

This PDF was generated on 28/01/2022 from online resources of
the **Qatar Digital Library**

The online record can be viewed at:

http://www.qdl.qa/en/archive/81055/vdc_100000001491.0x000127

It contains extra information, high resolution zoomable views and transcriptions.

'Military Report on Persia'

Holding Institution	British Library: India Office Records and Private Papers
Reference	Mss Eur F111/387
Date(s)	1905 (CE, Gregorian)
Written in	English in Latin
Extent and Format	1 volume (62 folios)
Copyright for document	Open Government Licence



About this record

A confidential report on Persia, compiled by Major A D Geddes, Captain of the General Staff, War Office, 1905.

Contained within the report are chapters on the history, ethnography, geography, ports and harbours, communications, trade and resources, military, and administration of Persia. Also included is a preface by Major-General J M Grierson, General Staff, War Office (folio 4), a glossary of geographical and topographical terms (folios 8-9), appendices (folios 58-60), and a colour map of Persia and Afghanistan (folio 64).

'Military Report on Persia' [front] (1/134)

Confidential.

25

①

This document is the property of H. B. M.
Government.

It is transmitted for the personal information of

MSS. Eur
F. 111
387

by direction of the SECRETARY OF STATE FOR WAR,
and is to be considered **Confidential**.

If not required, it should be returned to Sub-
division C. 2, War Office.

MILITARY REPORT

ON

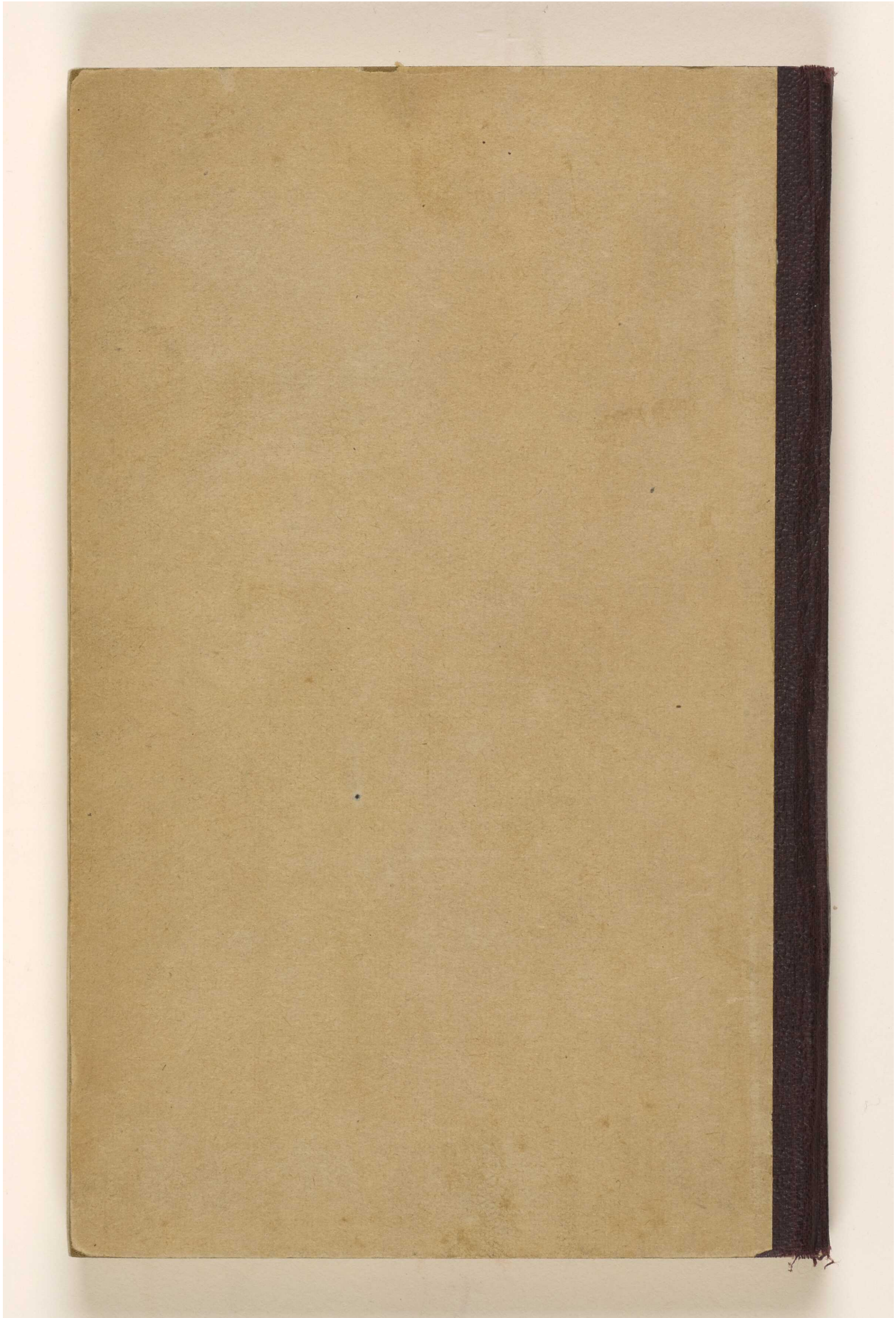
P E R S I A.

COMPILED BY THE GENERAL STAFF, WAR OFFICE.

1905.

A 950.

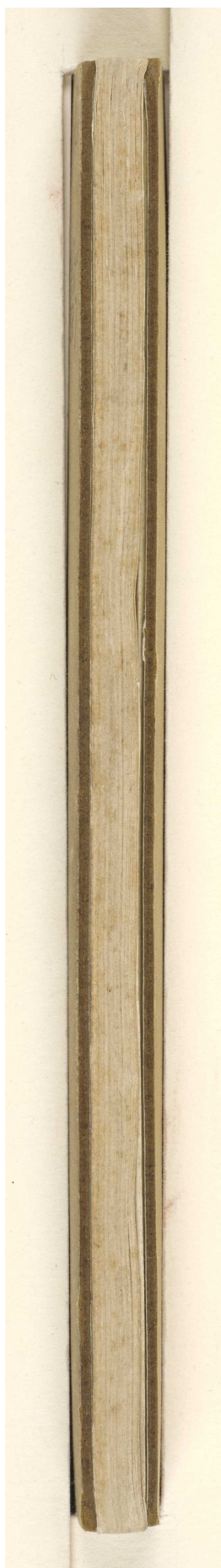
'Military Report on Persia' [back] (2/134)



'Military Report on Persia' [spine] (3/134)



'Military Report on Persia' [edge] (4/134)



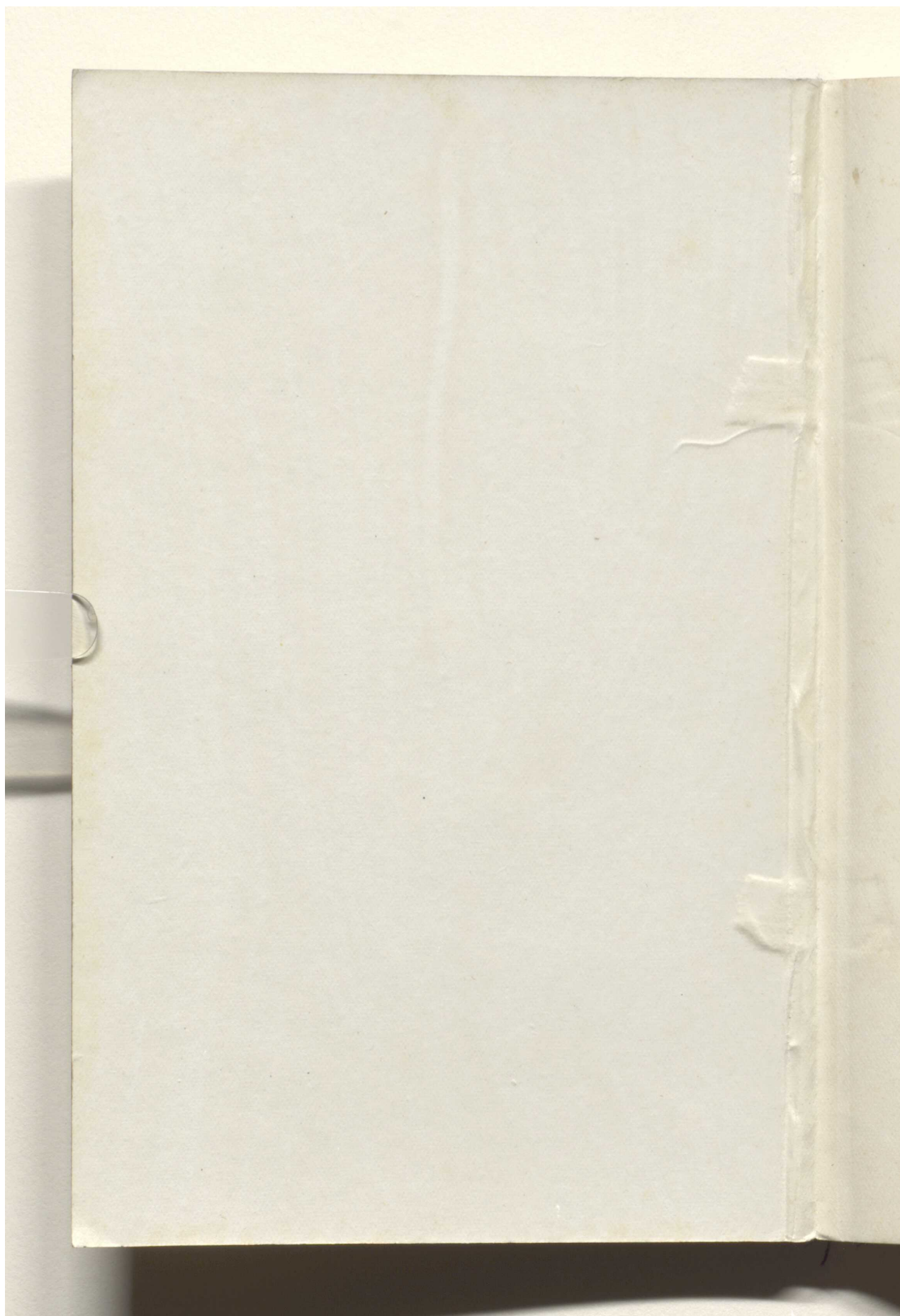
'Military Report on Persia' [head] (5/134)



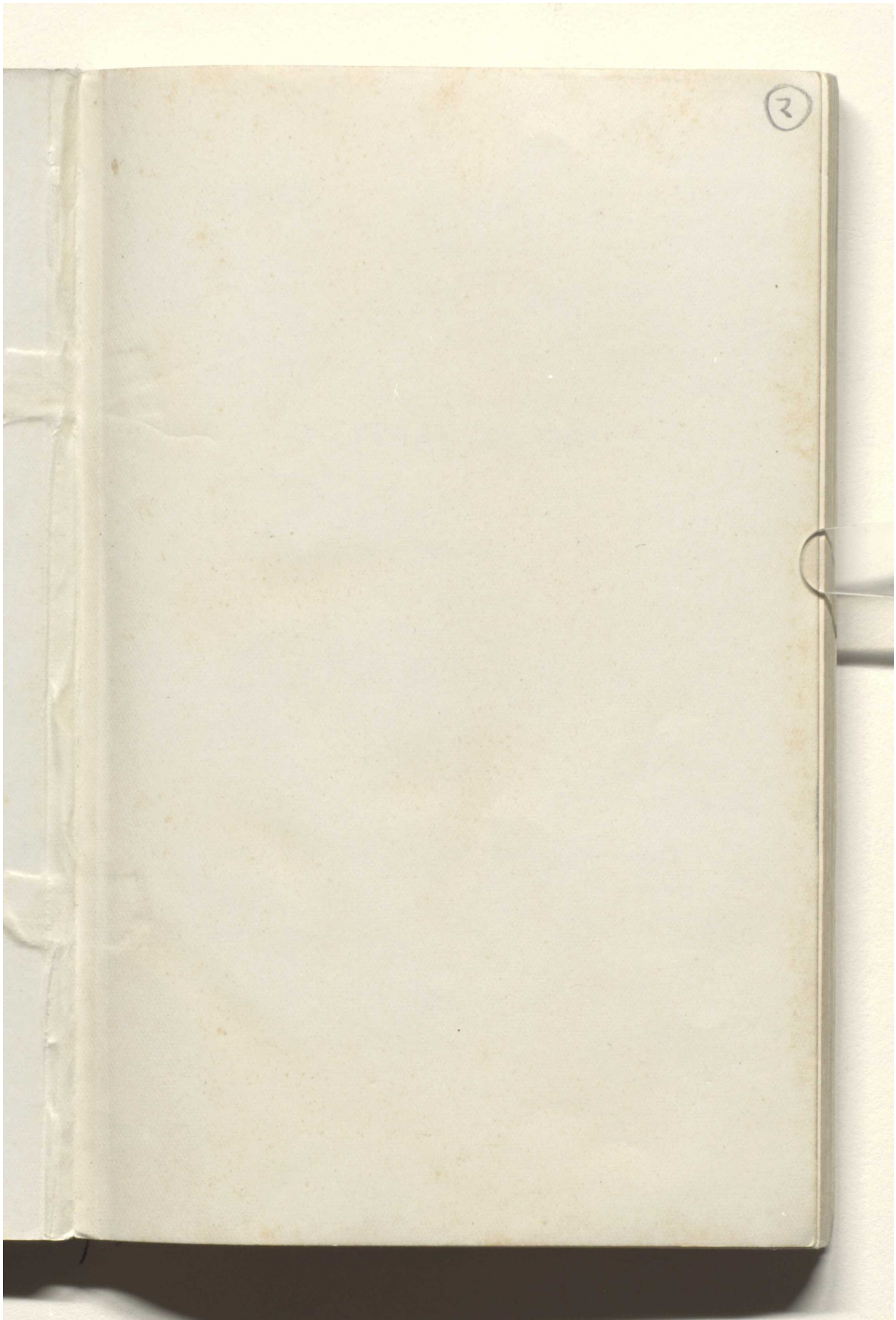
'Military Report on Persia' [tail] (6/134)



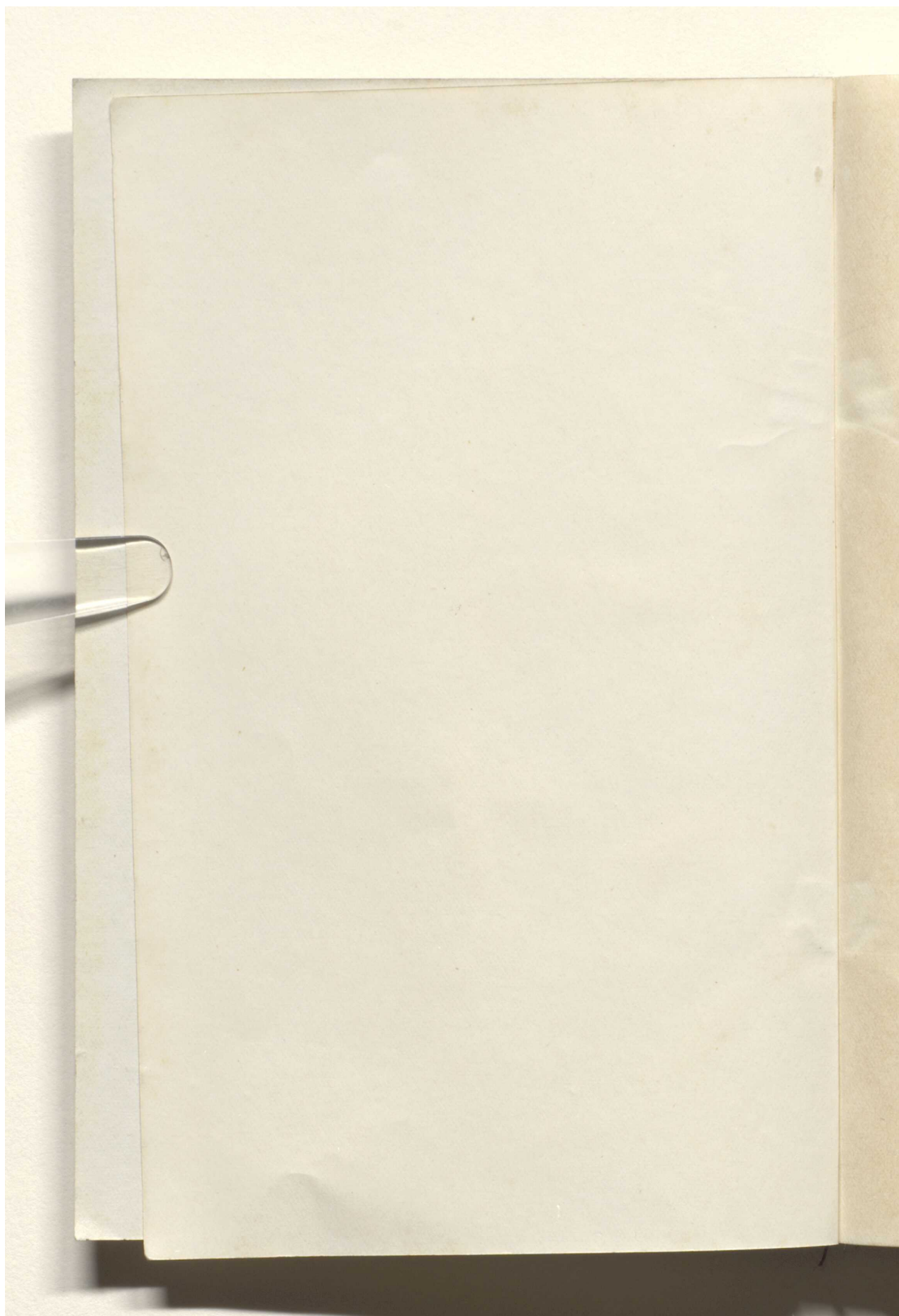
'Military Report on Persia' [front-i] (7/134)



'Military Report on Persia' [2r] (8/134)



'Military Report on Persia' [2v] (9/134)



Confidential.

MILITARY REPORT

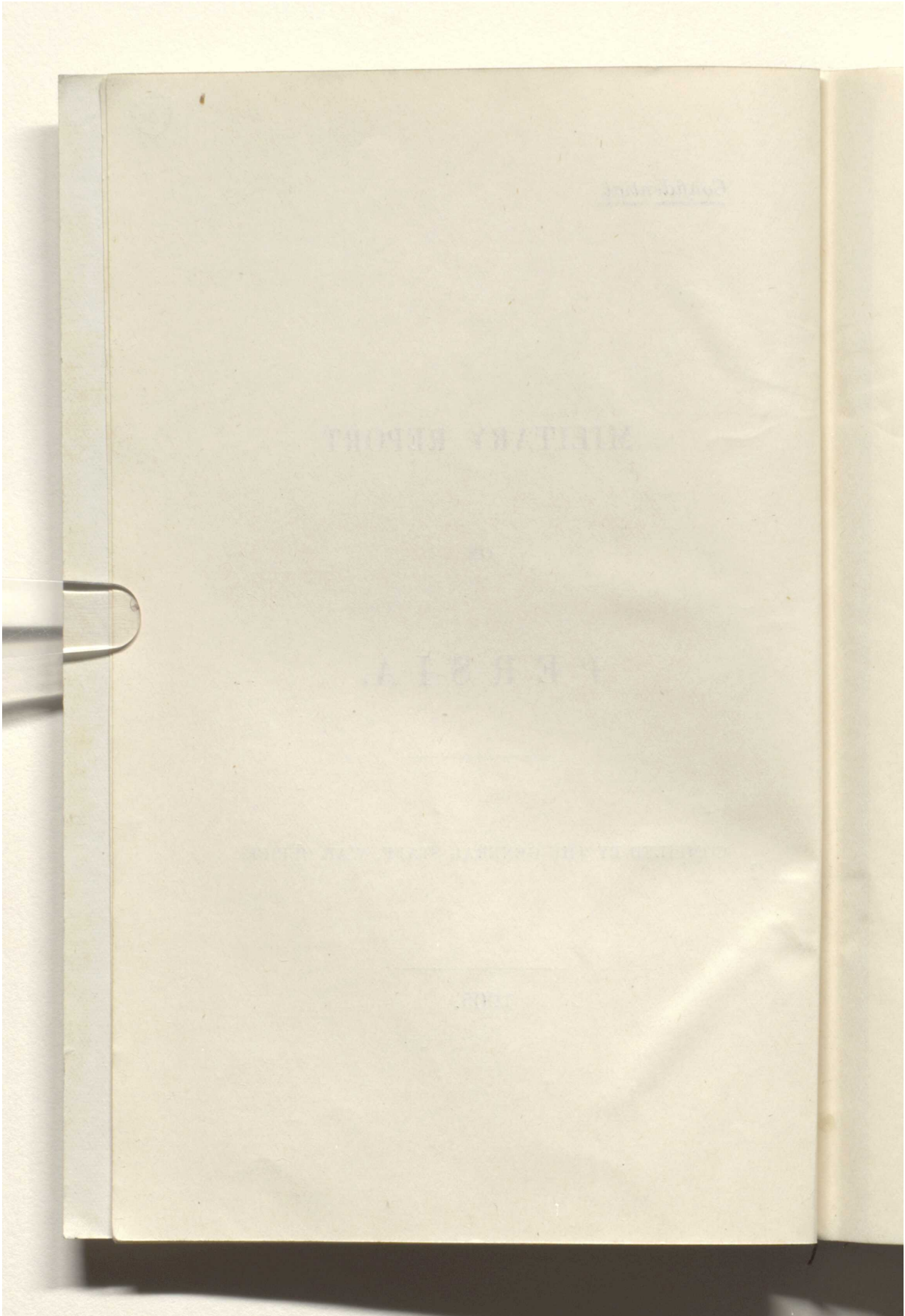
ON

P E R S I A.

COMPILED BY THE GENERAL STAFF, WAR OFFICE.

1905.

'Military Report on Persia' [3v] (11/134)



'Military Report on Persia' [4r] (12/134)

(4)

P R E F A C E

THIS report is intended to give, in a condensed form, such information regarding Persia as is likely to be of general utility from a military point of view. It has been compiled by Major A. D. Geddes, Captain of the General Staff, from the reports and works mentioned in Appendix C.

More detailed information regarding the country will be found in the works mentioned in Appendices B. and C.

J. M. GRIERSON,

Major-General,

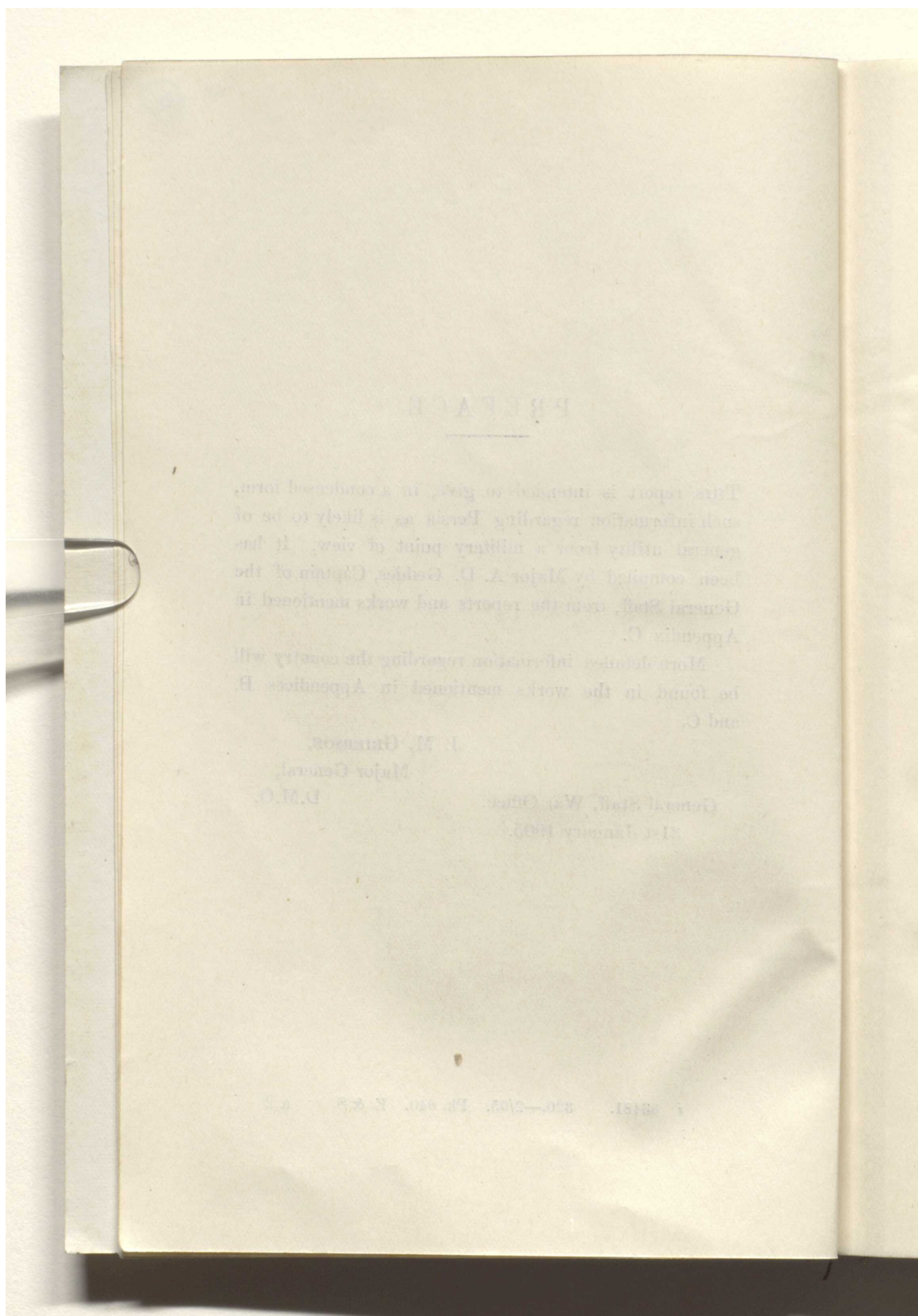
D.M.O.

General Staff, War Office.

31st January 1905.

i 33481. 320.—2/05. Pk. 640. E. & S. a 2

'Military Report on Persia' [4v] (13/134)



CONTENTS.

