it is equally impossible to say what exact proportion they should bear to the field, nor in most cases could we measure it if we did. It must be a matter of artistic perception which decides whether a space is properly filled. In any case the proportion would be an apparent rather than scientific one, and would be greatly modified by circumstances, colour for instance. I need hardly point out that the actual measurements would not be the same for a white object on black as for a black one on white. It is curious how prevalent the desire has always been to reduce to exact rules matters that are insusceptible of that kind of control. The 16th century efforts at a geometric way of drawing letters and the attempt to regulate minutely heraldic drawing are instances of a peculiarly wrongheaded way of approaching matters essentially æsthetic.

As to the animal forms, vigour is of the utmost importance, together with strong characterisation. In this connection the lions of the Assyrian reliefs are very suggestive. The expression of strong, leonine character by means of the accentuation of the muscular masses is a method that lends itself well to heraldic design. The composite figures are also well worthy of study in relation to the griffins and other monsters of later times. Gerard Leigh, writing in the middle of the 16th century, has something to say about griffins; they are, as you know, half eagle and half lion, which students of natural history may like to know, thus: "Griffins bear great enmity to man and horse; though the man be armed and on horseback, yet they take the one with the other quite from the ground and carry them clean away. I think they are of

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000a0

مكتبة قطر الوطنية
Qatar National Library

great hugeness," he goes on "for I have a claw of one of their paws which should show them to be as big as two lyons." In another place Leigh refuses to believe something because "he had not seen the proof thereof."

It will be well to consider animal pose in relation to the anatomical possibilities, and the qualities of dignity, strength, or grace which are associated with certain charges should also find due expression.

The schemes of arrangement that suggest themselves as suitable to decorative purposes, are very various. Complete series of family arms and those of alliances, together with the honours conferred on individuals; arms of successive owners; shields marking the visits of distinguished guests, and so forth.

Unity of plan, such as when the arms are arranged in relation to some central object as the altar in a church or the fireplace in a room, for example, is, of course, desirable. In the latter case the central position would be appropriately occupied by the entire armorials.

The employment of Badges in decoration opens up a large and interesting field of design from their value as decoration in places where shields of arms are not so suitable. Though not subject to the same rules as the regular arms they were still regarded as of great though secondary importance, and became practically hereditary in many cases. Time, however, will not permit of their adequate treatment here. A kind of badge, more ephemeral in character, called an impress, was a fashion that came to us from Italy, as many other heraldric fashions did. They were devised from mere fancy, and consisted of a device with an explanatory motto. Henry VIII. and his knights at the Field of the Cloth of Gold bore a series of devices, of which they wore part each day until the whole was complete. Cosmo de Medici had a tortoise with a sail attached and the motto "Festina lente," and there were others innumerable. Like other heraldic matters, they sometimes led to quarrels. A knight who strutted up and down at the court of King James, had a falcon embroidered on his sleeve, and the motto, "I bear a raven, fearless in flight, who checks at him his death is dight." Then a Scottish knight saw the device, and after a while appeared with another. His was a raven with a piece of meat, and its motto said, "I bear a raven picking at a piece; who pecks at him, I'll peck at his nese." The story goes on, that in the arrangements for the consequent fight, the Scottish knight, who had but one eye, demanded that his opponent should lose one of his, in order to be on an equality.

There will not be time to do more than briefly allude to colour treatment. It will suffice to say that it is not at all desirable that heraldry should *scream* in mural decoration however necessary it may have been to do so in the field. So long as the tinctures are distinguishable with sufficient clearness any modification of tint may be used, and the colour may be broken by means of diaper or other surface treatment that may be desirable in order to make the heraldry take its appointed place. Always avoiding, however, any interference with the clear statement of the heraldric facts. The decoration may be modelled in gesso and treated with monochrome, so as to emphasize the modelling, or in many another way that practice will suggest.

The revival of the art of enamel also offers a splendid material for heraldic work. The series of works in enamel on the monuments, and above all, the early Stall Plates of the Knights of the Garter at Windsor, are too well known to need more than an allusion to the magnificent field of study they afford; but it may perhaps be permitted to hope that the beautiful art of enamelling which (though its revival is less than 20 years old) is fully capable of worthily following its long ago predecessors, may have, some day, an opportunity of doing so.

The value of heraldry in domestic decoration is also obvious. One can hardly imagine anything to excel the gemlike effect of armorial enamels on the dark panels of a library, for example.

Whatever be the material in which heraldry finds its means of expression, it is permitted confidently to hope that the wide and increasing interest that is being extended to the subject may result in the production of work that is not unworthy to follow the best of its predecessors.

DISCUSSION.

Mr. CHARLES CHADWYCK-HEALEY, K.C., said that he had listened with great interest to Mr. Eve's remarks, and he wished to express his appreciation of the work that Mr. Eve had been doing for some time in developing the art of heraldry in this country. There was very great need for such work, for the country had been in a lamentable condition in this

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000081

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

matter for a great number of years, and it was so still, in spite of everything that had been done to bring about improvement. One need only to look, for instance, at the miserable way in which heraldry was impressed upon silver plate by the silversmith, by means of engraving. An instance came under his personal observation a year or two ago. It was desired to put a shield of arms upon a piece of old plate, and one of the leading silversmiths in London was invited to engrave it. A preliminary sketch was made, but a more pitiable thing was never turned out. The charges were reduced to the very smallest possible dimensions, so that they could hardly be recognised. The artist seemed to desire to display as much as possible the colour of the shield. The ordinary was also of the smallest dimensions. He hoped that the time was not very far distant when heraldry as a means of decoration might be developed, and that the practice of it would permeate through every class of artificer. But that could only be brought about by conscientious work, and by the example of men who had made the subject their study. He believed that a great deal was being done on the Continent in developing heraldry in design. Probably continental design would prove to be in the end rather more florid than English people cared to see, but, as an illustration of continental work he might refer to the Munich almanack, which was published every year, and which could be bought for a shilling. It was full of heraldic designs. The publication of a work of similar character was one of the ways in which heraldic design might be popularised in this country.

Mr. R. Garraway Rice agreed that the subject was of great interest. It was noticeable how much better the earlier heraldry was than the later. If he understood Mr. Eve's work aright, it had gone on the principle of trying to bring back that simplicity which was true decoration, and to avoid excessive ornament. In the 18th century, when classical forms prevailed in architecture, heraldry, which was essentially mediæval, was out of place, and it was very difficult to introduce it, hence architecture and heraldry seemed to have fallen apart. At the present day one had the advantage of being able to study the various periods, but it seemed to him that the difficulty which a modern designer had to contend with was that having at his finger-ends practically everything that had gone before, it was extremely difficult to avoid a kind of mixture. The difficulty of modern artists was to give something pure and to avoid introducing features which were out of place.

Mr. R. Phillips said that heraldry was a great aid in ornament, but no doubt those interested in the subject would agree that it had not retained the dignity and importance which properly belonged to it. He remembered in his wanderings in the New Forest coming upon a perfect mine of heraldry in the old Abbey Church at Christchurch. One point which had occurred to him, was the greater beauty of heraldic designs on buildings than in other things. He thought that the chief reason of this was, that in buildings, heraldic designs were always executed in higher relief.

Mr. George Clulow said that Mr. Eve had put before them, in a very interesting way, examples of the decorative use of heraldic design in England and other countries, but had omitted Germany. He regretted this, because there were, in Germany, numerous examples of the 16th century which abounded in the vigorous and decorative character on which Mr. Eve had properly laid much stress. As to the way in which heraldry is often expressed on plate, they must look at the subject from the point of view of the ability of the person called in to do the work. The incident of which Mr. Chadwyck-Healey had told them, displayed, of course, great ignorance on the part of the designer and engraver. It seemed to him that attention ought to be called to the fact that there were among them gentlemen who were capable of supplying heraldry in scientific form, and according to the proper heraldic use. The value of a paper, such as had been read, was that it would call attention to that fact.

Mr. Frank Frederick, in reply to the Chairman, said that the whole subject was absolutely new to him, as he came from a country where heraldry was not regarded, and where it was only seen in decoration and design. Only that day, in walking in the South Kensington Museum, he was struck with the fact that there was such a mine of wealth of design there.

Mr. Alexander Millar said that he had derived extreme pleasure from Mr. Eve's book. That was a work which everyone interested in the subject ought to possess. But, like another speaker, he had been a little disappointed not to find more reference to German heraldry. He possessed a book of which an English edition was about to be published, which appeared to him to be the fullest and finest work on German heraldic design, so far as ancient examples were concerned. In that book, the crest appeared to be composed, in many cases, of enormous horns, taking a sort of lyre shape, and ending in a kind of trumpet mouth. He did not think that he had seen anything like it in English heraldry, though it was extremely common in Germany. He should like very much to ask whether Mr. Eve could explain what the purport of that design was. Reference had been made to a German almanack, which had been published for seven or eight years; something of the same kind appeared in this country this year and last year, and he had copies of it. This book gave the English coats of arms in precisely the same style that coats of arms were given in the German almanack, but the design was less extravagant, and had a more chastened method of expression. Mr. Eve referred in his book to the origin of the

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x000036

مكتبة قطر الوطنية
Qatar National Library

fleur-de-lis, and he spoke of it as probably derived from the iris or the flag. He had the strongest possible belief that it was so derived, and he did not think that it could have been adopted from the lily, however much the lily might have been conventionalised.

