A History of Persia

Volume I

Percy Sykes

Curzon

A HISTORY OF PERSIA

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Percy Sykes

VOLUME ONE

with a new introduction by
Antony Wynn

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INTRODUCTION

SIR PERCY SYKES AND THE HISTORY OF PERSIA

Antony Wynn

Born in 1867, Sir Percy Sykes had a conventional start to life. His family were industrialist bleachers who had settled into prosperous squiredom in Cheshire and his father was an army chaplain who had served in the Crimea and was later a chaplain to Queen Victoria. It was natural that, after school at Rugby, Sykes should go to Sandhurst to train as an army officer and then join a cavalry regiment serving in India. That was the end of the conventional part of his career, for in India he spent his leaves exploring the Himalayas and was soon seconded to Army Intelligence, who in 1893 sent him to Persia.

At that time the British were concerned that Russia might attempt an invasion of India. The shortest route ran through Afghanistan, but arrangements had been made with the Afghan government to ensure that the Russians would meet with effective resistance. Persia, with its weak, corrupt and bankrupt government, was in no position to offer such resistance and offered a soft route for invasion, were the Russians to embark on such a course. Little was known about the region that bordered India and Sykes was sent to explore it.

After Sykes had undertaken a number of expeditions in the provinces of Kerman and Baluchistan, it was decided in 1894 to establish a permanent British presence in a new consulate at Kerman, from which he could establish a network of informants covering the eastern frontier of Persia. With a short break for the Boer War, Sykes was based there until 1905. He explored and surveyed every corner of his territory – much of it in very rough country – but, more importantly, he established good relations with all the leading local figures. Having arrived with the

mindset of an archetypal imperialist, he soon fell under the spell of Persian good manners and absorbed himself in Persian culture, religion and history.

Kerman is still the most relaxed and easy-going of all the Persian cities. Here Sykes met the Ne'matullahi Sufis and the Sheikhis, the most liberal and enlightened of the Persian Muslims, whose refreshing company he enjoyed. He learned Persian and even studied the Quran. He was fascinated by the local people and their affairs and became almost a gossip. He was also an avid reader of the Classics and, in his journeys of exploration, he traced the routes taken by Alexander the Great and Marco Polo, collecting archaeological items and recording inscriptions on the monuments that he found as he went. He wrote down everything that he found and made very detailed maps of the country, recording where water and fodder could be found for passing military forces, be they British or Russian. For all of this in 1902 the Royal Geographical Society awarded him their Gold Medal.

At this time, Persia was caught between Russia to the north and British India to the south-east, while the Royal Navy controlled the Persian Gulf. Persia was powerless and her only strength lay in being able to play each power against the other in an auction of personal favours by the Shah and his ministers. It has long been fashionable to belittle Curzon's exaggeration of the Russian threat of southward expansion, but it is often forgotten that in Sykes's time Russia had made the north of Persia a Russian colony in all but name. Russian consuls were established in all the towns of any size in the north and they even collected taxes for the Russian government. The local Persian governors were mere puppets and could do nothing about it. Russia was regarded as malevolently omnipotent until 1905, when the Japanese destroyed the Russian fleet at the battle of Tsushima. This showed the Persians that the Russians were no longer invincible and inspired the modernisers in their efforts to form a constitution and institute reforms.

It was against this background that Sykes took up his new post as consul-general at Mashhad. Having spent his years in the southern wildernesses, he was now in an important metropolis, a great city of pilgrimage, where the immensely wealthy shrine of the Imam Reza owned much of the local wealth and where the clerics were far more powerful than the government officials. By now he was thoroughly imbued with Persian culture and had acquired an extensive and detailed knowledge of the most important personages of the land. He was, untypically of his compatriots at the Legation in Tehran, sympathetic to the Persians and he treated all of them, of whatever background, with an unfailing respect, which they duly reciprocated.

The Persians looked to the British to support them against Russia and Sykes's personal prestige rode high on this wave of patriotic feeling for two years until 1907, when the British and the Russians divided Persia into two zones of influence, where each power undertook not to interfere with the interests of the other. The Persian Constitutionalists regarded this as an act of betrayal by the British, and were not satisfied by statements that Persia's independence would be assured. The Russian consul-general at Mashhad, flying in the face of the treaty with England, did all he could to cause disturbances that would justify his bringing in large numbers of troops from Ashgabad into Khorasan. Sykes's success in calming the various opposing factions in the face of Russian agitation was instrumental in frustrating Russian designs.

After his tour of duty at Mashhad Sykes was sent to relieve George Macartney, the British consulate-general at Kashgar. While he was there he set about writing this History. The style is ponderous and Victorian, not at all the sort of history that is considered useful today. It is almost a pastiche of a list of 'kings and queens', but at the time there was nothing else on the subject, in English or in Persian, other than Sir John Malcolm's history, written one hundred years earlier. However, considering the circumstances in which it was written, far from any libraries or academics that he could consult, and bearing in mind that Sykes was not a university man, this work of a Victorian soldier-scholar must still be seen as a classic.

The later editions come to life in their final chapters, for in them Sykes tells the story of his own involvement with Persia. His many critics found his account of the South Persian Rifles to be not only self-centred, but also self-serving. It gives the impression that Sykes ran the whole show on his own and it gives little credit to Consul Gough or to his own long-suffering subordinate officers. Moberly's Official History, written much later, is a more balanced account.

It is now fashionable to scorn histories such as this one, but it is worth bearing in mind that its appearance was welcomed in Persia itself and it was translated into Persian. Every country needs a chronicle, and this is what this book is. Sykes gave copies of the History as wedding presents to his offspring, children and grandchildren. Not all of them were grateful, but we should acknowledge the effort that he made to make Persia better understood.

Plate 1: Brigadier-General Sir Percy Sykes, KCIE, CB, CMG
(*Photograph courtesy of Mr Mark Sinclair, grandson of Sir Percy Sykes*)

Abdul Hussein Mirza Farman Farma

We scrutinize the dates
Of long-past human things,
The bounds of effaced states,
The lines of deceased kings;
We search out dead men's words, and works of dead men's hands.

MATTHEW ARNOLD'S *Empedocles on Etna.*

BAS-RELIEF OF CYRUS THE GREAT.

(From Perrot and Chipiez's *History of Art in Ancient Egypt.* Chapman & Hall, Ltd.)

A

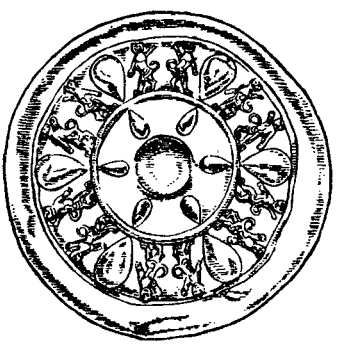
HISTORY OF PERSIA

BY

BRIGADIER-GENERAL SIR PERCY SYKES

K.C.I.E., C.B., C.M.G.

GOLD MEDALLIST OF THE ROYAL GEOGRAPHICAL SOCIETY
JOINT-AUTHOR OF 'THROUGH DESERTS AND OASES OF CENTRAL ASIA'
AND 'THE GLORY OF THE SHIA WORLD'



ACHAEMENIAN GOLD PATERA.
(From British Museum.)

WITH MAPS AND ILLUSTRATIONS

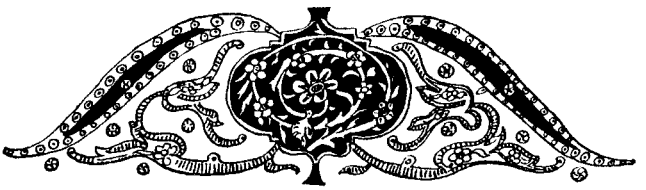
IN TWO VOLUMES—VOL. I

THIRD EDITION
WITH SUPPLEMENTARY ESSAYS

LONDON
ROUTLEDGE

Dedication

THIS EDITION IS DEDICATED TO THE BRITISH AND INDIAN OFFICERS, NON-COMMISSIONED OFFICERS AND MEN WHO SERVED WITH ME IN SOUTH PERSIA DURING THE GREAT WAR. THROUGH THEIR VALOUR, RESOURCEFULNESS, AND CHEERFUL ENDURANCE A GRAVE PERIL WAS AVERTED AND A DIFFICULT TASK WAS SUCCESSFULLY ACCOMPLISHED.