	Page
CHAPTER I.: Historical Sketch -	1
Ancient history -	1
Medo-Persian Empire -	1
Achæmenian dynasty -	1
Macedonian Empire -	1
Parthian Empire -	2
Sasanian dynasty -	2
Arab period -	2
Turkish period -	2
Mongolian period -	2
Modern history -	3
Safavi dynasty -	3
Afghan rule -	3
Zend rule -	4
Rise of the Kajar dynasty -	4
Accession of Fath Ali -	4
Death of Fath Ali -	5
Accession of Muhammad Mirza -	5
Accession of Nasr-ed-din -	5
Anglo-Persian War, 1856-7 -	5
Treaty of Paris, 1857 -	5
Assassination of Nasr-ed-din -	6
Muzaffer-ed-din -	6
Operations in Mekran, 1901 -	6
CHAPTER II.: Ethnography -	7
Population -	7
Tajiks -	7
Jews -	7
Armenians -	7
Nomads -	8
Turks -	8
Kurds -	9
Leks -	9
Arabs -	9
Lurs, Bakhtiaris, &c. -	9
Baluchis -	9

	Page
Gypsies	10
Timuris	10
Religions	10
<i>Shiah</i> Muhammadans	10
<i>Sunni</i> Muhammadans	10
Christians	11
Jews	11
Zoroastrians or <i>Guebres</i>	11
Babism	11
CHAPTER III.: Geography	12
General description	12
Area	12
Altitude	12
Deserts	12
<i>Hamuns</i>	12
Northern frontier	12
Eastern frontier	13
Sistan boundary	13
Perso-Baluch boundary	13
Southern frontier	14
Western frontier	14
Mountains	14
Northern system	14
Western and Southern systems	15
Eastern system	15
Rivers	16
Shat-el-Arab	16
Karun	17
Diala	17
Minab	17
Aras	17
Safed Rud	18
Gurgan	18
Atrek	18
Hari Rud	18
Tejend	19
Harhaz	19
Kashaf Rud	19
Helmand	20
Aji Chai	20
Jaghatu	20
Hamadan Rud	20
Zindah Rud	20
Kur or Bandamir	20

(6)

vii

	Page
Lakes - - - - -	20
Lake Urumiah - - - - -	21
The <i>Hamuns</i> of Sistan - - - - -	21
Lake Niris or Bakhtegan - - - - -	21
Climate - - - - -	21
Rainfall - - - - -	22
Diseases - - - - -	22
Provinces - - - - -	22
North-Western Provinces - - - - -	23
Azerbaijan - - - - -	23
Kurdistan - - - - -	23
Kermanshah - - - - -	24
Northern and North-Central Provinces - - - - -	24
Ghilan and Mazanderan - - - - -	24
Irak Ajemi - - - - -	25
Eastern Provinces - - - - -	27
Khorasan - - - - -	27
Astrabad - - - - -	28
Sistan - - - - -	29
,, climate - - - - -	30
,, roads - - - - -	31
,, canals - - - - -	31
,, wells - - - - -	32
,, villages - - - - -	32
,, population - - - - -	33
,, resources - - - - -	33
,, animals - - - - -	33
,, administration - - - - -	33
Southern and South-Western Provinces - - - - -	34
Luristan - - - - -	34
Chahar Mahal - - - - -	35
Arabistan - - - - -	35
The Persian Gulf Provinces - - - - -	36
Fars - - - - -	36
Laristan - - - - -	37
Yezd - - - - -	37
Kerman - - - - -	38
Persian Baluchistan and Mekran - - - - -	38
CHAPTER IV.: Ports and Harbours - - - - -	40
The Persian Gulf - - - - -	40
Persian Gulf ports - - - - -	40
Ports on the Arabian Sea - - - - -	44
Caspian ports - - - - -	45

viii

	Page
CHAPTER V.: Communications -	47
Roads -	47
Western system :	
Route I.—From Bushire to Teheran <i>viâ</i> Shiraz and Isfahan -	48
Route II.—From the mouth of the Shat-el- Arab to Teheran <i>viâ</i> the Tigris, Bagh- dad, Khanakin, and Kermanshah -	49
Route III.—From the mouth of the Shat- el-Arab to Teheran <i>viâ</i> the Karun, the Lynch Road, and Isfahan -	50
Route IV.—From the mouth of the Shat- el-Arab to Teheran <i>viâ</i> Shuster and Dizful -	52
Route V.—From Bandar Abbas to Teheran <i>viâ</i> Kerman and Yezd -	53
Route VI.—From Julfa to Teheran <i>viâ</i> Tabriz and Kazvin -	54
Route VII.—From Resht to Teheran <i>viâ</i> Kazvin -	54
Route VIII.—From Bayazid to Tabriz <i>viâ</i> Khoi -	55
Route IX.—From Isfahan to Hamadan -	55
(a.) <i>Viâ</i> Dehak and Sultanabad -	
(b.) <i>Viâ</i> Burujird -	
(c.) <i>Viâ</i> Amarat and Daolatabad -	
Route X.—From Hamadan to Sehna (Sin- neh) -	55
(a.) <i>Viâ</i> Khurwa -	
(b.) <i>Viâ</i> Bijar -	
Eastern system :	
Route XI.—From Bandar Abbas to Nasrat- abad (Sistan) <i>viâ</i> Regan and Sekuha -	56
Route XII.—From Nasratabad (Sistan) to Meshed <i>viâ</i> Neh, Birjand, and Turbat- i-Haidari -	56
Route XIII.—From Nasratabad (Sistan) to Meshed <i>viâ</i> Duruh, Ahingaran, and Sangun -	56
Route XIV.—From Gwador to Bampur <i>viâ</i> Pishin -	57
Route XV.—From Gwador to Jalk <i>viâ</i> Talar Pass, Parom, and Isfandak -	57
Route XVI.—From Jalk to Ladis <i>viâ</i> Gusht -	57

	Page
Route XVII.—From Pasni to Kuh-i-Malek	
Siah <i>viâ</i> Turbat, Dizak, and Ladis	58
Route XVIII.—From Ohahbar to Bampur	
<i>viâ</i> Geh and Kasrkand	58
Route XIX.—From Herat to Meshed <i>viâ</i>	
Ghurian and Turbat-i-Sheikh Jam	58
Route XXA.—From Quetta to Nasratabad	
(Sistan) <i>viâ</i> Nushki and Robat	58
Route XXB.—From Nushki to Nasratabad	
(Sistan) <i>viâ</i> the Helmand	59
Route XXI.—From Sarakhs to Meshed <i>viâ</i>	
Darband	60
Route XXII.—From Astrabad to Meshed	
<i>viâ</i> Kuchan	60
Route XXIII.—From Dushak to Meshed	61
Lateral Communications :	
Route XXIV.—From Meshed to Teheran	
<i>viâ</i> Sabzawar and Semnan	61
Route XXV.—From Shiraz to Kerman <i>viâ</i>	
Niris and Saidabad	61
Route XXVI.—From Bandar Abbas to	
Shiraz <i>viâ</i> Darab	61
Route XXVII.—From Shiraz to Lar	62
Route XXVIII.—From Kuchan to Astra-	
bad <i>viâ</i> Bujnurd	62
Route XXIX.—From Amol to Astrabad <i>viâ</i>	
Barfurush	62
Route XXX.—From Herat to Khaf <i>viâ</i>	
Ghurian	62
Route XXXI.—From Urumiah to Khoi	
Sanjak <i>viâ</i> the Lesser Zab Valley	63
Railways	63
„ Russo-Persian agreement concerning	63
„ possible alignments of	64
Cables	64
Telegraph system	65
Postal system	66
CHAPTER VI. : Trade, Resources, &c.	67
Irrigation	67
Trade	67
„ with British Empire	67
„ with Russia	67
„ with other countries	67
The 1903 Tariff	68
i 33481.	b

'Military Report on Persia' [7v] (19/134)

x

	Page
Resources	68
Wheat	68
Barley	69
Rice	69
Castor oil	69
Millet and Sesame	69
Opium	69
Cotton	69
Tobacco	70
Silk	70
Carpets	70
Wool	71
Hides and skins	71
Grapes	71
Dates	71
Other fruits	71
Medicinal plants	72
Colouring plants	72
Vegetables	72
Minerals	72
Oil-fields	72
Transport animals, remounts, &c.	72
Horses	73
Mules	74
Camels	74
Donkeys	74
Oxen	75
Livestock, sheep, &c.	75
Wheeled transport	75
CHAPTER VII. : The Army	76
Strength	76
Officers	77
Recruiting	77
Exemptions	77
Terms of service	77
Organisation	77
Infantry	77
Musketry training	78
Artillery	78
Guns	79
Cavalry	79
Regular Cavalry	79
The Cossack Brigade	79
Irregular Cavalry	81
Camel Corps	82

8

xi

	Page
Organisation— <i>cont.</i>	
Militia - - - - -	82
Military ranks and pay - - - - -	83
Allowances - - - - -	83
Distinguishing badges, &c. - - - - -	83
War Department - - - - -	84
Pay Department - - - - -	84
Arsenals - - - - -	84
Cartridge Factory - - - - -	84
Clothing Department - - - - -	85
Commissariat and Transport Department - - - - -	85
Medical Department - - - - -	85
Fighting strength of the Bakhtiariis - - - - -	85
Naval Forces - - - - -	86
CHAPTER VIII.: Administration, Revenue, &c. - - - - -	87
Government - - - - -	87
Present Sovereign - - - - -	87
Ministry - - - - -	87
Administrative divisions - - - - -	88
Administration of justice - - - - -	88
The <i>Karguzar</i> - - - - -	88
Revenue - - - - -	89
Taxation - - - - -	89
Crown lands - - - - -	89
Customs - - - - -	89
Rents and leases - - - - -	90
<i>Pishkash</i> and <i>Sadir</i> - - - - -	90
Financial position - - - - -	90
Banks, loans, &c. - - - - -	91
British Consulates - - - - -	92
„ Consular Guards - - - - -	93
Russian Consulates - - - - -	93
„ Quarantine Cordon - - - - -	94
Coinage - - - - -	94
Weights - - - - -	94
Measures - - - - -	95
Surface measures - - - - -	95
Calendar - - - - -	95
APPENDIX A.—Principal personages - - - - -	97
„ B.—Bibliography. - - - - -	98
„ C.—List of works, &c. consulted - - - - -	101
Map (in pocket at back).	
i 33481.	c

GLOSSARY of COMMON GEOGRAPHICAL and
TOPOGRAPHICAL TERMS.

(Persian unless otherwise stated.)

- | | |
|---|--|
| <i>ab</i> : water, river. | <i>karéz</i> : subterranean aqueduct. |
| <i>abád</i> : cultivated land. | <i>kaur</i> : water-course. |
| <i>ak</i> (Turk.) : white. | <i>kavír</i> : desert, lit. great (from Arab. <i>kebir</i>). |
| <i>bad</i> : wind. | <i>-kend</i> : village. |
| <i>bagh</i> : garden. | <i>khána</i> : house. |
| <i>bála</i> : summit, upper. | <i>khór</i> (Arab.) : creek. |
| <i>band</i> : dam. | <i>khus</i> : sweet. |
| <i>bándar</i> : landing-place. | <i>kizil</i> (Turk.) : red. |
| <i>bázár</i> : market. | <i>kuh, koh</i> : mountain. |
| <i>chah</i> : well, pit. | <i>kore</i> : channel. |
| <i>chahar</i> : four. | <i>hótal</i> : pass. |
| <i>chai</i> (Turk.) : river. | <i>kum</i> (Turk.) : sand. |
| <i>chak</i> : hole, mine. | <i>lut</i> : stony desert. |
| <i>chaman</i> : pasture. | <i>maidán</i> : open plain. |
| <i>chashma</i> : fountain. | <i>maz</i> : mountain. |
| <i>chol</i> : desert. | <i>mián</i> : middle. |
| <i>dagh</i> (Turk.) : mountain. | <i>mulk</i> (Arab.) : kingdom. |
| <i>damán</i> : foot of a mountain. | <i>naízár</i> : reed-bed. |
| <i>dára</i> : valley or pass. | <i>nawar</i> : a depression in the sand containing water after rain. |
| <i>darband</i> : difficult pass (lit. closed door). | <i>panj</i> : five. |
| <i>dariá</i> : river. | <i>pul</i> : bridge. |
| <i>dasht</i> : desert, plain. | <i>pur</i> : city. |
| <i>dazh</i> : quicksand. | <i>púshta</i> : hillock. |
| <i>deh</i> : village. | <i>rabát, robát</i> : halting-place. |
| <i>diz</i> : castle. | <i>raz</i> : castle. |
| <i>garmsir</i> : hot lands, winter pastures. | <i>rud</i> : river. |
| <i>gird</i> : environs. | <i>safed</i> : white. |
| <i>god</i> : lake. | <i>sar</i> : head, summit. |
| <i>gúdar</i> : pass. | <i>sarái</i> : inn. |
| <i>gúmbed</i> } tomb of a saint. | <i>sardsir</i> : cool lands, summer pastures. |
| <i>gúmbat</i> } | <i>sári</i> (Turk.) : yellow. |
| <i>guzár</i> : ferry. | <i>sabz</i> } green. |
| <i>hamún</i> : a lake with swampy edges. | <i>sebz</i> } |
| <i>haoz</i> : tank, reservoir. | <i>shahr</i> : town. |
| <i>kála</i> : village. | <i>shamál</i> (Arab.) : N.W. wind. |
| <i>kalán</i> : great. | <i>sharki</i> (Arab.) : S.E. wind. |
| <i>kanát</i> : subterranean aqueduct. | <i>shat</i> (Arab.) : fresh water. |
| <i>kára</i> (Turk.) : black. | |

(9)

xiii

shor : salt, brackish.

siah : black.

stan : country.

su (Turk.) : water, river.

surkh : red.

taftán : boiling (applied to a volcano).

tak : arch.

takht : throne.

taláb : lake.

tang : defile, pass.

tepe, tapa : hill.

turbat : tomb.

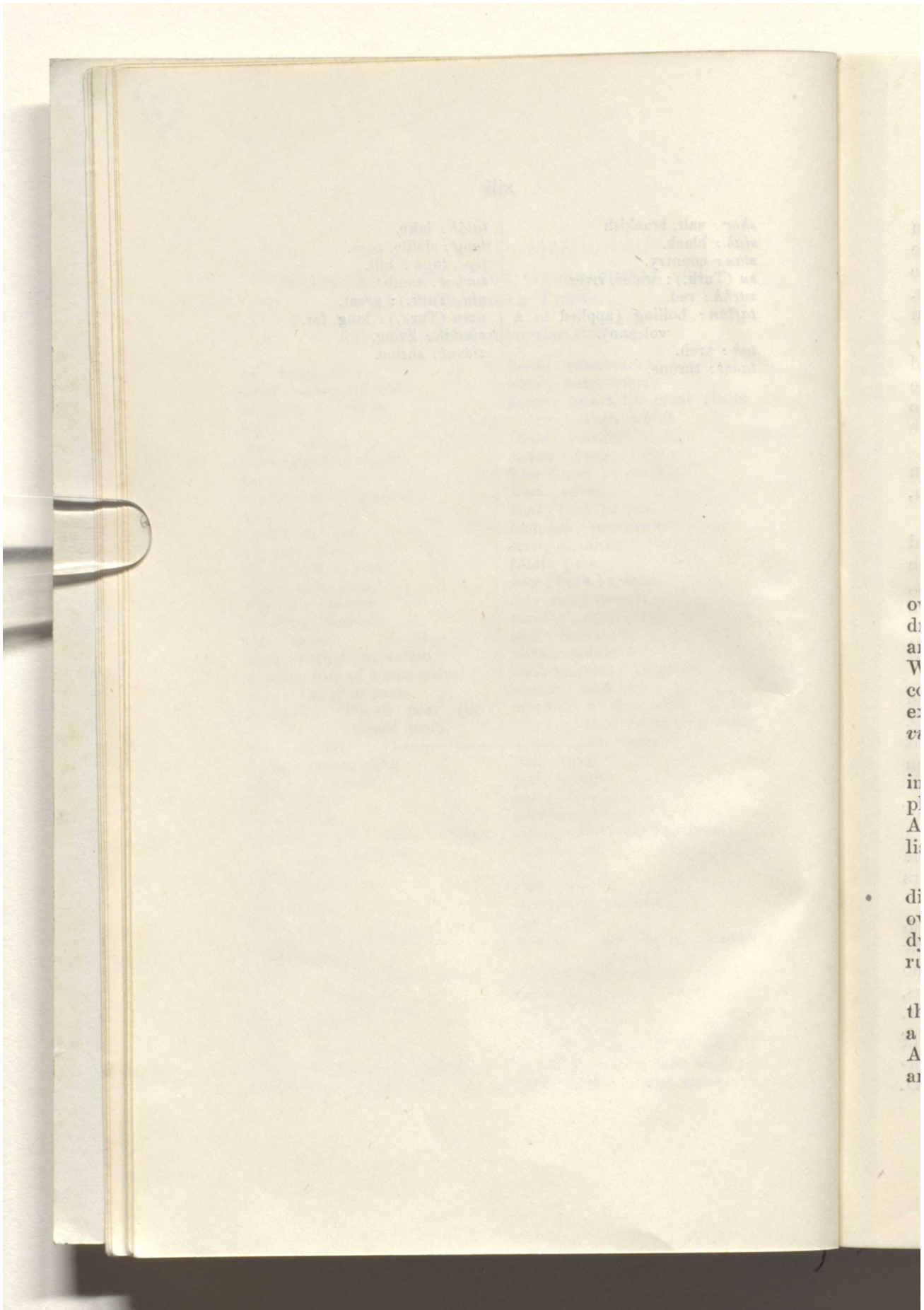
ulu (Turk.) : great.

úzen (Turk.) : long, far.

zindah : living.

ziárat : shrine.

'Military Report on Persia' [9v] (23/134)



(10)

MILITARY REPORT

ON

PERSIA.

CHAPTER I.

HISTORICAL SKETCH.

The continuous national history of Persia extends Ancient over a period of at least 2,500 years, and is full of history. dramatic incidents. The works of Herodotus, Strabo, and other earlier writers, and even the pages of Holy Writ, contain much that is interesting regarding the country. In modern times the subject has been exhaustively dealt with by many well-known historians, *vide* Appendix B., page 98.

In the 7th century B.C. the Medes extended their Medo-influence over the western portion of the great Iranian Persian plateau, which was inhabited in those days by various Empire. Aryan races, and Deioces, the first Medic king, established his capital at Ecbatana, the modern Hamadan.

About 550 B.C. the Persians, who inhabited the Achæ-district now known as Fars, revolted, and, led by Cyrus, menian overthrew the Medes and established the Achæmenian dynasty. dynasty, which produced, among others, such powerful rulers as Cyrus II., Cambyses, and Darius.

In 331 B.C. the Medo-Persian Empire was over-Mace-throwen by Alexander of Macedon, who, after defeating donian a large Persian army, proclaimed himself King of All Empire. Asia, and extended his dominion eastwards to the Oxus and the Indus.

i 33481.

A

In 326-5 B.C. Alexander returned through Southern Persia, after invading India. The route which he followed led from the mouth of the Indus along the coast to Gwetter, thence inland through Bampur, Saiadabad, to the north of Shiraz, and across the Karun at Ahwaz to Susa, a few miles south of Dizful.

Parthian
Empire.

The death of Alexander in 323 B.C. was followed by a period of civil war, which eventually led to the establishment of the supremacy of the Parthians, who inhabited what is now the province of Khorasan and the Caspian province of Mazanderan.

The Parthian Empire reached its zenith in the reign of Mithridates I., whose rule extended over Syria, Armenia, Persia, and part of India.

Sasanian
dynasty.

In 226 A.D. a Persian dynasty was again established by a descendant of Sasan, a satrap of Fars. One of the most celebrated of the Sasanian kings was Shapur I., who, in 260 A.D., defeated and captured the Roman Emperor Valerian. Under some of the later Sasanian rulers Persia enjoyed a period of great literary and commercial prosperity.

Arab
period.

In 633 A.D. the followers of the Prophet Muhammad commenced to invade Persia from Arabia, and by 650 A.D. the whole kingdom, from the Euphrates to the Oxus, was in their hands, and the majority of the population embraced Islamism.

Turkish
period.

The Arab rule was followed by a succession of Persian dynasties until, in 1063 A.D., Alp-Arslan, a Turk from Khorasan, made himself master of the whole Persian Empire. His successor ruled from the borders of China to the gates of Constantinople.

Mongolian
period.

Civil wars and rebellions proved fatal to the Turkish dynasty, and the beginning of the 13th century saw Persia overrun by a fresh horde of invaders from the north-east. This, the period of the Tartar incursions, was marked by the ravages of Changiz Khan and Timur.

On the death of Timur in 1405 A.D., the control of the Empire passed in succession to several of his descendants, the last of whom was overthrown in 1468 A.D.

by Uzun Hasan, a Turkoman chief from Diarbekir. For the next 31 years a state of anarchy prevailed.

The modern history of Persia may be said to commence from the rise of the Sufi or Safavi dynasty in 1499 A.D.

This dynasty was founded by Ismail, a descendant of Saifu-ed-Din Ishak, who was a resident at Ardebul in the 14th century, and whose reputation as a "holy man" attracted the attention of Timur. Ismail left his home on Lake Van before he was 18, and, taking advantage of the popularity of the Shiah religion (*see p. 10*), of which he was a devotee, collected a force of 16,000 followers, captured Tabriz, and was shortly afterwards, in 1499, proclaimed Shah of Persia. In 1510 he cleared Khorasan of the Uzbaks—Tartars led by a descendant of Changiz Khan—who had overrun that province.

The greatest ruler of the Safavi dynasty was, perhaps, Shah Abbas I., whose empire extended to the Oxus and included Herat and Kandahar. He flourished at the beginning of the 17th century. Under his successors, however, the empire dwindled. Turkey gained possession of Georgia, Azerbaijan, and Kurdistan, and the Imam of Maskat established his supremacy in the Persian Gulf. The Afghans, too, regained their position at Herat and Kandahar, and, in 1721, seized Kerman. In 1722 they followed up their successes by advancing against Isfahan, which they captured, after defeating a large Persian army. Husain, the last Shah of the Safavi dynasty, was compelled to abdicate in favour of Mahmud, the Afghan leader, and for the next eight years the Afghans ruled over Persia.

Then appeared two rival supporters of Husain's son Tahmasp, viz., Fath Ali Khan, a chief of the Turkish tribe of Kajars, and Nadir Kuli, a bandit chief from Khorasan. The latter murdered Fath Ali, drove the Afghans out of Persia, and finally usurped the throne, which he occupied under the title of Nadir Shah until his assassination in 1747.

Nadir's death was followed by a period of anarchy, 1747-60, during which perpetual struggles ensued between his relations and the chiefs of the various tribes.

The Zend rule, 1760-1779. From 1760 to 1779 Persia, with the exception of Khorasan, was ruled by Karim Khan, a chief of the Zend Kurds, who fixed his capital at Shiraz, where he died in 1779.

Rise of the Kajar dynasty, 1779. On the death of Karim Khan, Agha Muhammad, a son of the chief of the Turkish Kajar tribe from Astrabad, collected his tribesmen, overran the greater part of Persia, and established himself on the throne, thus founding the Kajar dynasty, of which the present Shah is the fifth representative.

Agha's reign was marked by many acts of cruelty, one of which was the massacre of the inhabitants of Kerman in 1795. He was murdered by his servants in 1797, and was succeeded by his nephew, Fath Ali Shah.

Fath Ali. The principal events which marked the reign of Fath Ali may be summarised as follows:—

- 1800. (i.) An offensive and defensive alliance with Great Britain, to protect India from Afghan incursions, and to check the growing influence of France in the Persian Gulf, the ports of which were opened to British and Indian traders.
- 1812. (ii.) War with Russia, which terminated in the treaty of Gulistan in 1813, Great Britain acting as mediator. Persia ceded to Russia the provinces of Georgia, Imeretia, Mingrelia, Persian Daghistan, Shirvan, Ganjeh, Karabagh, parts of Talish, and the ports of Darband and Baku, while Russia obtained the exclusive right of maintaining ships of war in the Caspian, a right which she has enjoyed ever since.
- 1814. (iii.) Another agreement with Great Britain, who pledged herself to assist Persia against invasion, provided that the Shah was not the aggressor. Persia undertook to co-operate in protecting India, and to allow a British representative to reside permanently at the Shah's court.
- 1826. (iv.) A second war with Russia, arising out of the frontier question of Northern Persia, and

terminating, in 1828, with the Treaty of Turkmanchai, by which Persia ceded to Russia the provinces of Erivan and Nakhchivan, and the frontier west of the Caspian was fixed from Mount Ararat, along the Aras, to Astara. Russia also claimed a war indemnity of 3,000,000*l*.

In 1834 Fath Ali died, and, with the assistance of Great Britain, his grandson, Muhammad Mirza, succeeded to the throne. Death of Fath Ali, 1834.

The new Shah entertained designs upon Herat, which he besieged in 1837, and only withdrew his troops when the Indian Government landed a force at Bushire as a protest. Accession of Muhammad Mirza.

In 1842 a treaty was concluded between the Shah and the Chief of Kandahar, by which Persia relinquished all claim to Afghan territory.

Muhammad Mirza died in 1848, and was succeeded by his son, Nasr-ed-din, who, in 1852, attacked and occupied Herat. In answer to a remonstrance by the British Government, the Shah gave a pledge that he would altogether refrain from interfering in the affairs of Herat. Accession of Nasr-ed-din, 1848.

When the Crimean War broke out, Persia at first offered to join the Allies, but her offer was not accepted. This led to strained relations with Great Britain, and the climax was reached in 1856, when Persian troops once more advanced against, and occupied, Herat.

The Government of India declared war against Persia, and despatched an expedition to Bushire under Sir James Outram. Bushire and Mohammera were captured, the Persians losing heavily in men, guns, and stores. A small British naval detachment, about 300 strong, sailed up the Karun to Ahwaz, which was abandoned by the Persians. Anglo-Persian War, 1856-7.

By the Treaty of Paris, ratified at Baghdad, Persia agreed to abstain from meddling with Afghan affairs, and the British force was withdrawn. Treaty of Paris, 1857.

1866. In 1866, Persia took possession of Western Baluchistan and Sistan, in consequence of which a Boundary Commission under Sir F. Goldsmid was appointed in 1870 to determine the frontier (*see* p. 14).

1896. In 1896 Nasr-ed-din was assassinated, and was succeeded by his second son, Muzaffer-ed-din, the present Shah (*see* p. 87).

Assassination of Nasr-ed-din. In 1900 Muzaffer-ed-din travelled in Europe, and visited Paris, Constantinople, and St. Petersburg. He did not include England, Germany, or Italy in his tour, because the courts of those countries were in mourning at the time.

Muzaffer-ed-din, 1900. In the same year he contracted a loan (*see* p. 91) of 2,400,000*l.* with the Russian Bank in Persia, and it is believed that one of the conditions secured to Russia the right of moving troops to Sistan through Persia by way of Meshed, in case of necessity.

In 1902 he again visited Europe, and spent a short time at the English court.

Muzaffer-ed-din's most notable reform is the reorganisation of the Customs by the introduction of a staff of Belgian officials (*see* p. 89).

Operations in Mekran, 1901. In 1901 a British mission, escorted by some 300 Indian troops, was despatched to Persian Mekran to co-operate with the local Persian troops in the capture of Muhammad Umar Khan, a rebel Baluch chief, who had taken refuge in a fort in Persian territory, from which he raided the neighbouring district of Kej. With the help of the British escort the forts of Irafshan and Magas were captured, the latter of which was partially demolished. Muhammad Umar fled into Afghanistan. In 1902 an Anglo-Persian agreement was concluded, by which, for the preservation of order, Persia bound herself to maintain a garrison in Irafshan, and to arrange an annual meeting between the Deputy-Governor of Bampur and the Nizam of Mekran to settle all border questions. In order still further to secure peace, the Government of India in 1904 authorised the formation of a Mekran Levy Corps of 300 tribesmen, with headquarters in Panjgur.

13

7

CHAPTER II.

ETHNOGRAPHY.

The population of Persia is estimated at about 9,000,000, or an average of nearly 13 inhabitants to the square mile.

It may roughly be divided as follows :—

(1) Urban	-	-	-	2,500,000
(2) Rural	-	-	-	4,300,000
(3) Nomad	-	-	-	2,200,000

Total	-	-	-	<u>9,000,000</u>
-------	---	---	---	------------------

The first two classes are composed chiefly of Tajiks, Jews, and Armenians.

The Tajiks or Tajaks are a Persian-speaking tribe of Iranian stock and are found in many parts of Central Asia. In the present day in Persia the name applies to the settled and more civilised Persian-speaking lowlanders in contradistinction to the dialect-speaking highlanders, such as the Kurds, Lurs, &c. When living in towns the Tajiks are traders and artizans; in the country they are tillers of the soil. They are not confined to Persia alone, but are found in Turkistan, Afghanistan, Bokhara, Khiva, and Kashgaria. By religion they are mostly *Shiah* Muhammadans in Persia, though elsewhere, especially in Afghanistan, many of them are *Sunnis* (see p. 10).

Jews are found in nearly all towns in Persia, but it is only in the larger cities, such as Teheran, Isfahan, Yezd, Shiraz, Hamadan, &c., that regular communities exist, with priests and synagogues.

The Armenian element was introduced into Persia in 1604, when Shah Abbas I. laid waste the whole of Armenia, and forcibly removed about 40,000 of its inhabitants into Persia, where they settled in Isfahan and the province of Azerbaijan. At the present day

they number in Persia over 50,000, and are found principally in Tabriz, Khoi, Selmas, Urumia, Maragha, Teheran, Hamadan, Julfa, Shiraz, Bushire, Resht, Enzeli, and in some of the villages of Chahar Mahal and the neighbourhood. Their language is a dialect of the original Armenian tongue, which was an offshoot of the Iranian branch of the Indo-Germanic family of languages, but contains a large admixture of Turkish and Persian words. By religion they are Christians of the Armenian Church, the doctrines of which differ slightly from those of the orthodox Greek Church. They are a quiet, law-abiding people, and, with the exception of a certain number of wealthy merchants, are mostly agriculturists of slender means.

Nomads.

Of the Nomads about—

850,000 are Turks and Turkomans,
800,000 Kurds and Leks,
300,000 Arabs,
230,000 Lurs,
20,000 Baluchis, Timuris, and Gypsies.

Turks.

The Turks are found chiefly in the north and north-west of Persia, but a few tribes inhabit also the south-western provinces. In the northern provinces they are called *Iliyat*, which means "tribes." Each tribe has its own chief, or *Ilkhani*, who is appointed by the Shah.

The principal northern tribes are :—

- (1.) The Kajars, who occupy the country south-east of the Caspian near Astrabad. The present reigning dynasty belongs to this tribe.
- (2.) The Afshars of Azerbaijan.
- (3.) The Shahsevens, including a large and powerful clan called Baghdadis, who are scattered generally over north-western Persia, and who provide the majority of the recruits for the Cossack Brigade (see p 79).

The principal tribe in south-western Persia is the Kashkai, to the south of Shiraz.

The Persian Turks are a branch of a race which is distributed over an area extending from the lower Lena

in Siberia to the Danube, and from the Crimea to India. This race includes the Osmanlis, or subjects of the Sultan of Turkey, the Tartars of Russia and Siberia, the Kirghiz of Central Asia, the Uzbaks of Khiva, Bokhara, and Ferghana, and the Turkomans of Transcaspia. They are believed to be of Mongolian origin, and to have migrated westwards from the Altai Mountains. The language of the Persian Turks is the Turki dialect, which is a modified form of that spoken in Turkey. They are a warlike people, and furnish the best Persian soldiers.

The Kurds chiefly inhabit Azerbaijan and the high-lands of western Persia, but a few are found in Khorasan. Their origin is wrapped in obscurity, but they are believed to be identical with a Turanian tribe, who in early days inhabited the mountains on the borders of Assyria, and who were known by the ancient Assyrians as *Gardu* or *Kardu*. Their language is a dialect of Persian with an admixture of foreign words. By religion they are *Sunni* Muhammadans (*see* p. 10). They are wild and lawless, and much given to brigandage. In appearance they bear some resemblance to the Afghans.

The Leks, a large nomadic tribe of Persian descent, although distributed generally over Persia, are found chiefly in Fars, Isfahan, and the neighbourhood of Teheran and Kazvin.

The Arabs inhabit the district of Arabistan watered by the lower Karun, and the provinces bordering on the Persian Gulf. The tribes occupying the Karun Valley are mostly under the control of the Sheikh of Mohammera (*see* p. 43).

The Lurs are supposed to be of the same original stock as the Kurds. They inhabit the mountainous districts of western and south-western Persia, and include the Feili, Bakhtiari (*see* p. 85), Kuhgelu, Mamaseni, and other tribes, although some of these disown the title.

They are all hardy and warlike tribes, with the usual characteristics of highland races. Their language resembles that spoken by the Kurds. Though nominally Muhammadans, they pay little attention to religious observances.

Baluchis. The Baluchis are spread over Persian Baluchistan and parts of Sistan. Their origin is obscure, but they claim to be of Arab extraction. By religion they are *Sunni* Muhammadans. Their language contains many Persian words, but is quite distinct. In appearance they resemble the Afghans, though their aspect is less formidable.

Gypsies. The Gypsies are of the usual type, and are found all over southern Persia.

Timuris. In the province of Khorasan there are a few families of Timuris, of supposed Tartar origin, who are believed to have been settled there by Timur in the 14th century.

