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A HANDBOOK OF MESOPOTAMIA

VOLUME I

GENERAL

Prepared on behalf of the Admiralty and the War Office

ADMIRALTY WAR STAFF

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NOTE

Mesopotamia is treated in four volumes. This first introductory volume contains matter of a general nature. The other volumes are devoted to the detailed description of the river and land routes. The second volume covers the regions of the Shatt el-'Arab and Kārūn, and of the Tigris and Euphrates up to Baghdad and Fellūjeh. To the third volume are assigned the Tigris and Euphrates from Baghdad and Fellūjeh to Mosul and Meskeneh, the Lesser Zāb, the country east of the Tigris towards the Persian frontier, and the routes running westward from the Euphrates valley across the Syrian desert. The fourth volume treats of the country north of the line joining Rowanduz, Mosul, Meskeneh, and Aleppo up to Van, Bitlis, Diarbekr, Malatiyeh, and Marash.

CONTENTS

LIST OF MAPS

CHAPTER I

BOUNDARIES AND PHYSICAL FEATURES

THIS handbook deals principally with the area comprised within the following boundaries: to the S. the Persian Gulf; SE., E., and NE. the chains of mountains that are the rim of the great plateau of **Irān** or Persia; to the N. the similar ranges which form the edges of the table-lands of **Armenia** and **Asia Minor**; to the W. the **Syrian desert**, and to the SW. the desert of Northern **Arabia.**

The well-defined limits mentioned above enclose what, relative to the surrounding highlands, is a vast depression of the surface, which, however, as explained below, contains a low plateau in itself. This depression falls away from the northern mountains, at first at a steep and then at a slowly diminishing gradient, till it reaches the point where the Tigris and Euphrates rivers approach to within 40 miles of each other, viz. on the line **Baghdad—Fellūjeh.** Here, now at a very low altitude, it changes suddenly into the great alluvial basin which, in almost a dead flat, stretches southwards for 350 miles, to end at the Persian Gulf. The heights of the mean river levels above the sea at the following places will illustrate conveniently and graphically the scale of declivity of this depression from north to south, till the sea is reached: Samsat, 1,615 ft.; Birijik, 1,115 ft.; Diarbekr, 1,900 ft.; Mosul, 980 ft.; Baghdad, 105 ft. (350 miles from the sea in a straight line); Basra, 5 ft. (55 miles from the sea in a straight line).

By its structure and configuration the whole area is divided into three districts or zones: by structure into a zone of older rock; a zone of younger sedimentary formations; and a zone of alluvial deposits. By configuration it is divided into a district of mountains and hills; a district of rolling and undulating plain intersected here and there by outcrops of rocks and by spurs from the mountains; and a district of watery dead plain of an astonishing fertility. The great depression which is the bulk of Mesopotamia, and with which we are chiefly concerned, is composed of the second and third zones and districts.

Before describing it, a brief allusion may be made to the first zone and district. South-eastward and eastward, beyond the Tigris, and to the north, between the Tigris and Euphrates, towers the highland zone ; range upon range of massive limestone mountains, till the passes to the plateaux behind them rise to 5,000 ft. and 6,000 ft., and the peaks to over 11,000 ft. The width of the mountain belt averages about 100 miles, and its parallel ranges number from five to ten. Between them lie valleys of varying size and elevation, generally more or less habitable, especially in the northern portion of the belt. A few have no outfall ; but the majority discharge the copious water which pours from the snow-clad ridges through great gorges and tremendous chasms into more westerly and southerly channels, and so eventually into a few large rivers—the **Euphrates,** the **Tigris,** and their main affluents. In the south-eastern section three of the largest—the **Kārūn, Jerrahi,** and **Zāb**—join their mud-flats with those of the **Shatt el-'Arab,** and have created an alluvial area nearly half as large as Babylonia 'between the rivers' ; more encumbered by silt, but with lowlands almost as fertile. All along these rocky and most rugged walls of Mesopotamia the terrain rises gently at first in a wide expanse of rolling country. Then, where the first mountains stand up and catch the moisture from the winds, come patches of forest—first oak, then pine and cedar ; finally, on the great heights, come Alpine conditions. There is thus a regular sequence of alluvium, sloping glacis, foot-hills, and high ranges on the south-east, east, north-east, and north. To the west the sequence is only one of alluvium and relatively low, featureless desert (the Arabian) for the lower part of Mesopotamia ; and shelving, undulating plain and the desert again (the Syrian) for Upper Mesopotamia. This desert slopes steadily up westwards ; it is traversed by numerous water-courses which trend to the Euphrates and are merely dry torrent beds that contain no water above the ground, but carry off such rains as fall.

Reverting now to the great depression between the mountain walls and desert already described, it falls, as stated above, into two most distinct zones or districts. The boundary between them is at or about a line from Beled, north of Baghdad to Fellūjeh on the Euphrates. The country between the rivers to the north of this line is known as **Jezīreh** (the island) ; the alluvial plain to the south is **Irak.**

Jezīreh is a low plateau, composed of limestone and sedimentary formations, detritus, intersected by low ranges of limestone, gypsum, and basalt, which slopes from the southern spurs of the Taurus and other ranges southwards to where it ends in the great alluvial plain of Irak. In its northern half, Jezīreh is distinctly a sub-

montane belt merging gradually into a rolling and undulating plain, and presents all the characteristics of such regions—good soil, plenty of water, fair rainfall. These favourable conditions diminish with increasing distance from the mountains, where the sloping plain assumes the character of the Syrian desert to its west. The ruins of innumerable towns and villages; the existence of the Assyrian Empire with Nineveh, its capital, at Mosul; the importance of this tract in Persian, Greek, Roman, and Arab times, testifies to what it was in the past, and may be again in the future under a good and settled government. The **Jebel Sinjar** range is a rough boundary between Upper and Lower Jezīreh; the latter is, and always has been, an unmitigated desert.