The CHAIRMAN regretted that he was not so entirely in sympathy with heraldry as a chairman ought to be. He looked upon it rather as an art of the past, chiefly of antiquarian interest. The shield of arms borne by a man's ancestors in battle interested him; but not the arms granted in recent years to a civilian—what had he to do with a shield at all? He (the Chairman) was interested in heraldry mainly because it was decorative. He regarded it as the type of what symbolic design should be, and of treatment of such design. But symbolism itself might become tiresome; the "rathe primrose" had not gained in poetry since it became a badge of party politics. The decorator had much to learn from heraldry—especially as to readable expression, and as to the logical use of colour—a mercy to those who had not very acute colour sense. Another lesson to be learnt from heraldry was as to the treatment of animal form in decoration, and especially in ornament, by no means an easy matter. As to the Sicilian silks to which the reader of the paper had alluded, possibly the weavers learnt from the heralds, or each might have learnt from the other. What Mr. Eve had said about proportion in heraldry would be helpful to designers and practical decorators; and it would be encouraging to them to be told that they might treat heraldry very freely, so long as they used their common sense. The pedantry connected with heraldry was one reason why artists "fought shy" of it. And the persons who hampered the artist did not always know. He had himself been called to order for introducing a diaper of grass as a background to the crest of a mower—that was not his crest said the worthy gentleman. In the decoration of a façade of a railway station not a hundred miles from Snow-hill the arms of the counties through which the line passed were on shields of all shapes and periods, according to the notepaper heading or other such "authority" from which the sculptor worked—plainly, he was of opinion that the shape of the shield was a matter with which he had no right to tamper. The result was hopeless incongruity. Apropos of silversmith's work, he agreed with Mr. Chadwyck-Healey. Presumably it was on account of cheapness that silversmiths resorted so enormously to engraving as a means of heraldic expression. But if heraldry was worth introducing at all, it was worth treating in a more dignified manner, and should not be introduced in the shamefaced manner which was usual. The "Münchener Kalendar," he might mention, were designed by Otto Hupp, an artist imbued with the mediæval spirit. Mr. Eve had mentioned Pugin. He might have mentioned also Clement Heaton, who in his day did most vigorous heraldic work. Referring to an illustration shown by the author, the Chairman protested against angel shield-bearers—there was authority for it in old work; but we knew better, or ought to. To make an angel hold the shield even of a great "swell," seemed to him playing it rather "low down" on the angel. Why did not we have heraldry on our stamps? It would at least prevent the necessity of changing them with each new reign. After referring to Mr. Eve's own excellent work in heraldic design, the Chairman concluded by proposing a hearty vote of thanks to him for his excellent paper.

The proposal was carried unanimously.

Mr. EVE, in reply, thanked the meeting for the attention which had been given to him, and also thanked the various speakers for their interesting remarks. The reason that he had not dwelt on German heraldry, was that it was a large subject, and he could not include it within the limits alloted to him. He was a great admirer of German heraldry, and he regarded it as extremely fine and vigorous. As to the Munich almanac, of course they all knew it. He should have dwelt upon heraldic ornament in iron work, but through an accident, he was unable to have the slides ready. They would have been useful as showing how heraldic design should be adapted to the material used. He could not give any information as to the German horns, about which a question had been asked. He had always understood that the horns were due to early decoration of the helmet, and that the crest was a perpetuation and a derivation of them. He had referred to Pugin, as a representative name in the gothic revival. His son-in-law Powell, Burges, and West, among others, had also done admirable work. The Chairman had objected that heraldry was a thing of the past, and he assumed that all heraldry was of a battle origin. But that was not the case. In mediæval times, many people who never fought if they could help it used heraldic arms; and even if such arms were of battle origin, he did not see why civilians should dispense with the opportunity of using a personal emblem because they did not use it for fighting purposes. The silks which he had referred to were the early textiles which came from the East through Sicily, or were those copied from oriental examples. If the animals in those early silks were compared with the earliest illuminated manuscripts the resemblance would be found to be most marked. With regard to the mower, he sympathised with the Chairman in the circumstances he had described. He agreed that correctness of expression should be insisted upon. If a thing was written in heraldry it ought to be written in such a way that its meaning should not be misunderstood. The accuracy of the heraldic statement being thus safe-guarded, ts decorative treatment could then take the course that seemed fit.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x00006f

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

729

TWELFTH ORDINARY MEETING.

Wednesday, February 25, 1903; Sir STEUART COLVIN BAYLEY, K.C.S.I., C.I.E., Vice-President of the Society, in the chair.

The following candidates were proposed for election as members of the Society:—

Anderson, Sir R. Rowand, LL.D., F.R.S.E., 16, Rutland-square, Edinburgh.

Baker, Charles Edmund, 54, Parliament-street, S.W., and Park Hill-lodge, Shortlands, Kent.

Calderwood, James Macdonald, M.Am.I.M.E., M.Inst.M.M., Messrs. Symons and Moses, P.O. Box 469, Johannesburg, Transvaal, South Africa.

Fraser, A. Brodie, Roddach Bow, Denton-road, Canton, Cardiff.

Grenfell, General Lord, G.C.B., G.C.M.G., The Palace, Valetta, Malta.

McLaughlin, Miss M. Louise, 2558, Eden-avenue, Mount Auburn, Cincinnati, Ohio, U.S.A.

Matland, George Read, 1, Finsbury-pavement, E.C.

Oelsner, Isidor, 31, Holland-villas-road, Kensington, W.

Quin, William James, J.P., Bishops Glen (P.O. Box 58), Bloemfontein, Orange River Colony, South Africa.

Rank, Joseph, Willersley-house, The Park, Hull.

The following candidates were balloted for and duly elected members of the Society: —

Ferguson, James, 4, Warltersville-road, Crouch-hill, N., and 91, Fore-street, E.C.

Hamilton, W. L. H., 16, St. Helens-place, E.C.

Hume, John, 18, Chapter-road, Willesden-green, N.W.

Lowry, George A., Board of Trade-buildings, Boston, Massachusetts, U.S.A.

Mackinlay, James W., Chumleigh, Finchley, N., and 85, London-wall, E.C.

Mossop, T., Bond-street-chambers, Bradford, Yorks.

Moysey, Frank Lindsey, 78, Wellmeadow-road, Catford, S.E.

Pyper, William James Stanton, Hollywood, St. Lawrence-road, Clontarf, Dublin.

Riley, Henry Lindon, LL.B., Court-chambers, St. Helens, Lancashire.

Scarborough, Prof. W. S., LL.D., Ph.D., Wilberforce University, Wilberforce, Ohio, U.S.A.

The paper read was—

TONKIN, YUNNAN, AND BURMA.

BY FRED. W. CAREY, F.R.G.S.
(Late H.B.M.'s Acting-Consul at Szemao, China.)

The title of my paper is somewhat of a misnomer. I could not hope to give you, in the time at my disposal this evening, a comprehensive description of Tonkin, Yunnan, and Burma. What I want to do is to treat, in a brief fashion, of these three countries in their relation to each other commercially; to describe two of the ways of penetration into South-West China; and to illustrate a journey from Haiphong up the Red River, through Yunnan and the Shan States into Burma. I trust that my illustrations will make up for any deficiency of matter in the paper itself.

Tonkin is the northern half of the kingdom, or empire of Annam, and was for many hundreds of years a tributary state of the Chinese empire. Little need be said of its history previous to the appearance of the French on the scene, towards the end of the 18th century. In 1799 they assisted their *protégé*, Ghia Lung, to the throne of Annam, but it was not until 50 years later that they began to take an interest in the government of that kingdom, an interest which did not cease until in 1885, as a result of the Franco-Chinese difficulty, Tonkin became a French colony.

Tonkin is divided naturally into two parts, the Delta, which is the low-lying and fertile southern portion, and the hilly country, commencing a little to the north of Hanoi, and extending north and east in both directions to the Chinese frontier. The mountainous portion is densely wooded, and very sparsely populated: minerals are said to exist in places. The Delta is simply one huge rice-plain, watered by the Red River and its numerous affluents. Generally speaking the climate of Tonkin is hot and unhealthy.

Haiphong, the principal port of Tonkin, is situated on the right bank of the CuaCam, one of the numerous mouths of the Red River, 12 miles from the sea. It is 48 hours from Hongkong by mail steamer. On account of the double bar at the entrance, the CuaCam is only navigable to steamers drawing less than 19 feet of water: and approach to the port of Haiphong is rendered still more difficul. from the fact that the tides in the Gulf of Tonkin are diurnal, *i.e.*, there is only one rise and fall during 24 hours, instead of every 12 as on our own coasts.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00009e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The CuaCam at Haiphong is connected with the Red River by the "Canal des Bambous," a narrow waterway lying right through the middle of rice-fields. Communication with Hanoi is kept up by steamers of some 180 tons burden. Passage through the canal is very uninteresting, only one elevation, known as "Elephant Mountain," because that is the animal it least resembles, breaks the monotony of the plain. Around this hill the steamer seems to be constantly circling owing to the windings of the canal. There are a few villages near the banks and as the steamer passes bands of naked little boys—regular pirates in embryo—issue, and solicit alms as they run along, after the manner of the "have-a-dive" boys at Aden. Six hours passage through the canal brings the steamer out into the rapid waters of the Red River, and ten hours later the boat generally announces its arrival at Hanoi by running on a sand-bank. The Red River is of a most treacherous nature as regards the rapid formation of sand-shoals. During the rainy season (corresponding to the Indian monsoons) it is subject to rapid changes, rising from 16 to 18 feet in as many hours: so that what one day is a broad tract of dry sand covered with traffic becomes the next a wide expanse of clay-coloured water, on which float hundreds of bamboo houses; for the Annamese fisherfolk prepare themselves for such emergencies by constructing their dwellings on a raft-like principle, so that they buoy up as the river rises.

Hanoi lies on the right bank of the Red River, a fine bridge, completed only last year, connecting it with the opposite bank. It is now recognised as the official capital of Tonkin, although until a year or two ago Hué, the residence of the Emperor of Annam, bore that title. History records that Hanoi was founded in the 8th century by a Chinese Mandarin. Its original Chinese appellation (Tungking—"Capital of the East") is now perpetuated in the name of the country itself.

The European portion of the town of Hanoi is splendidly laid out. The public buildings and the Cathedral are very fine, and the lakes and open spaces about the town admirably kept. Altogether Hanoi is one of the brightest and most picturesque cities of the Far East.