Religions. The following is an estimate of the distribution of the various religions in Persia :—

Muhammadans	{ Shiabs	-	8,000,000
	{ Sunnis	-	880,000
	{ Christians	-	76,000
	{ Jews	-	35,000
	{ Zoroastrians	-	9,000

Shiah Muhammadans. The national religion of Persia is the *Shiah* form of Muhammadanism, which was introduced by the Safavi dynasty at the beginning of the 16th century. It originated in the following manner :—

Shortly after the death of the Prophet, disputes arose among his followers regarding the succession to the Kaliph. A large section adhered to Ali, the son-in-law of the Prophet, whom they regarded as an incarnation of the Godhead. The descendants of these came to be looked upon by the remainder of the Moslem world as heretics, and the term *Shiah*, or Shi'ites was applied to them, *shi'a* being a word which in Arabic signifies "sectary." All other Muhammadans, who look upon Muhammad as the only Prophet, are called *Sunni*, or Sunnites, a name derived from the *Sunna*, or traditions, which they accept together with the Koran.

There is bitter hatred between the Shiabs and Sunnis, but the feeling is stronger on the part of the latter, who consider themselves orthodox Muhammadans.

To the usual Muhammadan confession "there is no God but God, and Muhammad is His Prophet," the Shiabs add "and Ali is the vicegerent (*vali*) of God."

They reject the *Sunna*, and repudiate the Kaliphs under whom these were handed down. Though they

accept the Koran, they give to it a mystical interpretation to reconcile it with some of their doctrines and practices, which are considerably more lax than those permitted by the orthodox Muhammadan faith.

The Christians include Armenians, Nestorians, Greek Christians, Orthodox, Roman Catholics, and Protestants.

For Jews see p. 7.

Jews.

The Zoroastrians, who practise the old fire worship of Persia, are found principally in the cities and villages of Yezd and Kerman, though a few live in Teheran, Kashan, Isfahan, and Shiraz. They are known by the name of *Gabr* in Persia, and *Parsi* in India.

Besides the above-mentioned recognised religions, there exists in Persia a comparatively modern, but rapidly-increasing creed known as Bábism. It was founded in A.D. 1844 by a young *Saiad* (descendant of the Prophet) named Mirza Ali Muhammad, a native of Shiraz, who, claiming to have received a Divine mission, assumed the title of the *Báb* or "gate," thereby signifying that he was the medium through whom a better life was to be attained. The doctrines preached by him were directed chiefly against the tyranny and fanaticism of the Koran, and the growing laxity of Mussulman practices in Persia. He laid great stress on the emancipation of woman, and his precepts in general had no little in common with those of the Christian faith, modified, however, by an admixture of occultism and the Koran. The Persian Government took steps to suppress what they considered a dangerous heresy, and in 1850 the *Báb* was executed at Tabriz, and his followers were subjected to rigorous persecution, which has since been repeated at various times. In 1852 an attempt on the part of some Bábis to assassinate the Shah gave rise to the suspicion that Bábism savoured more of politics than of religion, and resulted in renewed persecution.

At the present time, although not openly professed, Bábism in Persia is rapidly increasing in popularity, its converts being drawn chiefly from the Muhammadans. Its adherents are to be found in all classes of society, and are said to number over 600,000.

CHAPTER III.

GEOGRAPHY.

- General description. Modern Persia, or Iran, as it is called by its inhabitants, comprises the greater portion of the vast Iranian plateau, which rises on the north from the Caspian Sea and the plains of Turkistan, on the east and west from the valleys of the Indus and the Tigris respectively, and on the south from the Persian Gulf and the Arabian Sea. The eastern extremity of this plateau extends over portions of Afghanistan and Baluchistan.
- Area. The area included in Persian territory is estimated at nearly 700,000 square miles.
- Altitude. The general altitude of the plateau above sea-level varies between 4,000 and 8,000 feet.
- Deserts. A large portion of its surface consists of uncultivated waste land, confined chiefly to certain districts east of a line drawn from Teheran to Bam, through Yezd. The province of Khorasan contains the two principal deserts, the Dasht-i-Kavir or "great plain" in the north, and the Dasht-i-Lut or "desert plain" in the south. These, owing to the absence of fresh water, the great heat, and the existence of salt quagmires, can only be crossed by following the few recognised caravan routes. Being practically impassable for troops except in very small bodies, they would restrict the front of an army moving across Persia from north to south or *vice versâ*. See also pp. 15, 31, 47, and 48.
- Hamuns. The salt marshes, or *hamuns*, are a great feature of the province of Sistan, for a description of which see page 29. The proportion of land in Persia approaching the level of the sea is comparatively insignificant, and is limited to the plain of Arabistan in the south-west, to a few small areas along the Persian Gulf, and to the narrow strip of country between the Elburz Mountains and the Caspian, which comprises the Caspian provinces of Ghilan and Mazanderan.
- Northern frontier. The northern frontier of Persia has a length of about 1,300 miles.

of
The
the
rive
up
in
from
Gov

Rus
from
Bay

who
Sou
and
wh
as
bou
He
dire
and

ista
Sir
alte
old
the
bee
app

Ku
Fr
Mo
dir
sou
to
ter
Ku

From Mount Ararat on the west it follows the course of the Aras down to the Caspian Sea at Astara. Thence, skirting the southern shore of the Caspian to the mouth of the River Atrek, and conforming to that river as far as Chat, it takes a north-easterly direction up to the Kopet Dagh Mountains, which it follows in a general south-easterly direction to Sarakhs. This frontier line was fixed in 1881 by a treaty between the Governments of Russia and Persia.

The eastern frontier, which divides Persia from Russian Turkistan, Afghanistan, and Baluchistan, extends from Sarakhs in the north to the centre of Gwetter Bay (see p. 45) in the south, a distance of about 950 miles.

From Sarakhs it follows the Tejend river to Zulfikar, where Russian, Persian, and Afghan territories meet. South of Hashtadan it has not been properly defined, and is still under dispute. Its general direction is somewhat as follows:—Conforming to the Hari Rud as far as Kuhsan, it runs almost due south to the northern boundary of Sistan. Thence, after following the Helmand to the Band-i-Sistan, it takes a south-westerly direction to Kuh-i-Malek-Siah, where British, Afghan, and Persian territories meet.

The boundary between Persian Sistan and Afghanistan was fixed in 1872 by a British Commission under Sir F. Goldsmid. The Helmand, however, has since altered its course, and now flows to the westward of its old bed. Disputes have consequently arisen between the Persians and Afghans, the settlement of which has been undertaken by a Commission, under Col. McMahon, appointed in 1902.

The Perso-Baluch frontier from Kuh-i-Malek-Siah to Kuhak was delimited in 1896 by Colonel T. H. Holdich. From Kuh-i-Malek Siah it follows the crest of the Kacha Mountains and the River Talab in a south-easterly direction to the Mashkel Hamun. Thence it runs due south for about 80 miles, after which, by a bend, first to the east and then south, it includes Kuhak in Persian territory. The southern portion of this frontier, from Kuhak to Gwetter Bay, usually termed the Perso-Mekran

boundary, was fixed by Sir F. Goldsmid in 1871 under conditions of great difficulty, and has never been properly marked out or observed.

Southern frontier.

The southern frontier of Persia is formed by the Arabian Sea, the Straits of Ormuz, and the Persian Gulf. It extends from Gwetter Bay on the east to the mouth of the Shat-el-Arab on the west, a distance of about 1,100 miles.

Western frontier.

The western, or Perso-Turkish frontier, runs from the mouth of the Shat-el-Arab to Mount Ararat, and is about 750 miles in length. Leaving the Shat-el-Arab near its junction with the Hafar Channel, it runs west of Pusht-i-Kuh, passing a few miles east of Khanakin. Then, after following the Diala river for some distance, it runs in a general north-westerly direction to Mount Ararat, passing to the west of Maku. An Anglo-Russian Commission was employed on the delimitation of this frontier from 1849 to 1865, and a partial conclusion was arrived at in 1880, but the frontier has never been properly demarcated or observed.

Mountains.

The mountain system of Persia may be described as the framework which supports the great central table-land.

Northern system.

The Elburz Range forms the northern support. Commencing in the north-west from Mount Savalan (15,700 feet), it runs parallel to the southern shore of the Caspian, and extends eastwards to the northern limits of Khorasan, a distance of some 500 miles. North-east of Teheran, the snow-clad peak of Mount Demavend (19,950 feet) provides a conspicuous landmark for sailors on the Caspian, and for travellers by land. Other peaks are: Derfakh (7,850 feet) south of Resht, Kuh Kachan (12,200 feet) north of Teheran, Kuh-i-Nizwah (13,500 feet) north of Semnan, and Kuh Khushailak (10,000 feet) east of Astrabad. The lower slopes of the Elburz Mountains, especially on the northern face, are densely wooded, but the peaks are rocky and barren. On the southern face the lower slopes merge into gravel plains, extending for many miles from the foot of the range. North-west of the

Elburz Range are the Karadagh Mountains, which run parallel to the River Aras almost to Mount Ararat. They include the peak of Kamki (11,000 feet).

The western and southern systems consist of a series of mountain chains, which, extending from the Armenian highlands, run parallel to one another in a south-easterly direction through Luristan, the Bakhtiari country, and Fars, almost to the Persian Gulf, and then turn eastwards along the coast to Baluchistan. The general trend of these mountain chains from north-west to south-east has an important bearing on the question of communications across the Perso-Turkish frontier or leading inland from the Persian Gulf, construction being a matter of comparative difficulty or ease, according as the route selected lies across, or parallel to, the trend of the mountains. The most important ranges and peaks in the western system are :—

- (i.) Mount Sahend (11,630 feet) near Tabriz.
- (ii.) The Zagros Mountains in the west of Kurdistan. Highest peak, Manisht Kuh (9,500 feet).
- (iii.) Mount Elvend (12,290 feet) west of Hamadan.
- (iv.) Kuh Gurganak (14,500 feet), Kuh-i-Gerreh (12,000 feet), and Kuh-i-Kala (13,000 feet) in the Bakhtiari country.
- (v.) The Kuh-i-Dina in the province of Fars (average height, 17,000–18,000 feet).
- (vi.) The Kuhgehl Mountains in Arabistan. Highest peak, Kuh-i-Dil (10,400 feet).

The most important ranges and peaks in southern and south-eastern Persia are :—

- (i.) The Jamal Bariz south of Kerman. Highest peak, Kuh-i-Hazar (14,700 feet).
- (ii.) The Basman Kuh (12,000 feet), and Kuh-i-Taftan (12,600 feet), volcanoes in Persian Baluchistan. The former has long been dormant, but the latter is still active.

The mountain system on the eastern frontier of Persia is less strongly defined than on the north, south, and eastern systems.

and west, since it does not here constitute the eastern boundary of the great Iranian plateau.

There are, however, a few well-marked ridges, the general trend of which is more or less from north to south. Among these may be mentioned :—

- (i.) The Mirjawa range, which extends from Kuh-i-Malek Siah (5,632 feet) in a south-easterly direction along the Perso-Baluch frontier for about 100 miles. Highest peaks Lar Kuh (7,669 feet), and Kacha Kuh (7,164 feet).
- (ii.) The Bakaran Kuh, south of Birjand. Highest peak, Kuh-i-Baran, 8,358 feet.
- (iii.) The Kuh Bakharz near Turbat-i-Haidari. Average height, 7,000 feet.
- (iv.) The Binalud Mountains, west of Meshed. Highest peak, Sarbi (10,400 feet).
- (v.) The Bejwird Mountains (average height, 6,000 feet), which extend from Meshed south-west towards Yezd, and form the division between the Dasht-i-Kavir and the Dasht-i-Lut.
- (vi.) Kuh Benitak (6,932 feet) near Zulfikar.

Rivers.

The rivers of Persia may be classified under five headings, according as they drain—

- (1) into the Persian Gulf;
- (2) into the Caspian Sea and deserts of Turkistan;
- (3) into the Hamuns of Sistan;
- (4) into Lake Urumiah in Azerbaijan;
- (5) into the deserts of Central Persia.

(1.) Along the whole southern coast-line of Persia, from Gwetter Bay to the mouth of the Shat-el-Arab, there is scarcely one river which would be a serious obstacle to the movement of troops, or which is of sufficient size to be used as a channel of communication.

The Shat-el-Arab.

The Shat-el-Arab, however, possesses both these characteristics. It is of sufficient width and depth to admit ocean-going vessels and affords access to the rivers Tigris, Euphrates, Karun, and Diz. There is a bar at its

mouth, over which the depth of water at low tide is only 7 feet, but at high water, during spring-tides, vessels drawing 18 feet can ascend it as far as Basra. From Basra river-steamers ascend the Tigris to Baghdad. About 46 miles above the bar the Shat-el-Arab is connected with the Karun by the Hafar channel, which is 2 miles long and 400 yards wide, with a depth of from 3 to 4 fathoms.

From Mohammera the Karun is navigable for 117 miles as far as Bandar Nasri for vessels drawing $2\frac{1}{2}$ feet (from August to November) and 5 feet when the river is high.

At Bandar Nasri continuous navigation is interrupted by rapids. Cargoes are therefore transferred to the upper waters by a tramway which runs from Bandar Nasri to Ahwaz, a distance of $1\frac{1}{2}$ miles.

From Ahwaz to within 7 miles of Shuster the Karun is navigable for light-draft river steamers, which can also ascend its tributary, the Ab-i-diz, to within 10 miles of Dizful. The natural mouth of the Karun, the Barmeshir channel, is too shallow for navigation.

The Diala or Shirwan, which rises in the mountains of Ardelan and joins the Tigris at Baghdad, is too rapid and torrential for navigation.

The Minab, which rises in the hills about 100 miles north of Bandar Abbas, and debouches into the Persian Gulf some 30 miles east of that port, is unfordable in the rainy season.

(2.) The principal rivers draining into the Caspian Sea are :—

The Aras (ancient Araxes), which forms the greater part of the frontier between north-west Persia and Russian Trans-Caucasia, rises in Armenia and flows into the Caspian north of the Gulf of Kizil Agatch after a course of about 510 miles. For the last 10 miles it is known as the Kur. The principal crossing-place is at Julfa, where there is a ferry worked by wire hawsers from both banks. The stream at this point is about 100 yards wide in winter, with a depth of 8 feet, and a velocity of $2\frac{1}{3}$ miles per hour.

There are fords immediately above and below the ferry, which are practicable only during summer and early autumn, when the depth of water is about 3 feet.

Similar fords exist at Abbasabad, and other minor points between Julfa and Erivan.

Below Julfa passage can only be effected by means of boats or rafts.

The Safed Rud.

The Safed Rud, or White River rises in the mountains of Ardelan north of Sehna, and finds an outlet 57 miles east of Enzeli. Its upper waters are known as the Kizil Uzen as far as Manjil, where it is joined by the Shah Rud. Above Manjil it is fordable, when not in flood, near Mianeh and Derram. There are bridges at Manjil and 8 miles above Alwar. In spring it becomes a torrent and is quite unfordable. Below Rudbar it enters the plains of Ghilan, and flows with a moderate current between low and swampy banks. It is navigable for small boats only near its mouth, where the depth varies from 3 to 7 feet.

The Gurgan.

The Gurgan rises in the Armut Ali plateau west of Bujnurd, and, after a westerly course of about 200 miles, falls into the Caspian to the north of Ashurada Bay. It is quite unfordable in spring when the snows melt, but in the dry seasons it can be forded at a few points where dams have been constructed below Ak-kala. Near Gumbat-i-Kabus it is about 20 feet wide and 4 or 5 feet deep, and runs in a narrow bed between cliffs.

The Atrek.

The Atrek rises near Towarik to the north-east of Kuchan, and flows into Hassan Kuli Bay after a course of about 300 miles. From its source to a few miles below Chat it runs in a deep ravine, and is fordable only at wide intervals from September to February. At the point where the Astrabad-Chikishliar telegraph crosses, it is about 30 feet wide, and 3 feet deep when not in flood.

The Hari Rud.

The Hari Rud rises in Afghanistan near Daolat Yar and flows westwards past Herat to Kuhsan, where,

(19)

19

turning due north, it forms the boundary between Persia and Afghanistan as far as Zulfikar, and between Persia and Russian Turkistan from Zulfikar to Sarakhs. Above Herat there are numerous fords. Below Herat there is an important ford at Zindajan, which is generally used during flood-time. The Herat-Meshed main road crosses by the Tirlpul bridge 59 miles west of Herat. The river here is 100 yards wide. The Tirlpul bridge is of masonry, and has 6 arches; total length 180 yards; width of roadway, 11 feet. Near Zulfikar the water is taken off for irrigation, leaving a stream some 40 yards wide with a depth of about $2\frac{1}{2}$ feet and a sound gravel bottom. From Pul-i-Khatun to Daolatabad it is swelled by the waters of the Kashaf Rud, and is unfordable except at Shor Tapa and Naorozabad. At Sarakhs there is a ford 60 yards wide and $2\frac{1}{2}$ feet deep.

Below Sarakhs the Hari Rud is known as the Tejend. The It becomes deep and tortuous, and is unfordable Tejend. except in very dry seasons. The Central-Asian railway crosses it by a 2-span lattice girder bridge. North of the railway it gradually loses itself in the sands of Turkistan.

The Harhaz rises in the northern slopes of Demavend, The and falls into the Caspian near Amol, after a course Harhaz. of about 100 miles. In its upper portion it is a mere mountain torrent crossed by several wooden bridges. At Amol the main road from Teheran crosses by a masonry bridge of 12 arches. The stream at this point is broad, but not more than 2 feet deep in the dry season. In spring, when the snows melt on the Elburz Mountains, it becomes an unfordable torrent.

The Kashaf Rud, or Tortoise River, also known as The Ka- the Ab-i-Meshed, rises in the Binalud Mountains shaf Rud. near Meshed, and joins the Hari Rud at Pul-i-Khatun after a course of about 130 miles. In its upper reaches fords are plentiful, but below Meshed they are scarce, the easiest being that at Baghbagu.

B 2

From Darband to Pul-i-Khatun it is impassable in winter, but can be forded almost anywhere in summer. There are three stone bridges, two on the roads from Meshed to Chacha and Dushak, and the third near Kuzkan on the Meshed-Pul-i-Khatun road. The water, though brackish, is drinkable, except at Baghbagu.

(3.) The rivers that drain into the *hamuns* of Sistan belong rather to Afghanistan than to Persia. Mention may however be made of the Helmand, which forms the eastern boundary of Persian Sistan (see page 13).

The Aji
Chai and
the
Jaghatu.

(4.) Of the rivers that flow into Lake Urumiah the Aji Chai and the Jagbatu are the largest. The former rises in Mt. Savalan and flows through the plain of Tabriz. Its water is extremely salt. The latter rises near Sulimania, in Turkish territory, and drains the country south of the lake. Both are fordable, except during spring.

(5.) Of the rivers which lose their waters in the great salt deserts of central Persia, the most noteworthy are—

The
Hamadan
Rud.
The
Zindah
(Zenda)
Rud.
he Kur.

The Hamadan Rud, or Kara Su, which rises a few miles west of Hamadan, and flows past Kum to the Dasht-i-Kavir. Thirty-four miles from Hamadan it is crossed by a three-arched bridge on the Hamadan-Teheran road.

The Zindah Rud, which rises in the Bakhtiari Mountains, flows past Isfahan, and loses itself in a swamp 60 miles east of that town. It is crossed at Isfahan by three stone bridges, and is unfordable from March to June.

The Kur, or Bandamir, which rises in the Kuh-i-Dina, and flows into Lake Niris about 10 miles east of Shiraz. It is crossed near Persepolis by a three-arched masonry bridge on the Shiraz-Isfahan road, and 8 miles lower down by a dam. It is generally unfordable.

Lakes.

The lakes of Persia are few in number. Those which do exist are more of the nature of salt swamps,

where evaporation compensates for the absence of any outlet.

The largest of these is Lake Urumiah in the west of Lake Azerbaijan, which has a circumference of about 250 Urumiah. miles. Its waters are strongly impregnated with salt, so that animal life scarcely exists in them, and its shores are covered with a treacherous saline ooze, which renders approach difficult. A few sailing boats are employed on it in transporting grain for Tabriz. It has an average depth of about 20 feet.

The *hamuns* of Sistan (see p. 29) are of a similar Hamuns. character, but contain less water, and in the dry season their mud becomes encrusted with a thick layer of salt.

Lake Niris, or Bakhtegan, is a large shallow salt lake, Lake about 10 miles east of Shiraz, formed by the waters of Niris. the River Kur or Bandamir. It is about 60 miles long, with a breadth of from 3 to 5 miles. In a dry summer the water completely evaporates, leaving a salt ooze which can be traversed on foot.

The climate of Persia varies greatly according to the Climate. locality.

Along the shores of the Persian Gulf the heat in summer and autumn is intense, and during those seasons the ports become hot-beds of malaria, and are almost insupportable for Europeans.

At Bushire the highest temperature registered for the year 1903 was 108° F. in June, and the lowest 45° F. in December.

In winter, cold winds prevail along the gulf, and in spring, when the heated air of the deserts in the south-east begins to rise, a strong north-westerly wind sweeps down the valleys from the mountains of Kurdistan.

On ascending the plateau, the climate improves, and Fars, Isfahan, Kerman, and Yezd boast a delightfully pure air and a moderate temperature, which varies from 30° F. in December to 90° F. in June.

In Azerbaijan and the north-western districts the cold at high altitudes is very severe during winter, and heavy falls of snow are frequent. In December and

January, which are the coldest months, the temperature has been known to fall below zero F.

The low-lying portions of the provinces of Ghilan and Mazanderan, between the Elburz Mountains and the Caspian Sea, are notoriously unhealthy, owing to the damp, tropical heat of the plains, and the mass of dense vegetation which covers them.

In the deserts of Eastern Persia the heat of the sun is intensified by the absence of shade and by the scarcity of water, as well as by the presence of the all-pervading salt and sand. For the climate of Sistan, *see* page 30.

Rainfall.

In north-western Persia and along the shores of the Caspian Sea the annual rainfall considerably exceeds that in other parts of the country. The rainy season lasts from October to the end of April.

The following table, based on the observations of recent years, gives the mean annual rainfall at various places:—

Station.	Rainfall in Inches.
Resht	56·45
Urumiah	21·51
Astrabad	16·28
Bushire	13·36
Teheran	10·71
Meshed	6·43
Jask	3·24
Isfahan	3·23

Diseases.

The diseases most prevalent in Persia are malaria, cholera, typhus, typhoid fever, plague, dysentery, small-pox, measles, scarlet fever, ophthalmia, pneumonia, and venereal. Malaria is the scourge of Arabistan and of the shores of the Persian Gulf and Caspian Sea, but is almost unknown in the highlands of Western Persia. Epidemics of cholera are frequent in Teheran, Meshed, and other large towns.

Provinces.

The larger provinces are called *mamlikats*, the smaller *vilayets*.

For convenience of description, the various provinces which compose the Persian Empire may be grouped as follows :—

- (1.) North-Western Provinces.
- (2.) Northern and North-Central Provinces.
- (3.) Eastern Provinces.
- (4.) Southern and South-Western Provinces.
- (5.) Persian Gulf Provinces.

The province of Azerbaijan is under the governorship of the *Vali Ahd*, or Crown Prince of Persia. It is a mountainous region, intersected by deep ravines, with plateaux at intervals. Parts of it, notably the plain of Urumiah, are exceedingly fertile, and produce quantities of tobacco and cotton, besides grain, and fruits of many kinds. The inhabitants are chiefly Kurds and Turks, but a considerable proportion of Armenians and Nestorian Christians are to be found in the neighbourhoods of Tabriz and Urumiah. The Turks of this district supply most of the recruits for the Persian artillery and infantry.

The principal towns in Azerbaijan are :—

Tabriz.—The capital. Population 180,000. One of the largest commercial centres in Persia.

Ardebil.—Population about 3,000. A once populous city, but now half ruined.

Urumiah.—Population about 40,000, composed of Afshar Turks, Nestorians, and Jews.

Khoi.—Population about 60,000. A walled town situated in a fertile and cultivated valley.

Maragha.—Population about 15,000. Noted for its marble quarries.

Maku.—A village of about 400 houses, and the stronghold of Timur Pasha Khan, a semi-independent Kurdish chief.

Sujbulak.—Population 5,000.

The province of Kurdistan covers a large area, and is bounded on the north by the province of Azerbaijan, on the west by Turkish territory, on the south by Kermanshah, and on the east by the province of Hamadan. It includes the former small province of Ardelan.

The principal towns are:—

Sehna (*Senneh* or *Sinne*), the capital of Kurdistan, and the residence of the Governor of the Province; a flourishing town situated in a sheltered valley, which produces a good supply of fruit. It contains about 15,000 houses.

Banneh.—A town of about 900 houses.

Sakkis.—A town of about 2,000 houses. Chief industries, carpet-weaving and felt-making.

Kerman-shah.

The province of Kermanshah, lying to the south of Kurdistan, is one of the best grain-producing areas in Persia, and is also famous for its breeds of horses and mules.

The principal town is:—

Kermanshah, the capital. Population about 40,000.

An important trade-centre, from its situation at the junction of roads leading from Tabriz, Teheran, Isfahan, and Baghdad.

Northern and North-Central Provinces.

The Northern and North Central provinces include those of Ghilan and Mazanderan, and the large geographical area known as Irak Ajemi, which contains the smaller provinces or *vilayets* of Teheran, Isfahan, Kashan, Kum, Hamadan, Kazvin, Khamseh, Gerus, and Kharaghan.

Ghilan and Mazanderan.

The provinces of Ghilan and Mazanderan are contained in the strip of country, from 30 to 60 miles in breadth, which fringes the southern shore of the Caspian, and which is bounded on the south by the Elburz Mountains. These low-lying districts are covered with thick jungle, and the character and physique of the inhabitants are greatly affected by the unhealthy and relaxing climate.

Rice, cotton, and sugar are grown in considerable quantities in Mazanderan, and silk is cultivated in Ghilan.

The principal towns of Ghilan are:—

Resht.—Population about 30,000. Under the governor-generalship of the Shah's fourth son. Enzeli, the port of Resht (*see* page 46), is the principal landing-place in the north of Persia.

(22)

25

Lahijan.—Population 15,000. The chief centre of the silk industry.

Astara.—(See page 46.) A landing-place on the Caspian, to which goods for Tabriz are shipped from Baku and the Volga. An inferior caravan track connects it with Ardebil, whence a good mule road leads to Tabriz. There is no regular village or market.

The principal towns of Mazanderan are :—

Sari.—The old capital, which has now fallen into decay. Population about 8,000.

Barfurush.—The present commercial capital of Mazanderan. Population about 50,000.

Meshed-i-Ser.—A port of call on the Caspian for Russian merchant-vessels. Owing to its lack of depth, it can only be reached by flat-bottomed lighters into which passengers and cargoes are transhipped (see page 46). The village contains a Persian custom-house and about 160 small dwelling-houses.

Amol.—On the Harhaz river. Population varies between 40,000 in winter and 20,000 in summer. The trade-route from Meshed-i Ser passes through this town, whence there is a fairly good mule-track over the Elburz Mountains to Teheran.

The term Irak-Ajemi is used to denote a geographical, Irak- but not an administrative area. Its northern extremity Ajemi. consists of a stony plain, extending from the Elburz Mountains to the great desert of Central Persia. Further to the west the country is mountainous, varied in places with fertile spots and pleasant valleys, especially in the neighbourhood of Hamadan. In the southern districts desert predominates, but the country round Kashan is well cultivated, and produces excellent fruits, such as pomegranates, melons, figs, grapes, &c.

The principal towns in the *vilayets* (see page 24), included in Irak-Ajemi are :—

Teheran.—The capital of Persia. Population about 280,000, including many Armenians and Jews.

Various nomad tribes, such as the Shahsevan, and others, inhabit the country outside the city. The principal buildings in Teheran are the Palace of the Shah, the barracks, the arsenal, and the Legations of various foreign Powers, viz., Great Britain, Germany, Russia, France, Turkey, Austria, Belgium, Italy, Holland, and the United States of America. The town has been fortified on the Vauban system since 1871, but there is no masonry in the ramparts, and no guns are mounted.

Isfahan.—The old capital of the Persian Empire, and now one of the largest centres of commerce in the country, is well situated at the junction of the main routes leading from the Persian Gulf to Teheran. The population exceeds 80,000, and includes many Jews and Armenians. The city covers an area of nearly 20 square miles. The Zindah Rud, on which it stands, is spanned by five bridges, of which the largest and most famous is that of Ali Verdi Khan, 358 yards long, with a width of roadway of 30 feet. Opium is grown largely in the province of Isfahan, and, together with carpets, calicoes, and brass-work, forms one of the chief articles of export.

Kashan.—Population about 30,000; celebrated for its shawls and copper-ware.

Kum.—Population 12,000; tobacco and cotton are grown in the neighbourhood.

Hamadan.—The ancient Ecbatana; situated in a fertile plain covered with vineyards and orchards. Population about 20,000, including about 2,000 Jews. The Hamadan tanneries are the best in Persia.

Sultanabad.—Population about 4,000. An important centre of the carpet industry.

Kazvin.—At the junction of the roads leading to Teheran from Julfa and Resht. Population about 40,000. Copper, coal, and iron are found in the neighbourhood, and vines are extensively cultivated.

Zinjan.—Population 20,000.

The Eastern Provinces include the large province Eastern of Khorasan, with its smaller dependencies of Astrabad Provinces, and Sistan.

Khorasan is the largest province of Persia, its area Khorasan, being estimated at between 150,000 and 200,000 square miles. Its northern boundary is identical with the Russo-Persian frontier east of the Caspian (*see* page 13). Its eastern boundary coincides with the eastern frontier of Persia (*see* page 13). Towards the south it extends to the desert of Kerman, and in the west to the 56th degree of longitude.