FROM A COPPER LANTERN.

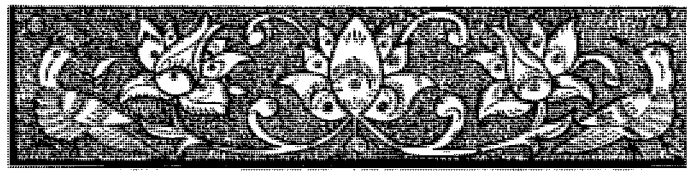
PREFACE TO THE THIRD EDITION

DURING the last decade Persia has changed, perhaps more than in any period of her eventful history. Mainly owing to the personality of Shah Riza, the founder of the Pahlavi dynasty, a strong national spirit has been awakened, the authority of the Government has been successfully asserted throughout the length and breadth of the land, the finances have been placed on a sounder footing, a gold standard has been adopted, and communications by air, by railway and by motor car are changing the outlook of this conservative nation and are making for progress. Nor have the changes in foreign policy been less momentous. Persia has shaken herself free from the hated Capitulations, just a century after they were imposed on her by Russia, and she now makes treaties with European powers on equal terms.

These and many other questions are dealt with in the present edition. By taking advantage of a new process it has proved possible to reproduce the last edition at a considerably lower price after necessary corrections had been made in the text, while the number of maps and illustrations has been curtailed. New material, which includes the great discoveries at Ur, and the successful quest of Aornos, has been embodied in Preliminary Essays, while the second volume concludes with a Final Essay. The most important works that have been consulted are referred to in the essays, and where necessary, references to the new material have been made in the text.

My thanks are due to the Secretary of State for War, who has granted me access to documents in the Historical Section of the War Office bearing on the campaigns in Persia. Mr. Leonard Woolley has, very kindly, checked the brief account I have given of his excavations, while Sir Percy Cox and Mr. E. M. Eldrid have helped me with valuable suggestions in the Final Essay. To conclude, I hope that the third edition of this work may be of some service to the people of Persia, among whom I spent the happiest years of my life, while if it helps Europeans and Americans to realize the profound influence of Persia on our art and civilization down the ages, I shall be richly rewarded.

P. M. S.



FROM AN ENAMELLED BOX.

PREFACE TO THE SECOND EDITION

DURING the six years that have elapsed since the first edition of this work was published, much has happened in Persia. Her historical soil has re-echoed, time and again, to the tramp of British, Russian, and Turkish troops, and, to some extent, she has suffered the lot of an invaded country. On the other hand, the Russians saved the capital and perhaps the very existence of Persia by defeating the Turks ; and the overthrow of the Kashgais and other raiding tribes in the South restored some measure of security in that part of the country. Moreover, the belligerents greatly improved the communications, and the large sums of money spent by Great Britain and, in a lesser degree, by Russia and Germany may, to some extent, be reckoned as a set-off to the serious loss of life, stock, and crops in the Western Provinces. The stirring events of the Great War are now recorded, and this history is thereby brought up to date. But the new chapters constitute only one part of the work. The other has been to revise the entire text of the first edition in the light of subsequent exploration and study; the criticisms of reviewers have also been carefully considered. In this task I have been helped by my friends.

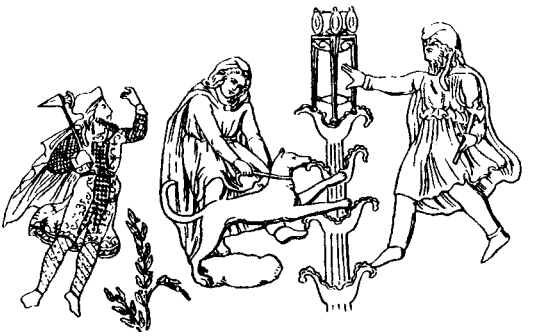
Dr. G. E. Pilgrim, who has travelled in Persia and Mesopotamia, has allowed me, in the section referring to geology, to make use of his discoveries. Mr. H. R. Hall, who recently excavated in Mesopotamia, has also given me the benefit of his discoveries and knowledge ; Messrs. G. F. Hill and A. G. Ellis have examined the periods in which they

rank as leading authorities ; Sir Louis Dane and Messrs. F. H. Brown and E. M. Eldrid have read the new chapters, and Mr. E. Edwards has helped me in more than one period. Indeed, every effort has been made to ensure that the second edition shall be better than the first.

As to maps, I am again using that of the Royal Geographical Society. It may interest my readers to mention that this map, which was sent to the prison camp at Kastamuni, Asia Minor, in the cover of my history, enabled a party of British officers to escape. Moreover, I have been permitted, through the courtesy of the Geographical Section of the War Office, to use a recent map " Persia and Afghanistan," which also includes Russian and Chinese Turkestan and shows the recently constructed railways. I have also been allowed to reproduce a plan of the neighbourhood of Shiraz. Finally, a new sketch-map of Arabia, which includes the results of recent exploration, has been specially prepared for this work.

In conclusion, the severance of my long connexion with Persia enables me to express my opinions freely and to place all the facts of a difficult and complicated problem before my European and Persian readers.

P. M. S.



PART OF A PERSIAN HUNTING SCENE.
(From a Polychrome Terra-cotta Vase in the Hermitage Museum.)

PREFACE TO THE FIRST EDITION

JUST a century has elapsed since the publication of Sir John Malcolm's *History of Persia*. In this long period the mystery of the cuneiform inscriptions has been solved, Susa has yielded up its secrets, and in many other directions a notable advance has been effected. Each important discovery has been embodied in some work of special value, but no book has been written dealing with Persia as a whole and embodying the rich fruits of this modern research.

After much hesitation I have attempted to fill what is undoubtedly a serious gap; for Persia has exercised considerable influence, extending over many centuries, on India and Central Asia, on Greece, on the Roman Empire, and consequently on Europe.

My primary aim has been to furnish fellow-officials serving in Persia and adjoining countries, and students, whether European or Persian, with a work which is, as far as possible, self-contained and complete. With this object I have focussed what is known of the ancient empires in their relations with Elam, Media, and Persia; and I have dealt somewhat more fully than would otherwise have been necessary with such subjects as the rise of Macedonia.

Having enjoyed the great advantage of twenty-one years' residence and travel in Persia, I am able to present

certain facts more vividly than would have been possible without the special knowledge thus gained. I also claim to have acquired to some extent the Persian point of view.

My thanks are due to the Government of India and to the India Office for much help, including a recently published map of Persia. Dr. F. W. Thomas placed the resources of the library of the India Office at my disposal even in Persia, and but for this I could not have carried out my plan ; Mr. A. G. Ellis has also constantly given me valuable advice. Messrs. E. Edwards, L. W. King, H. B. Walters, and J. Allan, of the British Museum, have helped me in the periods and subjects on which they are authorities ; while Mr. J. B. Capper has assisted me in seeing the book through the press. The chapters dealing with Nadir Shah have been read by Sir Mortimer Durand, who has made a special study of this period. I am indebted to many friends for illustrations, which Mr. Emery Walker has taken great pains to reproduce.

In my two former books I have described the unexplored parts of Persia, and have portrayed the customs and manners of the friendly race among whom I have spent the best years of my life. In the present work I realize an ambition of many years' standing, and I hope that the result may be considered to be useful by the Government I serve, as well as by my fellow-countrymen who create public opinion, which can have no safe and enduring basis in the absence of historical knowledge. If it is also used occasionally by students of Greek and Roman history, who may desire to learn something of the Persian point of view ; and if, finally, it helps Persians to realize more fully the splendour of their own history, my efforts, involving many years of study, will not have been in vain.

P. M. S.

A SPHINX.
(Achaemenian Gold Medallion from British Museum.)