At Hanoi we came into closer touch with the natives of the country, who belong to the common Indo-Chinese stock. The Annamese, both morally and physically, are one of the inferior races. The men are undersized, but active, good-tempered, and tractable. They have not the commercial instinct of their neighbours, and, as in Penang and Singapore, all trade is practically in the hands of Chinese merchants. The women have rather nice figures, and they would be considered good-looking but for their mouths, which are spoilt by the custom of covering the teeth with a layer of black lacquer. Their beauty is not enhanced, either, by the unpleasant habit of chewing betel. Equality of the sexes, so far as hard work is concerned, applies in Tonkin. We noticed many women employed in gangs, carrying timber for building, &c.

Hanoi is connected by railway with Langson, on the Kwangsi frontier. This line was a most costly one to the colony, and although it is intended to carry it on to Lungohow, and eventually to Nanning Fu on the West River, it is highly improbable that it will ever pay its working expenses. A railway to Viétri is also under construction, and will be carried on to Laokay in time. This is the line which is eventually to enter Yunnan, and I shall refer to it again in the course of my paper.

The steamer into which we changed at Hanoi, to continue our way up the Red River, belongs to the "Compagnie des Correspondances fluviales," who enjoy a monopoly of the river navigation in Tonkin. Our boat was a stern-wheeler, drawing five feet of water, yet able to run up as far as Yenbay, *only when the river is in flood*. We left Hanoi at noon. During the evening we passed Sontay (scene of a sanguinary battle between the French and Chinese in '85) on our left, and anchored soon afterwards for the night at Viétri, a small military post at the junction of the Clear and Red Rivers. The Clear River rises near Kaihua Fu in Yunnan, and has been suggested as an alternative route for a railway into that province. It is navigable for small steamers to Tu Yen-kwang, 40 miles or so up from Viétri.

During the forenoon of the next day we passed, on our left, the Black River, by far the most important tributary of the Red River. Steamers run regularly up to Chobo, but beyond that navigation is difficult and even dangerous at all times of the year, the river being very swift and rocky. Small narrow boats of half-ton capacity, carry goods during the dry season up to Laichow, near the Yunnan frontier; but when the river is in flood communication is impossible, and nothing is more dreary than life in some of the military posts on the Black River of Tonkin.

Three days out from Hanoi we reached Yenbay, a growing garrison town on the left

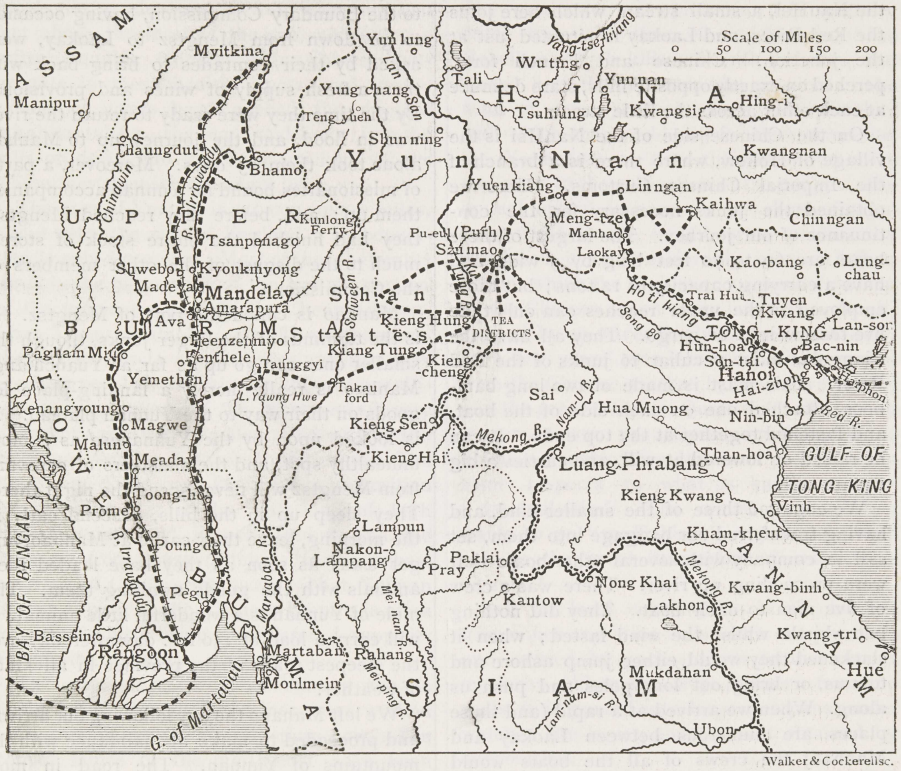
Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x000015

مكتبة قطر الوطنية
Qatar National Library

bank. There we changed into a small stern-wheel steamer of a newer type—the *Baoha* This boat runs between Yenbay and Laokay during the rainy season. Although only of light draught, and 40 tons burden, it cannot get up so far during the dry season. In fact the Red River is only navigable to small steamers, *all the year*, to Viétri. Native craft, on the contrary, are busiest when the river is low, and the current not quite so strong.

inch of space outside the cabin was occupied by soldiers of the Foreign Legion. Most of these men were Alsatians or Norwegians; but at different posts on the way up I met three Englishmen, who gave me plausible reasons to account for their enlistment in the Legion,—the real one being, I suspect, a desire to keep as far away as possible from the Scotland Yard authorities.

The great feature, and at the same time the



MAP OF TONKIN, YUNNAN, AND BURMA.

Accommodation for passengers on board the *Baoha* was limited. There were twelve of us, and only one small cabin; and in this we had to eat, amuse ourselves during the day, and sleep—the settees being hooked up in sleeping-car fashion at night. Those who occupied the upper berths were comfortable enough; but those underneath suffered from the heat, and from fear of the dreadful consequences should the bars holding up the berth and the 200 lb. gentleman above give way.

The company is subsidized for military purposes by the Government, and every square

drawback, of the Red River are its numerous rapids, which add an element of danger to the difficulties of navigation. There are no less than sixteen of these places between Yenbay and Laokay, where the current rushes down over rocks with great velocity. The worst rapid is the "Ta Kai," just below the post of Traihut. As the little steamer forged its way slowly up against the strong current, the Annamese crew threw "joss-paper" overboard in handfuls to propitiate the river gods, and they attributed our safe passage to this sacrifice. We were at all events luckier than

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x000014

مكتبة قطر الوطنية
Qatar National Library

the Commercial Mission sent out in 1896 by the French Chambers of Commerce to study the trade of Tonkin and China. They came to grief at the "Ta Kai," and had to continue their journey in junks. Perhaps the supply of "joss-paper" had given out!

The journey from Yenbay to Laokay usually occupies three days. Laokay is only a small place, but it is important as being the steamer terminus, and a frontier post. On the left bank the Tonkin-Yunnan frontier is marked by the NanHsi, a small stream which here joins the Red River, and Laokay is situated just at the junction. Chinese and French forts, perched on exactly opposite hills, stare defiance at each other across the little stream.

On the Chinese side of the NanHsi is the village of Hokow, where there is a branch of the Imperial Chinese Customs. Here we obtained the junks necessary for the continuance of our journey. The largest of these boats are 60 to 70 feet long by 9 wide, and have a carrying capacity of 12 tons; but those employed on the upper reaches can only take five tons weight of cargo. They all have the triangular mast peculiar to junks of the Red River. This mast is made of two long bamboos, attached one on each side of the boat, and fastened together at the top ends. It can be raised or lowered at will, and carries a big square sail.

We engaged three of the smaller kind, and having transferred our baggage into them, set sail in company with several other boats that were proceeding up river. There was a crew of five men to each boat. They did nothing but whistle whilst the wind lasted; when it slackened they would either jump ashore and tow us, or bring out long poles and push us along. When we arrived at a rapid (and these places are numerous between Laokay and Manhao) the crews of all the boats would combine to help each other over, and these were times of much hard work and fearful gesticulation. At critical moments recourse was had to the river gods, whose effigies are stuck up in rocky niches near the most dangerous rapids.

Proceeding up river from Laokay, we had Chinese territory on our right and French on our left, for the right bank is French up to the Lungpo stream, where the frontier turns at right angles and runs west.

About half-way up between Laokay and Manhao, on the left bank, is the small village of Hsinkai, from which place there is a road that runs by fairly easy gradients up to the Mengtsz plain and so on to the Yunnan plateau. Up this road the French intend to carry their railway, and a lot of levelling work has already been done on this portion of the line.

When the river is low, and with a favourable wind, junks accomplish the journey up to Manhao in four or five days, but under adverse circumstances they sometimes take a month. Rather a funny thing happened during the delimitation of the Tonkin-Yunnan frontier a few years ago. Two French officers, attached to the Boundary Commission, having occasion to go down from Mengtsz to Laokay, were asked by their comrades to bring back with them a fresh supply of wines and provisions. By the time they were ready to return the river was in flood, and the journey up to Manhao alone took them 35 days. Moreover, a party of missionaries bound for Yunnan accompanied them up; and, before they reached Mengtsz, they had finished the entire stock of stores, much to the disgust of the other members of the Commission.

Manhao is called the port of Mengtsz. It is the terminus of the larger junks, though the smaller ones can go up as far as Yuanchiang. Manhao is really merely a landing-place for goods on their way to the Yunnan plateau. It is looked upon by the Yunnanese as a most unhealthy spot, and the muleteers of caravans from Mengtsz will never spend the night there. They sleep up in the hills, descend early in the morning, leave their cargo at Manhao, and get away as soon as they have loaded their animals with the goods awaiting them. The mule of Yunnan is a wonderful little animal. It will carry a load of 150 lbs. day after day over the steepest roads of the province in all kinds of weather.