The northern portion is occupied by various mountain ranges which connect the Elburz system with the Hindu Kush. The central and southern portions are completely taken up by the two great deserts, the Dasht-i-Kavir and the Dasht-i-Lut (*see* page 12). Cultivation is restricted principally to the valleys, which intersect the northern portion, and these are, fortunately, extremely fertile. The country round Meshed produces some of the finest crops in Persia, and, wherever irrigation can be carried out, even the plains can be cultivated with advantage. The population is composed largely of the descendants of the various races which from time to time have overrun the district.

For centuries Khorasan was a constant source of trouble to Persia, until some 25 years ago it was reduced to a state of comparative order by the late Shah.

The principal towns of Khorasan are :—
Meshed or *Mash-Had*.—The capital. Population about 70,000. The shrine of Reza, the eighth of the twelve *Imams*, brings thousands of pilgrims to this city every year, and constitutes the chief source of its prosperity (*see* p. 91). Situated at the junction of several roads, it is also an important strategical point, and a great centre for commerce. It contains both a British and a Russian Consulate. The principal industries are the manufacture of sword-blades, and the weaving of carpets and silk-stuffs.

Kuchan.—Population about 12,000. The centre of the best grain-producing area in the province.

Nishapur.—On the high road to Teheran. Population 11,000. Famous for its turquoise mines.

Karez.—A village on the custom-frontier of Khorasan, on the Meshed-Herat caravan route. It contains about 170 houses, a small fort, and a Russian quarantine cordon post of one officer and six Cossacks (*see* page 94).

Turbat-i-Haidari.—Population about 8,000. The residence of a British vice-consul, and the headquarters of the Russian quarantine cordon (*see* page 94). Is also an important trade centre.

Kain.—Once the capital of the district of that name. Population 20,000, 50 per cent. of whom, being *Saiads* (descendants of the Prophet) and *Mullahs* (priests), are exempt from taxation. Saffron is grown in considerable quantities in the neighbourhood. An old fort about 2 miles from the city occupies a commanding position against an attack from the east.

Bujnurd.—On the road from Kuchan to Astrabad, surrounded by mountains. Population about 8,000.

Kelat-i-Nadiri.—A strong natural fortress on the Persian side of the frontier east of Kuchan. It has been strengthened and improved at various times, and is now a Persian military post, with a garrison of about 400 men with 2 guns, but would require a large force to hold it effectively.

Sarakhs.—On the Tejend, consists of a new and an old town on opposite sides of the river. Both are small military posts, the former belonging to Persia and the latter to Russia. The Persian garrison consists of about 400 infantry, and 6 small guns of various patterns.

Astrabad. The province of Astrabad, situated at the south-eastern angle of the Caspian, differs little in its physical conditions from the provinces of Ghilan and Mazanderan with their rich vegetation and unhealthy climates.

Strategically it is closely connected with Khorasan, of which it has been fitly described as the "key," from its dominating position with regard to the principal approaches from the west. The only town of any size or importance is the capital, *Astrabad*, which has a population of about 8,000, mostly Turkomans.

The extraordinary fertility of the soil attracts emigrants from all parts of Persia, and even from Afghanistan. The local industries are soap-boiling of a primitive kind, the manufacture of gunpowder, and the making of a rough felt. Considerable quantities of wheat, barley, and rice are grown in the province. For a description of the Bay of *Astrabad* and the port of *Gaz* see page 45.

At *Gumbat-i-Kabus*, on the left bank of the River *Gurgan*, the Russians have a regular fortified post in Persian territory. It is garrisoned by some 300 to 400 men, said to belong to the Turkoman irregular brigade.

The region known as *Sistan* lies to the south-east *Sistan*. of Khorasan, and consists partly of Afghan and partly of Persian territory. The dividing line between the two was fixed in 1872 by Sir F. Goldsmid as following the old bed of the *Helmand* to the *Band-i-Sistan*, and thence running south-west to *Kuh-i-Malek Siah*. In consequence, however, of the river having altered its course, the boundary is again under dispute, and is being delimited (see page 13).

Persian *Sistan* comprises the low-lying swampy region which receives the waters of the *Helmand*, the *Harut*, and other rivers, and appears to have once been a lake, but is now partially drained and cultivated, so that the original lake has resolved itself into a large depression, part of which is known as the *Naizar*, or reed-bed, the deeper portions being called *hamuns*. These, according to the season of the year and the state of the floods, are converted alternately into lakes, swamps, and dry land. The *Naizar* is connected with the *Hamun-i-Helmand* by a thick belt of reeds, which is flooded during the rainy season and overflows into the *Hamun-i-Helmand*, forming one vast salt lake, which for the greater part of the year is almost impassable without the aid of boats or rafts.

The God-i-Zirreh, in Afghan Sistan, is occasionally flooded by the overflow from the *hamuns*, but usually presents the appearance of a desert encrusted with salt.

The cultivated area of Persian Sistan extends along the left bank of the old bed of the Helmand, from Takht-i-Shah, its northern limit, to Band-i-Sistan, about 40 miles to the south, and from east to west from the Helmand to the Hamun-i-Helmand, a distance of about 35 miles.

It is divided into five sub-districts known locally as—

- (a.) Miankangi or "low ground between" the branches of the Helmand.
- (b.) Pusht-i-Ab, signifying "beyond the river."
- (c.) Sheb-i-Ab, or "southern water."
- (d.) Mahal-i-Sharaki } named after the principal
- (e.) Mahal-i-Nahrui } tribes inhabiting them.

The Miankangi is covered with tamarisk jungle, and is liable to floods.

The Pusht-i-Ab includes all the villages west of the Rud-i-Parian, and north of a line from the Band-i-Parian to the Hamun-i-Helmand.

The Sheb-i-Ab district, in the extreme south-west, is the most fertile portion of the inhabited area.

The Mahal-i-Sharaki includes all the land enclosed between the villages of Dashtak, Burs-i-Sarband, Malik-Haidari, Deh Bozi, Gori, and Bahramabad.

The Mahal-i-Nahrui is bounded on the east by the Helmand from the Band-i-Sistan to the Band-i-Parian.

The whole of the inhabited area is generally flat, but here and there a few mounds, called *tapa*, rise abruptly from the plain, and afford points from which good views of the surrounding country may be obtained.

The Kuh-i-Kwajah is a conspicuous, flat-topped, isolated hill to the west of the cultivated area on the edge of the *Naizar*, and is a useful landmark. Except in the Miankangi district, the country is almost entirely devoid of trees.

Climature.

The great feature of the Sistan climate is the north wind, which blows violently, and with little intermission, throughout the summer and winter, tempering the heat

in the former season, but increasing the cold in the latter. The only times which are free from these gales are short periods in April and May, and again in November and December.

The temperature in summer during June and July reaches a maximum of 110° F.; but in winter it has been known to fall as low as 23° F. in January, the severity of the cold being intensified by the wind, and necessitating the use of thick, warm clothing.

The swamps breed swarms of flies, some of which are fatal to horses. Malaria, though prevalent, is undoubtedly kept down to a certain extent by the gales. The dust storms in the dry season are very trying.

The rainy season lasts from December to March, during which period there are usually some half dozen falls of a moderate nature.

There are no good roads in Sistan, though there are many tracks used by the natives. The canals, with which the country is intersected, are crossed either by fords, or occasionally by bridges of sufficient strength to bear a single loaded camel. If these canals were bridged, there would be nothing to prevent wheeled artillery or transport from moving freely over most of the cultivated area, except through the tamarisk jungles of the northern district.

The cultivated area is intersected by a network of canals, constructed for purposes of irrigation. They are fed from the waters of the Helmand and its various branches.

The Helmand proper irrigates Afghan territory only. The Rud-i-Sistan irrigates the southern and south-western districts, while its two branch canals irrigate the north-western district, and the Rud-i-Parian the northern or Miankangi district.

The majority of the canals have a maximum depth of not more than 6 feet; the average breadth of the larger ones is from 20 to 25 feet, and of the smaller from 12 to 15 feet. Except in the Miankangi district, there is an entire absence of timber for bridging purposes. The canals are not used as a means of communication, but

there is nothing to prevent the larger ones from being navigated by narrow boats or rafts drawing not more than 2 feet 6 inches of water. The wood of the tamarisk trees is not buoyant, so that rafts, if made from it, must be kept afloat by artificial means. A force proceeding to Sistan should be provided with Berthon boats, and materials for constructing rafts.

Wells. Water can be found almost anywhere in Sistan at a depth of from 5 to 15 feet below the surface, and the soft soil renders the sinking of wells a comparatively easy matter.

Villages. The majority of villages consist of huts of wattle and daub, and are frequently moved from one locality to another. There are also stationary hamlets built of mud or sun-dried bricks, of which the principal are :—

Nasratabad.—The capital of Sistan. Population about 300 families. A large village, fortified by mud walls. The garrison usually consists of a battalion of Persian infantry.

Muhammadabad.—In the Sheb-i-Ab district, containing about 150 well-built houses.

Luf.—A large village of 200 houses.

Sekuha.—A walled village of 300 houses. The old fortifications are much decayed. The usual garrison is 50 Persian infantry.

Aliabad.—A well-built village of 250 houses, containing a good supply of water, and many fruit gardens, and the residence of the Chief *Mullah* of Sistan. The surrounding land in the immediate vicinity is exceptionally well cultivated for Sistan.

Banjar.—The largest village in Sistan. It contains about 800 houses. The surrounding country is highly cultivated.

Burj Afghan.—Contains about 95 houses, and is situated on the main route from Nasratabad to northern Sistan.

Warmal.—The most southern point of the cultivated area, contains about 150 well-built houses with fruit gardens.

(26)

33

The population of Sistan consists of the sedentary inhabitants of villages, and of nomads. The total number is estimated at 100,000. It represents a variety of tribes or clans, of very mixed race, poor physique, and of no military value. The borders of the *Naizar* and *Hamun-i-Helmand* are peopled by a tribe called Sayads, who gain a livelihood by netting wildfowl, in the pursuit of which they employ rafts, called *tutins*, made by tying together bundles of reeds. A large percentage of the population consists of Baluchis.

Wheat and barley are grown in considerable quantities in Sistan, and are exported to Kain, Kerman, and Baluchistan, to the extent of some 18,000 tons annually. The ground is very fertile, and the supply of water is ample, but the methods employed by the Sistanis are so primitive that the natural resources of the country are not turned to the best advantage. The manufacture of *ghi* (clarified butter) is also an important local industry.

The following is a recent estimate of the animal resources of Sistan:—

Horses	-	-	1,000
Camels	-	-	2,140
Donkeys	-	-	9,700
Cattle	-	-	48,000
Sheep and goats	-	-	250,000

Mules are not bred or kept by the native population.

The present Governor, or Hashmat-ul-Mulk, is the eldest son of the late Amir of Kain, of which district Sistan is, for administrative purposes, a sub-division.

The transfer of the Customs administration to the hands of Belgian officials (*see* p. 89) has deprived the Hashmat-ul-Mulk of much of his former influence, his power being considerably curtailed by the consequent reduction of his revenue. For further details, *see* "Notes on Persian Sistan 1903," and "Military Report of the Nushki-Chagai-Western Sinjarani Country, 1904," both compiled in the Intelligence Branch, Simla.

i 33481.

C

Southern and South-Western Provinces. Luristan is a term frequently used in a general sense to denote the tract of mountainous country extending from the Turko-Persian frontier on the west to the borders of Isfahan and Fars on the east, and from the districts of Kermanshah and Hamadan on the north to the plains of Arabistan on the south. It is also applied in a special sense to a small district to the north-east of Pusht-i Kuh.

*Luristan. The provinces of Luristan and Arabistan were, until recently, combined under the jurisdiction of one Governor-General, the Salar-ed-Dowleh, third son of the Shah. In June 1904, this prince was deposed by his father, who divided his province into three separate provinces, now called Luristan, Burujird, and Arabistan, each under its own governor.

In its general sense Luristan embraces the territories occupied by various branches of the Lur tribes, of which the most important are the Bakhtiari (see page 85), inhabiting the mountains west of Isfahan; the Feili Lurs, confined to a narrow strip on the western frontier to the south of Khanakin; the Kuhgelu south of the Bakhtiari; and the Mamaseni still further to the south-east towards Shiraz.

The northern extremity of the province is drained by the River Diala, which flows into the Tigris. The mountain-torrents of the eastern slopes drain into the great salt desert of Central Persia, while the remainder of the province is drained by the Karun and its tributary the Ab-i-Diz.

The Ab-i-Diz divides the Bakhtiari country from that of the Feili Lurs, who are not on good terms with their neighbours. All these tribes possess the usual characteristics of highland races. They are brave, hardy, warlike and crafty, and resent intrusion into their country, thereby impeding commercial enterprise.

The valleys between the parallel chains of mountains, which traverse the province from north-west to south-east, afford rich and well-watered pastures for the flocks and herds of the nomad tribes.

* Not to be confounded with Laristan (see pp. 37, 38).

(27)

35

The hill sides are mostly covered with shrub oak, but the Bakhtiari country is particularly rich in timber trees, of which the oak is indigenous, while the ash, walnut, plane, elm and beech are cultivated near the villages.

The climate varies with the altitudes, and the inhabitants change their quarters accordingly, moving to the valleys in winter and gradually seeking higher pastures as the temperature rises.

The region known as Chahar Mahal is under the Chahar governorship of Isfahan, but is farmed to the Bakhtiaris. Mahal. It is an unusually fertile and grain-producing area, but affords little pasture-land.

The opening up of the trade route from Ahwaz to Isfahan by Messrs. Lynch Brothers (*see* page 50) has brought British interests in touch with the Bakhtiaris, the most friendly disposed of all the Lur tribes.

The principal towns in the district inhabited by the various Lur tribes are :—

Khoramabad.—On the Dizful-Burujird road. Population 2,000. The seat of government in Luristan, and the residence of the Governor of Pish-Kuh. The present town stands at the foot of a solitary rock, crowned by a ruined fort.

Burujird.—Population 17,000. In the north-east corner of the Bakhtiari country. An important trade-centre, owing to its situation at the junction of several roads. The chief local industry is the manufacture of printed calico.

The province of Arabistan comprises the level country Arabistan. watered by the lower Karun, bounded on the north by the Bakhtiari Mountains and on the south by the Persian Gulf. It includes the district formerly known as Khuzistan, and coincides with the ancient Elam. The inhabitants, numbering nearly 200,000, are mostly Arabs, descendants of the seventh century conquerors of Persia, but many have intermarried with the Persians.

The headquarters of the Governor-General are at Shuster, on the Upper Karun.

c 2

The principal towns are:—

Shuster.—Population about 8,000, mostly Arabs. The town stands on an eminence between two branches of the River Karun. The climate is extremely hot and unhealthy in summer. A small steamer, worked by Messrs. Lynch Bros. under arrangements with the Persian Government, runs from Ahwaz to Shuster in connection with the Mohammera—Bandar Nasri steamer. No conveniences, however, exist at Shuster for landing or warehousing.

Dizful.—On the Ab-i-Diz, which is here spanned by an imposing bridge of stone and brickwork 30 yards long and of great antiquity. Population about 16,000. The town contains a large number of flour-mills, and indigo is cultivated in the neighbourhood to a considerable extent. Some 20 miles to the south-west are the ruins of the ancient city of Susa.

Ahwaz.—Population about 4,000. On the left bank of the Karun. The rapids, $1\frac{1}{2}$ miles below the town, interrupt navigation and are circumvented by a tramway from Bandar Nasri to Ahwaz. (See p. 52.)

Mohammera.—(See p. 43.)

Persian
Gulf
Provinces.
Fars.

The province of Fars is divided into 22 districts, of which the principal are Behbahan, Kazerun, Abadeh, Dehbid, Firuzabad, Arsinjan, and Abarkuh. The northern and north-western districts are physically and geographically more closely connected with the province of Luristan than with the Persian Gulf Provinces (see p. 34).

Fars may be regarded as the cradle of the Persian Empire, which derives its European name from that province, the Greek Persis and Fars being variations of the same word. On the north it extends to the deserts of Irak Ajemi, and on the south to the Persian Gulf, its eastern and western neighbours being respectively the provinces of Kerman and Arabistan. The greater part of the

province is occupied by mountain ranges, the continuation of the Kurdistan and Luristan systems, the only exception being a narrow strip of low-lying coast to the south of Behbahan. The Governor resides at Shiraz.

The nomad population of the province consists of Turks, Arabs, and a few Lurs. The urban population is chiefly Persian. The plateaux to the east of Shiraz contain salt lakes, which receive the streams from the surrounding mountains.

The principal towns are :—

Shiraz, the capital, population about 50,000, situated in a plain completely surrounded by mountains. It contains many monuments of its former greatness, and is celebrated for its wines, which are made from the local grape.

Kazerun.—On the Bushire-Shiraz road. Population from 3,500 to 4,000. Contains plentiful supplies of fuel, forage, and good water.

Firuzabad.—On the most easterly of the routes leading from Bushire to Shiraz. Population 2,000. Considerable quantities of fruit, rice, and barley are grown in the neighbourhood, which is very fertile, and large numbers of donkeys are obtainable.

Behbahan.—On the road leading from Shiraz to Shuster. Population about 5,000. The plain of Behbahan is very fertile, but the water supply is not good.

Bushire.—(See page 42).

The province of Laristan occupies the plateau Laristan, bordering on the Persian Gulf between Bushire and Bandar Abbas. It provides winter pastures for the Kashkai nomads, and produces indigo and various kinds of gum.

The principal town is *Lar*, an important road-centre of about 7,000 inhabitants.

Lingah is the port of Laristan (see page 43).

The province of Yezd is situated on the south-western Yezd. border of the Dasht-i-Kavir. It is traversed from

south-east to north-west by the trade route from Bandar Abbas to Kashan and Teheran. The principal town is *Yezd*, a thriving city with a population of about 45,000, which includes many Jews and Gabrs. It lies in a sandy plain bounded by mountains on the north and south. The local industries are the cultivation of opium and cotton, and the weaving of carpets.

Kerman.

The province of Kerman is bounded on the east by part of Sistan and Baluchistan, on the west by the province of Fars, on the south by parts of Laristan, Mekran, and the Persian Gulf, and on the north by Khorasan.

The principal towns are:—

Kerman, the capital, situated at the junction of the trade routes leading from Bandar Abbas and Baluchistan to Teheran and Meshed. Population about 75,000, including some 1,500 Gabrs. It contains both a British and a Russian consulate. Wheat, barley, and maize are grown in the neighbourhood in sufficient quantities for exportation, but frequent droughts interfere with the regularity of the crops.

Bam.—The capital of the Bam-Narmashir district. Population 13,000. An important station on the Central Persian telegraph line (*see* p. 65). Supplies of grain and dried fruits are plentiful, and the water from the *kanats* is good.

Bandar Abbas.—(*See* p. 40.)

Regan.—At the junction of the trade routes from Bandar Abbas and Chahbar. Population 500. Supplies and good water are obtainable.

Persian
Baluchi-
stan and
Mekran.

Persian Baluchistan is under the jurisdiction of the Governor-General of Kerman. It is divided into the following districts:—

- (1.) Sarhad, in the north.
- (2.) Sarbaz, in the west.
- (3.) Bampur, in the east.
- (4.) Mekran, in the south.

Sarbaz is further sub-divided into the frontier districts of Irafshan and Bampusht.

The revenue of Persian Baluchistan, as collected in 1902, amounted to over 14,000*l*.

There are 14 Government forts in Persian Baluchistan, of which the principal are Ladis, Bampur, Fahraj, Aptar, and Isfaka. The walls are of mud, and incapable of resisting modern artillery. The garrison of the province, called the Army of Kerman, consists of 1,100 cavalry, 2,400 infantry, and 24 guns, mostly unserviceable. In addition to the Government forts there are many others belonging to the various tribes which inhabit the district, in fact almost every village may be described as a mud fort. The climate along the coast is extremely hot and unhealthy. Malaria and diseases of the eye and skin are prevalent. The inhabitants of this portion of the province subsist almost entirely on fish, a fact which is mentioned by Herodotus.

The principal towns, &c., are:—

Ladis.—The principal village in Sarhad. Contains about 60 houses and a small fort. Is situated in a well-watered, fertile district.

Kasrkhand.—Population about 1,500. A large village in Sarbaz surrounded by date groves.

Bampur.—The capital of the Bampur district. Population about 2,500. An important road centre, and a Persian fort. The usual garrison consists of 50 cavalry, 50 artillery, and 300 regular infantry. The fort is incapable of offering serious resistance to modern guns. The climate is unhealthy and the water supply indifferent.

Geh.—An important village of about 600 huts. Believed to have formerly been the capital of Mekran.

Chahbar.—(See p. 44).

Gwetter.—(See p. 45).

CHAPTER IV.

PORTS AND HARBOURS.

The
Persian
Gulf.

The Persian Gulf lies between the parallels of 24° and 30° N. latitude, and the meridians 48° and 57° E. longitude. Its length from north-west to south-east is about 460 miles, and its average breadth about 120 miles, except at its entrance, where the distance from Musandam Point to the Persian shore is only 29 miles.

On the Persian side of the gulf, the coast being mountainous, the water is deeper near the shore than on the Arabian side, which is flat and low, with reefs and shoals extending a considerable distance from it for nearly its whole length. The head of the gulf is bordered by the low alluvial tract comprising the delta of the Euphrates. Supplies and fuel on the shores of the the gulf are scarce, and fresh water, except after the winter rains, is difficult to obtain, and generally of bad quality. Perhaps the worst feature of the gulf is the unhealthiness of the climate (*see p. 21*).

The Persian coast, though extremely hot in summer, is less trying to Europeans than the Arabian, and the temperature at the head of the gulf is much lower than at the entrance.

Persian
Gulf ports.

Bandar Abbas, on the northern shore of the entrance to the Persian Gulf, 13 miles due north of Kishm town, is one of the principal ports of the Persian Gulf both from a commercial and strategical point of view. The population, composed of Arabs, Persians, Baluchis, and Hindu merchants, varies between 9,000 in winter and 4,000 in summer. The trade is chiefly in British hands. The value of the imports in 1903 amounted to 449,145*l.*, of which 72 per cent. were supplied by the United Kingdom

and India. Bandar Abbas is connected with the interior of Persia by five caravan routes, of which the most important are those leading to Teheran *viâ* Kerman, and to Khorasan *viâ* Sistan (*see* pp. 53, 56). There is no proper harbour. The roadstead is exposed to the south-east wind, which causes a heavy surf, but is sheltered from other winds by the islands of Kishm, Larak, and Ormuz. There is a wharf in front of the custom-house, but landing is difficult at low water.

Anchorage for vessels of moderate draught can be obtained 2 miles from the shore, in 4 or 5 fathoms. Larger vessels must lie 4 miles out.

Clarence Strait, between Kishm Island and the mainland, from 1 to 7 miles in width, affords a well-sheltered roadstead, and is of sufficient depth to admit large vessels, from its entrance off Bandar Abbas, to as far west as Basidu. In conjunction with Bandar Abbas, and the adjacent islands of Kishm and Ormuz, Clarence Strait possesses many of the necessary qualifications for a naval base, and for a strong strategical position commanding the entrance to the Persian Gulf. Kishm Island is 60 miles long, and has a breadth of from 6 to 19 miles.

Kishm town, at the eastern extremity of the island, has a population of about 6,000. An old Portuguese fort is still standing, but there are no modern defences. The water supply, from seven reservoirs and three wells, is liable to fail in dry seasons.

Basidu, at the north-west corner of Kishm island, has been a British concession since 1820. It has no defences, and most of the larger buildings are in ruins. Population about 350. It is of no practical value for naval purposes except as a harbour for small vessels. The water supply is drawn from three reservoirs, but is limited.

Laft Point, 32 miles west of Kishm town, on the north side of the island, provides good anchorage, sheltered from all winds, in deep water close to the shore. A supply of water is probably easily obtainable, and the ground lends itself to defence. On the other

hand, the tidal streams are strong, and the climate is excessively hot in summer.

Henjam Island, off the south of Kishm, would make a useful signal-station, but is unsuitable for a defended post, the anchorage being bad, and the tidal streams strong. A telegraph station was re-established on the island in April 1904 by the Indo-European Telegraph Co., and it is intended to connect it with Bandar Abbas.

Ormuz Island, 10 miles E.N.E. of Kishm town, and three miles from the Persian shore, affords good anchorage to the east of the old Portuguese fort, sheltered from all but the north-east winds. The island is approximately circular, with a diameter of 4 miles. Dried fish and salt are the chief resources. The water is unfit to drink, so that, unless wells could be sunk, condensers would be necessary to supply troops.

Larak Island, about 7 miles south-east of Kishm town, possesses an old Dutch fort, but no modern defences. The anchorage is too exposed to be of much practical value.

Bushire.—The chief seaport of Persia, and the headquarters of the British Political Resident in the Persian Gulf. Population about 15,000. The town lies at the north end of a peninsula, which is connected with the mainland by a neck of swampy ground some 12 miles long and 3 to 6 miles wide, which would be a serious obstacle to troops. The harbour consists of a belt of deep water to the west and north-west of the town. There is anchorage for vessels drawing up to $19\frac{1}{2}$ feet about $2\frac{1}{2}$ miles N.N.W. of the town. On the east side of the town is an embankment, which can be reached by shallow-draught vessels and native *baghalas*, by means of which passengers and cargoes are landed from ocean steamers. Piers and wharves do not exist. There are no modern defences against an attack from the sea, but on the land side the old town wall, about 30 feet high and 5 to 6 feet thick, is pierced for musketry.

The water supply is brought into the town from wells outside, there being none in the town itself. The cable station is at Reshire, 5 miles to the south. For

cables and inland communications *see* pp. 64 and 48 respectively.

Chiru is a village on the mainland, opposite Hinda-rabi Island. The anchorage is reported to be good and sheltered, except from the south-east. There is a fair supply of water. In conjunction with Hinda-rabi Island, the place might be converted into a small naval station.

Fao, on the right bank of the Shat-el-Arab, is in Turkish territory, but may be mentioned here as being the cable station at the head of the Persian Gulf (*see* p. 64). The village contains about 400 inhabitants, and the stone fort is garrisoned by a detachment of Turkish troops, but has no modern defences. The landing-place is a rough stone jetty.

Lingah, the port of Laristan, was once an important commercial distributing centre, but its trade is now rapidly declining. Pearl fishing is the principal local industry. The value of the imports in 1903 showed a decrease on that of 1902, chiefly owing to the fact that many pearls were shipped direct to India from the Arabian coast in preference to sending them *via* Lingah. Population about 12,000, chiefly Arabs. The harbour has a breakwater, and is sheltered from all but the south-west winds. Anchorage in 5 fathoms 6 cables off shore. The water supply is good, and provisions are procurable.

Mughu is a small fishing village on the bay of the same name. The anchorage is good, and sheltered from the north-westerly and south-easterly gales. A coast road connects the village with Lingah. There are no built landing-places.

Mohammera is on the north bank of the Hafar Channel, which connects the Karun with the Shat-el-Arab (*see* p. 17). Population about 6,000. The Arab Sheikh of Mohammera, though nominally a Persian subject, is virtually independent. His territory stretches along the coast from the Shat-el-Arab eastwards to within a few miles of Dilani. On the north-east it marches with that of the Bakhtiaris from Band-i-Kir to Ram Hormuz, and on the east with that of the Kuhgehl tribe. He exercises control over the once-powerful tribe of Káb

Arabs, whose headquarters are at Felahieh. His position was, however, considerably weakened when, in 1902, the control of the customs of the port was transferred from his hands to that of the new Belgian administrators, in exchange for a subsidy. Vessels can lie off the town, close to the bank, but cannot be brought alongside the wharf. Cargoes &c. are transhipped to the river steamer of Messrs. Lynch Brothers, and conveyed thus to Bandar Nasri. The Karun at Mohammera is swift and full of cross-currents, so that large vessels usually anchor in the Shat-el-Arab. There are no modern defences.

Khor Musa, an inlet east of the mouth of the Shat-el-Arab, has good depth, and possesses qualifications for a useful landing-place for troops and a defensible naval station, but no pier or landing-stage exists at present, and no practicable route leading inland has as yet been discovered.

Ports
on the
Arabian
Sea.

Chahbar is the port of Persian Mekran. Population about 3,000, chiefly Baluchis and Hindu merchants. The trade is considerable. The bay is $7\frac{1}{4}$ miles wide at its entrance, and 10 miles from north to south, but lacks deep water near the shore, and is exposed to the south-east monsoon. Extensive dredging operations and breakwaters would be required to render Chahbar suitable for a large naval station. There are no modern defences, but 300 yards from the shore is an old square fort, near which a sandy beach provides an easy landing-place. There is also a good landing-place for troops and stores opposite the telegraph station. The water supply from wells south of the fort is good, and supplies are obtainable. The telegraph station, on the land line from India to Cape Jask (*see* p. 64), $\frac{1}{2}$ mile south of the town, is guarded by a detachment of 50 men of an Indian regiment, under a native officer. For roads leading inland, *see* p. 58. The climate is comparatively cool, and healthy for Europeans.

Cape Jask is an important British cable station (*see* p. 64). The village of Jask lies $6\frac{1}{2}$ miles north of the cape, and about 1 mile from the shore. Population about

200 males. On the east side of the cape there is an open anchorage for deep draught vessels, and on the west side for vessels of moderate draught. There are no piers or built landing-places, and in heavy weather landing is impossible. The water supply is drawn from wells and tanks, which are dependent on the rainfall. There are no roads leading to the interior. The telegraph station has a guard of 50 men of an Indian regiment, and could easily be defended, except against artillery. In the village is an old mud fort with walls 24 feet high, on which are mounted a few obsolete guns.

Gwetter, on the bay of the same name, 60 miles east of Chahbar, is a small village with a population of about 250. The Perso-Baluch frontier divides the bay in half, leaving the village and the mouth of the River Dashtiari in Persian territory. There is no harbour. The roadstead is shallow and exposed, and unsuitable for large vessels.