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FROM LUSTRED POTTERY.

VOLUME I

PRELIMINARY ESSAY

(To be read with Chapters V. and VI.)

The Flood.—During the decade which has elapsed since the publication of the second edition of this history, Leonard Woolley has made discoveries at Ur which undoubtedly mark an epoch. "A few years ago," to quote the great archaeologist, "the Flood, even if not dismissed as a legendary fiction, seemed something too remote and vague to be admitted into history."[1] To-day all this is changed and although its exact date cannot be fixed, we know whereabouts it came in the sequence of ancient history which eight years of strenuous but fruitful effort have revealed to the world.

The discovery was made by digging a pit 75 feet wide and 48 feet deep on a site which denudation had worn down to the period of 3200 B.C. Eight successive layers of buildings were discovered with floors of rammed clay, which had preserved specimens of different types of pottery, some of which was new to the finders. In the upper levels the potter's wheel was used, but, in the lower, the ware was made by hand. The buildings were all of good quality, with different kinds of bricks, some being made of cement, the earliest known use of that material. The stone figure of a wild boar, the most ancient piece of sculpture which Ur has yielded, was found at a depth of 28 feet, and its antiquity must be prodigious.

A stratum of clear sand, measuring 11 feet, the work of the Flood, was discovered at 40 feet, and below it an irregular

[1] For Mr. Woolley's most recent discoveries I am indebted to his lectures and to his kind assistance. I have also consulted his work *The Sumerians*; the *History and Monuments of Ur*, by C. J. Gadd; and the contributions of Professors Langdon and Campbell Thompson to the *Cambridge Ancient History*.

stratum which showed signs of continuous occupation by the pre-Flood population. These men were not savages. They lived not only in reed huts but also in brick houses with wooden doors set in sockets of imported stone. They used weapons and tools of copper, but polished stone axes were also found. They spun thread, wove cloth, and manufactured pottery of good quality. In the graves the corpse was laid extended on its back with the feet together. Clay figurines, representing females with inhuman heads, and vessels of painted clay were placed by the dead. To conclude this brief account, the men who inhabited the site after the Flood were of the same stock as those who lived before it, using the same pottery. But they were a poorer and a decadent race. Then follows a complete change of culture and we find the relics of a different race from that which knew the Flood. The newcomers were presumably the Sumerians.

The Cradle-land of the Sumerians.—One problem of great importance, in which distinct progress has been made, is that of the Sumerians. Who were they? Where was their cradle-land? And when did they reach Babylonia?

The Sumerians, a dark-haired race—the "black-heads" of the texts—were of Indo-European stock. Their original home was mountainous, this being indicated by the fact that their gods are represented as standing upon mountains. It was also a land of forests, as the architecture of their earliest buildings, based on a tradition of timber construction, clearly proves. A verse in Genesis is also to the point: "And it came to pass as they journeyed from the east, that they found a plain in the land of Shinar; and they dwelt there."[1] This undoubtedly refers to the Sumerians, Shinar being Sumer, and again serves as an indication. Nor is this all. Quite recently the world was astonished by the discovery in the Indus Valley of remains of a very early civilization, which closely resembled that of Sumer. In the rectangular stamp seals bearing identical inscriptions, in buildings, and in terra-cotta figures, there is clear proof that the two civilizations sprang from a common stock, and it is evident that their cradle-land was somewhere in the mountains of Eastern Persia, in Afghanistan, or in Baluchistan.

In Chapter V.[2] reference is made to the legend of Oannes,

[1] Genesis, xi. 2.
[2] All references, unless otherwise stated, refer to this History.

who led a race of beneficent monsters from the Persian Gulf, and introduced agriculture, the art of writing, and working in metals. Here again we have an indication that the Sumerians, representing a higher civilization, reached Babylonia by sea and, conquering the inhabitants of the marshes, founded towns, for the Sumerians were emphatically town-dwellers. This is the era of great archaeological discoveries, and we may hope that, within the next decade, the port from which these conquerors set out on their great adventure may be identified. Were I asked where to start the quest, I should suggest Harmuza, the port at which Nearchus beached his fleet on the Minab River, before marching inland to report its safety to Alexander the Great. To-day neighbouring Bandar Abbas is the natural outlet for trade from Herat, from Meshed, and from the intervening centres.

The Sumerian problem is somewhat complicated by the discovery, referred to on page 50, of a fine painted pottery, which is as ancient as the earliest graves at Ur. It is older than the earliest Elamite ware and therefore constitutes a powerful argument against the Sumerians being of Elamite origin, a theory which at one time appeared to be plausible in view of the text quoted above, the mountainous nature of Elam and its forests. Similar pottery has been discovered at Carchemish and elsewhere, which proves that the pottery cannot be Sumerian. Campbell Thompson favours a proto-Elamite population which was driven out by the Sumerians, whereas Woolley, who considers that the land only became fit for human occupation when man had reached the chalcolithic age, is inclined to favour an Akkadian Babylonia which was conquered by the Sumerian invaders.

Very Ancient Dynasties.—Recent discoveries prove that the Sumerians had a much longer connection with Babylonia than was previously suspected. About 2000 B.C., after the downfall of the Third Dynasty of Ur, the scribes drew up records of the previous dynasties and of their achievements. Most of these chronicles have perished, but, fortunately for us, the lists of their kings have survived. In these lists, ten kings are shown who reigned before the Flood. The length of their reigns is apparently fantastic, but perhaps we do not understand the system of reckoning that is used. The same remark, albeit to a lesser degree, applies to the lists of the first two dynasties that ruled after the Flood,

preceding the First Dynasty of Ur. Until recently none of the names given could be identified, but the discovery of monuments of the First Dynasty proves its historical character. We are therefore justified in accepting the records of the scribes who mention not only kings but also cities as existing before the Flood, notably Eridu.

The Ancient Cemetery at Ur.—Among the most important discoveries at Ur was that of a cemetery, in which the earlier graves may be dated at about 3500 B.C., while the latest may come down to 3100 B.C., the date of the foundation of the First Dynasty of Ur, which ruled until 2930 B.C. The royal graves consisted of buildings constructed at the bottom of shafts and the great architectural surprise was the discovery that the Sumerians used not only the column but also the arch, the vault, and the dome, thousands of years before they were known in Europe.

Another surprise was the discovery that royal burials were accompanied by human sacrifice on a large scale. In the grave of Queen Shub-ad, the ladies of the Court were killed and laid in two parallel rows, and two corpses were found, one lying at the head and the other at the foot of the bier. In no text is there any reference to these awful funeral rites, which may be explained by the deification of the early monarchs, and this fact alone proves the great antiquity of these tombs. The offerings in these graves included gold and silver bowls for libations, cups, daggers with golden blades, beads of gold and *lapis lazuli*, and an amazing gold helmet. Below the royal tombs were found graves of a much earlier type, in which pictograph seal-impressions were discovered with a linear design. These seal-impressions, which are of great antiquity, are adorned with a linear design similar to those discovered a generation ago by the De Morgan Mission at Susa, and thus prove the connexion between the two countries. To sum up, "in 3500 B.C. Sumerian art stood at a level seldom reached in the ancient world, and it must have had behind it centuries of growth and experience." [1]

In the land of Sumer neither minerals nor stone were found. Consequently one of the problems to be solved is the source whence the raw materials for these skilled craftsmen were derived. The copper has recently been proved by analysis to have come from mines in Oman, a fact of great importance; and

[1] Woolley, *Op. cit.* p. 45.

diorite was brought from Magan, which may have been a port in the same country. As to the *lapis lazuli*, Woolley considers that it came from Badakshan.[1]

The above facts tend to prove the existence of an extensive foreign trade, eastwards with Elam and Central Asia, and southwards down the Persian Gulf. Westwards, too, about the time of the First Dynasty in Egypt, mace-heads and other objects of Sumerian manufacture reached the valley of the Nile. Viewed from another point of view, Sumer perforce exported her wares to pay for her raw materials. We are therefore fully justified in believing that, in the fourth millennium B.C., there were trade-routes radiating in every direction from Sumer, and that merchants travelled by land or sea with some measure of security.