We left Mahano the day following our arrival, and proceeded to make acquaintance with the mountains of Yunnan. The road in most places was simply a series of stone steps, and one's first experience of riding up these, though amusing to the onlooker, is unpleasant, the stones are so very, very hard. After crossing the first range above the Red River, we felt that we had earned a good night's rest. This, however, we did not get, as the inns between Manhao and Mengtsz are mere hovels, meant as shelter more for passing pack-animals than travellers. The noise made by the mules, and the chattering of their drivers disturbed us; but the worst enemy to slumber in all Chinese inns is the "chamois"—Mark Twain's variety.

Next day, after crossing a second range of mountains, 6,000 to 7,000 feet above sea-level,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x00008e

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

we followed a spur down into the plain of Mengtsz. This place, opened by the French to frontier trade in 1889, is the principal port of entry for foreign goods into south and eastern Yunnan. I note, in passing, that 72 per cent. of the whole Import trade into Yunnan, *viâ* Mengtsz, is indisputably British, and 79 per cent. of the total Export trade.

Yunnan has been aptly described as a mountainous desert, with here and there an oasis in the shape of a fertile plain. Most of these plains lie at elevation of from 4,500 to 6,000 feet above the level of the sea, and enjoy a warm, equable climate. The Chinese congregate in these healthy spots, and in the course of years have pushed the original inhabitants, *e.g.*, the Sians and Lolos, into the hills or down into the fever-stricken valleys where they themselves cannot live.

The area of Yunnan is 110,000 square miles, about twice the size of England. Its population is only 8,000,000. Most of the inhabitants dwell in the big centres of the eastern portion of the province—Yunnan Fu, Cheng Chiang, Chao Tung, Linan, &c. It follows, therefore, that large tracts of the province are very sparsely peopled, and almost entirely uncultivated. The poverty of the inhabitants is very apparent, and the traveller wonders why the wealth of Yunnan is so often referred to. The reason, no doubt, is to be found in its position on the map. It is the hinterland of both British Burma and French Tonkin, and the highway from these countries to the richest province of China—Szechwan. That Yunnan is also a part of the Chinese Empire is often forgotten, China being considered, I suppose, a negligible quantity.

The mineral resources of Yunnan are no doubt large, though the mines were worked to a greater extent formerly than now. The copper mines to the north-east have been exploited for centuries: deposits of silver and lead occur in places. Near Mengtsz there are important tin mines; and iron and coal exist in large quantities in the neighbourhood of Tunghai. Zinc and mercury have been found, I believe, by French prospectors. Gold is worked at Talang, and one or two other places; but Yunnan includes no Klondyke within its borders. The situation of most of these mines, however, is unfavourable from a commercial point of view. Heavy cost of transport and distance from the world's markets are factors that have to be reckoned with. I know that the Mengtsz merchants make very little profit on the *tin* they export to Hongkong, but it happens to be for them the most convenient way of paying for some of the goods they import.

As the most valuable article of commercial exchange, however, *opium* has superseded everything for the last 30 years. The cultivation of the poppy in Yunnan can be traced back to the year 1760—eighty years before our so-called Opium War with China—and the Yunnanese are further credited with having discovered the way of smoking the drug. The production of opium in any quantity dates from the time of the Mahommedan Rebellion, which killed the silk industry, and closed half the mines in the province. The want of some product, easily transportable, with which they could pay for their needs, led the Yunnanese to turn their attention more and more to the cultivation of the poppy. The annual output is now not far short of 5,500 tons, whils in the neighbouring province of Szechwan it is considerably more. Indian opium, which the sophist accuses us of forcing on the Chinese, is, on entry into China, handicapped by an exceedingly heavy import duty. In a few years' time it is bound to be ousted from the Chinese market by the native article, and the great "Opium Question" will then no longer concern us. Opium smoking is, no doubt, a terrible vice, but it is preferable, in some respects, to what is known as *our* "national sin." The opium smoker never wants to go "mafficking," or paint the town red, to the great discomfort of respectable citizens!

Salt for local consumption is all obtained from mines and brine wells within the province, and carried by pack-animals to the various markets. When the brine is drawn from the wells, it is poured into large iron pans, under which a fire is set, and the salt obtained by evaporation.

With the exception of the minerals referred to, Yunnan possesses no product suitable for exportation, and possible goods for carriage by projected Burma-Yunnan or Tonkin-Yunnan railways are hard to think of. The trade that might eventually arise in live stock has been made much of, and certainly many parts of the Yunnan plateau are particularly suited to the breeding of sheep, oxen and ponies.

This question of railways into Yunnan is one on which there exists considerable differences of opinion. It can be viewed from the commercial or political aspect, and may briefly be summed up as follows:—The French have obtained a concession to extend their railway

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x0000bc

مكتبة قطر الوطنية
Qatar National Library

from Laokay to Yunnan Fu. The construction of this line, it is thought by some, will "interpose an insurmountable barrier of French influence between Burma and Western China" to the prejudice of British trade. The Indian Government is, therefore, urged to construct an opposition line from the Kunlung Ferry to Tali Fu. The distances as the crow flies are about equal, but it is not denied that the engineering difficulties of the British line are far greater than those to be overcome by the French.

The French are greatly favoured in two respects. Tonkin is much nearer than Burma to the richest and most populous portions of the province; and, owing to the trend of the country, the approaches to Yunnan from Tonkin run parallel with the mountain ranges. Situated thus, the French are bound to extend their influence in Yunnan, but the statistics of the trade of Mengtsz prove, I think, that commercially, we have no cause to fear their rivalry.

From Burma the railways suggested would have to traverse, or *dodge*, the chains of mountains which divide the Mekong and Salween Rivers and their numerous affluents. I am aware that, thanks to the action of the Yunnan Company, and the help accorded them by the Indian Government, a route has been found from Kunlung which avoids the steeper gradients; but the railway proposed could be built only at an immense cost, and even then as the Western portion of the province is wretchedly poor, to compete with the French railway it would have to be carried on over most difficult country to Yunnan Fu. The trade possibilities of the province, viewed ever so optimistically, do not, I think, warrant such a huge undertaking; and I see in the passive attitude of the Indian Government, not blindness to the political importance of such railway schemes, but merely a hesitation to burden themselves with the financial responsility.

A line that could be built at a comparatively small cost, and that would pay, is one from Bhamo, our trade mart on the Irrawaddy, to Tengyueh, the port of Western Yunnan.

The hostility of the population to railway schemes was shown in the riots which broke out at Mengtsz, in June, 1899. A mob attacked the foreign settlement there in the middle of the night, and burnt two houses occupied by the Commissioner and members of my own service.

For many years to come the Yunnanese will have to depend on their present means of transport. Besides the mule, there is the bullock, also used as a pack animal. The water buffalo, though strictly speaking an agricultural animal, is sometimes harnessed to a rough cart used, equally, to carry stones, or to take a party of Yunnanese ladies to some temple on the hills. In it they also visit their family graves, an act of piety that more often develops into a happy picnic.

Reference to family graves brings us to funerals. The three important occasions of a Chinaman's life are his birth, his marriage, and his death. In Yunnan the last is the event which calls for most display. On the death of a relative even the poorest family gives a feast to which all their friends are invited. The funeral car used has a paper Stork on top. It is the emblem of immortality. The Goose is, similarly, the symbol of conjugal felicity. A paper one is always stuck up on a pole outside the house of a newly-wedded couple in Yunnan. So that the rich man may have every comfort when he wakes in the Buddhist purgatory, paper images of what he will most need are made, and after being carried in his funeral procession are burnt at his graveside. There is for instance his horse, with groom in charge. Four paper bearers also carry his sedan chair, ready for him to step into when he lands on the other side of the Styx. The mourners at a Yunnanese funeral wear white, not black, another instance of their topsy-turvydom. To the principal guests at the funeral two pieces of white cloth are given, one for the head, the other for the waist.

From funerals I turn for a moment to other examples of Yunnanese customs, in which a procession forms the distinctive feature. There is the "Ying Chun" Festival or ceremony of meeting the Spring. The chief official of the place is then borne on a special car to a small temple marking the eastern boundary of his town. There he meets the plaster figure of a buffalo, supposed to represent the Spring, with which after worshipping at the temple he returns in state to his residence.

At another procession during the year, an idol (that is presumably in need of an airing) is borne round the town on the shoulders of respectable shopkeepers.

But the prettiest processions take place every spring and autumn to mark the season's changes. Then the people make what they call "Flower Cars." Little boys, dressed to represent the heroes and heroines of antiquity, are perched up aloft on iron bars, and as the cars move along, borne on men's shoulders,

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000040

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

they wave their fans and nod their heads. The whole effect is very picturesque and pleasing.

The Chinese are past masters in the art of irrigating their fields. Their staple food, rice, must be grown in water until it ripens, and in Yunnan they have all kinds of ingenious ways of carrying water on to their farms. One method is the wheel that is turned by a stream, and to which is attached hollow pieces of bamboo. These fill and empty themselves automatically into a wooden shoot leading into the fields.

After the rice is harvested, it has to be hulled or skinned before it can be eaten, and this labour calls for a further display of ingenuity. The apparatus used in many villages consists of a wooden log, hollowed at one end, and with a piece of hard wood fastened through the other. The log is evenly balanced, and a stream of water is directed on to the hollow end, which sinks down under the weight of water, empties itself, and rises again. The other end falls continually on to the grain, and loosens the husk.

The Yunnanese live almost entirely on rice and vegetables. When they can afford it they buy some pork, or kill a fowl, but meat to the majority of the inhabitants is a luxury. Only the Mahommedans eat beef, and where they live beef can usually be purchased daily in the market. The Mahommedans in Yunnan are probably descended from the soldiers stationed there by the Great Mongol Emperor, Ghenghis Khan, when he invaded Burma and India in the 13th century. In 1855 occurred their terrible rebellion, and the Mahommedans kept the field against the Imperialist troops till 1873. The Chinese eventually gained the ascendency, but not before the population of the province had been reduced by many millions.