Gwadur, although east of the Persian frontier, may be mentioned here as a terminus of routes from Sistan (see p. 57), and an important cable and telegraph station. It belongs to the Sultan of Maskat. Population about 5,000. There are no jetties or built landing-places. Cargoes are landed on the beach from surf-boats, lighters being unable to reach the shore. The best anchorage is east of Gwadur Head, $2\frac{1}{2}$ miles from the shore. Landing is impossible in rough weather. The water supply from wells is fairly good.

Bandar-i-Gaz is the port of Astrabad.

Caspian
ports.

The village of Gaz consists of a few small huts and sheds, with a caravanserai and a Persian custom-house. The bay of Astrabad, on which it is situated, is a stretch of shallow water 40 miles long and about 8 miles in breadth, with a maximum depth of 3 fathoms. It is protected from the north by a tongue of land, called the Mian Kaleh, at the eastern extremity of which are three islands. The Russians have maintained a small naval station on the island of Ashurada since 1838. The Caucasus and Mercury Steam Navigation Company (a Russian enterprise) run a weekly service of steamers to Bandar-i-Gaz from Baku *via* Krasnovodsk.

Since the opening of the Trans-Caspian Railway, the port of Gaz has lost much of its commercial value.

Meshed-i-Ser, in Mazanderan, is a fishing village of about 160 small houses.

The roadstead is exposed to all northerly winds, and it is dangerous for ships to approach the shore within 2 miles on account of the surf and the shallowness of the bay. Cargoes are landed from flat-bottomed boats.

Enzeli is the regular landing-place for passengers and cargoes entering Persia from Baku *viâ* the Caspian. The Caucasus and Mercury Company run a bi-weekly service in summer and a weekly service in winter. The village is situated at the extremity of a spit of sand on the western side of the entrance to the *Murdab*, a shallow lagoon some 7 miles in diameter. Vessels drawing more than 8 feet of water can only approach to within 1 mile of *Enzeli*. The remainder of the journey is performed in flat-bottomed surf-boats and small launches, which cross the *Murdab* and land their freights at *Pir-i-Bazar*, the port of *Resht*. The bad weather, which not infrequently occurs in the autumn and winter, makes landing impossible even in surf-boats and launches; steamers consequently often return with their passengers and freights to Baku, and wait for a more favourable opportunity. A cart-road from *Pir-i-Bazar* to *Resht* joins the Russian *Resht-Teheran* carriage-road, the value of which is, however, considerably diminished by the defects of *Enzeli* as a port. The Russian Government has recently obtained permission to undertake dredging operations at the mouth of the lagoon, and to construct a breakwater to facilitate the landing of passengers and cargoes. *Kazian*, a village on the east of the entrance to the lagoon, is also to be connected with *Resht* by a carriage-road, which has been commenced.

Astara, a landing-place for goods proceeding to *Tabriz viâ Ardebil*, is but little used, owing to the shallowness of the bay and the difficulty of approach. The roadstead is open and exposed to the north winds. It is a port of call for the Caucasus and Mercury mail and passenger steamers plying between Baku and *Enzeli* (*see above*).

(33)

47

CHAPTER V.

COMMUNICATIONS.*

With the exception of some three or four short carriage-roads mentioned below, constructed mainly by Russian enterprise, there are practically no roads in Persia which, as regards their suitability for wheeled traffic, can, according to European standards, be described as "good." Roads.

Such as exist are either caravan or mule-tracks, which have been to some extent improved for commercial purposes by a slight expenditure of labour, or else mere natural paths worn smooth by generations of horses, camels, mules, and donkeys. Long stretches of sand, rough mountain-tracks covered with boulders and loose jagged stones, slippery rocks, narrow defiles, and steep gradients, are the characteristics of most Persian roads.

The numerous irrigation cuts, which intersect the cultivated portions of the country, would prove serious obstacles to troops moving off the roads.

Except on the better class of roads, where carriages and fourgons are used, the usual method of travelling is either by "*chapar*-riding," or by caravan.

The former is the posting system, by which relays of fresh horses are obtained at the *chapar-khanas*, or fixed stations, along the route. By the latter method, which is less speedy but more independent, the transport animals and caravan equipment are hired or purchased for the whole journey.

The charge for post-horses when *chapar*-riding is equivalent to about 2*d.* per mile for each horse. A single traveller with a servant and baggage requires at least four horses. Of late years the introduction into Teheran by the Russians of carriages has led to their more extensive use on some of the smoother main tracks, other than main roads, such as those from Teheran to Hamadan, Meshed, Kashan, Kerman, Ispahan, and even further

* For details regarding routes, see "Routes in Persia," "Routes in N. and S. Baluchistan," and "Report on the Nushki-Chagai-W. Sinjarani Country," all compiled in the Intelligence Branch, Simla.

south to Kumishah. The *chapar* service has, consequently, been proportionately neglected, and in some places has entirely fallen into disuse, while in others the riding horses are inferior to those formerly employed.

The *takhtrawan*, or mule-litter, is sometimes used by Persians when travelling.

The main routes through Persia may be classified under two headings, the Western and Eastern systems, according as they converge upon Teheran or Meshed. To these may be added such roads as connect the two systems laterally from east to west, regarding which it is important to note that the great desert areas of the Dasht-i-Kavir and Dasht-i-Lut constitute an almost impassable barrier between the two road-systems, and confine lateral communication to the more mountainous regions which lie along the northern and southern frontiers of Persia (see pp. 12, 15).

Western
system.

The principal routes from the Persian Gulf to Teheran are :—

I.—From BUSHIRE to TEHERAN, *viâ* Shiraz and Isfahan.
761 miles. 37 stages.

Sections.

(a.) Bushire to Shiraz, *viâ* Kazerun. 178 miles.
10 stages.

This section, though used as the post-road, is a narrow mule-track, crossing a succession of mountain ranges by steep and difficult passes which are impracticable for artillery or wheeled transport. Supplies are procurable at Kazerun and Shiraz. Water is obtainable throughout.

An alternative route *viâ* Firuzabad, 205 miles, is longer, but less difficult. Good water throughout, except near Ferashband.

(b.) Shiraz to Isfahan *viâ* Dehbid and Abadeh.
312 miles. 14 stages.

Practicable for all arms. Regularly used by camels and mules. Water is plentiful throughout, except between Ab deh and Surmek. Supplies are scarce, except in the larger towns and villages.

(c.) Isfahan to Teheran, *viâ* Kashan and Kum.
271 miles. 13 stages.

A good post-road, practicable for all arms throughout. From Kum to Teheran, a distance of 92 miles, it has been improved into a carriage-road. Supplies and water are abundant.

II.—From the mouth of the SHAT-EL-ARAB to TEHERAN, *viâ* the Tigris, Baghdad, Khanakin, Kermanshah, and Hamadan. 1,079 miles (*viz.*, 567 miles by water, and 512 miles or 33 stages by road).

Sections.

(a.) From the mouth of the Shat-el-Arab to Basra.
67 miles (by river).

The Persian Gulf mail steamers run regularly from Karachi to Basra, to which point the Shat-el-Arab is navigable, under favourable conditions, for vessels drawing 17 feet of water.

(b.) From Basra to Baghdad. 500 miles (by river).

The Euphrates and Tigris Steam Navigation Company's paddle-steamers complete this journey in about five days. The river is navigable for vessels drawing 5 feet in the rainy season, and 3 feet in the dry.

(c.) Baghdad to Khanakin. 94 miles (by road). 6 stages.

A much used trade-route, and is also traversed annually by many thousands of pilgrims visiting Kerbela. It crosses the River Diala at Bakuba by a swinging bridge of boats. River 60 yards wide. The pass over the Jebel Hamrin is at present only fit for pack animals, but otherwise the road in dry weather is fit for wheeled traffic.

Supplies and water are obtainable throughout.

(d.) Khanakin to Kermanshah. 123 miles. 9 stages.

Across the Zagros Mountains by the Tak-i-Ghirreh Pass (6,000 feet), which is difficult, but not impracticable for wheeled artillery. Roadway 10 to 20 feet wide. Between the pass and Kerind the road is rough, but improves on approaching Kermanshah. Supplies are scarce in winter, but water is abundant.

(e.) Kermanshah to Hamadan. 103 miles. 6 stages.

A rough road, impassable in places for wheeled transport. Supplies and water plentiful.

(f.) Hamadan to Teheran *viâ* Pik.
187 miles. 12 stages.

Practicable for all arms and for wheeled transport.
Water plentiful and supplies abundant.

III.—From the mouth of the SHAT-EL-ARAB to TEHERAN,
viâ the Karun, the Lynch Road, and Isfahan.
709 miles (*viz.*, 163 miles by water, and 546 miles
or 33 stages by road).

Sections.

(a.) From the Shat-el-Arab mouth to Mohammera.
46 miles (by water). (*See* pp. 16, 17.)

(b.) Mohammera to Ahwaz. 117 miles by the Karun
River.

The river steamers of Messrs. Lynch Bros. usually
perform this part of the journey in about two days.

N.B.—The road from Mohammera to Ahwaz follows
the right bank of the Karun to Kat Omira, where
the river must be crossed in boats, and thence up the
left bank to Ahwaz, a distance of about 82 miles. Shortly
after leaving Mohammera it crosses swampy ground,
intersected by irrigation channels, and is difficult for
wheeled traffic or mounted troops.

(c.) Ahwaz to Isfahan, over the Bakhtiari Mountains.
275 miles. 20 stages.

This is the new route opened in 1900 by Messrs.
Lynch Bros. Leaving the Karun at Wais, it runs *viâ*
Alwanieh, Malamir, and Ardal, crossing four chains of
mountains almost at right angles (*see* p. 15). It is at
present a good mule-road, but not fit for wheels.

The highest point reached is the Zirreh Pass (8,800
feet, immediately north of Ardal), which is liable to be
blocked by snow in winter. It can be avoided by a
detour to the east *viâ* Chighakhor (8,000 feet), or
to the west by a track cut through the Darkash Warkash
gorge, which is extremely difficult for pack animals.
The following bridges have been constructed by Messrs.
Lynch Bros.:—

- (1) A wire-rope suspension bridge over the Karun
at Godar-i-Balutak; length 120 feet; clear
width of roadway 10 feet.

35

51

(2) A wire-rope suspension bridge over a tributary stream at Pul-i-Amarat; length 70 feet; clear width of roadway 10 feet.

(3) A single-arch brick bridge at Dopulan; width of roadway 10 feet.

North of the Zirreh Pass is the fertile district of Chahar Mahal, from which the road descends by the Gardan-i-Rukh (7,730 feet) to the rich and populous valley of the Zindah Rud. The water supply from streams and wells is abundant throughout, but it would be difficult to obtain supplies and forage for a large body of troops along the road, unless sufficient notice were given to the Bakhtiari chiefs to collect them in advance.

The following stages between Ahwaz and Isfahan are recommended for troops:—

	Miles.
1. Wais - - -	17 $\frac{1}{2}$
2. Mulla-Sani - - -	12
3. Alwanieh - - -	12
4. Jaru - - -	17
5. Tauleh - - -	10
6. Ali Khurshid - - -	14 $\frac{3}{4}$
7. Stream on Kaleh-i-Tul plain - - -	13
8. Malamir - - -	10 $\frac{1}{2}$
9. Bridge at Godar-i-Balutak - - -	17
10. Deh Diz - - -	13
11. Pul-i-Amarat - - -	11
12. Sarkhun - - -	12
13. Dopulan - - -	16
14. Ardal - - -	7 $\frac{1}{2}$ *
15. Shalamzar - - -	15
16. Shamsabad - - -	12
17. Kahv-i-Rukh - - -	10
18. Zindah Rud - - -	17 $\frac{1}{2}$
19. Baghwash - - -	16 $\frac{1}{2}$
20. Isfahan - - -	17
TOTAL, Ahwaz to Isfahan - - -	271$\frac{1}{4}$ or 274$\frac{3}{4}$

* Or Naghun 11.

D 2

(d.) Isfahan to Teheran (*see* Route I., page 49).
271 miles. 13 stages.

IV.—From the mouth of the SHAT-EL-ARAB to TEHERAN
viâ Ahwaz, Shuster, Dizful, and Burujird.
700 miles (*viz*, 163 miles by water, and 537 miles
or 37 stages by road).

Sections.

(a.) From the mouth of the Shat-el-Arab to Ahwaz.
(*see* Route III., page 50). 163 miles by water.

Cargoes are landed at Bandar Nasri, $1\frac{1}{2}$ miles below
Ahwaz, and transferred to Ahwaz by a short tramway
(*see* p. 17).

(b.) From Ahwaz to Shuster.
55 miles. 4 stages.

A fair mule-road. Water is abundant and supplies
procurable in small quantities.

(c.) From Shuster to Dizful.
36 miles. 2 stages.

Practicable for baggage-animals. Water and supplies
abundant.

(d.) From Dizful to Khoramabad *viâ* Pul-i-tang.
157 miles. 14 stages.

This is the most difficult section of the route, owing
to the steep gradients encountered while crossing the
mountains of Luristan. It is only practicable for pack-
animals. Water and pasture are abundant, but fuel and
supplies scarce, and the natives are hostile. A more
direct pathway, reported suitable only for infantry un-
accompanied by baggage, leads due north from Ab-i-zal
to Khoramabad over the Kuh-i-gird mountains.

(e.) Khoramabad to Burujird *viâ* the Zagha Pass
(6,830 feet). 63 miles. 4 stages.

A rough mule-track. Water and grass plentiful, but
supplies cannot be obtained.

(f.) Burujird to Teheran *viâ* Sultanabad and Kum. 226 miles. 13 stages.

A good road for pack-transport as far as Kum, thence to Teheran by carriage road (*see* Route I, p. 49).

Water and supplies obtainable throughout.

V.—From BANDAR ABBAS to TEHERAN *viâ* Kerman, Yezd, and Kashan. 876 miles. 50 stages.

Sections.

(a.) From Bandar Abbas to Kerman *viâ* Baft. 289 miles. 18 stages.

Practicable for baggage-animals but unsuited for wheeled traffic. Donkeys are generally used on this section for the transport of merchandise. Water and supplies scarce as far as Daolatabad.

(b.) Kerman to Yezd *viâ* Bahramabad. 211 miles. 12 stages.

A level road, practicable for all arms and for wheeled transport, but water and supplies are scarce. Camel-grazing is procurable at most stages.

(c.) Yezd to Teheran. 376 miles. 20 stages.

A good and level road, suitable for wheeled transport throughout. Between Nain and Nao Gumbaz (16 miles) the water supply is scarce and brackish, elsewhere sweet water is obtainable from wells along the route. Supplies are also scarce between Yezd and Nain.

N.B.—From Yezd a road leads to Isfahan *viâ* the Zindah Rud. Distance, Yezd to Isfahan, 186 miles. 10 stages. It is practicable for all arms, but would be difficult for wheeled artillery owing to the number of ditches which must be crossed. Water is procurable from streams and *kanats*, but supplies are scarce.

The more usual route is that *viâ* Kuhpa, leaving the main Yezd-Kashan road at Nao Gumbaz, from which place the distance to Isfahan is 108 miles.

VI.—From JULFA to TEHERAN *viâ* Tabriz and Kazvin.
490 miles. 28 stages.

The concession for this important road was granted to a Russian company in 1902. It is being constructed in such a manner that it can be readily converted into a railway track. The whole route, although difficult in places, is practicable for mules and camels. Water and supplies are plentiful throughout. At Julfa the road from Tiflis runs down to the northern bank of the River Aras, which is crossed by a ferry (*see* p. 17).

Sections.

(a.) From Julfa to Tabriz *viâ* Sufian.
95 miles. 5 stages.

This, though at present a rough road over a hilly country, is capable of being made practicable for wheeled traffic.

(b.) Tabriz to Kazvin. 304 miles. 16 stages.

A good mule-road, except where it crosses the mountains at Mianeh. Work is expected to be commenced on this section in 1906. Carriages now run between Zinjan and Kazvin.

(c.) Kazvin to Teheran. 91 miles. 7 stages.

This section has lately been improved into a good, level road, fit for wheeled traffic.

VII.—From RESHT to TEHERAN *viâ* Kazvin.
203 miles. 12 stages.

A good made road, practicable for wheeled transport throughout. Water and supplies plentiful.

Sections.

(a.) Resht to Kazvin. 112 miles. 6 stages.

This section was completed as a carriage road in 1899 by a Russian company.

Pir-i-Bazar, a port on the Murdab, is connected with Resht by a short road 6 or 7 miles in length, practicable for vehicles and pack-animals, and a road is also being constructed between Resht and Kazian at the entrance to the Murdab opposite Enzeli (*see* page 46).

(b.) Kazvin to Teheran. *See* Route VI., section (c).

VIII.—From BAYAZID to TABRIZ *viâ* Khoi.

170 miles. 8 stages.

This is part of the trade-route between Europe and Persia *viâ* Trebizond. It is regularly used by camel and mule caravans, but is unsuitable for wheeled traffic. Supplies and water are plentiful. The distance from Trebizond to Tabriz is about 500 miles, which caravans cover in about fifty days.

IX.—From ISFAHAN to HAMADAN.

(a.) *Viâ* Dehak and Sultanabad. 264 miles. 12 stages.

Practicable for artillery throughout, and for wheeled transport, except near Nesher, about 30 miles from Hamadan. Water obtainable from *kanats*, and supplies procurable in small quantities.

(b.) *Viâ* Burujird. 270 miles. 13 stages.

This alternative road crosses a rough mountainous district between Dumbena and Chaman-i-Sultan. It could be made practicable for wheels, but is difficult in places.

Water and supplies procurable throughout.

(c.) *Viâ* Amarat and Daolatabad. 267 miles. 13 stages.

An alternative route which could be made fit for wheels with little trouble. Supplies and water obtainable throughout. The last 35 miles from Daolatabad to Hamadan are along a good level road fit for wheeled artillery.

X.—From HAMADAN to SEHNA (Sinneh).

(a.) *Viâ* Khurwa. 89 miles. 4 stages.

A good mule-road. Supplies and water obtainable throughout.

(b.) *Viâ* Bijar. 130 miles. 8 stages.

A good road, practicable for wheels. Water is scarce for the first few stages, but the supply increases towards Sehna.

From Sehna a road leads to Tabriz *viâ* Maragha, over a rough and uneven country, suitable only for pack animals. Distance, 226 miles. 18 stages. Supplies are scarce, except at Maragha and the more important villages. Water is obtainable throughout.

Eastern
system.

XI.—From BANDAR ABBAS to NASRATABAD (Sistan) *viâ* Regan and Sekuba. 495 miles. 24 stages.

This is a much-used caravan route, but would be difficult for troops or transport animals, other than camels, on account of the scarcity of water in the Kerman desert. Between Bandar Abbas and Regan the road crosses two difficult passes, which require considerable improvement to render them practicable for wheeled artillery.

From Regan to the eastern border of the Dasht-i-Lut the road is level and suitable for all arms. The distance across the desert is about 90 miles. Wells would have to be dug, or water carried, for troops.

XII.—From NASRATABAD (Sistan) to MESHED *viâ* Neh, Birjand, and Turbat-i Haidari. 574 miles. 33 stages.

This is a continuation of the road from Quetta to Sistan (see Route XX., p. 58). It is practicable for all arms throughout, and for wheeled transport between Neh and Meshed. Water is scarce in the fifth and sixth stages, but is otherwise obtainable throughout. Supplies are plentiful at, and after leaving, Neh.

XIII.—From NASRATABAD (Sistan) to MESHED *viâ* Duruh, Abingaran, Sangun, and Turbat-i-Sheikh Jam. 492 miles. 25 stages.

This alternative route is reported to be better than the preceding one. It presents no great difficulties for

(38)

57

transport, being mostly firm, sandy going, except at the *hotals* in stages 8, 9, and 12, which would require work before guns could be taken over them.

Water is plentiful, except in stages 4 and 14.

Supplies are plentiful in the Sunnikhana district, the Khaf valley, and from Turbat-i-Sheikh Jam to Meshed, but not in the intervening tracts. Camel-grazing is abundant as far as Sangun, but grass is scarce. North of Sangun grass is abundant in spring, but camel-grazing becomes scarce.

XIV.—From GWADUR to BAMPUR *viâ* Pishin and Serbaz. 248 miles. 18 stages.

Fit for camels, but impracticable for wheeled artillery owing to the difficulty of the Kekampancho Pass (4,900 feet), which is crossed about 23 miles north of Serbaz. Water is abundant except between Gwador and Pishin, and for some 20 miles beyond the Kekampancho Pass. Supplies are plentiful at Bampur, but scarce elsewhere.

XV.—From GWADUR to JALK *viâ* the Talar Pass, Parom, and Isfandak. 321 miles. 18 stages.

Fit for camels throughout, but impassable for wheeled artillery owing to a narrow gorge at Rogan Mush. The Zamiran range is crossed near Parom at an elevation of 3,691 feet. Supplies are procurable at most stages north of Amalani, and fuel and camel-grazing at all stages except stage 1. Water is abundant, except between Gwador and Amalani, and in the Zamiran Mountains, where it is dependant on the rainfall.

XVI.—From JALK to LADIS *viâ* Gusht. 191 miles. 12 stages.

Fit for camels throughout, but impassable for wheeled artillery near Gusht. Camel-grazing and fuel are procurable at all stages, and water except at Gusht. Supplies must be carried.

XVII.—From PASNI to KUH-I-MALEK SIAH *viâ* Turbat, Dizak, and Ladis. 452 miles. 30 stages.

Fit for camels throughout, but not for wheeled artillery. Water, fuel, and camel-grazing are easily procurable at all stages, except in the Simish Kaur between Dizak and Gusht, where the water is undrinkable and grazing scanty. Supplies are plentiful at Turbat and Ladis, but are elsewhere unobtainable.

XVIII.—From CHAHBAR to BAMPUR *viâ* Geli and Kasrkand. 275 miles. 20 stages.

Fit for camels throughout, but impracticable for wheeled artillery between Kasrkand and Bampur. Supplies are procurable at Champ, but otherwise scarce. Water, wood, and camel-grazing are obtainable throughout.

XIX.—From HERAT to MESHED *viâ* Ghurian and Turbat-i-Sheikh Jam. 216 miles. 12 stages.

A good and level road, mostly over alluvial soil, practicable for wheeled artillery. Supplies and water are plentiful throughout. From Herat to the Persian frontier it is reported to be fit for wheeled transport. An alternative route to Karez runs along the right bank of the Hari Rud *viâ* Tirpul, and is equally good. Distance to Meshed 234 miles.

XXA.—From QUETTA to NASRATABAD (Sistan) *viâ* Nushki and Robat (Kuh-i-Malek Siah). 569 miles. 33 stages.

Sections.

(a.) Quetta to Robat (Persian frontier) *viâ* Dalbandin, Kundi, and Saindak, keeping south of the Afghan-Baluch frontier. 463 miles. 25 stages.

This is a much-used trade route and has lately been improved. Wells have been sunk at intervals, and fortified *thanas* (police-posts) have been established along the route, to secure the safety of caravans. Camel-grazing is with difficulty obtainable throughout, and grass and supplies are scarce.

The water supply at the various stages is very indifferent both as regards quantity and quality, especially between Humai and Amalaf (37 miles), where no sweet water has yet been discovered (January 1904). Considerable preparations would be required to guarantee supplies at each stage even for small detachments, and the water supply (except perhaps between February and May) is so scanty, and only obtainable at such long intervals, that any troops using this route would require to be mounted on camels, and to use camel-draught for guns accompanying the force.

A branch railway is being constructed from Quetta to Nushki, a distance of 83 miles, and is expected to be open to traffic by the end of 1905.

(b.) Robat to Nasratabad. 106 miles. 8 stages.

This section is fit for camels throughout, and might, with a little labour, be made practicable for wheeled transport. Water is abundant, but supplies are scarce until Sistan is reached. The Sistani fly is very troublesome to animals between Hurmak and Sistan.

XXB.—From NUSHKI to NASRATABAD *via* the Helmand.

This is an alternative route to the preceding one. The Helmand can be reached from Nushki at the points Kwaja Ali, Lundi Wali, and Basabat by several tracks across the desert. The distances from Nushki to Nasratabad by these routes vary between 364 and 382 miles.

The desert tracks, although not devoid of serious difficulties for the march of troops, can be regarded as practicable at the season of the year during which water is found in the depressions in the sand (*i.e.*, from February to May).

The Sistan Mission, consisting of—

1,480 men,

156 horses,

2,250 camels,

travelled by some of these routes in 1903, and found little difficulty as regards water, but the season was an exceptionally favourable one.

The road along the left bank of the Helmand from the above points to Chahar Burjak presents no difficulty even for wheeled transport, and water and supplies are plentiful. At Chahar Burjak a branch road crosses the Helmand by a ford, and follows the right bank to Lash Juwain. At certain seasons it is liable to floods, but is otherwise fit for all arms. The road to Nasratabad follows the left bank of the Helmand to Band-i-Kamal-Khan, and then strikes across the plain to Sekuha. Several canals are crossed, which require to be bridged for wheeled artillery or transport, unless boats or rafts are available. Otherwise the road is fit for all arms. Water is plentiful, and supplies and forage can be obtained on reaching Sistan.

XXI.—From SARAKHS to MESHED *viâ* Darband and the Kashaf Rud. 97 miles. 6 stages.

Reported to be a "good road throughout." Water, fuel, and forage are plentiful, and supplies can be obtained. The Kashaf Rud is slightly brackish, but not unfit for drinking. A good camel-road leads from Sarakhs to Merv *viâ* Shor Kala. 92 miles. 6 stages.

From Sarakhs, a road follows the Tejend river to Pul-i-Khatun, and runs thence to Kuhsan along the right bank of the Hari Rud. Distance, 125 miles. It is reported to be level and fit for guns. Water, fuel, and forage are plentiful, but supplies are scarce.

From Pul-i-Khatun a road branches off to Turbat-i-Sheikh Jam *viâ* Zorabad. 83 miles. 5 stages. It is fit for wheeled traffic, except from Zorabad to the Benitak Kuh Pass (3,750 feet), where it is only practicable for pack transport, including camels. Water is plentiful, but supplies are scarce.

XXII.—From ASKHABAD to MESHED *viâ* Kuchan. 177 miles. 13 stages.

This is one of the routes recently improved by the Russians into a carriage-road, and is regularly traversed by phaetons and 4-horsed fourgons. It is, however, a rough road for wheels.

The section from Askhabad to Kuchan zigzags over the mountains by fairly easy gradients, and is kept in good repair on the Russian side of the frontier. Between Kuchan and Meshed the road is practically level, but the culverts and bridges are in bad repair, and in wet weather the going is very heavy. Water and supplies are abundant between Kuchan and Meshed, but scarce from Askhabad to Kuchan.

XXIII.—From DUSHAK to MESHED.
102 miles. 5 stages.

A good mule-track over the mountains, capable of being made suitable for wheeled traffic with some labour. Water and supplies are scarce.

XXIV.—From MESHED to TEHERAN *viâ* Sabzawar and Semnan. 545 miles. 25 stages. Lateral communications.

Practicable throughout for all arms and for wheeled transport. Supplies and water abundant throughout.

XXV.—From SHIRAZ to KERMAN *viâ* Niris and Saidabad. 349 miles. 15 stages.

Fit for pack-animals, but unsuitable for wheeled traffic.

The *kavir*, west of Saidabad, becomes an impassable swamp in wet weather, but in the dry season is encrusted with hard salt. Water can be obtained at intervals.

XXVI.—From BANDAR ABBAS to SHIRAZ *viâ* Darab. 353 miles. 20 stages.

The ascent to Gura (2,000 feet) is over a broken rocky country, and this portion of the road would be impracticable for carts or wheeled artillery.

Beyond Gura, between Tarun and Forg, there is a narrow defile in which two horses can barely pass each other. From Forg to Shiraz the road is easy, and, with a little labour, could be made fit for wheeled traffic. Supplies are abundant at Forg, Darab, and Fasa, and

water is plentiful throughout. Donkeys (but no mules) are obtainable in considerable numbers at most of the larger villages.

XXVII.—From SHIRAZ to LAR. 174 miles. 10 stages.

Practicable for pack animals. Water is obtainable throughout, but supplies are scarce. From Lar a road leads to Mughu Bay, 126 miles, the last 50 miles over a mountainous district. Water is obtainable from wells, but no supplies can be procured. Mughu Bay is connected with Lingah by a good road practicable for wheeled artillery. Distance, 26 miles.

XXVIII.—From KUCHAN to ASTRABAD *viâ* Bujnurd. 276 miles. 16 stages.

From Kuchan to Bujnurd the road is fairly good and suitable for pack transport. Water and supplies are plentiful. From Bujnurd to Astrabad the best route is that *viâ* Findarisk. It is described as "good and level," with plentiful supplies of water, fuel, and forage.

XXIX.—From AMOL to ASTRABAD *viâ* Barfurush. 147 miles. 10 stages.

This route follows generally the direction of the ancient paved causeway which was constructed in the 17th century by Shah Abbas I., but which has now fallen into such decay as to be practically useless. The blocks of stone, of which the old causeway is composed, have in many places been removed, leaving large holes in their places, so that the traffic of the country passes on either side of it along rough paths usually deep in mire and only fit for mules. From Astrabad to Ashraf the road runs through low, swampy country with rice-fields at intervals. From Ashraf to within a few miles of Astrabad the country is hilly and wooded. Water is plentiful throughout, but supplies are scarce.

XXX.—From HERAT to KHAF *viâ* Ghurian. 118 miles. 6 stages.

Reported to be a good road except near Karat, where the pass through the mountains is difficult, but not im-

practicable, for wheeled traffic. Water is obtainable throughout, but supplies are scarce between Ghurian and Karat.

XXXI.—From URUMIAH to KHOI SANJAK *via* the Zab Asfal (Lesser Zab) valley.
167 miles. ? stages.

Although avoided by caravans owing to the turbulence of the frontier tribes, this route is reported to be the easiest line of communication between North-west Persia and the Tigris valley. Except for a few miles near the frontier, where improvements are needed, it is passable for wheels.

From Khoi Sanjak the Mosul-Baghdad main road can be reached by easy routes. Water is plentiful, but supplies are scarce.