The Sumerian Army.—Few sayings are truer than that civilization advances on a powder-cart. In the case of the Sumerians, who founded their empire among brave and warlike races, superiority in the science and organisation of war was essential. Thanks again to Leonard Woolley, we now know something of the military organisation and of the weapons used by the Sumerians in the middle of the fourth millennium B.C. Our information is mainly based on a "standard," a mosaic of shell and *lapis lazuli* that was discovered in a royal grave at Ur, as also were the weapons. The "standard" is arranged in three rows. In the bottom row are chariots, drawn by four asses. In each chariot there was a driver and a warrior armed with "light throwing-spears carried in a quiver attached to the car," and with thrusting spears. In the middle row, the infantry advance in close order. They wear conical copper helmets and long cloaks, and their weapon is a thrusting spear. This phalanx is preceded by skirmishers, armed with axes, swords, or spears. In the top row, the King, armed with an adze and a specially heavy spear, is represented as the victor, receiving the prisoners. Among the weapons found in these early tombs were arrow-heads of more than one type and fragments of bows. It has hitherto been believed that archery was not practised by the Sumerians until the reign of Dungi,[2] but here we have the proof that it was known in the middle of the fourth millennium B.C. and probably very much earlier. Coming down the centuries, on the "Stele of the Vultures," referred to on page 66,

[1] *Vide* p. 33, footnote 2.
[2] *Vide* Chapter V. p. 69.

Eannatum leads a compact phalanx of spearmen, whereas in the "Stele of Naram-Sin," the bow, the spear, the javelin, and the battle-axe are all in use.

In early times the entire population would, if required, serve in the army, but under Sargon and Hammurabi there was a standing nucleus of guards, supported by what may be termed the territorial force. In view of the campaigns undertaken for the purpose of foreign conquest, this arrangement was inevitable, but it involved national decay. So also did the ruthlessness of the victors, who massacred their prisoners and destroyed the cities which they captured. It is obvious that these barbarous methods of waging war between cities, inhabited by people of the same race, led to the final downfall and disappearance of the Sumerians.

The Period of Civil Wars.—The First Dynasty of Ur ruled for rather less than two centuries. It was succeeded by ten dynasties about which we know very little. Generally speaking, the period was one of chronic disorder, of which the Elamites took advantage both to raid and to conquer. Although there were Sumerian dynasties in this dark period, among them the Second Dynasty of Ur, the Semites gradually gained the upper hand, Kish, Opis, and Mari becoming the capital in turn. In the imperfect lists it is clear that there is overlapping, while, to add to the confusion, the name of Fannatum of Lagash,[1] who certainly ruled over a united Sumer, does not appear.

The Dynasty of Akkad.—On page 67 a reference is made to Elam and the Kish Dynasty which, in view of recent discoveries, is not entirely accurate. The prosperous dynasty of Lagash was overthrown by Lugal-zaggisi, who founded a short-lived Sumerian empire with Erech as his capital, Lagash having been treated with customary ruthlessness by the victor. But the Sumerian, after a successful reign of twenty-five years, was defeated and captured by Sargon, the founder of the dynasty of Akkad, whose capital, Agade, is believed to be represented by the ruins of the mound ed-Der, situated a few miles to the south-west of Baghdad.

Sargon was succeeded by his son Rimush (not Urumush as I have given it), and then by Manishtu, both of whom were erroneously considered to be Kings of Kish, although there is no doubt as to the successful campaigns which they waged. But Naram-Sin, the "conqueror of nine armies," was the

[1] *Vide* p. 65.

greatest of Sargon's sons, whose bas-relief can still be seen in the mountains of Kurdistan, thus proving the wide range of his conquests.

The Guti.—The glory of Akkad faded, and there was a short-lived dynasty at Erech, but Sumer and Akkad alike, as also Elam, were overwhelmed by the Guti. Under these barbarians, "business documents and works of art are alike lacking." Yet, as the years passed, the city-states recovered some measure of independence, Gudea of Lagash, for instance, ruling under Guti overlords, but undoubtedly living to see Sumer freed from their tyranny.

The Third Dynasty of Ur.—Sumerian reaction under Ur-Nammu, a *Patesi* of Ur, created another empire of Sumer and Akkad, Ur once again becoming the capital. To this, the Third Dynasty, which ruled from about 2278 to 2150 B.C., we owe the great Ziggurat tower, the temple of Nana, the royal palace, and other buildings. Nor was their activity less in digging great canals, one of which connected Ur with the Persian Gulf, thereby enabling vessels to unload at the quays of the city. Generally speaking, the prosperity of the country, alike from agriculture and from commerce, reached its zenith, and the standard of life was higher than at any subsequent period in its history. Against this must be set the fact that arts and crafts were in a decadent state. To quote Woolley: "Only architecture and sculpture in the round equal or outstrip the effort of a younger civilization." The overthrow of this prosperous empire was sudden. The Amorites under Ishbi-Irra of Mari, invaded Akkad, and the Elamites crossed the Tigris. In the words of the chronicler, "Ur was smitten with weapons," and the glory of Sumer as an independent nation departed for ever.

Isin, Larsa, and Elam.—On page 71 some details are given about the states of Isin and Larsa, which it is now possible to amplify. Ishbi-Irra founded a dynasty at Isin, which ruled for five generations. But, practically at the same time, a rival state was founded at Larsa, situated at the head of the marshes of the lower Euphrates and only distant seventy miles from Isin. This curious state of affairs can best be explained by the fact that Elam, which had not directly annexed any Sumerian territory after the overthrow of the empire of Ur, although its last King "went in fetters to Elam and wept and fell," was protecting Larsa.

The Amorite dynasty was permeated with Sumerian culture, as is proved by the transfer of its capital to Isin, where it set to work to rebuild the cities of Sumer that had suffered in the invasion. As was inevitable, hostilities broke out between the two rival states, in which Isin was, at first, victorious. But the scene changes, and we find Warad-Sin, an Elamite, enthroned at Larsa, which was reduced to the state of a vassal kingdom by his father, Kudur-Mabug, King of Western Elam. A few years later, under Rim-Sin, Isin was taken, with the result that the whole of Sumer and part of Akkad was ruled by the Elamite monarch.

During this period the Western Semites had been growing in power and had founded a dynasty at Babylon. Hammurabi, the great figure of the age, ascended the throne just after Rim-Sin's capture of Isin, which state had been allied to Babylon. For some years Hammurabi did not feel himself strong enough to take up the challenge. When he did so, he seized Isin and and then waited twenty-five years. By this time Rim-Sin was very old and Hammurabi drove the Elamites back to their own country, and thereby made himself supreme ruler of Sumer and Akkad.

The Greatness of Sumer.—In summing up the claims of Sumer to immortality, Woolley points out that the prehistoric civilization of Egypt and that of Sumer have nothing in common. He then goes on to state that, between prehistoric Egypt and the First Dynasty of Egypt, there were changes, amounting to a new culture, which were due to foreign influence. In its early stages we have mace-heads of stone, cylinder-seals and stone vases of Sumerian manufacture, and, in view of the recently proved greater antiquity of the civilization of the lower Euphrates, there is no question that Egypt was deeply indebted to Sumer. To go farther, our fathers were taught that we owed to Hellas all our arts and our entire civilization, and it is only in the present generation that it has been acknowledged that the Greeks learned from Crete, from Lydia, from Persia, and from Egypt. But, behind all these great centres of civilization was Sumer, the great Mother of Arts and Civilization.

(*To be read with Chapter X.*)

A recently discovered clay tablet has shed new light of great importance on the downfall of Assyria. It is written by

a Babylonian scribe to recount the chief events that occurred during the tenth to the seventeenth years of the reign of Nabopolassar, or B.C. 616-609.

From this record we learn that Nineveh fell in 612, but that a body of the garrison broke through the besiegers' lines and set up a new King at Harran, where he maintained his position for a short time, with ever increasing difficulty. Probably the end came with the defeat, at Carchemish in 605, of Necho, who had evidently marched to his assistance.