The first Chinese settlers intermarried freely with the native tribes around them, and the result is that the beliefs and customs of their descendants, the Yunnanese of the present day, differ in many respects from those common to other parts of China. They are intensely superstitious, and believe in divination of all kinds. They would even have faith, I believe, in the weather forecasts of our Meteorological Department. The local diviner is usually a blind man. When a young man wishes to start a home of his own, he does not go on his knees and ask some sweet maid to be his everlasting cook and stocking darner. He obtains instead her "card of nativity" through one of the recognised match-makers of the place, and sends it with his own to a diviner. If the "stars are in conjunction" negotiations can continue, but if they don't agree all is at an end! At least he must seek elsewhere.

Phrenology is not practised, so far as I am aware, but physiognomists get a good living amongst the Yunnanese. A Chinaman is not supposed to grow a moustache until he is at least 30 years of age. He makes a virtue of necessity in this case. However, when he does want to increase his attractions, the Yunnanese applies to a physiognomist, who will discover for him a lucky day on which to start growing a moustache.

In Yunnan the "five senses of man" are said to be the ears, eyes, mouth, nose, and eyebrows. Blue or grey eyes are rarely met with amongst the Chinese, the prevailing colour being black. The consequence is that the Yunnanese attribute extraordinary powers to our eyes. According to them we can see the precious minerals in the earth. I have even been asked by some country people to aid them to find the silver supposed to have been hidden by their parents in their garden during the Mahommedan rebellion.

The Yunnanese lady is fond of dressing herself and her children in bright colours. The most favoured material is Szechwan flowered silk; but for ordinary wear coloured cotton cloth, made and dyed locally, is in general use. Woollen cloth is much appreciated, but is very dear, all on the market being of British or German manufacture. As jewellery—earrings, bracelets, rings, necklaces, and hair ornaments are worn. These are generally made of silver, but the very poor classes manage with brass or pewter.

In India the would-be beauty must imitate the waddle of an elephant. In China the "waving willow" walk is held up as the acme of perfect progression for women. To obtain this walk mothers bind the feet of their girl-babies in rather a cruel fashion, so as to make them small and pointed. In Yunnan it is only the girls of the richer classes whose feet are permanently deformed. It is a silly custom, of course; but one thing may be said in its favour, and it is probably why the women have so long permitted themselves to be the victims of such a fashion. On account of their bound feet the Chinese women are not compelled to slave in the fields like the women of every other Eastern race, whilst their husbands loaf at home. To be in the fashion, the Yunnanese women of the poorer classes bind their feet

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00002b

مكتبة قطر الوطنية
Qatar National Library

with cotton bandages, so as to make them appear smaller, but beyond giving them the necessary willowy step, it does not seem to hurt them in any way.

To turn once more from frivolous to serious consideration of our subject. It is 18 days journey by mule caravan from Mengtsz to Szemao. The main road leads through Linan, Shihping, noted for its lovely lake, Yuanchiang, a small, fever-stricken, walled city, on the Red River, Talang, and Pu-Erh. The road lies over mountain ranges, down the beds of streams, and up wooded valleys, never monotonous, but often difficult. Just east of Yuanchiang the road crosses a range 8,000 feet high, descending immediately after the Red River, only 1,500 feet above the sea at that place. The climb on the opposite side is a very stiff one, and the best way is to cling on to your pony's tail and let him pull you up.

The roads in Yunnan, generally, are in a deplorable condition. The bridges, however, are a noticeable feature of the province. The curve of the ordinary stone ones is unnecessarily high in proportion to the width of the streams they span. Between Yuanchiang and Talang, there are two rather fine chain suspension bridges. They span the Papien and the Homa rivers, which unite further south, and enter Tonkin as the Black River. The planking in the centre of these bridges is purposely left loose, and is, in fact, very unsafe. This is to prevent caravans of pack animals from passing over in a body, and causing too great a strain on the structure. At present only two or three can cross at a time, and they have to pick their steps most carefully.

The scenery on the road was most superb, and the vegetation most varied, the flowers at different elevations corresponding to those of the Tropics, and the Temperate and Frigid zones respectively. In fact Yunnan is the botanist's paradise.

Szemao is a busy town of 10,000 inhabitants, healthily situated on a little rising in the centre of a typical Yunnan plain. It was opened to frontier trade in 1896, and Consuls for both Great Britain and France appointed there. It was found, however, that the commercial importance of the place had been over-estimated and both Consulates have lately been suppressed. In return, a Consulate General has been established at Yunnan Fu, the capital of the province.

The trade of Szemao is principally in the famous Pu-Erh tea, that is held in such great esteem by the Chinese of other provinces. Raw cotton is imported from the British Shan States; but other necessaries of life, *e.g.*, matches, woollen cloth, lamps, &c., are supplied from Mengtsz.

The architecture of Yunnan has characteristics of its own, notably so in the pointed gables that adorn the houses and temples. The walls, though built of sun-dried and burnt bricks, form no part of the structure of a house, and might fall down without causing a general collapse. The woodwork in all cases supports the roof, and is the solid portion of their buildings. The "guardian" figures outside their temples are rather quaint, their conception of a "lion" being particularly funny.

The animals best known to the Yunnanese are the elephant, tiger, panther, bear, wild boar, sambhur, or big deer, several varieties of small deer—including the musk deer, the fox, wolf, monkey, and wild cat. There are others, but this will suffice to show the variety existing in the province. The panthers at Szemao are rather a nuisance. On three occasions whilst I was out riding on the hills my dog was attacked by a panther. Young bears are sometimes brought into the market for sale. Elephants are found in a wild state in the Chinese Shan States. Some of the Shan chiefs own tame ones, and at rare intervals these are sent into Szemao, as a mark of respect to the Chinese officials.

In the neighbourhood of Szemao live many of the aboriginal tribes, whom the Chinese, in their gradual march westwards, have ousted from their former homes in the plains. The Lolos, so often referred to by travellers, are scattered all over Yunnan. Only in one place, in the north of the province, do they exist as a separate and independent community. They possess a language and literature of their own, though very few of them can now write and read their own characters. Their religion is a form of spirit worship, and consists chiefly in propitiating the evil spirits, so that no harm may come to the inmates of the house. The religion of all these native tribes is a simple one, based on old legends, and arising in the first instance from an attempt to account for the three inexplicable mysteries — Dreams, Disease, and Death.

The Lolos are fond of music and dancing, amusements they indulge in on moonlight nights. Their dancing is not quite like ours. Although both sexes take part in it, they evince no desire to hug each other. They simply move around in a circle, and stamp their feet in time with the music.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x000089

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

The Woni race are supposed to be the oldest inhabitants of Yunnan. They are divided into numerous clans, each wearing different dresses, with as much variety of colour and detail as in the tartans of the Scottish clans. The men, as a rule, wear the blue cotton jacket and trousers common to the poorer classes throughout China; but the women retain the picturesque costume of their tribe. The Akka of the Shan States belong to the Woni race, as do also the Putu and the Mahê. The Mahê lead a wretched existence. They dwell in tiny little bamboo and mud hovels on the outskirts of Szemao and Pu Erh, and act as "hewers of wood and drawers of water" to the Chinese. Every day they go out, young and old, to the neighbouring hills in search of firewood, which they bring into the town toward evening. They sell as much as they can carry for 75 cash, equivalent to 2d. in our money. They never grow rich!

I shall not have time this evening to describe any more of these hill tribes, but I should like to mention, in passing, the interesting "Wa" tribes, wild and tame, of the Meng Lem district.

My homeward journey led me through the Shan States and Burma. The healthy portion of the Yunnan plateau terminates in most abrupt fashion a few miles beyond Szemao, and one literally tumbles off the edge, down into the lower plains and valleys inhabited by the Shans. Szemao is the last town, and I may add the last centre of civilisation in this direction, until British territory is reached; for south or west beyond Szemao there doesn't exist a single inn for the convenience of travellers. The only way is to camp out, or sleep in the Shan temples *en route*. Except in bad weather, a tent is preferable, and even the muleteers either sleep under a piece of stout cloth held off the ground by sticks, or erect a shelter of branches, roofed with grass. I have stayed in Shan temples, and slept very comfortably under the shadow of the great gilt Buddha, but the awakening was always somewhat of a shock, as it is the practice for the priests and the boy novices to kneel down every day at dawn, and yell their morning orisons.

The capital of the Chinese Shan States is Kenghung, on the Mekong, the residence of the Saw Bwa, or Hereditary Chieftain, who is the nominal ruler of the "Sip Song Panna," *i.e.*, the "Twelve States." From Szemao to this place it is six days' journey. Though the plain of Kenghung lies at an elevation of 2,100 feet above the sea, it is considered by the Chinese to be a most unhealthy spot. Through it runs the Mekong, here nearly 200 yards wide, and crossed by a rude ferry.

The houses of the Shans are usually constructed on piles, their living apartments being thus well off the ground. They do not copy the architecture of the Chinese, and the few bridges that one meets with are of wood or bamboo, and very frail.

One custom of the Chinese Shans is worth noting. At the New Year the young girls provide themselves with balls, like a small pincushion in shape, filled with cotton seed, and covered with pieces of coloured cloth. To one side is attached a long string with streamers. These are thrown by the girls from a certain distance to the young men. By catching or missing them the youths show their preference, and marriage engagements are the result. To obtain some photographs I joined in the game, but I was careful to show no preference.

From Kenghung to Kengtung it is another ten days by caravan. There is nothing to be said in connection with our journey thither, except that the roads were worse if anything than any I have yet seen. Plains give way to mountains, mountains to valleys, and valleys to plains; rarely did we get any level road. Occasionally we came to a river, which the animals had to swim, whilst the baggage was carried across in clumsy boats.

Twelve days out from Szemao we crossed the Burma frontier, marked by a wooden post and a heap of stones. As we neared Kengtung we found evidence of British influence in the roads; they were wider and better kept than those we had been traversing. The country around produces cotton, tea, and a little opium.