The Lesser Zab river also is navigable for small steamers from Taktak (14 miles below Khoi Sanjak) to its junction with the Tigris, the distance by river from Taktak to Baghdad being 326 miles.

The only railway in Persia is a short single line, Railways.
5½ miles in length, from Teheran to the village of Shah-Abdul-Azim. It is worked by a Belgian Company, and is connected by two short branch lines, each 2½ miles long, with some limestone quarries near the city. The gauge is 1 metre.

In 1890 the Shah entered into an agreement with the Russian Government, under which he bound himself not to permit the construction of railways in Persia for a period of 10 years. This period was extended in 1900 with conditions more favourable to the Russians, giving them the monopoly of railway construction in Northern Persia. The exact limit of the extension has never been made known, but it is believed to be for at least 10 years. Russo-Persian agreement.

An understanding also exists between the British Government and the Shah, which practically allows to the former the option of constructing railways in Southern Persia should Russia commence work in Northern Persia.

The following are some of the possible railway alignments, which have been mooted at various times

with a view either to connecting Europe with India, or Russia with the Persian Gulf or Arabian Sea :—

Possible
railway
align-
ments.

- (1) From Baghdad or Basra to Karachi, along the coast-line of the Persian Gulf and Arabian Sea, or by taking a more inland route to Bandar Abbas *viâ* Ram Hormuz.
- (2) From Julfa to Teheran, and thence *viâ* Kashan, Yezd, and Kerman to Chahbar, with a branch from Bam to Sistan.

N.B.—The Russian line from Batum *viâ* Tiflis has now been extended to Erivan, and arrangements have been made for prolonging it to Julfa.

- (3) From Teheran to Bandar Abbas *viâ* Kerman.
- (4) From Teheran to Meshed.
- (5) From Askhabad to Meshed.
- (6) From Meshed to Sistan, and thence to Chahbar.
- (7) From Tejend to Sistan *viâ* Sarakhs and Yezdun.
- (8) From Nushki to Sistan, and thence to Kerman or Bandar Abbas.
- (9) From Teheran to Baghdad *viâ* Hamadan and Khanakin.

The trend of the parallel mountain ranges (*see* page 15) favours the construction of railways from north-west to south-east, while it greatly increases the difficulty of constructing them from north to south, or *vice versa*.

Cables.

The following is a list of cables in the Gulf of Oman and in the Persian Gulf (*vide* Map) :—

From	To	Length in Sea Miles.	Owned by
1. Karachi -	Cape Jask (<i>viâ</i> Gwadar).	544	Indo-European Telegraph Department.
2. Cape Jask	Bushire -	501	Do. do.
3. Do. -	Do. -	520	Do. do.
4. Bushire -	Fao -	152	Do. do.
5. Cape Jask	Maskat -	218	Do. do.

The above are all single-wire lines, and British property.

No. 4 connects at Fao with the Turkish land telegraph line, which forms one of the main lines of telegraphic communication between Europe and the East *viâ* Constantinople.

The following are the principal overland telegraph lines in Persia :—

- (1) From Bushire to Teheran. (Indo-European Telegraph system (vide map).
graph Department.)

675 miles of line. Three wires on iron posts. At Bushire it connects with the Indo-European cable from Karachi. (See p. 64).

- (2) From Teheran to Julfa. (Indo-European Telegraph Department.)

415 miles of line. Three wires on iron posts. From Julfa this line is carried, *viâ* Kertch, across Europe, and is one of the chief lines of telegraphic communication between London and India.

- (3) From Teheran to Meshed.

A Persian line under the supervision of an inspector of the Indian Telegraph Department.

- (4) The Central Persian Telegraph.

Commenced in 1902 by the British Government with the object of connecting India with Europe by a line joining (1) above at Kashan, *viâ* Bam, Kerman, and Yezd.

The section from Kashan to Bam was completed on the 1st January 1904, and consists of three wires. A temporary single-wire line was completed from Bam to Robat (Kuh-i-Malek Siah) on the 9th May 1904, *viâ* Nasratabad (Ispe)—Baluchab. At Robat it joins the permanent single-wire line to Quetta.

- (5) Meshed to Nasratabad (Sistan).

This was commenced by the Persian Government in 1902, and reached Nasratabad in December 1903. The work was supervised by Russian engineers. It consists of a single wire on wooden poles.

(6) Karachi to Jask, *viâ* Gwadar and Chahbar (Indo-European Telegraph Department).

(7) In addition to the above, there are some 3,700 miles of Persian telegraph lines (*see* map), worked by native staffs. They all consist of single wires on wooden poles.

Postal
system.

In 1877 Persia joined the International Postal Union. There now exists between Persia and other countries:—

- (1) A bi-weekly service (weekly in winter) *viâ* Russia (either by the Resht-Baku Caspian route, or overland by the Tabriz-Tiflis route). London to Teheran 16 days.
- (2) A bi-weekly service from Teheran to London *viâ* Bushire and Bombay in 40 days.
- (3) A tri-weekly service between Meshed and Askhabad.
- (4) A Parcel Post with Europe *viâ* Askhabad and Russia.

The usual mode of conveying mails on inland lines is in saddle-bags carried by horses, and letters and parcels frequently suffer from wet and want of care in packing, but, since the recent reorganisation of the postal system by Belgian officials, fourgons have been substituted wherever possible. These now run between Teheran and the following places:—Meshed, Isfahan, Kumishah, Kerman, Zinjan, Resht and Hamadan; and also on the Julfa-Tabriz and Meshed-Askhabad roads. Except in winter, they are found preferable to pack-horses.

43

67

CHAPTER VI.

TRADE, RESOURCES, &c.

The scarcity of water and the preponderance of Irrigation. desert are serious difficulties in the way of agriculture in Persia, and the question of artificial irrigation is consequently one of great importance.

Irrigation is carried out by means of water-cuts from rivers, artificial wells, or subterranean aqueducts, called *kanat* or *karez*, which convey the water from upland springs to the low-lying fields. The agricultural implements in use are of the most primitive kind.

According to the Report of the Commercial Intelligence Committee of the Board of Trade, published in June 1904, the total trade of Persia with foreign countries exceeds 8,000,000*l.* sterling per annum, of which over 5,000,000*l.* are imports and over 3,000,000*l.* exports. It is distributed as follows:—

(a.) With the British Empire :

Imports ; about 2,000,000*l.*, consisting of cotton yarns and tissues, which form two-thirds of the total imports of these commodities into Persia ; and tea, coffee, and spices from India.

Exports ; about 500,000*l.*, consisting of raw products, such as dried fruits, opium, gums, pearls, raw hides, and manufactured goods such as carpets and silk tissues.

(b.) With Russia :

Imports ; about 2,000,000*l.*, consisting of sugar, cotton tissues, kerosine, animals, flour, tobacco, and other vegetable products.

Exports ; about 1,500,000*l.*, consisting of raw products, such as dried fruits, raw cotton, rice, hides, pelts, wool, cocoon silk, and gums.

(c.) With other Countries :

Imports ; about 1,000,000*l.*, consisting of sugar, woollen, cotton, and silk tissues from France and Austria,

With the
British
Empire.

With
Russia.

With
other
Countries.

E 2

tea from China and Batavia, raw materials from Turkey and Afghanistan, and manufactured articles from Germany.

Exports; about 1,000,000*l.*, consisting of opium to China, cocoon silk to France and Italy, carpets to Turkey, Europe, and America, and cotton, silk, and woollen tissues to Afghanistan and Turkey.

The 1903
Tariff.

By the Russo-Persian Treaty of Turkmanchai (page 5), a duty of 5 per cent. *ad valorem* was imposed on all goods, exports and imports, passing between Russia and Persia. This duty was subsequently extended, under a "most-favoured-nation clause," to British trade with Persia. In 1902 a new Russo-Persian Convention was ratified, under which a revised tariff, drawn up by Russia, came into force on the 14th February 1903. This tariff substituted for the 5 per cent. *ad valorem* duty a system of specific duties, which affects certain articles to a greater extent than others. An Anglo-Persian agreement was signed on the 9th February 1903, by which Great Britain secured equal treatment with Russia under the new tariff, but the duties nevertheless fall more heavily on articles in which Great Britain and India are most interested, such as tea and cotton piece-goods, than on those with which Russia is chiefly concerned.

The following are the principal resources of the country:—

Wheat.

The plains north of Bushire and on the banks of the Karun produce excellent crops of wheat. During 1903, which was an exceptionally favourable year, over 1,400 tons were exported from Bushire, and 3,600 tons from Mohammera, mostly to the United Kingdom.

The province of Kermanshah is also an important wheat-growing country, the usual annual output amounting to about 60,000 tons. The price in 1903 was 1*s.* 2*d.* to 1*s.* 7*d.* per cwt. Wheat is also grown in considerable quantities in Khorasan, Sistan, and Kerman. During the year 1902-03 nearly 1,500 tons of grain, valued at 2,300*l.*, were exported to Russian territory from Khorasan and Sistan.

Barley is grown chiefly in the province of Kerman- Barley. shah and along the Karun in the proportion of one-third barley to two-thirds wheat. It is used mostly for forage.

Rice is cultivated chiefly in the Caspian provinces Rice. of Ghilan and Mazanderan. The exports from these provinces for the year ending March 30th, 1903, amounted to about 37,000 tons, valued at 269,000/. In Central and Southern Persia it is grown only in sufficient quantities for home consumption.

The castor-oil plant is grown almost everywhere in Castor oil. Persia, the oil being used for lamps. The seed is exported to Russia, principally from Khorasan.

Millet and sesame are grown in small quantities in Millet and the neighbourhood of Bushire and Dizful. sesame.

Opium has long been a chief source of revenue to Persia Opium. and is one of the most important exports. The principal markets are Isfahan, Shiraz, Yezd, Hamadan, and Meshed. It is exported to China, Great Britain, and America. The crop of poppies occupies the fields from November to June, after which the same ground can be used for some other crop. The annual production is about 980,000 lbs., of which about one-third is consumed in the country. The export duty has recently been raised from 5 to 14 per cent., but the production of the drug is still rapidly on the increase to the detriment of more useful crops.

Khorasan is the most important cotton-growing Cotton. province in Persia. Large quantities are also grown in Central Persia, Isfahan, Yezd, and Kashan, principally for export to Russia. Azerbaijan produces a small quantity. Persian cotton is very short in the staple, and of inferior quality. The value of the raw cotton annually exported is estimated at about 450,000/.

Persian tobacco, or *tombac*, is obtained from a dis- Tobacco. tinct species of plant. It is grown at Shiraz and Isfahan, and exported to Turkey, Aden, and India. Shiraz *tombac* is considered the best.

Ordinary tobacco is also grown in small quantities in the province of Kermanshah, and at Urumiah and Resht, chiefly for home consumption. The total value of the unmanufactured tobacco exported during the year ending March 1903 amounted to about 25,000*l.*, an almost equivalent amount being imported, chiefly from Turkey and Russia.

Silk. The silk industry has recently been revived in Northern Persia, and the silkworm is now extensively reared in Ghilan and Mazanderan, the export of cocoons constituting an important and rapidly increasing trade. During the year ending March 1903 over 1,000 tons of cocoons, valued at 240,000*l.*, were exported from Resht, chiefly to Marseilles and Milan. The eggs of the silkworm are imported from Asia Minor. In addition to the export trade, nearly one-half of the production finds a market in Tabriz, Kashan, Isfahan, Yezd, Kerman, and Meshed, where it is used in the manufacture of carpets, brocades, velvets, &c. A considerable quantity finds its way to Baghdad *via* Kermanshah. Silk is also cultivated, but in insignificant quantities, at Yezd, Kashan, and Urumiah; and, in Khorasan, at Sabzawar and Turbat-i-Haidari.

Carpets. The manufacture of carpets is confined chiefly to those districts in which wool, grain, and labour are most abundant.

Kerman carpets are highly esteemed, especially in Constantinople. In Tabriz the industry has recently been largely developed, and high-grade carpets are now produced there. In Sultanabad large quantities of all grades are produced by the British firm of Messrs. Ziegler & Co. and the Persian Manufacturing Company. Fars and Kurdistan are noted for their heavy all-wool carpets. Many of the silk carpets are woven in Meshed. All Persian carpets are made on hand-looms, chiefly by women. The value of the carpets exported during the year ending March 1903 amounted to nearly 250,000*l.*

Wool. Meshed is now the only large export market for wool in Persia. All the wool from Khorasan and Sistan passes through Transcaspia into Russia, a considerable

quantity, however, subsequently finding its way to Germany, the United Kingdom, and America. The value of the wool thus exported from the above-mentioned provinces in 1902-03 amounted to about 68,000*l*. The wool of Kermanshah and Azerbaijan is chiefly absorbed in the manufacture of carpets and other home industries. Southern Persian wool is of three classes:—The fine Arab or Baghdadi wool, the Shuster, and the common Persian. Shuster wool, although inferior in quality, commands a higher price than the others, owing to the fact that facilities for exporting it are much greater. The total value of the wool exported from Persia in 1902-03 amounted to about 80,000*l*.

Goat and sheep skins are exported to India from the Hides and Gulf ports. There is also a valuable trade in lamb-skins skins, to Russia, chiefly from Shiraz.

Fox and sable skins are exported to Russia from Shiraz, Azerbaijan, and Central Persia to the extent of about 160,000 skins per annum. The value of the skins and peltries exported during the year ending March 1903 amounted to nearly 120,000*l*.

The grape is cultivated in the northern and north-western provinces. The best wine is made at Shiraz, Isfahan, Hamadan, and Teheran, but only for home consumption. There is no export trade in wine.

Dates are grown all along the southern coast of Persia, and form one of the chief articles of export from Mohammera, Bandar Abbas, and Minab.

Apples, pears, pomegranates, melons, nuts, peaches, Other oranges, limes, &c. grow in profusion in the more populous areas and can be obtained at very moderate prices. The best melons come from Isfahan.

Gum-tragacanth is extracted from a low thorn-bush, Medicinal plants, &c. which grows abundantly in the hilly districts of Kurdistan and Western Persia. The best quality comes from Burujird, Nehavend, and Kermanshah. The deserts produce liquorice and assafœtida. Gum-arabic and gum-ammoniac are obtained from Shiraz and its vicinity.

The forests of Puslit-i-Kuh produce a considerable supply of *sakkis*, or gum-mastic.

Colouring plants.

Indigo and saffron are cultivated in Laristan and Khorasan respectively. Madder is grown in Isfahan, Yezd, Shuster, and Kurdistan, and is exported in small quantities from the Karun. Henna is produced in the Yezd-Kerman region, and exported to Russia and Turkey.

Vegetables.

Most ordinary European vegetables thrive well wherever irrigation exists.

Minerals.

There is little doubt that the mineral resources of Persia are considerable, but as yet they are undeveloped. Traces of copper and iron have been observed in the northern and north-western provinces, and in the neighbourhood of Isfahan. Coal is found between Teheran and Tabriz and on the slopes of Demavend. Gold and silver have as yet been discovered only in small quantities.

Turquoise mines are worked at Nishapur close to the Teheran-Meshed road. Saltpetre is found in Sistan, and sulphur at Bandar Abbas. Large quantities of salt are obtained from the islands of Kishm and Ormuz. About 4,000 tons of red oxide of iron are exported annually from Ormuz Island.

Oil-fields.

From Khanakin, on the western frontier of Kerman-shah, a wide oil-bearing tract extends southwards to Shuster, showing the existence of petroleum and naphtha in considerable quantities. In 1902 Mr. D'Arcy, a British subject, commenced boring for petroleum near Kasr-i-Shirin with promising results. With this exception, the oil-fields of Persia are as yet undeveloped.

Transport animals, remounts, &c.

The ordinary means of locomotion are supplied by horses, mules, camels, and donkeys. Oxen are sometimes employed by the natives in the Bakhtiari hills for transporting their household goods and produce.

Horses.

The majority of horses in Persia are in the hands of the nomad tribes. Each family, of which there are some 149,000, possesses on an average four or five animals. Mares are kept almost entirely for purposes of

breeding. The Persian horse is small but enduring and resembles the Arab, but has less bone. The best districts for horses are Khorasan, Kermanshah, Hamadan, and Kurdistan. According to a recent estimate, the district of Khorasan could provide, for military purposes, about 3,000 light cavalry horses and about 7,000 smaller pack-horses, the former varying in price from 14*l.* to 18*l.* the latter from 5*l.* to 6*l.* In the province of Kermanshah the Sinjabis possess about 1,000 horses, and rear annually some 200 foals. Prices vary from 5*l.* to 8*l.* for ordinary horses from four to five years old. The best season for buying is during the latter part of April. In Southern Persia there are few horses east of Bushire; such as there are, are owned chiefly by the Kashkais and other tribes near Shiraz. The horses of Azerbaijan are of the Cossack stamp, small and wiry, but prices in this district are higher.

The Bakhtiari horses are a mixture of Persian and Arab strains, and are hardy and enduring, but the breed is said to be falling off owing to the practice of selling the young stock as yearlings to Isfahan and Arabistan dealers.

The horses used by the Royal family and Persian noblemen are usually bred in private establishments, but wealthy Persians frequently give fancy prices in the open market for exceptional animals.

The average Persian saddle-horse stands from 13·2 to 14·1 hands; the pack-horse from 12·3 to 13·3. The latter is capable of carrying a load of 200 lbs. A large percentage of horses in Persia are unsound, spavin and sand-cracks being the most common causes. The former may be due to the severe bits used, and the latter to bad shoeing and the dryness of the climate.

Mules are bred chiefly in Arabistan, Kermanshah, Mules. Luristan, and the Bakhtiari country.

The Arab mule, used in Arabistan, is small and light, standing about 13 hands. Prices range from 11*l.* to 13*l.*

The Shuster or Dizful mule is larger, standing 13·2.

The mules of Kermanshah are very large and strong, standing nearly 15 hands, and are said to be capable of

carrying a very heavy load. Prices vary from 14*l.* to 16*l.* for a good three-year-old mule. In cool weather the average daily journey of a mule is 25 miles. His ration, when grass is not procurable, consists usually of 10 lbs. of barley and 20 lbs. of chopped straw. The ordinary baggage mule is well up to a load of 200 lbs., and will last, it is said, in caravan work for at least 10 years.

Camels. The camel is used for transport purposes principally in eastern and south-eastern Persia. The best animals come from Khorasan and Kazvin. The Khorasan camel is noted for its size and strength, and, owing to its long hair, is capable of enduring extreme cold. In Sistan alone the number of camels is estimated at over 2,000. They are employed chiefly on the caravan routes between Quetta, Meshed, and Kerman. The camels of Baluchistan and southern Persia are smaller, but are more suitable for riding. An ordinary Persian camel can carry 320 to 400 lbs. for 15 miles a day, at an average rate of 2½ miles per hour. The Khorasan camel, however, is reported to be capable of covering 20 miles a day, with a heavier load. Prices for the latter vary from 10*l.* to 12*l.*, but an ordinary camel can be purchased for from 4*l.* to 8*l.* A good camel is said to last for at least 15 years in regular work.

Donkeys. Large numbers of donkeys are used in Persia for transport purposes, particularly on the roads leading inland from Bandar Abbas and Lingah, and in Sistan. They can be purchased chiefly in Arabistan, but a considerable number are brought across the gulf from Maskat and Bahrein. The Bakhtiaris own a great number. The Persian donkey is small, but strong and enduring, and capable of carrying a load varying between 130 and 200 lbs. Good riding donkeys fetch from 3*l.* to 4*l.*, but pack-donkeys can be bought at prices from 30*s.* to 3*l.*

Oxen. Pack-oxen of a small and sturdy type are used by the Bakhtiaris and the Lur tribes in general. Oxen are also used for ploughing in most of the southern districts of Persia.

Besides the animals used in Persia for transport ^{Livestock.} purposes, there is practically an unlimited supply of sheep and goats, which are maintained by the nomad tribes both for the value of their wool and hair, and as their chief source of food supply. In winter the hill tribes drive them down to the plains in search of pasture, returning to the higher altitudes as the summer season advances. From 45,000 to 60,000 head of sheep, valued at from 25,000*l.* to 30,000*l.*, are exported annually to Transcaucasia from Azerbaijan and Kurdistan. Transcaspia is also supplied from Khorasan with livestock to the value of about 30,000*l.* per annum. The felt with which the tents of the nomads are covered is made from the hair of goats and camels.

There is no vehicle in Persia peculiar to the country; in fact, owing to the physical difficulties of the country, and ^{Wheeled} the absence of suitable roads, wheeled transport is not employed for general purposes. On some of the better roads (*see* p. 47), however, carriages are used by travellers and rich Persians and also in the postal service. They can be hired, together with post-horses, from the postal contractors, but as there are usually no fixed rates, the charges are very high:—*e.g.*, the cost of hiring a carriage from Teheran to Isfahan is about 20*l.*, with extra charges for baggage. The vehicles are nearly all of Russian manufacture, and are generally of the *droschki* or "phaeton" type, with four wheels, and are drawn either by a pair of horses or by four harnessed abreast. Since the Belgian officials took over the management of the postal service, they have introduced *fourgons*, wherever it has been found possible to do so (*see* p. 66). These are also of Russian make, with no springs, and are drawn by four horses. Besides carrying mails, they are gradually coming into use for the transport of merchandise.

CHAPTER VII.

THE ARMY.

Strength.

The war establishment of the Persian Army is nominally about 130,000 men, but, according to recent estimates, it may be assumed that scarcely half that number would be forthcoming on mobilisation. With the exception of the Cossack Brigade, it may be fairly described as a badly-equipped and badly-armed mob.

The following figures illustrate in round numbers the difference between the nominal and available strength of the army in 1899 :—

	Nominal Strength.	Available Strength.
Regular Infantry - - -	78,500	35,000
Irregular Cavalry - - -	37,500	13,600
Cossack Brigade - - -	1,700	1,400
Artillery - - -	11,000	6,000
Local Militia - - -	2,000	1,000?
Total - - -	130,700	57,000

Of the above available troops, the approximate number actually under arms in 1899 was as follows :—

Infantry - - -	10,700	} 13,600
Cavalry - - -	2,100	
Artillery - - -	800	

Theoretically the soldier is supposed to spend two years out of every three with the colours, and is permitted, when not under arms, to return to his home and pursue his ordinary vocation. In practice, however, many regiments are entirely disbanded, and, in others, service is frequently evaded by bribery, so that the numbers under arms are still further diminished.

There is plenty of good fighting material in Persia, but the profession of the soldier is not popular with

the masses, and want of organisation, combined with an impoverished exchequer, has reduced the army to a state of comparative insignificance.

Officers are appointed and promoted by patronage and by purchase without regard to efficiency, and take little interest in the study of their profession. Sums varying between 200*l.* and 1,000*l.* are frequently paid to obtain high commands.

Recruits for the regular infantry and artillery are obtained by the *bounitcheh* system, under which each district, village, or tribe furnishes its quota of recruits in proportion to the amount contributed by it to the revenue. This system leads to much irregularity, and is far from satisfactory, the result being that the ranks are filled with weaklings and "village failures," and not with the best men.

The following classes are exempted from service:— Christians, Jews, Gabis, cultivators of crown lands, inhabitants of villages freed from the land tax, *Saiads* (descendants of the Prophet) and *Mullahs* (priests).

The province of Azerbaijan provides the majority of recruits for the infantry and artillery. The districts of Kerman and Yezd are seldom drawn upon, on account of the poor physique of the inhabitants.

In the infantry and artillery service is practically for life. For service and enlistment in the cavalry and Cossack brigade, see pages 80, 81.

The regular infantry is organised in 79 battalions, each consisting, nominally, of from 30 to 40 officers and 1,000 rank and file. They are numbered consecutively from 1 to 79 but, in practice, are usually designated by territorial titles.

For administrative purposes, a distinction is made between regiments recruited from Azerbaijan and those recruited from other provinces, the former being termed Azerbaijani and the latter Iraki.

A battalion on parade consists of 10 companies, the proportion of officers being three or four per company.

Each company is divided into two sections. In peace time the infantry are, as a rule, armed with old smooth-bore muskets and rifles of various obsolete patterns, those intended for issue in time of war being stored in the arsenals at Teheran and other places. The latter consist chiefly of Werndl rifles and a few Martinis, which have been confiscated by the Customs officials at various times in the Persian Gulf. The bulk of the infantry are stationed in Northern and Eastern Persia.

Musketry
training.

The ordinary Persian infantry soldier receives no regular musketry training. Such as are quartered in Teheran have occasional opportunities for target practice, but the expenditure of ball ammunition does not exceed five rounds per man per annum.

Artillery.

The artillery is divided into 27 *Taifas*, or tribes, designated according to their locality. The total effective strength is about 5,800 men, nearly all of whom are drawn from Azerbaijan. This branch is more popular than the infantry.

The following is the strength of a battery of horse or field artillery in peace :—

- 5 officers.
- 80 rank and file.
- 6 guns.
- 6 waggons.
- 39 horses for guns and mounted men.
- 4 spare horses.

In time of war, extra horses are provided for the ammunition waggons, and 24 mules for baggage, &c. The guns, except those of the Cossack Brigade, are 8 c.m. and 9 c.m. *Euchatius*, purchased from the Austrians second-hand. Batteries are, as a rule, well-horsed, and the harness is rough, but serviceable.

Mountain batteries have four *Euchatius* guns. The mules are supplied from the Government breeding establishments of Mazanderan, or hired from contractors as required.

The distribution of guns is approximately as follows :—

Description.	No. of Guns.	Where stationed.
7 c.m. Euehatius -	70	24 at Teheran.
8 c.m. „ -	21	Teheran, Tabriz, and elsewhere.
9 c.m. „ -	18	Teheran, Tabriz, Khoi, Kerman-shah.
8.7 c.m. Krupp -	8	Teheran, with Cossack Brigade.
9 c.m. „ -	2	Isfahan.
B.L. converted -	2	Tabriz.
M.L. (English) -	1	Tabriz.
Nordenfeldt -	4	Teheran.
Total modern guns	126	

Besides the above, there are about 460 guns of obsolete pattern, mostly of native manufacture, stored in the arsenal at Teheran, or distributed throughout the provinces. For many years the Chief Instructor of the Persian Artillery was General Wagner von Wetterstadt, an Austrian artillery officer, but he retired from the post in 1901.

The entire force of the regular cavalry of Persia is included in the Cossack Brigade, a body of Persian troops trained by Russian officers and N.C.O.s, which has been in existence since 1879. The origin of this force was the result of a Russian mission, which was despatched to Teheran in that year. Under its auspices a regiment of from 400 to 600 Persian horsemen was raised, and Russian officers and instructors were provided by the Russian Government, as also were Berdan carbines, on payment.

In the following year a second regiment was organised on similar lines, and the two thus formed were designated the "Cossack Brigade." In 1884 the Czar of Russia presented the Shah with four 8.7 centimetre steel Krupp guns, which were added to the brigade as a battery of light field artillery. Since then another battery has been added.

The headquarters of the brigade are at Teheran, but, as the men are given two months' furlough during the year, one-sixth of the force is permanently absent, and, of the remainder, a large number are required for detachment duty.

The present composition of the brigade is:—

4 cavalry regiments (called *polk* or *faoj*).

2 batteries of horse artillery.

3 companies of infantry each 100 strong.

Each cavalry regiment consists of two squadrons, of about 60 rank and file each, the total strength of a regiment being 130. The cavalry are armed with the Berdan rifle, a sword, and dagger.

The establishment of a battery of the Cossack Brigade is:—

100 mounted gunners,

32 dismounted gunners,

168 horses,

26 waggon horses and spare horses.

Each battery is armed with four 8·7 c.m. Krupp guns, and has a full proportion of waggons.

In 1904 the strength of the brigade was:—

Russian officers	-	-	4	Including about 200 Persian officers.
Russian N.C.O.s	-	-	5	
Cavalry	-	-	520	
Infantry	-	-	300	
Artillery	-	-	250	
Band	-	-	70	
Total			- 1,149	

In addition to the above there are also about 400 men employed as guards for Persian officials, legations, &c., and on detachment at various places, such as Gumbat-i-Kabus, and at the posts on the quarantine-cordon in Khorasan (*see* p. 94).

The uniform is nearly identical with that of the Cossacks of the Russian army, consisting of a long-

skirted brown coat and pantaloons tucked into high boots. The head-dress is the usual black lambs-wool *kulah*, which has a high crown and no brim or peak.

Each man brings his own horse on enlistment, and replaces it, when necessary, at his own expense during his period of service.

The Russian officers are attached for a period of three years. The present efficiency of the brigade is largely due to the efforts of General Kossagovsky, the late Russian Commandant, who was succeeded in the command by Colonel Tchernozuboff in March 1903. The position of the Commandant is less important now than formerly, the brigade having been placed under the Persian Minister of War. New barracks and stabling have been erected near the *Maidan*, or Central Square, of Teheran.

Recruiting is carried out under the supervision of the Commandant, and the service is rapidly increasing in popularity, even among the wild nomad tribes. Men are not enlisted for any special term of service.

The classes which supply the recruits are :—

- (1.) Persians.
- (2.) Turks from Azerbaijan and Kazvin.
- (3.) Nomad tribes in the vicinity of Teheran, Kum, and Kasvin, and particularly the Baghdadi branch of the Shahsevan tribe.

The last two classes are preferred. The men undergo an annual training in musketry and artillery practice, similar to that prescribed for the Russian Army.

The irregular cavalry of Persia is divided into 69 Irregular squadrons, distributed among the various provinces from cavalry. which they are recruited. Azerbaijan claims the largest number, having 17 squadrons allotted to it; Khorasan comes next with 13. The actual effective strength falls far short of the nominal strength, and is estimated at about 13,600. The training and organisation are based upon the old Tartar system of tribal levies. The chief

responsible for the maintenance of the regulation number of horsemen receives a capitation grant of from 2*l.* to 4*l.* per man per annum, in return for which he is expected to produce, whenever required, his contingent fully armed, equipped, and organised. The distribution of the Government grant is left in the hands of the chief of the tribe.