(*To be read with Vol. I., p.* 270.)

The important discovery made by Sir Aurel Stein in 1926 of the site of Aornos,[1] the scene of perhaps the most splendid feat of arms of Alexander the Great, affords a good opportunity for reconsidering the whole question of the campaign in India, on which so much fresh light has been shed.

The main body marched from the neighbourhood of Kabul, by a route that lay to the north of the Khyber Pass, to the Lower Swat Valley, with instructions to prepare the passage of the Indus, which was, it is now believed, crossed a few miles above Attock. Alexander led a picked force into the mountains to the north in pursuance of his policy of leaving no possible enemy unsubdued on his flanks. He marched up the fertile and populous Kunar Valley, and, traversing the range to the east, invaded the land of the Assakenoi, who inhabited the Swat Valley. This Aryan people, although strong enough to raise an army which included elephants, feared to meet Alexander in the field and decided instead to defend their fortified cities. Stein, who was the first European explorer to tread in the footsteps of mighty Iskandar in this area, identifies the cities, and, using the lucid account of Arrian, takes us to Massaga, Bazira, and Ora. The capture of the last-named stronghold concluded the campaign in the Swat Valley, the dispirited Assakenoi fleeing eastwards into the Indus Valley, where they occupied the natural fortress of Aornos. Alexander thereupon marched south and rejoined his main body in the Indus.

The reason that prompted the "Lord of the Two Horns" to undertake what was, in effect, a new expedition against Aornos was surely due to the desire to accomplish a great feat

[1] *On Alexander's Track to the Indus*, by Sir Aurel Stein.

of arms, rather than owing to any military necessity. Under Stein's guidance we are led to the famous stronghold on a great precipitous mountain, situated in a bend of the Oxus, and now termed Pirsar. Not only did Stein discover this stronghold, but, with Arrian as his guide, he traces the difficult operations, which included filling up a ravine with earth and timber, and finally in the present Una Peak he discovers the origin of Aornos.

(*To be read with Chapter XLI.*)

During the course of his journey across Eastern Persia in 1915, Sir Aurel Stein visited the Kuh-i-Khoja, the Sacred Hill of Sistan.[1] There, thanks to his remarkable flair and knowledge, he discovered the first pre-Moslem mural paintings found in Persia, and dating from Sasanian times. The most striking of these was a portrait of Rustam, the mighty champion, seated, "holding a curved mace painted in red with yellow ornaments. The head of the mace was in the form of an ox-head, this corresponding with the famous *gurz* of Rustam. In a position of worship stands a three-headed figure, which in treatment is similar to figures discovered in Chinese Turkestan."

Among other wall paintings was "a robed figure, standing and nearly life-size, which in pose and dress distinctly had the typical appearance of a Bodhisattra, as made familiar by Central Asian Buddhist sculptures and frescoes."

The importance of these discoveries is considerable, as proving the wide range of Buddhist art, and it is possible that these paintings were executed to the order of Sakae rulers, who gave its name to Sakistan, the modern Sistan.[2]

While dealing with the question of the fresh light that has been shed on Sasanian art by Sir Aurel Stein, a passing reference must be made to the important part played by the Sarmatians, an Iranian tribe which settled in the steppes of South Russia.[3] In the fourth century A.D., apparently in alliance with the Goths, they invaded the Crimea; they also pressed hard on the Danubian frontier of the Roman Empire. As a result of this connexion, the Sarmatians taught the Germanic tribe cloisonné, with the garnet as the stone chiefly employed, and this art

[1] *Innermost Asia*, by Sir Aurel Stein (Clarendon Press, 1928), ch. xxviii. p. 915.
[2] I. 433.
[3] Vide *Iranians and Greeks in South Russia*, by M. Rostovtzeff (Clarendon Press, 1922).

spread all over the Roman Empire to France and to England. In the latter country the art was confined to Kent, and "exhibits an interesting and original development characteristic of the rich civilization which flourished there from the fourth to the sixth century." So widespread was Persian art in the Sasanian period.

DARIUS HUNTING LIONS.
(Agate Cylinder Seal in British Museum.)

CHAPTER I

CONFIGURATION AND CLIMATE

There is a certain tawny nudity of the South, bare sunburnt plains, coloured like a lion, and hills clothed only in the blue transparent air.—R. L. STEVENSON.

A lamp gives no light in the Sun :
And a lofty minaret looks mean on the slopes of Alvand.
The *Gulistan* of Sadi.

The Situation of Persia.—Between the valleys of the Indus on the east and of the Tigris on the west rises what is generally termed the Iranian plateau. Persia fills the western and larger portion of this elevated tract, the eastern portion being occupied by Afghanistan and Baluchistan. These countries are surrounded on all sides by gigantic ranges, which are highest on the west and north, and the interior is divided into two chief basins. That on the west, which includes about three-fifths of Persia and is subdivided into many smaller basins, joins the eastern, the basin of Sistan, not very far from the province of that name. This latter area is chiefly drained by the classical Etymander, now termed the Helmand, and by minor rivers most of which, in flood time at any rate, discharge into the *hamun* or lake of Sistan.

In altitude the plateau exceeds 5000 feet at Kerman, 5000 at Shiraz, and 3000 in the region of the great northern cities of Teheran and Meshed, while Tabriz, in the extreme north-west, exceeds 4000. Of the central cities, Isfahan exceeds 5000 feet, and Yezd 4000. These figures are of interest, for they bring out the contrast between the inhabited

part of the plateau and the great desert which occupies the heart of the country and lies considerably lower, although rising almost everywhere above 2000 feet.

Boundaries and Provinces.—In describing the boundaries of Persia I propose also to refer to its chief provinces, which almost all lie away from the centre and within reach of the frontiers.

The eastern province of Khorasan is bounded on the north by a series of ranges which rise in stern beauty above the steppes of Turkestan. Some years ago I visited the extraordinary natural fortress of Kalat-i-Nadiri[1] and climbed its northern wall, which is one of the mountains in this range. From the crest I looked across the yellow plain, stretching northwards in level monotony, and was struck by its immensity; for I realized that it extended as far as the tundra and the distant Arctic Ocean, with no intervening mountains. This range does not form the Persian boundary throughout, but, under the names of Kopet Dagh and Little Balkans, runs off in a north-westerly direction to the Caspian Sea. A little farther west, just within the limits of Iran, lie the rich valleys of the Atrek and Gurgan. In its lower reaches the Atrek forms the Russo-Persian boundary until it discharges into the Caspian Sea.

The district of Kuchan, which lies on both banks of the upper Atrek, is the richest in Khorasan and, like Bujnurd lower down the valley, is inhabited by Kurdish tribes which were transplanted from the Turkish frontier by Shah Abbas to act as "Wardens of the Marches." The valley of the Gurgan is also naturally rich, with an abundant rainfall and fertile lands; but at present most of the country is inhabited by only a few thousand families of nomadic or semi-nomadic Turkoman belonging to the Yamut and Goklan tribes.

The Gurgan district was the classical Hyrcania, and the Vehrkano of the Avesta, and was famous for its fertility Strabo wrote: "It is said that in Hyrcania each vine produces seven gallons of wine and each fig-tree ninety bushels of fruit. That the grains of wheat which fall from the husk on to the earth, spring up the following year; that bee-hives are in the trees, and the leaves flow with honey."[2]

In the central section of the northern frontier the rich

[1] *Vide Journal R.G.S.*, December 1906.
[2] Strabo, ii. 1. 14 (translation by Hamilton and Falconer).

maritime provinces of Mazanderan and Gilan lie between the great Elburz range and the Caspian Sea, and present a complete contrast to upland Persia by reason of their heavy rainfall and mild climate and the dense forests these produce. To the west of Gilan, Persia again marches with Russia, the boundary, since the treaty of Turkomanchai,[1] running from the frontier port of Astara almost due north until it strikes the River Aras, which in its upper reaches divides the two countries. At the north-west corner is the superb mountain mass of Ararat, the Hebrew form of Urartu, where the three empires of Russia, Turkey, and Persia meet.