Four days later, after negotiating the usual mountain barrier, we descended into the fine plain of Kengtung. This place is one of the outposts of our Empire. It is the residence of a political officer, who, whilst subordinate to the Superintendent of the Southern Shan States, is in charge of the Kengtung State, extending from the Chinese frontier on the north, to Siam on the south. Kengtung is garrisoned by Indian troops, and possesses a post and telegraph office.

Big forests of teak exist in Kengtung territory, near the Siamese frontier, and are worked by the Sawbwa under British supervision.

The Bazaar at Kengtung is one of the sights of British Burma. On market day it is thronged

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984183.0x0000a2

مكتبة قطر الوطنية
Qatar National Library

with people dressed in every conceivable colour, and the scene is most animated. Lightly clad Siamese, natives of Laos, swarthy Indians, stolid Cantonese pedlars, Burmese, Shans, and numerous hill tribes jostle each other, and the babel of languages once heard is not easily forgotten.

The Shan, or "Tai" race is divided into many clans. The inhabitants of Kengtung are known as "Kuns," those of the Chinese Shan States, as "Lü," of Meng Lem as "Lem," &c.

There is a good mule-track between Kengtung and the Salween. Two very high mountain ranges have nevertheless to be negotiated, but a new route has lately been surveyed that avoids the steeper hills, and a big cart road will shortly be ready for caravans. After leaving Kengtung one travels in comparative comfort. At most of the stages along the road bungalows have been built for the traveller. Seven days' travelling brought us to the Salween, at a place called Takaw. We crossed the river by a ferry boat similar to the one at Kenghung. The ferry system in the Shan States certainly needs amelioration.

Two days later we reached the pretty Namkham River, one of the tributaries of the Salween, and the following day arrived at Hsai-Kao, where there is a post and telegraph office. From Hsai-Kao, a good, wide road led us across undulating plains, resembling the downs of Wiltshire. Water in many places is rather scarce; but with this defect remedied no country would be better suited for colonisation. Like Yunnan, the Shan States could well support a larger population. Amongst the present inhabitants are the "Red Yang" tribe whose dress is very curious. I was glad to add a photo of them to my collection.

Seventeen days out from the Kengtung we arrived at Taunggyi, the capital of the Southern Shan States. It is a prosperous, and growing British settlement, situated in a splendidly chosen spot in a plain 4,600 feet above the sea. This place was only a tiny hamlet twelve years ago. About that time, Mr. Hildebrand, until last year Superintendent of the Southern Shan States, happily selected Taunggyi as his official residence, and it now bids fair to rival that well-known sanatorium of Burma—Maymyo. Trade is thriving, thanks to the construction of good cart roads, and we are bound to hear more of Taunggyi as a commercial centre in the future.

From Taunggyi we turned south to the older military settlement, Fort Stedman, distant one day's march only. Fort Stedman is situated on the eastern shore of Lake Yawng Hwe. The place is much lower and hotter than Taunggyi. Proximity to water could have been the only reason for choosing it as a residence for troops.

Sending my caravan round the lake, I crossed myself in a small dug-out. The shores and islands of the lake are inhabited by the Inthas—a hybrid tribe of Burmese origin. Their method of paddling with their legs is, I believe, absolutely unique. Standing on the gunwale of the boat, they balance themselves on one leg, and twisting the other round the long paddle force the blade back through the water. In this way they send the boat along at a great speed.

The third morning after quitting Lake Yawng Hwe, we finally left the hills behind us, and descended into the hot plains of Lower Burma. For the next two days the roads, though wide and level, were horribly dusty, and the heat and glare intense. We struck the Rangoon-Mandalay railway at Thazi, a small junction town, where I paid off my caravan. We had taken 48 days in coming from Szemao, and in spite of the different altitudes traversed, none of us were ill on the way, a result, I expect, of the quinine that I occasionally dispensed to all.

From Thazi I went down to Rangoon; then wishing to see a little more of Burma, I took the night mail up to Mandalay. A large proportion of the Chinese population of Mandalay are natives of Yunnan, who have, in most cases, taken Chinese wives, and settled there. Continuing my railway journey I went right up to the northern terminus, Myitkina, a settlement on the upper reaches of the Irrawaddy, quite close to the Chinese frontier. Some speculators are dredging for gold in that river, just above Myitkina.

From Myitkina, I went down on a Government launch, kindly placed at my disposal by Sir Frederic Fryer, through the wonderful gorges of the Irrawaddy, rarely visited by travellers, though well worth seeing. At Sinbo, just above the first defile, the river, at the commencement of the rains, rises sometimes as much as 84 feet, owing to the narrowness of the passage lower down. We went down with the current, at a good pace, to Bhamo, a trade-mart and military station—also the terminus of the Irrawaddy steamers. Bhamo is growing wonderfully, and trade with Yunnan across the frontier steadily increasing.

From Bhamo, I continued my way down the river on one of the Irrawaddy Flotilla Com-

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984188.0x000061

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

734

pany's well-appointed steamers. I enjoyed this part of my trip immensely, and am only surprised that the lovely scenery of the Upper Irrawaddy, with its pagoda-lined banks, does not attract more travellers.

It is getting late, however, so with a passing reference to the "Shwe Dagon," or Golden Pagoda of Rangoon, I bring my paper to a conclusion.

DISCUSSION.

The CHAIRMAN, in thanking Mr. Carey, said that that gentleman had served in China, first under the Imperial Customs Department, with Sir Robert Hart, and had spent seven years of his life in Yunnan. So that no man was able to give a better account of the countries with which his paper dealt, than he. During the last two years he had served in the British Consular service in Yunnan, and while there, being a most expert photographer, he had taken the large number of excellent pictures which he had shown on the screen that evening. He, himself, saw enough to recognise how exceedingly good the pictures were. It had been the hope of the authorities of the Society of Arts to have had as chairman that evening Sir Hugh Barnes, the Lieutenant-Governor designate of Burma. Unfortunately, however, Sir Hugh had to be in the country. To him (the Chairman) the paper was particularly interesting, for, although he had never set foot in the actual territories which Mr. Carey had traversed, he recognised so many traits in regard to scenery, custom, and the appearance of the people, like those with which he had been familiar among the Indo-Chinese tribes all along our Eastern frontier. For instance, one picture showed the use of the solid wheel, another the mode of irrigation, while yet another exhibited huts built upon piles. Still further he recognised the similarity in the native dances, and the plaids which designated the different tribes. All that kind of thing one met among the tribes to the east of Assam, Manipur, and right down to the frontier. The only point in the paper upon which he had anything serious to say, was with regard to the railway from Burma to Yunnan. Upon that he entirely agreed with Mr. Carey. Lord Curzon, when at Rangoon a year or so ago, expressed his opinion in very plain terms, saying that if there was any money to spend, the communications in Burma had the first call upon it. But there was a great deal to do in the interior, said Lord Curzon, before it would be just to spend any of the Indian taxpayers' money upon what was a doubtful thing, commercially and politically, in regard to Yunnan. He (the Chairman) concluded that Lord Curzon was right in saying that he would hold his hand.

Obituary.

THOMAS WARD, J.P.—Mr. Ward, of Wadebrook-house, Northwich, whose death occurred on Wednesday evening, 18th inst., at the age of 68, had been for some years a member of the Society of Arts. He was Managing Director of the Salt Union and Chairman of the British Salt Association. In December, 1894, he read a paper before the Society on "The Manufacture of Salt," for which he received a silver medal. At the general election of 1895 Mr. Ward contested the Northwich Division in the Unionist interest, but was defeated by Sir John Brunner.

MEETINGS OF THE SOCIETY.

ORDINARY MEETINGS.

Wednesday evenings, at Eight o'clock :—

MARCH 4.—"Education in Holland." By J. C. MEDD. The HON. LYULPH STANLEY, M.A., will preside.

MARCH 11.—"Existing Laws, By-laws, and Regulations relating to Protection from Fire, with Criticisms and Suggestions." By T. BRICE PHILLIPS. (Fothergill Prize Essay.) SIR WILLIAM H. PREECE, K.C.B., F.R.S., will preside.

MARCH 18.—"New Aspects of Life Assurance." By WILLIAM SCHOOLING.

MARCH 25.—"Oil Lighting by Incandescence." By ARTHUR KITSON.

INDIAN SECTION.

Thursday Afternoons, at 4.30 o'clock :—

MARCH 12.—"The Currency Policy of India." By J. BARR ROBERTSON. SIR EDWARD A. SASSOON, Bart., M P., will preside.

APRIL 23.—"The Province of Sind." By HERBERT MILLS BIRDWOOD, C.S.I., M.A., LL.D. The EARL OF LYTTON will preside.

MAY 14.—"The Province of Assam." By SIR CHARLES JAMES LYALL, K.C.S.I., M.A., LL.D.

COLONIAL SECTION.

Tuesday Afternoons, at 4.30 or 5 o'clock :—

MARCH 3, at 4.30 p.m.—"The Uganda of To-day." By HERBERT SAMUEL, M.P. Sir HARRY H. JOHNSTON, G.C.M.G., K.C.B., will preside.

MARCH 31, at 4.30 p.m.—"British North Borneo." By HENRY WALKER, Commissioner of Lands, British North Borneo. The RIGHT HON. SIR GEORGE TAUBMAN GOLDIE, K.C.M.G., will preside.

MAY 5, at 4.30 p.m.—"The Lagos Hinterland: its People and its Products." By MAJOR J. H. EWART.

APPLIED ART SECTION.

Tuesdays, at 4.30 or 8 o'clock.

MARCH 17. 4.30 p.m.—"Artistic Fans." By MISS HANNAH FALCKE. SIR GEORGE BIRDWOOD, K.C.I.E., C.S.I., will preside.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00003e

مكتبة قطر الوطنية
Qatar National Library

CANTOR LECTURES.