The arms usually belong to the tribesmen. In the north-west they are mostly Peabody-Martini and Berdani, in Mazandaran and Khorasan Berdani and Werndli, and in the south-western provinces chiefly Martini.

The irregular cavalry are seldom called upon to serve outside their own districts. A few selected regiments, eight in all, are employed to garrison Teheran, Mazandaran, Khamseh, Isfahan, Meshed, and Bujnurd. These receive a slightly higher training, similar to that adopted in the Cossack Brigade.

The Shah's bodyguard, selected from four special tribes, has its headquarters in Teheran. It is composed chiefly of boys and old pensioners, and is invariably below its establishment of 2,500.

The irregular cavalry of Khorasan and Southern Persia is considered superior to that of Azerbaijan. The hill-tribes of the south-western provinces, such as the Lurs, Bakhtiari (see p. 85), and neighbouring branches are reported to be capable of providing good material for training as mounted men. The breed of horses in these provinces has, however, deteriorated considerably in recent years.

Camel
Corps.

The Camel Corps (*Zamburakchi*) is a relic of the old Persian Mountain Artillery. It consists of 40 or 50 camels with obsolete swivel-guns, and is of no value, except for ceremonial purposes.

Militia.

The title Militia, used by many writers, appears to be a misnomer. The force so called consists of small and insignificant bodies of local police raised and employed in various districts for the preservation of

order. In 1892 they were about 2,000 strong, but since then their numbers have decreased considerably.

Persian Title.	Corresponding to	Yearly Pay, equivalent to £ s. d.				Military ranks and pay.
		Cossack* Brigade.	Irregular Cavalry.	Artillery.	Infantry.	
		£	£	£	£	
<i>Sartip</i> I.	- General -	270	340	280	280	
" II.	- Lieut.-General -	—	230	230	230	
" III.	- Major-General -	—	185	190	185	
<i>Sarhang</i>	- Colonel -	58	115	115	90	
<i>Yawar</i> I.	- Major -	47	—	57	29	
" II.		—	—	38	23	
<i>Sultan</i>	- Captain -	35	18	25	12	
<i>Naib</i> I.	- 1st Lieutenant -	23	14	13	6	
" II.	- 2nd " -	16	—	9	4	
<i>Vakil</i>	- Sergeant -	7	7	5	35s.	
<i>Sowar</i>	- Trooper -	5	70s.	—	—	
<i>Topchi</i>	- Gunner -	—	—	47s.	—	
<i>Sarbaz</i>	- Private -	—	—	—	27s.	

* The apparent low rate of pay in the higher rank of the Cossack Brigade as compared with that in other branches may be accounted for by the fact that pay is issued in the former case regularly, and in the latter case only when the troops are under arms, and even then frequently in arrears.

In addition to the above rates of pay, both officers and men receive *jirah* or ration-allowance in lieu of rations in kind. This varies between about 110l. a year for a *Sartip* and 35s. a year for a *Sarbaz*.

Lodging allowance (*khanewarch*) is also issued to the rank and file, whether actually under arms or on half-pay. It is equivalent to about 25s. a year.

Officers, Cossacks, and irregular cavalry (when embodied with regulars) receive *alikh* or horse-allowance (10s. to 12s. per mensem).

Distin-
guishing
badges.

The universal head-dress for officers and men is the Persian *kulah* (see p. 81). This is ornamented in front with the badge of the "lion and sun," the pattern and material of which vary according to rank. Other distinguishing marks for officers are metal or worked stars worn on the collar of the tunic. These vary in number and material from the single silver star of a *Naib II*. to the three gold stars of a *Sartip*. The uniform of officers resembles that worn in the Austrian Army.

The official distinctive colours of the various branches of the service are :—

Cavalry	-	-	-	Green.
Artillery	-	-	-	Blue.
Infantry	-	-	-	Red.

These colours appear usually on the facings and epaulettes of the tunics.

The War
Depart-
ment.

The Shah is supreme head of the army. He is assisted by a Minister of War (*Vazir-i-Jang*) and a Commander-in-Chief (*Sipah-Salar*). The executive powers of the *Sipah-Salar* are often subordinated to those of the chief civil authority of Persia, the *Sadr Azam*.

There is no regular staff, but such staff work as may be required is performed by the *Adjutan Bashi*, who is the nearest approach to a Chief of the Staff, assisted by various *adjutans*, or aide-de-camps.

Pay De-
partment.

The Pay Department is under the control of a civilian official, whose title is the *Vazir-i-Lashkar*. He is assisted by a large staff of military accountants. The duties of the department consist in the preparation of the estimates, and in checking the accounts furnished by the various disbursing officers from the several provinces.

Arsenals.

Arsenals, for the purchase, storage, and issue of arms, ammunition, equipment, and stores have been established at the following places :—Teheran, Tabriz, Khoi, Urumiah, Isfahan, Shiraz, Meshed, Astrabad, Kermanshah, Khoramabad, Shuster, Kurdistan, Kerinan, Sari. The chief control is exercised by a civil minister, the *Vazir-i-Kur-Khaneh*.

In 1902 the cartridge factory at Teheran was re-organised by an ex-non-commissioned officer of the Austrian Army. New machinery was ordered from Austria, and it is expected that cartridges will be turned out at the rate of 12,000 per diem with European, and 2,000 per diem with Persian, workmen.

The central office of the Clothing Department is at Teheran, whence issues are made to the governors of provinces, all receipts, &c. being checked by the master-General.

Commissariat and Transport departments do not exist in the Persian Army. Troops, when required to change stations, provide their own transport as best they can, donkeys being generally used for the purpose. The Shah alone has a permanent camp transport establishment of about 1,500 mules and camels.

The Medical Department is at present in a very rudimentary condition.

Further particulars concerning the Army will be found in the "Report on the Persian Army," by Lieut.-Colonel H. P. Picot.

According to information supplied by their chiefs, the Bakhtiaris are capable of putting 30,000 fighting men in the field, of whom some 7,000 or 8,000 would be well mounted and armed with breechloading rifles; of the remainder, about half would be mounted, and all armed with native guns. A general levy of the tribesmen, between the ages of 20 and 60, would produce 70,000 to 80,000 men.

The above estimate is doubtless an exaggeration, and it is probable that the force which could be raised in an emergency would not exceed 20,000 fighting men, of whom from 2,000 to 3,000 would be mounted.

There are from 7,000 to 8,000 Martini rifles in the Bakhtiari country, the remaining firearms being smooth-bore muskets of Persian manufacture. As it is difficult for the tribesmen to obtain fresh supplies of ammunition, they refill old cartridge cases with country-made black powder. The tribesmen are always ready to fire at any-

thing for the sake of practice, but seldom at ranges exceeding 400 yards. The use of the backsight is unknown to them. They are brave, hardy, and keen, and proud of their warlike traditions, and the chiefs, especially the younger ones, are not averse to the improvement of their fighting material by the introduction of some of the principles of modern European warfare. A report made in 1903 to the effect that 100 Bakhtiari had been enlisted in the Cossack Brigade proved to be incorrect: the men were found to be villagers from the neighbourhood of Burujird, disguised as Bakhtiari.

Naval
forces.

The Persian naval force consists of :—

1. The "Persepolis," a screw steamship of 600 tons and 450 h.p., armed with four 3-in. guns.
2. The "Susa," a river steamer on the Karun of 30 h.p. ; practically of no value.

Both the above were built in 1884.

3. The "Selika," now called the "Muzafferi," a yacht armed with two Q.F. 1-pr. Hotchkiss guns. She was purchased from the Belgians in 1903, and is commanded by a Belgian.
4. The Shah's yacht on the Caspian, 120 tons : a present from the Czar of Russia.

CHAPTER VIII.

ADMINISTRATION, REVENUE, &C.

The Government of Persia is theoretically an absolute monarchy, the supreme power being vested in the Shah, whose word is law. In recent times, however, the position of the "King of Kings" has lost much of its former significance, the influence of Western civilisation, the presence in the country of representatives of foreign powers, and a respect for the *Mullahs* acting as a whole-some check on the Royal will and pleasure.

The present Shah, Muzaffer-ed-din, was born in 1853, and succeeded to the throne in 1896, on the assassination of his father, Nasr-ed-din. He is the fifth ruler of the Kajar dynasty (*see p. 4*). His elder brother, the Zil-es-Sultan, now Governor of Isfahan, was set aside, his mother not being of royal birth.

The Shah is assisted in the duties of administration by the *Sadr Azam*, or Grand Vizier, who corresponds in a measure to our Prime Minister, and by other Ministers of State, who exercise control over the following departments:—

- | | |
|---------------------|--|
| 1. Foreign Affairs. | 14. Crown Domains. |
| 2. War. | 15. Public Works. |
| 3. Finance. | 16. Religious Endowments and Pensions. |
| 4. Interior. | 17. Press. |
| 5. Treasury. | 18. Crown Buildings. |
| 6. Court. | 19. Ceremonies. |
| 7. Justice. | 20. Army Accounts. |
| 8. Commerce. | 21. Arsenals. |
| 9. Sciences. | 22. Shah's Cabinet. |
| 10. Customs. | 23. Mines and Industries. |
| 11. Telegraphs. | 24. Mint. |
| 12. Posts. | |
| 13. Agriculture. | |

The appointment of Ministers is made by the Sovereign, and their term of office depends entirely on the Royal favour. The titles borne by the various Ministers are frequently altered when fresh appointments are made.

Adminis-
trative
divisions.

For purposes of administration Persia is divided into a number of provinces, each under a Governor-General or Governor appointed by the Shah. The larger are called *mamlikats*, the smaller *vilayets*. These provinces are subdivided into districts or dependencies, which are known by various designations, such as *mahal*, *beluk*, &c., according to their relative size and importance. The governors of districts are either appointed directly by the Crown or are nominated by the Governor-General of the Province. A system of purchase is in vogue by which such posts are usually sold to the highest bidder, a practice which greatly militates against the efficiency of the Persian administration. Some provinces are by custom looked upon as the perquisite of members of the Royal family, as, for instance, that of Azerbaijan, which is usually reserved for the *Vali Ahd*, or Crown Prince. The jurisdiction of Governors-General and the number of administrative divisions are changed so frequently that it is hardly possible to give a complete and correct list of them.

Adminis-
tration of
justice.

Justice is administered by the Governors or their representatives and by the clergy (*Mullahs*). The former are guided by the *Urf*, or law of custom, the latter by the *Shar*, or written Divine Law, based on the Koran. Every town also has a mayor or chief magistrate, called *Beglerbeggi*, *Kalantar*, or *Darogha*, and each village a headman or *Kedkhoda*. These settle petty disputes in their respective areas of jurisdiction and assist in the collection of the revenue.

Karguzar.

Disputes between foreigners and Persian subjects are settled by a provincial official termed the *Karguzar*,

who is a representative of the Central Tribunal of the Ministry for Foreign Affairs at Teheran.

The regular revenue of Persia is derived from the Revenue, following sources:—

- (1.) Taxation (*maliat*).
- (2.) Crown lands.
- (3.) Customs.
- (4.) Rents and leases.

Taxation is assessed under the head of land tax, herd Taxation, tax, or trade tax.

The land tax is levied on all property, with the exception of church property and property which is held under certain conditions in return for feudal service. It varies from 5 per cent. to 20 per cent. according to the facility or difficulty of irrigation.

The herd tax is supplementary to the above, and falls chiefly on the nomad tribes, who, through it, contribute their sole share to the Imperial revenue.

The trade tax takes the form of a poll tax on artisans, or of an impost of 20 per cent. on trade profits.

The cultivators of Crown lands give to the State a proportion of the produce of the land they rent. Crown lands.

Since the year 1900 the administration of the Persian Customs has been carried out by a staff of Belgian officials, under the directorship of M. Naus. Previous to that date the post of collector of customs was farmed out to the highest bidder, with results which were more satisfactory to the holders of the post than to the Treasury. The financial difficulties in which Persia found herself induced her to undertake measures for the adoption of a more profitable system of collecting her customs, and resulted in an application in 1898 to the Belgian Government for the loan of a staff of Belgian officials.

The request was complied with, and, in 1899, as a tentative measure, the custom-houses of the provinces of Azerbaijan and Kermanshah were entrusted to the Belgians. The result proved so satisfactory that, in 1900, the Persian Government abolished the farm system, and extended the new régime to the remaining provinces. Under the new system, the revenue derived by the State from the customs has shown a marked increase. In 1901 it amounted to nearly 320,000*l.*, whereas under the old system it seldom reached more than three-fifths of that sum. In 1902-03 it amounted to 418,000*l.* gross and 380,000*l.* net. It is estimated that the 1903 tariff will produce a further net increase of 200,000*l.* (see page 68).

Rents and leases.

A considerable revenue accrues to the Treasury from the farming-out of the postal and telegraph systems, the mint, press, and various concessions.

Other sources.

Pishkash.

Sadir.

In addition to the regular revenue, two other sources may be mentioned, from which a fluctuating income is derived. These are termed *pishkash* and *sadir*. The former consists of offerings made to the Shah by his subjects on the first day of the new year and on other occasions. The latter is an emergency tax levied unsystematically, whenever funds are required for a special purpose, such as an increase of the army or the erection of royal or public buildings.

Financial position of Persia.

The total revenue in 1901 amounted to 1,500,000*l.* The recent fall in the price of silver accounted in a great measure for the lowness of the figure as compared with previous years, *e.g.*, in 1876, when the *kran* was worth nearly 9*d.*, instead of about 4½*d.* as now, the revenue amounted to 1,950,000*l.*

Banks, loans, &c.

The following are the principal banks in Persia:—

(1) *The Imperial Bank of Persia.*

Established in 1889 under a British Royal Charter, a concession for its formation having been granted by the Shah to Baron Julius de Reuter. The head office

is at Teheran, and there are branches at Tabriz, Resht, Meshed, Isfahan, Yezd, Shiraz, Bushire, Kerman, Sistan, and other places. The following loans have been made to the Shah at various times by this Bank :—

(a.) In 1892.—500,000*l.*, on the security of the Customs receipts of Southern Persia and the Persian Gulf. This was redeemed in 1900.

(b.) In 1903.—2,000*l.*, at 10 per cent., to the shrine of Imam Reza at Meshed (*see* p. 27), on the security of the shrine authorities.

(2.) *The Russian "Banque d'Escompte."*

Formerly known as the *Banque des Prêts de Perse*. Is connected with the Russian State Bank; it has its head office at Teheran, with branches in provincial towns, and is opening a branch in Sistan. The following loans have been issued to the Shah by this Bank :—

(a.) In 1900.—A loan of 2,400,000*l.*, at 5 per cent., on the security of the Customs receipts of Persia, except those of the province of Fars and the Persian Gulf. At the same time it was stipulated that Persia should repay the balance of the British loan of 1892, and agree to contract no further loans from any foreign power, without the consent of Russia, for a period of 10 years.

(b.) In 1902.—1,000,000*l.*, on the same security as the preceding loan.

(c.) In 1903.—55,000*l.*, for the purpose of collecting troops in the neighbourhood of Teheran.

(3.) There used to be in Teheran a branch of the Russian "*Banque de Commerce de Moscou*": it was withdrawn in 1904.

	Residence.	Rank.
British Consu- lates.	Ahwaz - - -	Vice-Consul for Arabistan.
	Bandar Abbas -	Consul.
	Bam - - -	Consular Agent.
	Bushire - - -	Consul-General for the pro- vinces of Fars, Khuzistan, and Laristan, and the dis- trict of Lingah, and for the coasts and islands of the Persian Gulf, within the dominions of Persia. Also a Vice-Consul.
	Isfahan - - -	Consul-General.
	Kerman - - -	Consul.
	Kermanshah - -	Vice-Consul.
	Meshed - - -	Consul-General for Khorasan. Also a Vice-Consul.
	Mohammera - - -	Consul.
	Nasratabad (Sistan) -	Consul for Sistan and Kain. Also a Vice-Consul.
	Resht - - -	Vice-Consul.
	Shiraz - - -	Consul.
	Tabriz - - -	Consul-General.
	Teheran - - -	Envoy Extraordinary and Consul-General. Also a Vice-Consul.
	Turbat-i-Haidari -	Consul.

A reorganisation of the British Consular Guards British was carried out in 1904, the distribution being as Consular follows:— Guards.

		Indian Cavalry.
Teheran	- - -	8
Tabriz	- - -	6
Isfahan	- - -	8
Kerman	- - -	6
Sistan	- - -	20
Bandar Abbas	- - -	6
Turbat-i-Haidari	- - -	25
Meshed	- - -	23
Ahwaz	- - -	12
Kermanshah	- - -	8
Bushire	- - -	9
Total	- - -	131

In addition to the above, a half-company of Indian infantry is stationed at each of the following places:— Bushire, Chahbar, and Jask, for the purpose of protecting the cable and telegraph stations.

Russian Consulates have been established at the Russian following places:— Consul-ates.

Residence.	Rank.
Astrabad - - -	Consul.
Bushire - - -	Consul-General.
Isfahan - - -	Consul.
Kerman - - -	Consul.
Kermanshah - - -	Consul.
Meshed - - -	Consul-General.
Resht - - -	Consul.
Sistan - - -	Consul.
Shiraz - - -	Consul.
Tabriz - - -	Consul-General.
Teheran - - -	Envoy Extraordinary and Consul-General.
Urumiah - - -	Consul.

Russian quarantine cordon. A quarantine cordon is maintained in Khorasan by the Russians. It was first instituted in 1897, at the time of the outbreak of plague in Bombay. Since that time a more or less rigorous medical supervision has been enforced against all arrivals from Baluchistan. At present the cordon extends from the *Kavir* on the west to the Hari-Rud on the east. The principal stations are Karez and Turbat-i-Haidari, at each of which is a Russian officer, with a Russian doctor, and six or seven Cossacks. There are minor stations at Dehrrabad, Salami, Rushkar, and Zirmir, at each of which there are 6 or 7 Persian postal *sowars* under Russian supervision. The Russian officers in command receive their instructions from the Russian Consul-General at Meshed.

Coinage. The unit of money is the *kran*, a silver coin weighing 71.04 grains troy, equivalent in value to about 4.36d.

The coinage consists of:—

Nickel	-	1 <i>shahi</i> piece	=	$\frac{1}{20}$ <i>kran</i> .
		2 <i>shahi</i> „	=	$\frac{1}{10}$ <i>kran</i> .
Silver	-	5 <i>shahi</i> piece.		
		10 <i>shahi</i> „		
		1 <i>kran</i> „		
		2 <i>kran</i> „		
		5 <i>kran</i> „		

Imperial Bank of Persia notes are issued in denominations of 1 *toman*, 2 *toman*, 3 *toman*, 5 *toman*, &c. (10 *kran* = 1 *toman*.)

The average value of the *kran* (for the period 1901-1903) was 55 *kran* = 1l. sterling. Gold coins, called *ashrafi*, or gold *toman*, are also struck, but are not in circulation. One gold *toman* = 17 *kran*.

Weights. Weights and measures differ in almost every province and town.

The unit of weight is the *miskal* = 71 grains.

16 *miskal* = 1 *sir*.
5 *sir* = 1 *abbasi*, *wakkeh*, or *kervankeh*. Table of weights.

Dealers in provisions employ a weight called a *man* (also called *maund* or *batman*), which varies in certain provinces, thus:—

1 *Tabriz man* = 8 *abbasi* = 6½ lbs. avoirdupois.
1 *Shah man* = 16 *abbasi* = 13 „ „ „
1 *Rey man* = 32 *abbasi* = 26 „ „ „
1 *Bandar Abbas man* = 840 *miskal* = 9 lbs. avoirdupois.
1 *Man-i-Kohne* = 1,000 *miskal* = 10¼ lbs. avoirdupois.

Forage and coal are sold by the *kharvar*:—
1 *kharvar* = 100 *Tabriz man* = 650 lbs.

A *Tabriz kharvar*, however, = 1,014 lbs.

Liquids are weighed, not measured.

The unit of measure is the *zar* or *gez*, which also varies in different provinces. Lineal measures.

The most common standard is:—

1 *zar* = 40·95 inches.
6,000 *zar* = 1 *farsakh* = 3·87 miles.

In Azerbaijan 1 *zar* = 44·09 inches.

The *jirib* is the unit of area measurements.

Ordinarily, 1 *jirib* = 1,000 square *zar* = 1,294 sq. yards. Surface measure.

In some provinces, however, 1 *jirib* = 1,066 square *zar* = 1,379 sq. yards.

The Persians use a lunar calendar, termed *Hijreyeh* Calendar. from the fact that it commences from the date of the *Hijra*, or Flight of the Prophet from Mekka to Medina, 16th July, 622 A.D.

The months, of which there are twelve in the year, consist alternately of 29 and 30 days. To the last month an extra day is added eleven times in a period of 30 years. At each of these times the year consists of 355 days, instead of 354, as ordinarily. 32 of our years are nearly equal to 33 Muhammadan years.

In official documents the Mongolian Solar Calendar is used, the year commencing with the vernal equinox, the 21st March, and consisting of 365 to 366 days.

Each cycle of 12 years is designated by the name of an animal.

(58)

APPENDIX A.

The following are some of the principal personages holding offices, &c., in Persia:—

Name or Title.	Office.
Majid Mirza - or Ain-ed-Dowleh	<i>Vazir-i-Azam</i> or Prime Minister. Appointed in September 1903. He is a cousin and a son-in-law of the present Shah, and was formerly Governor of Teheran.
Ahmed Khan Kajar - or Ala-ed-Dowleh	Governor-General of Fars at the time of Lord Curzon's visit to Bushire, in November 1903, but recently superseded.
Mirza Ali Asghar Khan - or Atabeg-i-Azam or Amin-es-Sultan	Ex-Grand-Vizier of Persia. He resigned in September 1903, proceeded to travel abroad, and visited Port Arthur among other places.
Amir Khan - or The Sipah-Salar	Minister of War and Commander-in-Chief of the Persian Army. He is a brother of the Ain-ed-Dowleh.
Hashmat-ul-Mulk Khazal -	Governor of Sistan. Sheikh of Mohammera, and a son-in-law of the Shah.
Masud Mirza - or The Zil-es-Sultan	The eldest son of the late Shah (see p. 87). Governor of Isfahan.
Muhammad Ali Mirza or The Vali-Ahd - M. Mousnikoff -	The Crown Prince of Persia, and Governor-General of Azerbaijan. Russian Consul-General in Khorasan.
Mushir-ed-Dowleh	The Persian Minister for Foreign Affairs.
Muzaffer-ed-din -	The Shah of Persia or <i>Shahin-Shah</i> (King of kings). The 5th of the Kajar dynasty (see p. 87).
Naus, Mons. -	The Belgian Director-General of Persian Customs.

Name or Title.	Office.
Schindler, Gen. A. H.	Controller-General of the Passport Office. . A recognised authority on Persia and Persian affairs.
Shua-es-Sultaneh . -	The Shah's second son. Appointed Governor-General of Fars in May 1904.
Tchernozuboff, Col. -	The Russian officer who, in March 1903, succeeded General Kossagovsky in the command of the Persian Cossack Brigade (see p. 81).
Yamin-i-Nizam - -	A prominent Persian official in Sistan connected with the Boundary Commission.

APPENDIX B.

BIBLIOGRAPHY.

- Adams (J. E.). Persia. 1900.
 Alcock (T.). Travels in Persia, &c. 1831.
 Anderson (T. S.). My Wanderings in Persia. 1880.
 Arnold (A.). Through Persia by Caravan. 1877.
 Baker (V.). Clouds in the East: Travels on the Perso-Turkoman Frontier. 1876.
 Bassett (J.). Persia: a Narrative of Travel. 1887.
 Benjamin (S. G. W.). Persia and the Persians. 1887.
 Biddulph (E.). Four Months in Persia. 1892.
 Binder (H.). Au Kurdistan et en Perse. 1887.
 Bird (J. L.). Journeys in Persia and Kurdistan. 1891.
 Bleibtren (J.). Das Land der Sonne und des Löwen. 1894.
 Browne (E. G.). A Year among the Persians. 1893.
 Brugsch (H.). Reise der k. preussischen Gesandtschaft nach Persien. 1860-61, 1862-63.
 Buckingham (J. S.). Travels in Assyria, Media, and Persia.
 Chardin (J.). Voyages en Perse. 1711.

(59)

99

- Chirol (V.). The Middle Eastern Question. 1903.
 Collins (E. T.). In the Kingdom of the Shah. 1896.
 Conolly (A.). Journey to India through Persia. 1834.
 Curzon (G. N.). Persia. 1892.
 De Windt (H.). A Ride to India across Persia. 1891.
 Dieulafoy (J.). La Perse et la Susiane. 1887.
 Doncourt (A. B. de). La Perse. 1885.
 Driault (E.). La Politique orientale de Napoléon. (Gardonné's Mission to Persia, 1807-09.) 1904.
 Elenko (E.). Otcherki Persii. 1902 (in Russian).
 Fraser (J. B.). Narrative of a Journey into Khorasan. 1825.
 Gasteiger Khan (A.). From Teheran to Baluchistan. 1884.
 Goldsmid (F. J.) &c. Eastern Persia Boundary Commission. 1876.
 " " Telegraph and Travel. 1874.
 Gordon (T. E.). Persia re-visited. 1895.
 Harris (W. B.). From Batum to Baghdad ... *viâ* Persian Kurdistan. 1896.
 Holdich (T. H.). The Indian Borderland (Perso-Baluch Boundary). 1901.
 Hunt (G. H.). Outram and Havelock's Persian Campaign. 1858.
 Ives (E.). A Journey from Persia to England. 1773.
 Joubert (P. A.). Voyage en Perse. 1821.
 Jenkinson (A.). Early Voyages to Persia. 1886.
 Khanishu (J.). About Persia and its People. 1899.
 Kinneir (J. M.). Geographical Memoir of the Persian Empire.
 Krahmer. Die Beziehungen Russlands zu Persien. 1903.
 Layard (H.). Early Adventures in Persia. 1887.
 Le Messurier (A.). From London to Bokhara, and a Ride through Persia. 1889.
 MacGregor (C. M.). A Journey through Khorassan. 1879.
 " " Routes in Persia. 1878.
 Malcolm (J.). History of Persia. 1815.
 Markham (C. R.). History of Persia. 1874.
 Markham (C. J.). A Journey through Persia. 1889.
 Mohun Lal. A Tour through Khorasan and Part of Persia. 1834.
 Morgan (J. de). Mission scientifique en Perse. 1895.
 Morier (J.). A Journey through Persia. 1812.
 " " A Second Journey. 1818.
 Orsolle (E.). La Caucase et la Perse. 1885.

- Outram's Persian Campaign in 1857. 1860.
 Perkins (J.). Eight Years in Persia. 1843.
 Porter (R. K.). Travels in Georgia, Persia, &c. 1821-2.
 Radde (G.). Reise an der persisch-russischen Grenze.
 1886.
 Rittitch (P. A.). A Railway across Persia. 1900.
 Rohrbach (P.). Persien und die deutschen Interessen.
 1901.
 Ronaldshay (Earl of). On the Outskirts of Empire in
 Asia. 1904.
 Safar Nameh. Persian Pictures. 1894.
 St. Arroman (R.). Les missions françaises. (Chez les
 Persans.) 1895.
 Sérénà (C.). Une Européenne en Perse. 1881.
 „ Hommes et choses en Perse. 1883.
 Stack (E.). Six months in Persia.
 Stahl (A. F.). Reisen in Nord- und Zentral-Persien. 1895.
 „ Zur Geologie von Persien. 1897.
 Stuart (D.). The Struggle for Persia. 1902.
 Sykes (E. C.). Through Persia on a Side-Saddle. 1898.
 Sykes (P. M.). 10,000 Miles in Persia. 1902.
 Vambéry (H.). Meine Wanderungen und Erlebnisse in
 Persien. 1867.
 Vaughan (H. B.). Journey through Persia. 1892.
 Wagner (M.). Travels in Persia. 1856.
 Weeks (E. L.). From the Black Sea through Persia, &c.
 1896.
 Whigham (H. J.). The Persian Problem. 1903.
 Wills (C. J.). In the Land of the Lion and the Sun.
 1883.
 Wilson (C. W.). Murray's Handbook for Persia, &c.
 1895.
 Yate (Col. C. E.). Khorasan and Sistan. 1900.