The north-west province of Iran is Azerbaijan, with its chief centre, Tabriz, the largest city in Persia, situated at a point where roads from the distant Bosphorus and from Trebizond meet others from the Caucasus and the valley of the Tigris. Here the great trunk route into Persia and Central Asia is entered. The rainfall is more abundant than in the districts lying to the east, and the province is very fertile. As these pages will show, it has always played an important part in Persian history.

On the west Persia is bounded by the valleys of the Tigris and Euphrates. On this flank parallel, serrated mountains, in range after range, known to the ancients as the Zagros, divide the Iranian plateau from the plains. These rise gently, and not sheer to their full height, as do the mountains of the Armenian plateau when approached from the south. The classical empires of Media and of Persia came into existence in these bracing uplands, which are comparatively well-watered and fertile so far as the hill country is concerned ; though the interior districts of Kum, Kashan, and Isfahan are arid and almost rainless.

To the west of the southern section of this barrier is the rich valley of the Karun, now the province of Arabistan, which, under the name of Elam, was the first portion of Persia to be civilized, centuries before the Aryans appeared on the scene. To the south the plateau containing the provinces of Fars and Kerman looks down upon a narrow, low-lying strip of country bordering the Persian Gulf, termed the *Garmsir* or " Hot Country " ; and here again intercourse has been made exceptionally difficult by nature, with the

[1] *Vide* Chapter LXXVI.

result that Persians, who are no engineers, have ever been averse from the sea.[1]

The province of Fars is much drier, and consequently less fertile in the east than in the west, and the interior district of Yezd is more or less a sandy desert. The province of Kerman, too, is saved only by the height of its ranges from hopeless aridity. In Kerman, and still more in Persian Baluchistan, which marches with British Baluchistan, there are large semi-desert areas apart from the barren Lut.

In Persian Baluchistan, where the ranges, which invariably run parallel to the coast, trend more east and west, communication with the sea is equally difficult ; and north of this outlying province is Sistan, the delta of the Helmand, with a solitary hill, Kuh-i-Khwaja, on which Sir Aurel Stein discovered ruins and frescoes of the first Buddhist sanctuary ever traced on Persian soil.[2] Farther north, again, a desert divides Persia from Afghanistan until the Hari Rud is struck at the point where it makes its great bend from west to due north. Known in its lower reaches as the Tejen, this river divides the two countries until, at Zulfikar Pass, the kingdom of the Amir ends and two boundary pillars—which I saw, from the Persian side of the river, shining in the sun—mark the spot where, some thirty-five years ago, the Russo-Afghan Boundary Commission began its labours. The Tejen continues to form the boundary of Persia as far as Sarakhs, which is situated at the north-east corner of Iran, and only a few miles from grim Kalat-i-Nadiri, where our survey started.

To summarize, upland Persia is strongly protected by titanic natural ramparts along her northern frontier, except where the Tejen breaks through into the sands of Turkestan. Along the western frontier the ramparts are still more serrated, and the only natural route—a difficult one—passes through Kasr-i-Shirin, Kermanshah, and Hamadan. Farther south, the modern province of Arabistan, lying in the rich valley of the Karun, has never been fully and permanently absorbed by Persia, owing to the difficult ranges which cut it off from the province of Fars. The coast districts along the Persian Gulf, too, have always been separated from the uplands and,

[1] To give a single example, Abdur Razzak, mentioned in Chapter LX., wrote : " As soon as I caught the smell of the vessel, and all the terrors of the sea presented themselves to me, I fell into so deep a swoon that for three days respiration alone indicated that life remained within me."—*India in the Fifteenth Century* (Hakluyt Society).

[2] " Third Journey of Exploration in Central Asia " in *Journal R.G.S.*, Aug. and Sept. 1916.

like Arabistan, inhabited by a non-Aryan people : and even to-day few Persians can keep their health if forced to reside at the ports on the Persian Gulf. Persian Baluchistan is a distant province of torrid deserts, where the authority of the Shah is weak. On the east, in the southern section, the deserts of British Baluchistan are as hopelessly arid and as great an obstacle to intercourse as can be imagined. But where the boundary marches with North-West Afghanistan, the routes are wide and easy. This accounts for the fact that until comparatively recently Afghanistan was a Persian province. The last campaign in which a Persian sovereign took part in person was the attempt to recover Herat in 1838. To-day, however, although Persia welcomes Afghans, who are the chief owners of camel transport, no Persian or other foreigner can enter the kingdom of the Amir without running risk, and Afghanistan can now claim the doubtful title of being the last Hermit Kingdom in Asia.

Meaning of Iran and of Persia.—Persians call their country Iran and themselves Irani, a word which is the Airiya of the Avesta and signifies the "land of the Aryans" or "Illustrious." Thus the modern meaning of Iran is restricted when used in a political sense to apply to modern Persia only ; and the geographical use of the term Iranian plateau to include part of Baluchistan and also Afghanistan is, strictly speaking, more correct. The term " Persia," employed by Europeans and most other foreigners, is derived from the classical Persis. This latter word signified the province of Parsa, now Fars, which gave birth to the ruling dynasty of the Achaemenians, and in consequence had its meaning extended so as to include the entire country and also its people. Even to-day the province of Fars is held to be the most typically Persian province in the empire. The word *farsi* is employed by the Persians to describe their own language, although, when applied to an individual, it is restricted to an inhabitant of the province of Fars. It should be added that the Parsis of India are so called from being followers of the old Persian religion. Parsi is the Persian word, and Farsi its Arabic form which has been generally adopted, there being no *p* in the Arabic language. The term Farsistan, which some European writers affect, is incorrect.

The Formation of the Iranian Plateau.—Much work still remains to be done on the geology of Persia, many portions

of it having never been visited by a geologist. At the same time it is possible to give in outline an account of the origin and history of the Iranian plateau, which would appear to be sufficient for our purpose.

During the latter part of the Cretaceous period most of Persia was under the sea. An important exception was a strip of country, which ran across what are now the straits of Hormuz, in continuation of the mountain chain of Oman and the peninsula of Musandam, and extended in a broad belt, at first northward through portions of the provinces of Fars and Kerman, and then north-westward between Kerman and Niriz, through the Isfahan province into Azerbaijan and the Caucasus. The tract to the eastward of this old land area was elevated into dry land early in the Eocene period, and, except near the coast, has never since been submerged.

The region which lay to the south-west of the old land surface continued to be open sea throughout the Eocene and most of the Oligocene periods. In the Miocene period movements of the sea floor separated portions of the Persian water area from the main body of the ocean, converting much of it into inland seas and lakes, which by their evaporation produced the great beds of salt and rock-gypsum that characterize this part of Persia. The land of Iran was, at this period, still cut off from land communication with Europe, and it was not until the very end of the Miocene period that much of the country occupied by these large bodies of water was elevated. The establishment of a land connexion between the two continents coincides with the migration of the Asiatic land-fauna to Europe, where its fossil remains have been found in abundance in Upper Miocene and Pliocene deposits.

No doubt the elevation of the Iranian plateau proceeded throughout the Pliocene period, but by far the most intense uplift seems to have occurred at the close of the Pliocene. Numerous lakes, many of them of great size, existed on the Persian plateau during the Pleistocene as they probably had in Pliocene times, and the country was covered by forests and meadows supported by a humid climate, probably even more so than that of the Caspian provinces to-day. The gradual drying up of these lakes is a phenomenon which is still in operation at the present day. We must include amongst the lake areas that region which is now occupied by the plains of Mesopotamia and the Persian Gulf. Much

of this may even have been a large inland sea, but, in any case, there is distinct evidence that the old land stretching across the Straits of Hormuz was not finally submerged until after the Pleistocene period, since the traces of buried valleys beneath the sea in the neighbourhood of Musandam are still apparent, and lake deposits of recent age are to be seen in Mesopotamia as well as in some of the islands of the Persian Gulf.