Monday Evenings, at Eight o'clock:—

PROF. J. A. FLEMING, M.A., D.Sc., F.R.S., "Hertzian Wave Telegraphy in Theory and Practice." Four Lectures.

LECTURE I.—MARCH 2.—*General Principles. The Theory of the Radiator or Aerial.*—Introductory remarks—The production of an electric wave—The theory of the aerial or radiator—Comparison between organ pipes and Hertzian wave radiators—The propagation of an electric wave over earth or water surface—Fundamental and harmonic electrical oscillations in radiators—The Marconi radiator—The Braun radiator—The Slaby radiator—Oscillation transformers and multiplicators.

MEETINGS FOR THE ENSUING WEEK.

MONDAY, MARCH 2...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. (Cantor Lectures.) Prof. J. A. Fleming, "Hertzian Wave Telegraphy in Theory and Practice." (Lecture I.)

Farmers' Club, Salisbury-square Hotel, Fleet-street, E.C., 4 p.m. Mr. Edwin Clements, "Railway Rates for the Carriage of Agricultural Produce."

Royal Institution, Albemarle-street, W., 5 p.m. General Monthly Meeting.

Engineers, in the Theatre of the United Service Institution, Whitehall, S.W., 7½ p.m. Mr. W. Worby Beaumont, "Road Traffic in and near Large Cities."

Chemical Industry (London Section), Burlington-house, W., 8 p.m. Mr. Thomas Tyrer, "The need of a Duty-Free Alcohol for Industrial Purposes."

Camera Club, Charing-cross-road, W.C., 8¼ p.m. Mr. E. W. Pulling, "A Tour round the World. No. II.: The Malay States, China, and Japan."

Medical, 11, Chandos-street, W., 8½ p.m.

Victoria Institute, 8, Adelphi-terrace, W.C., 4½ p.m. Paper by Cavaliere W. P. Jervis.

Medical and Chirurgical, 20, Hanover-square, W., 5 p.m. Annual Meeting.

TUESDAY, MARCH 3...SOCIETY OF ARTS, John-street, Adelphi, W.C., 4½ p.m. (Colonial Section.) Mr. Herbert Samuel, M.P., "The Uganda of To-day."

Alpine Club, Savile-row, W., 3½ p.m. Mr. H. Woolley, "The Canadian Rockies."

Royal Institution, Albemarle-street, W., 5 p.m. Sir William Abney, "Recent Advances in Photographic Science." (Lecture II.)

Central Chamber of Agriculture (at the HOUSE OF THE SOCIETY OF ARTS), 11 a.m.

Civil Engineers, 25, Great George-street, S.W., 8 p.m. Mr. George Frederick Zimmer, "Mechanical Handling of Material."

Pathological, 20, Hanover-square, W., 8½ p.m.

Anglo-Russian Literary Society, Imperial Institute, South Kensington, S.W., 3 p.m. Mr. F. H. Skrine, "Some Phases of Russian History."

Zoological, 3, Hanover-square, W., 8½ p.m. 1. Mr. J. T. Cunningham, "Observations and Experiments on Japanese Long-tailed Fowls." 2. Mr. E. R. Sykes, "The Land Operculate Mollusca collected during the 'Skeat Expedition' to the Malay Peninsula." 3. Mr. R. Lydekker, "The Significance of the Callosities on the Limbs of the *Equidæ*."

WEDNESDAY, MARCH 4...SOCIETY OF ARTS, John-street, Adelphi, W.C., 8 p.m. Mr. J. C. Medd, "Education in Holland."

United Service Institution, Whitehall, S.W., 3 p.m. Major-General C. E. Webber, "An Organisation of the Nation for Defence."

Entomological, 11, Chandos-street, W., 8 p.m. 1. Mr. G. A. James Rothney, "The Aculeate Hymenoptera of Barrackpore, Bengal." 2. Mr. Charles Owen Waterhouse, "Notes on the Nests of Bees of the Genus 'Trigona.'" 3. Colonel Charles Swinhoe, "The Aganiidæ in the British Museum, with descriptions of some New Species."

Archæological Association, 32, Sackville-street, W. 8 p.m.

Obstetrical, 20, Hanover-square, W., 8 p.m.

Royal Archæological Institution, 20, Hanover-square, W., 4 p.m. Viscount Dillon, "Armour Notes."

THURSDAY, MARCH 5...Royal, Burlington-house, W., 4½ p.m.

Antiquaries, Burlington-house, W., 8½ p.m.

Linnean, Burlington-house, W., 8 p.m. 1. Mr. W. S. Rowntree, "Some Points in the Visceral Anatomy of the Characinidæ." 2. Mr. F. G. Parsons, "The Anatomy of the Pig-footed Bandicoot *Chæropus Castanotis*." 3. Dr. Elliot-Smith, "Furthur Notes on Lemurs."

Chemical, Burlington-house, W., 8 p.m. 1. Mr. H. Bassett, "The mechanism of the reduction of potassium bichromate by sulphurous acid." 2. Mr. H. A. D. Jowett, "The constitution of pilocarpine, Part IV." 3. Messrs. H. A. D. Jowett and C. E. Potter, "Preparation and properties of 1,4 (or 1,5) dimethyl glyoxaline and 1,3 dimethyl pyrazole." 4. Mr. R. G. Hill, "Some analyses of 'Reh,' or the alkaline salts in Indian Usar land." 5. Messrs. W. H. Perkin and J. F. Thorpe, "Experiments on the synthesis of camphoric acid. Part III. Synthesis of isolauronolic acid." 6. Messrs. T. M. Lowry and G. C. Dorrington, "Camphor-β-thiol." 7. Mr. F. D. Chattaway, "Isomeric change of dibenzanilide into benzoylorthoamino- and benzoylparaamino-benzophenone." 8. Messrs. J. C. Cain and F. Nicoll, "The rate of decomposition of diazo-compounds. Part. III.: The temperature co-efficient."

Royal Institution, Albemarle-street, W., 5 p.m. Prof. L. C. Miall, "Insect Contrivances." (Lecture II.)

National Indian Association, Jehanghir Hall, Imperial Institute-road, S.W. Mr. R. Masujima, "The Japanese Code regarding Family Law."

Junior Art Workers' Guild, Clifford's-inn, Fleet-street, E.C., 8 p.m. Mr. Cyril Davenport, "Bookbinding."

Civil and Mechanical Engineers, Caxton-hall, Westminster, S.W., 8 p.m. Mr. R. W. A. Brewer, "The Production of Power by means of Gas Producers and Engines."

FRIDAY, MARCH 6...Art Workers' Guild, Clifford's-inn, Fleet-street, E.C., 8 p.m. Lecture on "Carpaccio."

Royal Institution, Albemarle-street, W., 8 p.m. Weekly Meeting. 9 p.m. Dr. J. G. McKendrick, "Studies in Experimental Phonetics."

Geologists' Association, University College, W.C., 8 p.m.

Philological, University College, W.C., 8 p.m.

Quekett Microscopical Club, 20, Hanover-square, W.C., 8 p.m.

SATURDAY, MARCH 7...Royal Institution, Albemarle-street, W., 3 p.m. Lord Rayleigh, "Light: its Origin and Nature." (Lecture III.)

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984185.0x00004d

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Engineering.

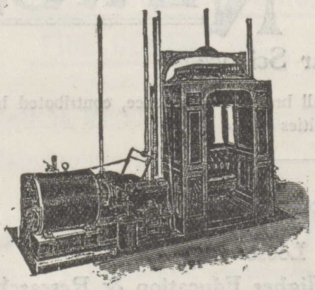
Johnson & Phillips,
Victoria Works, Old Charlton, Kent.

Manufacturers of . DYNAMOS & MOTORS . . . .
ALTERNATORS & TRANSFORMERS
SWITCHBOARDS . . . . . .
MEASURING INSTRUMENTS, &c., &c.

Sole Makers of . . **The 'ARK' Enclosed Long Burning Arc Lamp.**
'JOHNSON & PHILLIPS' Open Arc Lamps.

Manufacturers of every Description of Machinery for
MAKING, LAYING, & REPAIRING CABLES.

WAYGOOD & OTIS LTD.
To H. M. The King.



Lifts & Cranes
FALMOUTH ROAD, LONDON, S.E.,
and 4, QUEEN VICTORIA STREET, E.C.

Abyssinian & Artesian TUBE WELLS.
Le Grand and Sutcliff,
ARTESIAN WELL & WATER WORKS ENGINEERS.
Contractors to the Admiralty, War Office, India Office, Trinity House. Crown Agents for the Colonies, &c.
Improved Patent Economical System for Raising Water by Compressed Air.
MAGDALA WORKS, 125, Bunhill Row, LONDON, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984181.0x00005d

مكتبة قطر الوطنية
Qatar National Library

Miscellaneous.

Society of Arts Examinations, 1903.

MONDAY, MARCH 30th, to THURSDAY, APRIL 2nd.

Grade I. Preliminary or Junior. Grade II. General or Intermediate.

In Grade II. First, Second, and Third-class Certificates will be granted in each subject.
In Grade I. Certificates will be given in each of the subjects enumerated. These will be of one class only.
In Rudiments of Music Higher and Elementary Certificates are given. In Harmony Higher, Intermediate, and Elementary Certificates will be granted.

A Fee of 2s. 6d. will be required by the Society from each Candidate in each subject in Grade II., and in Grade I. a fee of 2s. for one subject, and 1s. for each additional subject taken up by the same Candidate. The fees for Harmony and Rudiments of Music are the same as for Grade II.

MEDALS AND MONEY PRIZES are awarded in all the subjects of Examination. Full Particulars of these will be found in the Programme.
There will be no Prizes or Medals in Grade I.

The Examinations are under the control of Local Committees. No application can be recognised unless sent through a Committee.

The last day for receiving applications is WEDNESDAY, the 4th March, 1903, and after that date none will be received under any circumstances whatever. Application forms from the Provinces should therefore be posted not later than TUESDAY, the 3rd MARCH. Committees may, however, close their entry lists at an earlier date, if found desirable.