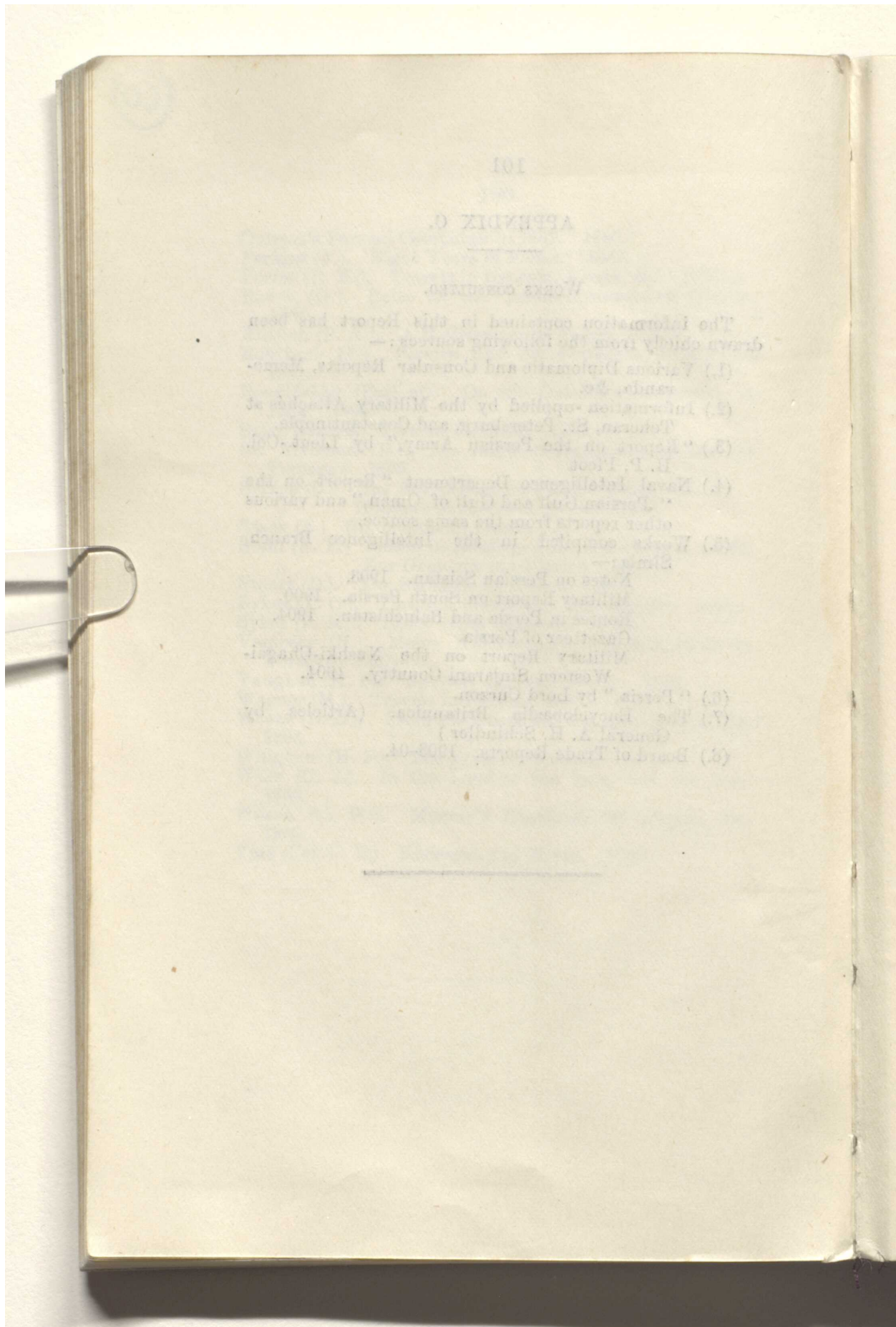
APPENDIX C.

WORKS CONSULTED.

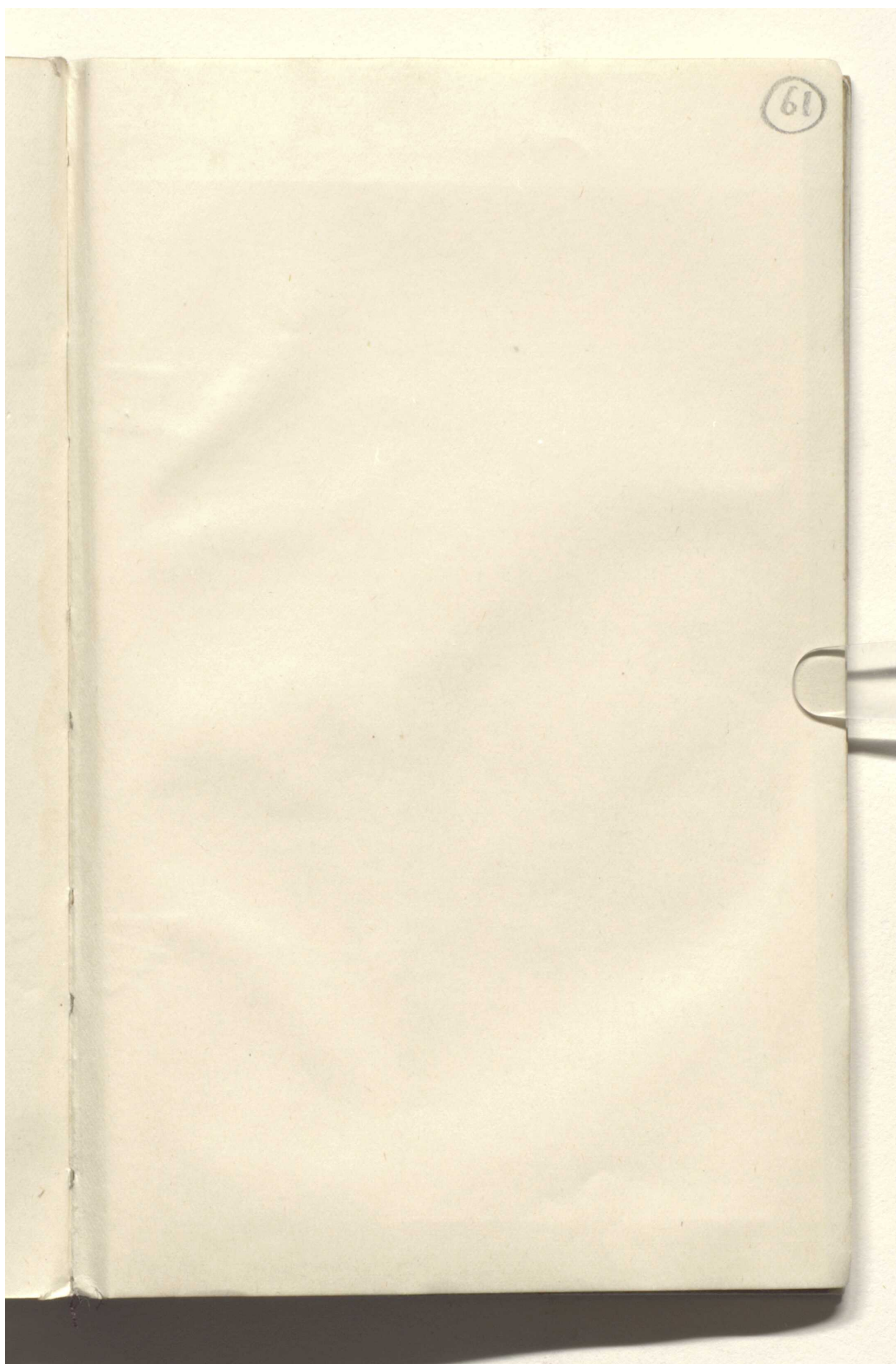
The information contained in this Report has been drawn chiefly from the following sources :—

- (1.) Various Diplomatic and Consular Reports, Memoranda, &c.
- (2.) Information supplied by the Military Attachés at Teheran, St. Petersburg, and Constantinople.
- (3.) "Report on the Persian Army," by Lieut.-Col. H. P. Picot.
- (4.) Naval Intelligence Department "Report on the Persian Gulf and Gulf of Oman," and various other reports from the same source.
- (5.) Works compiled in the Intelligence Branch, Simla :—
 - Notes on Persian Seistan. 1903.
 - Military Report on South Persia. 1900.
 - Routes in Persia and Baluchistan. 1904.
 - Gazetteer of Persia.
 - Military Report on the Nushki-Chagai-Western Sinjarani Country. 1904.
- (6.) "Persia," by Lord Curzon.
- (7.) The Encyclopædia Britannica. (Articles by General A. H. Schindler.)
- (8.) Board of Trade Reports. 1903-04.

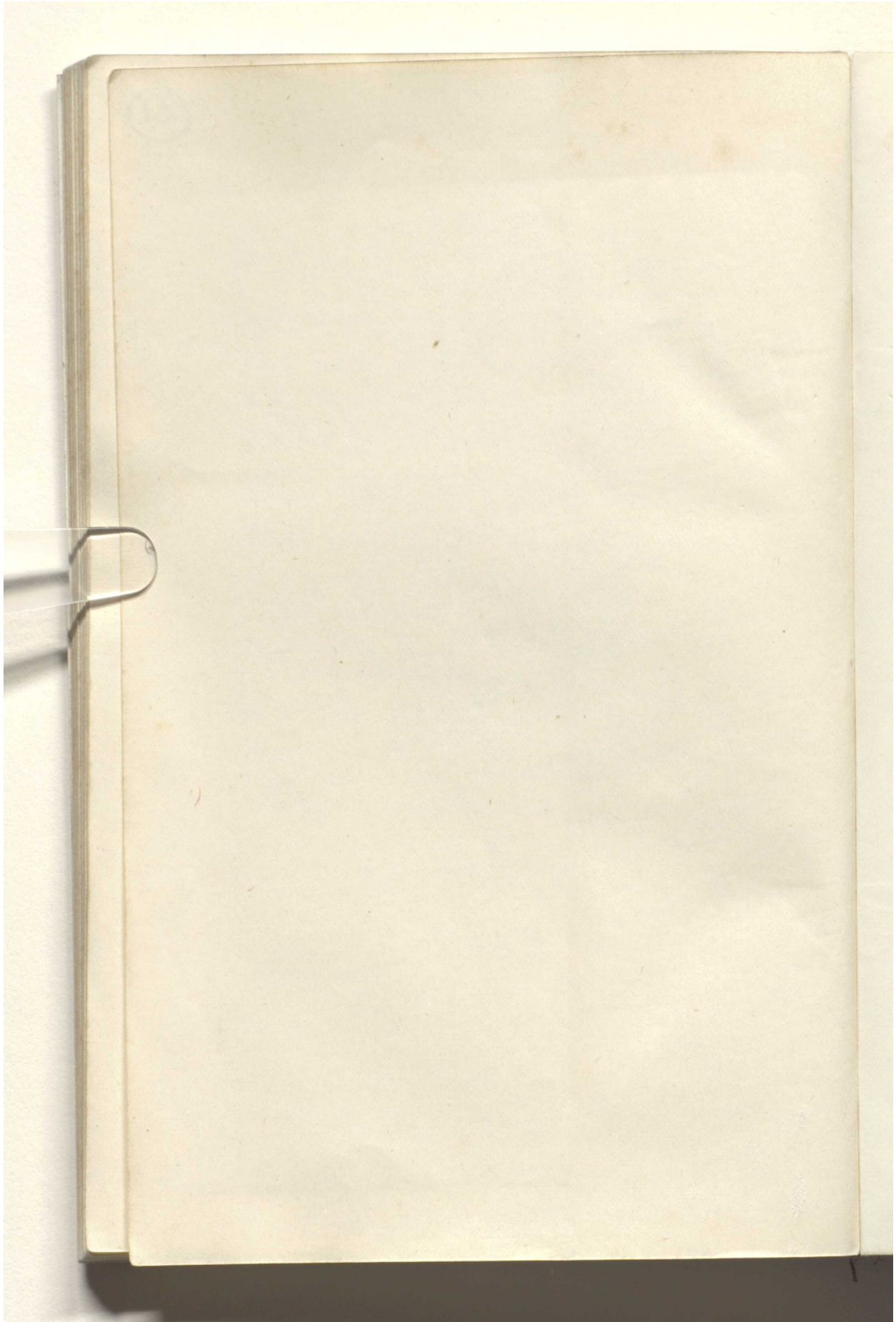
'Military Report on Persia' [60v] (125/134)



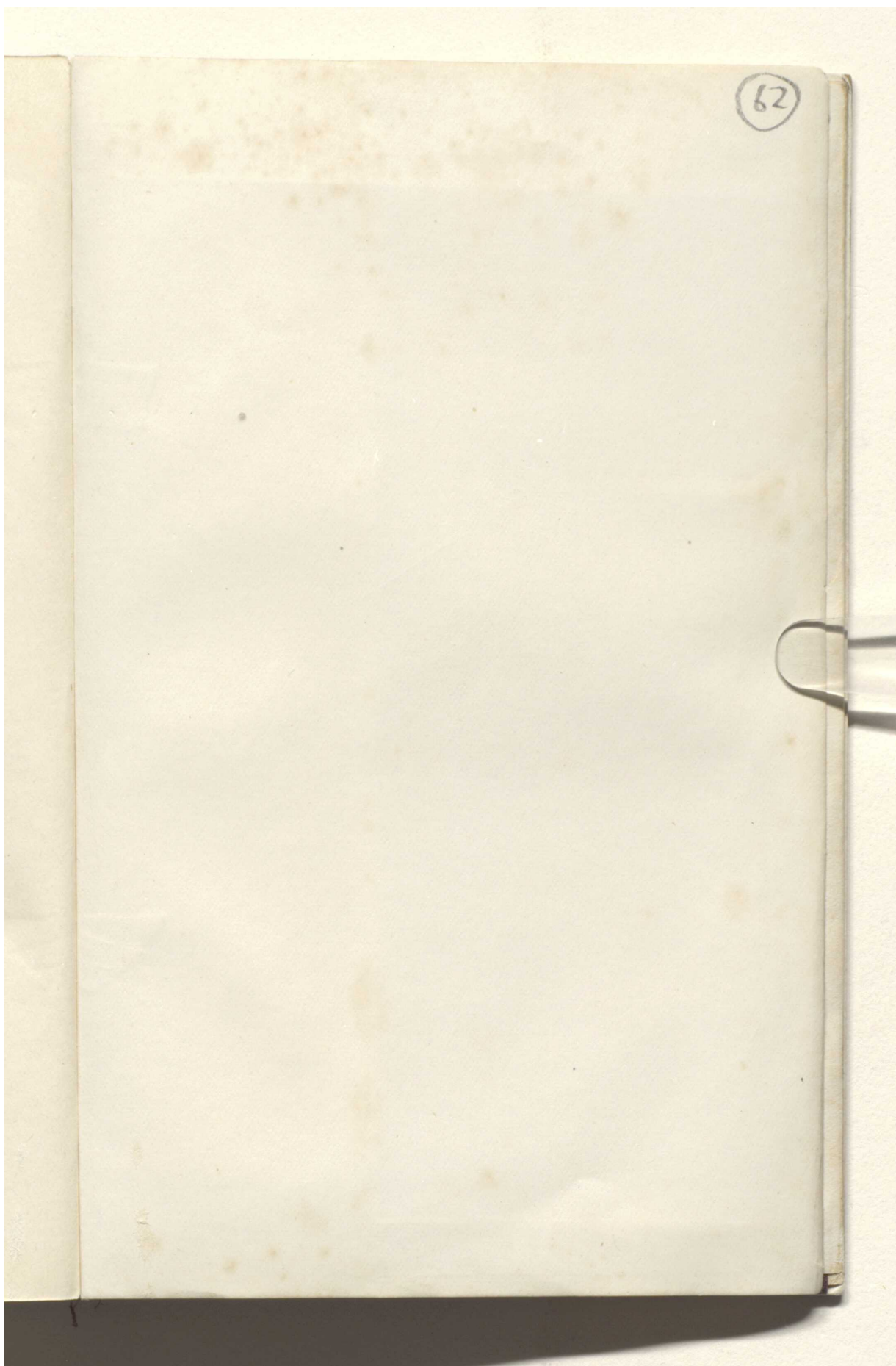
'Military Report on Persia' [61r] (126/134)



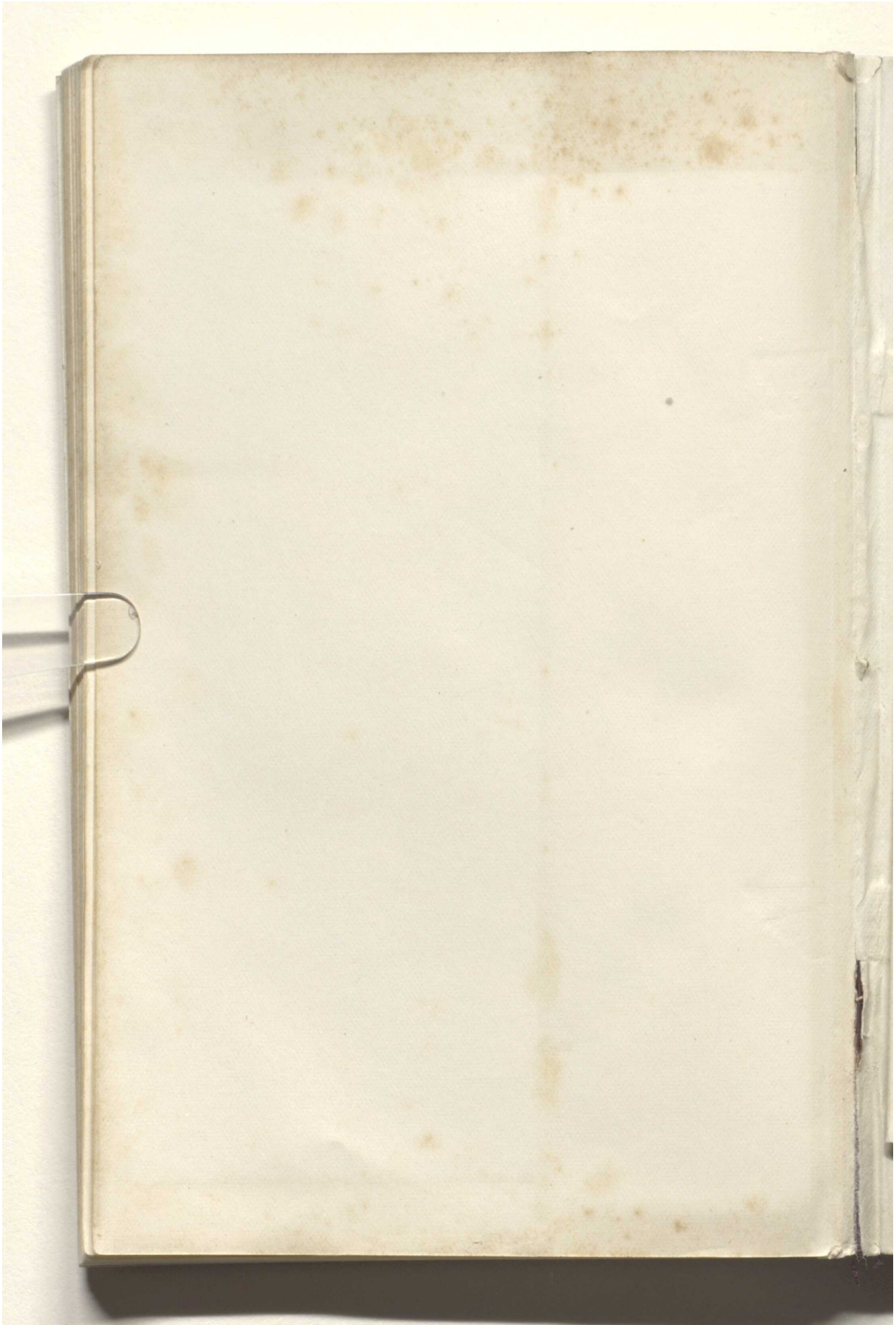
'Military Report on Persia' [61v] (127/134)



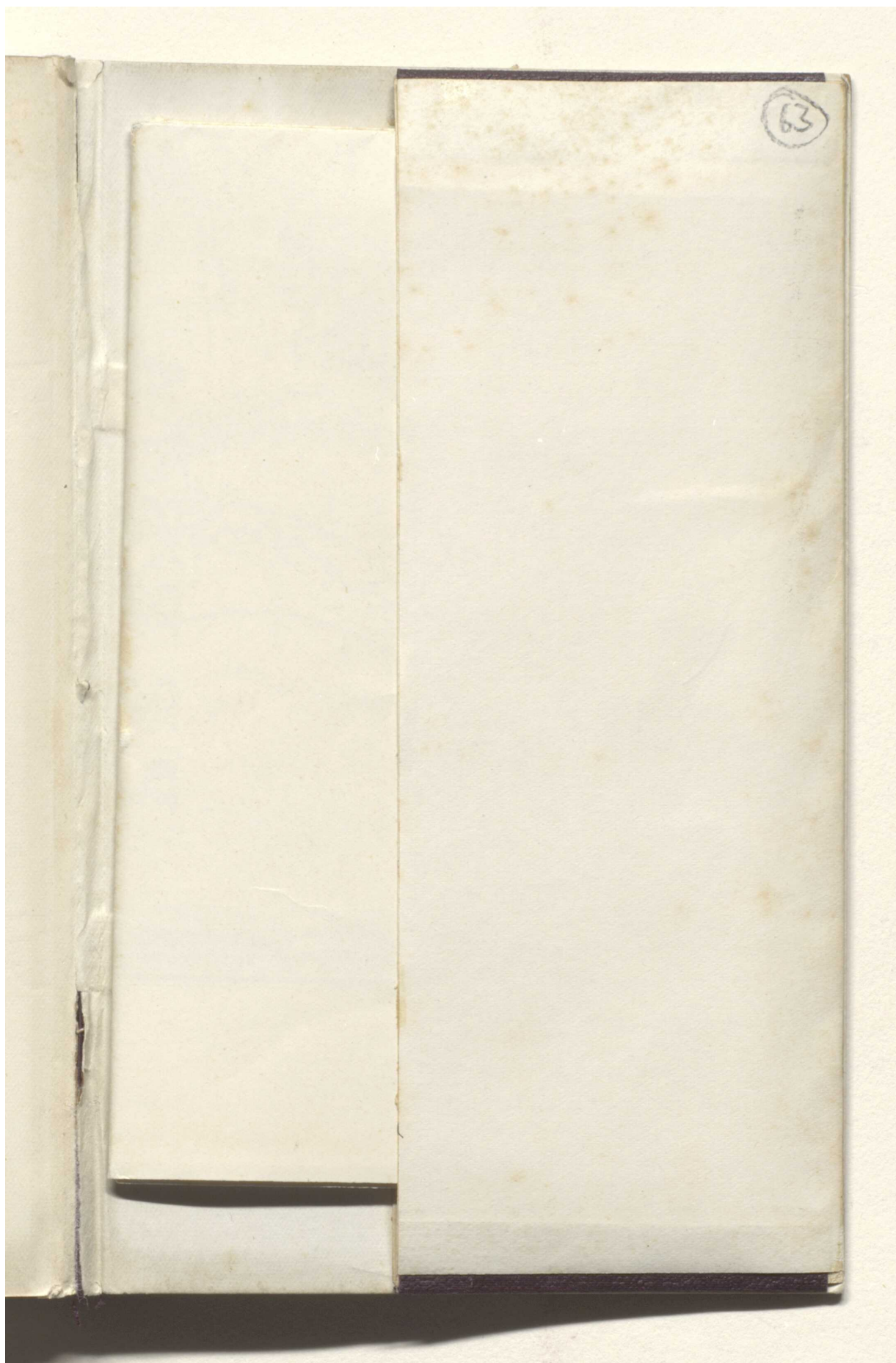
'Military Report on Persia' [62r] (128/134)



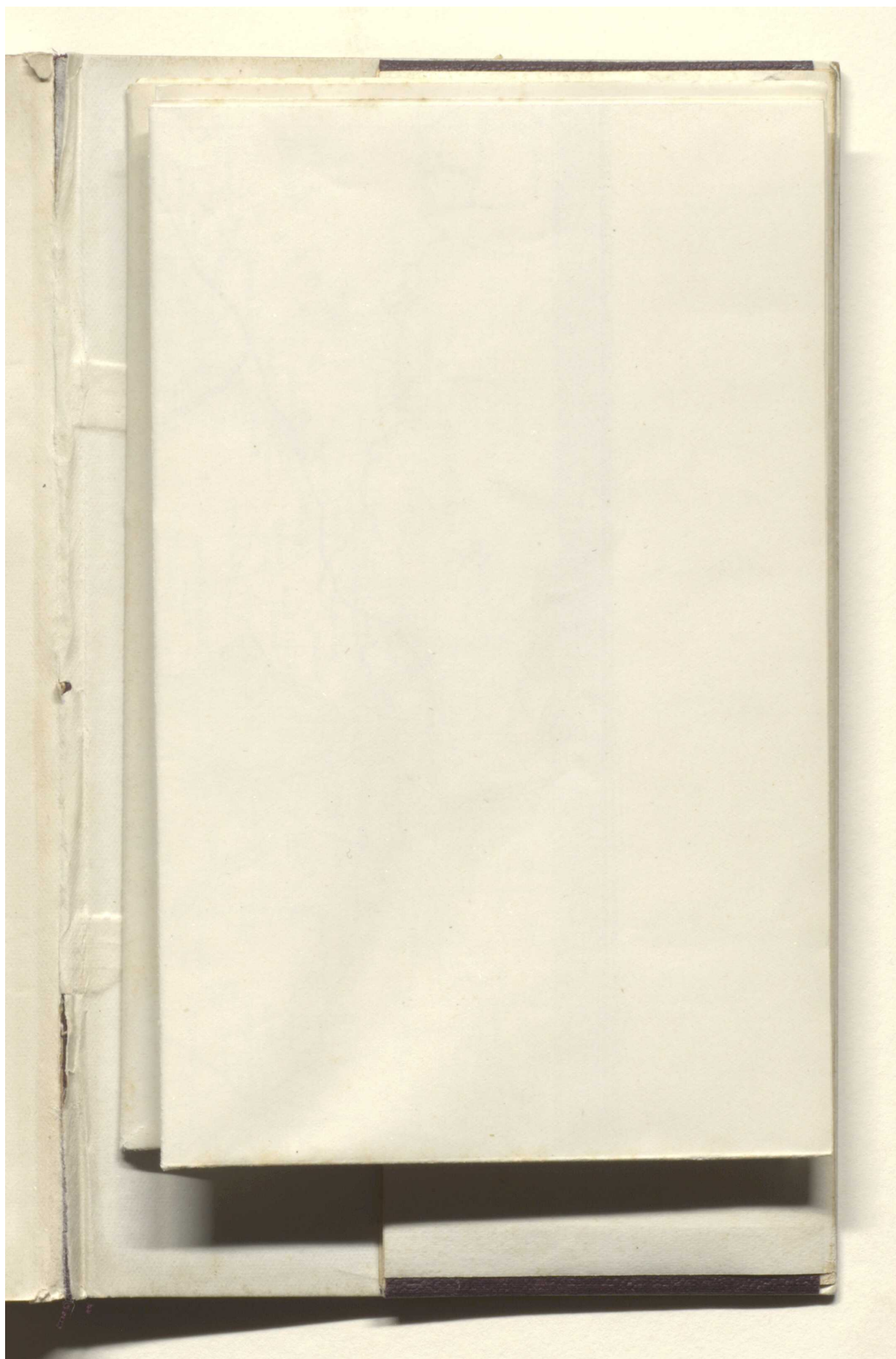
'Military Report on Persia' [62v] (129/134)



'Military Report on Persia' [back-i] (130/134)



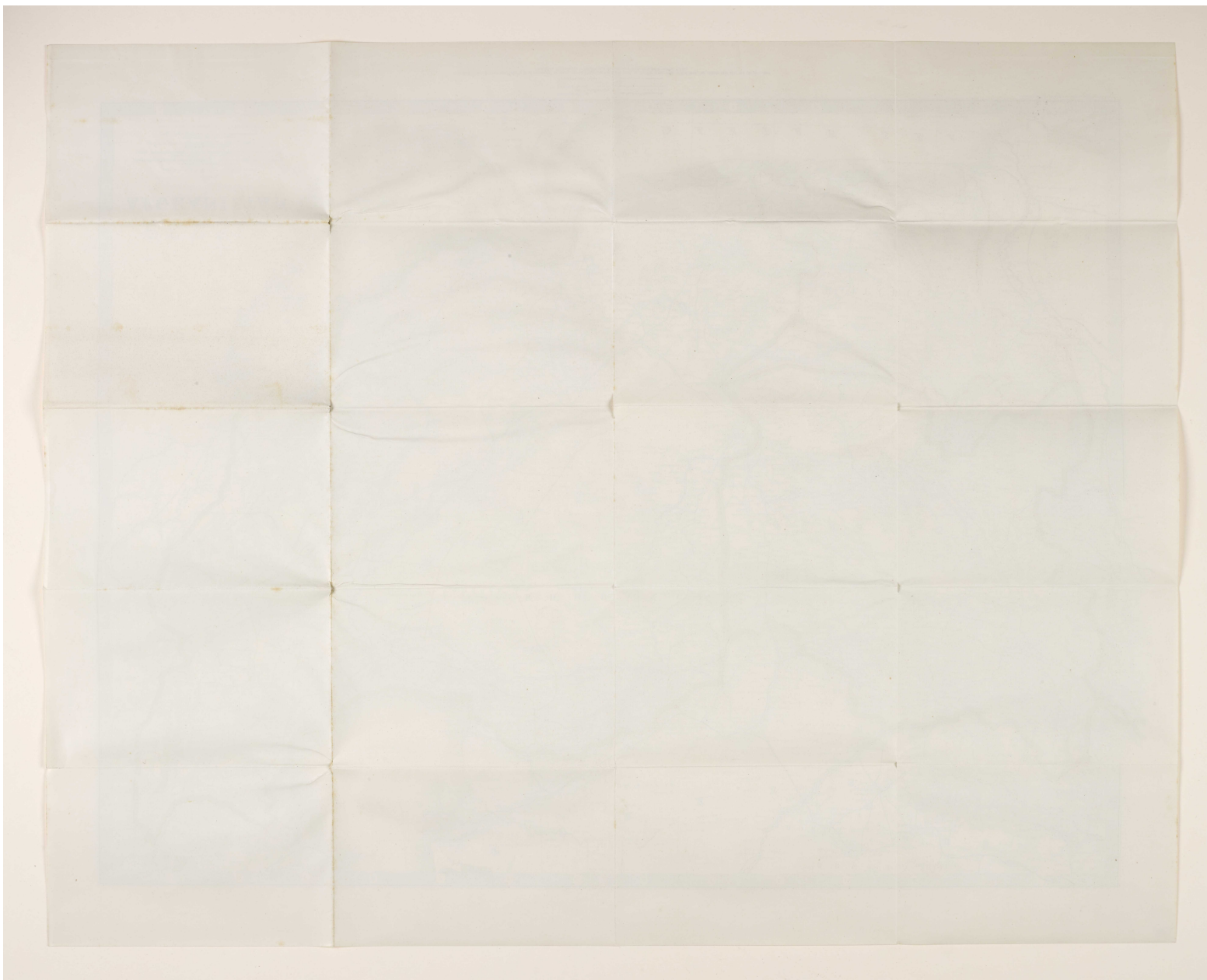
'Military Report on Persia' [64r] (131/134)



'Military Report on Persia' [64r] (132/134)



'Military Report on Persia' [64v] (133/134)



'Military Report on Persia' [64v] (134/134)