During a portion of the Pleistocene period the Persian plateau, in common with Europe and Central Asia, may have experienced the rigours of the glacial epoch, and may have been buried beneath glaciers, and have been uninhabitable for long periods, which may be reckoned in millennia.[1] After these cataclysms what was left in Persia? Vast lakes of salt water occupying what is now the great desert; lofty, bare ranges covered by receding glaciers; the sea penetrating into the continent, and volcanoes such as Ararat, Demavand, Sahand, and Taftan vomiting out destruction and death. The Iranian plateau was indeed at this period a land of death.

But on its western side the action of the numerous rivers began. By these soil was brought down and gradually formed a land, which was not only inhabitable, but was destined in the course of the ages—owing partly, at any rate, to its natural advantages—to be the home of what was among the earliest civilizations of the world.

The Resemblance of Persia to Spain.—In many ways Persia resembles Spain to a remarkable degree. The traveller from the north no sooner quits France than he rises through the Pyrenees on to a plateau of an average height of between two and three thousand feet, where the jagged ranges are aptly termed Sierras or "Saws," and where the country is generally bare and treeless. Traversing this great plateau for some four hundred miles, he crosses the "hot country" of Andalusia, which corresponds to the low-lying coast district of Persia, before the sea is reached. Again to the north, as if to complete the analogy, the provinces bordering on the Biscayan Sea differ from the Spain of the plateau as the Caspian provinces do from the rest of Persia. Moreover, although Persians are termed the French of the East, it would

[1] I am much indebted for the above information to Dr. G. E. Pilgrim of the Geological Survey of India, who is publishing the results of his discoveries in South Persia and Mesopotamia.

be more apt to compare them with the Spaniards, whose customs and whole manner of life are akin to the Persian.

The Aridity of Central Asia.—Central Asia, of which Persia forms a part, is mainly composed of deserts, and although the variations in elevation are stupendous, ranging from the Caspian Sea and the basin of Turfan, which lie below sea-level, to the Pamirs and Tibet, where the traveller is seldom below 10,000 feet, yet everywhere, except in the actual ranges, aridity is the marked feature common to all countries alike, whether Turkestan, Persia, Afghanistan, Tibet, or Baluchistan. This aridity, which is due to the scanty rainfall, results in rivers of such weak volume that they fail to reach the sea. From this cause the whole enormous area, stretching for some three thousand miles from east to west, is composed of basins, none of which have any outlets. Again, owing to the scanty rainfall, there are immense desiccated areas, and the whole region may be described as consisting partly of desert pure and simple, and partly of desert tempered by oases. In other words, we are dealing with a vast area in which cultivated districts capable of sustaining population are rare and far apart. To put it another way, if the desert tracts could be removed, the cultivable districts would together make up a very small country. I lay considerable stress on this fact; for dwellers in Europe, where almost the whole of the land is valuable owing mainly to abundant rainfall, can with difficulty realize the utterly different conditions which prevail in Central Asia.[1]

The Climate of Persia.—The marked feature therefore of Persia and of Central Asia generally is aridity.

The Rainfall.—The amount of rainfall on the plateau is now observed, mainly at the offices of the Indo-European Telegraph Department, and, thanks to the courtesy of Mr. Gilbert Walker, Director-General of Observatories in India, I am able to give the following table, which is based on observations taken for a period of ten years:

Jask	. . . .	4.17	inches annual rainfall.
Bushire	. . . .	11.07	„ „
Isfahan	. . . .	4·74	„ „
Teheran	. . . .	9·30	„ „
Meshed	. . . .	9·37	„ „

[1] This question has been dealt with in a remarkable book termed *The Pulse of Asia*, written by Ellsworth Huntington. His main thesis of a progressive desiccation in Central Asia has by no means gained universal acceptance, but no writer on the subject can neglect his works.

In view of the latitude and the power of the sun, the amount of rainfall here shown compares most unfavourably with the 39.5 inches of the British Isles and their cloudy skies, or the 27.65 inches of the Delhi District.

Persia, both in its situation and its physical conformation, is unfortunate so far as rainfall is concerned, since the high ranges intercept the greater portion of the moisture-laden clouds, which discharge very freely in the Caspian provinces, but rarely cross the Elburz. Nothing is more striking than to stand on this gigantic rampart with luxuriant forest-clad slopes on its northern face and an absolutely naked prospect to the south when once the crest is reached. Fortunately such moisture as there is (snow in terms of water being included in the table given above) falls mainly during the winter and spring, when the "treasures of the snow . . . reserved against the time of trouble."[1] can be stored in the mountains to replenish springs, on which the irrigation of the country depends. Indeed, but for the high ranges the whole of the plateau would be a desert; and, conversely, the size of the cities and the destiny of the population depend on the height and width of the range from which the water-supply is drawn. In a huge country like Persia it is obvious that the amount of rainfall must vary. Central, South-Eastern, and Eastern Persia are less favoured than other parts. In Khorasan, for example, in a good year 65 per cent of the grain crops are *daima* or rain-fed, whereas in South-East Persia all crops have to be kept alive by irrigation, and there are practically no rain-fed crops at all.

It has already been pointed out that in the Caspian provinces the conditions are entirely unlike those which prevail elsewhere. Instead of a treeless, arid country, there is jungle too dense to traverse. The rainfall exceeds 50 inches, and moisture is everywhere so abundant that the climate is generally fatal to Persians of the plateau. These in turn entirely fail to appreciate the natural wealth of the three Caspian provinces of Astrabad, Mazanderan, and Gilan.

Cold and Heat.—Persia is a land of extremes in climate: yet the atmosphere is one of the most invigorating and delightful imaginable. In winter the thermometer occasionally sinks below zero in the plains and frequently in the mountains; but, if the weather be fine, the cold is seldom

[1] Job xxxviii. 23.

trying, and it is delightful to spend whole days in the open throughout the winter. Yet the waves of cold can be intense, and every winter men and animals are frozen to death when caught in a blizzard far from shelter. In the uplands snow lies occasionally for four or five months, preventing all agricultural operations, and causing heavy loss to live stock. Considered, however, as a whole, the Persian winter is as near perfection as can be imagined, and if the traveller sometimes has to walk the entire stage because it is too cold to ride, he experiences in return such a sense of vigour and vitality as is rarely felt in less dry and less bracing climates.

Let us now take the opposite extreme and seek an example of a torrid climate. In this respect Arabistan bears the palm with its capital Shuster (more correctly Shushtar), perhaps the hottest place on earth. I shall never forget my experience there in the month of June 1896, with the thermometer registering the shade temperature with monotonous regularity at 129°, and the withering heat-waves reflected off the low rocks, which also kept off any cooling breeze from the north. The Persian Gulf, too, is perhaps the hottest body of sea in the world, and I recollect feeling the Red Sea comparatively cool after experiencing the heat of "The Gulf." On the plateau the conditions are quite different; for, as a rule, the heat during the day is not trying and the nights are invariably cool. In fact at Meshed the highest recorded night temperature during 1912 was 74°, and the highest day temperature 102°, in the same year. Outside, however, in the open country the heat, and still more the glare, are very trying, and caravans usually travel by night. The proximity of mountains makes it easy almost everywhere to seek a hill retreat during the hottest months; and at Teheran, at Meshed, at Kerman, and indeed at most places on the plateau, there are cool resorts within a few hours' ride, and these amenities make the summer months delightful.

Wind.—The winds of Persia blow with remarkable uniformity either from the north-west or from the south-east. The reason for this is the situation of the Atlantic Ocean and Mediterranean and Black Seas in the one direction, and of the Indian Ocean[1] in the other. The bearing of the

[1] I have to thank Mr. Gilbert Walker for the following valuable note: "From October to April the southernmost storms from the Atlantic travel over Italy, the eastern Mediterranean, and Syria; and a large proportion—I believe at least 60 per cent—pass on into Mesopotamia, Persia, Afghanistan, or Baluchistan and the plains of India."

axes of the mountain ranges, too, lies mainly in the same direction. As the powerful sun beats on the treeless plains it produces a stratum of heated air, and this, as it rises, draws a current of colder air mainly from the north-west. The prevalent wind in the autumn and winter is north-westerly, and in the spring and summer south-easterly. The close juxtaposition of high ranges with low-lying tracts and the absence of trees all make for windiness. There are, indeed, various unfortunate districts where there blows an almost perpetual gale. In the case of a valley in the province of Kerman which runs down somewhat abruptly from 8000 feet to 3000 feet, this characteristic is recorded in the following lines :

They asked the wind, " Where is thy home ? "
It replied, " My poor home is in Tahrud : but occasionally I tour round Abarik and Sarvistan."