Copies of the Programme for 1903, with full details, together with the questions for 1902, and reports by the Examiners, can be had, Price 3d., on application to the Secretary, SIR HENRY TRUEMAN WOOD, Society of Arts, Adelphi, London, W.C.

The questions for the years 1896 to 1902 inclusive can also be obtained (price 3d. each year), on application as above.

6d. Monthly.

The ILLUSTRATED

SCIENTIFIC NEWS,

A New Journal of Popular Science,

Containing Original Articles and Up-to-Date Intelligence in all branches of Science, contributed by many of the leading Scientific Authorities of the day.

The March Number contains:

Coherers: Some Experiments on Loose Contacts.
The Barmen-Elberfeld Suspended Railway. Higher Education & Research.
Nernst and the Cooper-Hewitt Electric Lamps.
The Pendulum Propeller.
The Splash of a Projectile. The "Piano Player Parodox."
Constituents of the Atom. The Fate of the Oyster, &c., &c.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x00007b

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

Engineering.

ESTABLISHED 1810. *ON ADMIRALTY LIST.*

JOHN SPENCER & SONS, Ltd.

OFFICES:—NEWCASTLE-ON-TYNE: 27, Westgate Road.
LONDON: Cannon Street Buildings, 139, Cannon Street.

WORKS: At Newburn and Ouseburn, NEWCASTLE-ON-TYNE.

MANUFACTURERS OF STEEL

By the Siemens, Cementation, and Crucible Processes.

SHIP AND BOILER PLATES UP TO 12 FEET WIDE.

INGOTS, SLABS, BLOOMS, BILLETS, and BARS of all Sizes.

RIVET STEEL. SPECIAL MILD STEEL for Boiler Flues.

STEEL FORGINGS, STEEL CASTINGS, of all Descriptions, to any Weight, Rough or Machined.

CRANK AXLES and SHAFTING Hydraulic Pressed.

SPRINGS.—Laminated, Volute, Patent Improved Volute, Conical, Spiral (Original Manufacturers of Volute Springs).

BUFFERS—of Wrought and Cast Iron—of all Descriptions. Best Cast Steel for Tools from finest Dannemora Brands. Best Cast Steel Files.

Iron Forgings of all Kinds. Foster's and Fownes' Patent Crank Shafts.

WASTENEYS SMITH'S PATENT STOCKLESS ANCHORS.

Newburn Steel Works, NEWCASTLE-ON-TYNE.

Telephone No. 719 Eastern. *Telegrams:* "Sankey, Canning Town."

SANKEY'S

FIRE-RESISTING BRICKS, FIRE CEMENT, etc.

should be used by

Scientists, Metallurgists, Assayers, Manufacturers, and others dealing with intense heats, continuous or intermittent.

J. H. SANKEY & SON,

Manufacturers, Merchants, and Shippers.

Est. 1857. Contractors to H.M. Government.

Head Office and Stores:

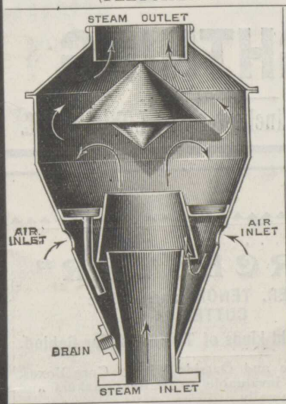
ESSEX WHARF, CANNING TOWN, E.

Superior qualities of Cements, Limes, Bricks, Tiles, Slates, Glazed Bricks, Sanitary and Fire Clay Goods.

Best Stock in the Kingdom.

EXHAUST HEAD

(FLETCHER'S PATENT).



Prevents the Ejection of Oil and Water.

Reduces the Noise.

Guaranteed Effective.

Saves the Grease.

Prevents Damage to Property.

No Back Pressure

SOLE LICENSEES.

The FRICTIONLESS ENGINE PACKING CO., Ltd., Hendham Vale, Manchester.

Specialities—"Karmal" Packing. Roko-edge Belting.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x00004f

مكتبة قطر الوطنية
Qatar National Library

Engineering.

FREDK. SMITH & CO.,
Wire Manufacturers, Limited,
Anaconda Works, SALFORD, MANCHESTER.
Contractors to H.M. Government and Railway Companies.
ALSO AT HALIFAX. . . .

Patent Galvanised Telegraph Wire (100-lb. coils) to all Specifications.
COPPER WIRE (100 per cent. Conductivity.)
Plain Soft. Hard drawn for Telephone Lines.
Special Tinned Wire. Silicium Bronze Wire.
COPPER TROLLEY WIRE.
Specially Prepared, Half-mile and Mile Lengths, Tested, Guaranteed.
SPECIAL BRONZE TROLLEY WIRE.

THE NATIONAL ELECTRIC WIRING CO., LTD.,
Electric Light, Power and Traction Engineers.
CONTRACTORS TO . . .
H.M. WAR OFFICE, OFFICE OF WORKS, Etc., Etc.
Head Office: 34, VICTORIA STREET, LONDON, S.W.
BRANCHES: *Liverpool, Greenock, Bangor, Northampton, Dublin, Belfast.*
TOWN LIGHTING,
TRAMWAY OVERHEAD EQUIPMENT,
COUNTRY AND TOWN HOUSE LIGHTING,
etc., etc., etc.

Telegrams—"WEATHERVANE, LONDON."
Telephone—No. 3,053 Central
JOSEPH LEWIS.
Admiralty Contractor.
WORK ON LOFTY BUILDINGS WITHOUT EXPENSE OF SCAFFOLDING.
LIGHTNING CONDUCTORS
AND EVERY WORK IN CONNECTION WITH THEM.
5 & 6, Gt. Winchester St., LONDON, E.C.

THE NEW . . .
"WORCESTER"
TRIMMER. TENON, and MITRE CUTTER
Leaves all the old kinds of Trimmers Far Behind.
It makes Inside and Outside Mitres, Core Boxes, Tenons, and is invaluable to Pattern-makers and Woodworkers generally.
Write for List and Sample of Work.
J. W. & C. J. PHILLIPS,
23, College Hill, London, Eng.

PATENTS. G. F. REDFERN & CO.,
ESTABLISHED 1830. General Patent Office,
4, SOUTH STREET, FINSBURY, LONDON.
British, Foreign, and Colonial Patents obtained at fixed and moderate charges. Designs and Trade Marks registered at home and abroad. Circular of information forwarded free on application. Telephone No. 4492 Central. Telegraphic address, "Invention, London."

JOURNAL OF THE SOCIETY OF ARTS.
COPY for Advertisements must reach the Office NOT LATER than the MONDAY preceding date of Publication.
5, QUEEN VICTORIA STREET. London. E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984182.0x0000bb

مكتبة قطر الوطنية
Qatar National Library

BRITISH LIBRARY

TRADE MARK

W. T. GLOVER & Co., Ltd.,
TRAFFORD PARK, MANCHESTER,

Makers of all descriptions of VULCANISED RUBBER and PAPER

INSULATED WIRES and CABLES.

Telegraphic Address: "CABLES, MANCHESTER." Telephone Nos.: 1187, 3049, and 4927, MANCHESTER.
London Address: 2, QUEEN ANNE'S GATE, S.W.
Telephone No.: 191, WESTMINSTER. Telegraphic Address: "PHONOSCOPE, LONDON."



THE SHANNON FILING CABINET
For Correspondence, Invoices, etc.

The "SHANNON" SYSTEM.

File Letters and Answers together by using the

Shannon Letter Filing Cabinet

In conjunction with the Rapid

Roller Copier.



THE RAPID ROLLER COPIER.

INSTANT REFERENCE!!!

PERFECT SYSTEM!!!

Write for Catalogues to **The SHANNON Ltd.,** Ropemaker Street, LONDON.

F. W. SCHAFER—Managing Director.

All communications respecting Advertisements should be addressed to Walter Judd, Ltd., 5, Queen Victoria st, London, E.C.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984184.0x000013

مكتبة قطر الوطنية
Qatar National Library

THE
India Rubber, Gutta Percha, and Telegraph Works Co., Ltd.,

Works . . .
SILVERTOWN, LONDON, E., and
PERSAN (Seine-et-Oise), FRANCE.

Foreign Branches . . .
MELBOURNE—274, Flinders Street.
PERTH (W.A.)—131, Queen's Buildings, William St.
CALCUTTA—1—1, Fairlie Place.
SYDNEY—279, George Street.
BRISBANE—Edward Street.
BUENOS AYRES—Calle Reconquista 140 & 142.
CHRISTCHURCH (NEW ZEALAND)—234, Cashel Street.
SOUTH AFRICA—213, West St., Durban, NATAL; Willoughby Bldgs., Bulawayo, MATABELELAND.

Electrical Engineers,
100–106, CANNON ST.,
LONDON, E.C.
DYNAMOS, MOTORS, CABLES.

THE CHLORIDE
STORAGE BATTERY
Contains all
THE LATEST IMPROVEMENTS
TO ENSURE
DURABILITY, EFFICIENCY,
AND
SIMPLICITY OF WORKING.

For Full Particulars and Prices apply to
The CHLORIDE ELECTRICAL STORAGE COMPANY LIMITED.
London Office: 39, VICTORIA ST., S.W.
CLIFTON JUNCTION, near MANCHESTER.

London: Printed by WILLIAM TROUNCE, at his office, No. 10, Gough-square, Fleet-street, in the Parish of St. Dunstan, in the County of Middlesex, and published for the Society of Arts, by GEORGE BELL AND SONS, York-street, in the Parish of St. Paul, Covent-garden, in the City of Westminster, February 27, 1903.

Reference: Mss Eur F111/393. Copyright for this page: Creative Commons Attribution Licence
View on the Qatar Digital Library: http://www.qdl.qa/en/archive/81055/vdc_100179984187.0x0000c4