But it is in Sistan that the wind displays its fullest strength. There blows the famous " Wind of one hundred and twenty days," with a maximum velocity of seventy-two miles an hour. This summer gale is known in the Herat valley as the " Wind of Herat," and probably originates in the Pamirs. It then follows down the Perso-Afghan frontier, and its power ceases a few stages south of Sistan. Its maximum velocity is attained at Lash-Juwein in Afghan Sistan, and one can only feel sorry for the unfortunate inhabitants. To give some idea of what gales are in Sistan, Sir Henry McMahon reported one in March 1905, which blew at the rate of one hundred and twenty miles an hour.[1] It is possible that this wind suggested the invention of windmills, which were known in Persia before the Arab conquest, and long before they were invented in Europe. This fact is brought out clearly in Masudi,[2] where it is narrated that the Persian slave who assassinated Omar knew how to construct windmills. To-day in Persia these windmills are found only in the districts where this wind blows.

The Climate of Ancient Persia.—The importance of climate in its effect alike upon the configuration of a land and upon its people, its government, and its history is so great that it is of considerable interest to know whether there has been any change in historical times.

[1] *Journal R.G.S.* for October 1906.
[2] *Vide* Chapter XLVI.

Huntington [1] has devoted a chapter to this very question, in which in addition to noting the changes towards aridity in the basins of Lop, Turfan, and Sistan, all of which he carefully examined, he has quoted my views to the effect that Persian Baluchistan and Kerman must have been more fertile when Alexander the Great traversed them some 2200 years ago than they are to-day.[2] Take, for instance, one section of the Mighty Greek's journey, from Bampur in Baluchistan to the district of Rudbar in the Kerman province.[3] Throughout the distance of one hundred and fifty miles I did not find a single village or hamlet, and the whole country is now only fit for occupation by nomads. It is impossible to believe that the Greek army could have traversed the desert as it is to-day without great difficulty ; whereas Arrian shows that when once the Bampur Valley had been reached the army found enough supplies to feed it for two months. After this the refreshed heroes marched in comfort across Southern Persia, by the route which our party was enabled to traverse only by means of forage and all other supplies laid out in advance at every stage. Huntington also gives other examples drawn from various sources, all of which tend to show that the aridity of Persia is increasing. It is of course difficult to distinguish between deforestation caused by man and continued by his flocks and the deforestation which is due entirely to change of climate. In any case it is of interest to note that in the central portion of Khorasan, termed Kuhistan in ancient times and mentioned in the Avesta,[4] there was a great forest known as the " White Forest," of which not a vestige is left to-day. And yet, were the rainfall a few inches heavier, forests would be able to reproduce themselves. To take a second instance in the history of Mohamed Ibrahim,[5] the Chief of Jiruft stated that he was quite safe against attack from Kerman, " owing to the rugged ranges and thickly wooded spurs." This was in the eleventh century of our era : and to-day, in the whole of the splendid mountains to the south of Kerman, which are referred to in the passage quoted above, there are only a few old junipers which are not reproducing themselves.

There is of course the hypothesis that war and mis-

[1] *The Pulse of Asia*, chap. xvi.
[2] *Ten Thousand Miles, etc.*, chap. xiv.
[3] *Vide op. cit.* p. 144.
[4] William Jackson's *Zoroaster*, p. 215.
[5] For Mohamed Ibrahim *vide* Chapter LI.

government, the effects of which are shown in deforestation and in other ways, have caused the depopulation of Persia; and to a certain extent this is true, as will appear in this book. Moreover, the traveller who sees the ruins of deserted towns does not always realize that in Persia the sites of towns and villages were frequently changed after an earthquake or an outbreak of plague, or for other reasons. Again, if he visits Persia in the winter he is apt to take an exaggerated view of its aridity. But no theory based on considerations such as these can weigh against the absolute proof that, in the Lop basin for instance, there was in the Middle Ages a dense population living on lands irrigated from a river which has now ceased to flow, and that in the Turfan basin the underground channels termed *Kanat* were not introduced until comparatively recently.

Again, many years ago, when travelling from Panjgur on the Perso-Baluch frontier to Quetta,[1] I traversed a country devoid of all inhabitants; yet the hillsides for mile after mile were carefully terraced and had evidently supported a dense population whose crops were rain-fed, where to-day there are only wells of bad water at long intervals, and where rain-fed crops would be quite out of the question. Nor had this population disappeared before the dawn of history. On the contrary, the pottery which littered the sites of their towns was of about from the tenth to the thirteenth century of our era. At the time I attributed the disappearance of all population from a tract measuring two hundred miles from west to east to deforestation and war, and I did not realize that this was but one illustration of a larger question which included the whole of Central Asia. Similar deserted tracts have also been noted in Kharan, now a hopelessly arid district, and they perhaps supply the strongest of all proofs that aridity has increased on the Iranian plateau.

Population.—The present population of Iran is estimated to be about ten millions,[2] and there may be perhaps two million Persians living in the Russian, Turkish, and Indian empires. Before the era of sea transport there is no doubt

[1] *Ten Thousand Miles, etc.*, p. 234. I have also consulted Sven Hedin's *Overland to India*, chap. I.; Stein's *Ruins of Desert Cathay, passim*; and *Is the Earth drying up?* by Prof. Gregory (*Journal R.G.S.* for February and March 1914).

[2] Divided into nine million Shias, nine hundred thousand Sunnis, eighty thousand Christians (Armenians, Nestorians, Greek Orthodox, Roman Catholics, Protestants), thirty-six thousand Jews, and ten thousand Zoroastrians. *Vide* article on "Persia" in 11th edition of the *Encyclopædia Britannica*.

that the cities of Persia were generally larger and more prosperous than at present, as the greater caravan traffic must have provided a living for thousands of families along the main routes apart from the benefits conferred on the agricultural class. Moreover, as already explained, it is at least possible that the rainfall was heavier and the agricultural capabilities of the country were greater at earlier periods than to-day. Again, certain districts such as Astrabad are suffering from being overrun by nomads. But after making these allowances it is difficult to believe that the plateau has ever been more than sparsely peopled, and in my opinion it is an error to suppose that in respect of population it ever resembled modern Europe. It is impossible to make an accurate estimate; but, if we consider the much larger volume of traffic which passed across "the Highway of the Nations" before the era of sea transport, and the fact that Persia was generally the seat of a great empire, even although the capital was rarely on the plateau, I am inclined to suggest that fifteen millions may have lived in the country which now supports but two-thirds of that number.

The Mountains of the Iranian Plateau.—Persia is not, as is sometimes stated, merely a vast plain surrounded by exterior mountain chains. On the contrary, practically in every part there are detached parallel ranges with valleys averaging twenty miles in width, this formation being repeated with a monotony which is exasperating to the traveller whose journey lies at right angles to their trend. Limestone is the prevailing rock material from the Elburz in the north to the Baluchistan ranges in the south; but gypsum, saliferous beds, conglomerate sand, and alluvial shingle are frequently found. The central masses of the hills are occasionally formed of red sandstone and arenaceous shales: limestone is, however, much more frequent. As the gypsum and saliferous deposits are soluble, and are thus affected by the melting snows, these substances have been carried down into the plains and have thereby produced the dreary areas covered with salt crystals, of which there is a good example near Nishapur.

The gigantic gravel slopes are a striking feature. That which extends from the Elburz is enormous, having a width of some sixteen miles. Its depth, too, is great. When experiments were made at Teheran, which is built on the slope, with a view to obtaining water by means of artesian