Irak is a perfect plain. In 350 miles it falls only 220 ft. to the sea. It is a sheet of the most fertile alluvium, an argillaceous, calcareous loam, interspersed with occasional, unimportant, pockets of stiff clay or else pebbles; sand is sometimes met with, but not to any appreciable degree. There is not a stone on the surface. This loam-plain bears depressions of vast extent in which the floods of the rivers have formed, especially during the later centuries of Turkish misrule, enormous permanent marshes and swamps, more particularly on the lower course of the Euphrates river. These are among the unpleasant existing features of the country, but no doubt many of them could be drained. Throughout the great alluvial plain the boundless horizon is unrelieved by a single range, hill, or natural eminence, and is unbroken save by the artificial mounds which are the silent evidence of the existence of bygone civilizations. There remains the most important feature of Mesopotamia, its river and drainage system: the **Euphrates,** the **Tigris,** and the **Kārūn.**

The **Euphrates** passes through three distinct phases in its course to the sea; its two main sources lie deep in the Armenian plateau: from the northern flows the **Furāt Su,** which after a course of about 275 miles joins the larger southerly arm, the **Murād Su** (about 400 miles). Their united waters flow for 115 miles to Samsat, above which place they burst through the mountains in a terrific cañon. Thence, for 720 miles from **Samsat** to **Hīt,** the river crosses open, treeless country which becomes more level and barren as the river proceeds south. From the west it receives only one important tributary, the **Sajur,** which comes in quite high up some 20 miles south of Jerablūs, and from the east only two, the **Belikh** and the **Khabūr,** both in the middle third of this section. As far as the Khabūr the country extending east and west from the river valley is cultivable, and here for the last 30 years Arabs and Kurds have been gradually settling down to till the soil. Where cultivation

does not yet, or cannot, exist, there stretches a steppe-like desert, covered with verdure in spring and bare and brown during the rest of the year. The river itself flows in a trough generally a few miles wide which it has carved through the desert. The stream meandering from side to side in this trough contains many islands and a number of rapids. The valley floor is for the most part covered with alluvium, and contains bays of varying extent which are capable of cultivation, but are generally, owing to the insecurity which prevails and the sparse population, a wilderness of tamarisk jungle and reeds, the natural home of numberless wild pig. Halfway down the olive gives way to the date palm. At **Hīt** the river enters its delta, after passing through a reef of limestone rocks with outcrops of sulphur, brine, and bitumen springs. The river here is about 250 yards in width and still flows briskly through this last obstruction. In Irak the river flows through alluvial plain and marsh, its waters finding their way through successive bifurcations of the channel (between **Museyib** and **Samāweh,** and between **Nāsirīyeh** and the **Shatt el-'Arab**) and forming large shallow lakes surrounded by reedy swamps, which have been compared to Norfolk broads.

The course of the **Tigris** is geographically similar. Two chief sources, rising near those of the Euphrates, drain the south-eastern ranges of Armenia. They unite some 58 miles below **Diarbekr,** which lies on the main or western branch that bears the name of Tigris, the eastern source being called the **Batman Su.** From their junction to **Samarra** the distance is about 250 to 300 miles, the river flowing first through winding gorges, then below **Jezīret-ibn-Omar** through rolling country, and below **Mosul** through steppe and desert interrupted by the **Hamrīn Geya.** A short distance below Samarra it reaches the alluvial plain. Like the Euphrates, it flows from Mosul to Samarra in a wide trough with similar characteristics to the Euphrates trough. The affluents of the Tigris are on its left bank, where the drainage of the Kurdish hills is brought in by a number of streams, of which the most notable are the **Greater** and **Lesser Zāb** and the **Diyāleh.** Consequently the Tigris brings down eventually somewhat more water than the Euphrates, and also on its swifter current more silt. At **Baghdad** and in the alluvial area, the Euphrates and Tigris are within 40 miles of each other, but soon diverge again to a distance of 100 miles. Below **Amara** the Tigris is much reduced by the numerous canals which carry a great proportion of its water into extensive swamps, particularly at the inlet of the Suweib about 3 miles below Kurna, which also bring an access of water from **Karkeh** river. The waters of the Euphrates join those of the Tigris partly at **Kurna,** 240 miles in a straight line

below Baghdad, and partly at **Gurmat 'Ali**, a few miles above Basra. Together they form the Shatt el-'Arab, a noble river 1,200 yards wide, navigable up to **Basra** for ocean-going steamers. Twenty miles below Basra it receives the **Kārūn** river at **Mohammareh**, and at **Fāo** it flows into the sea.

The **Kārūn** river takes its rise in the highlands of Luristan, enters the plains at **Shushtar**, and breaking through a low transverse range at **Ahwāz**, flows in a steady and tortuous course through sparsely inhabited but not unfertile country, the plains of southern **Arabistan**, to join the Shatt el-'Arab at Mohammareh.

CHAPTER II

CLIMATE

Introduction

The climatic conditions of Mesopotamia are those of a subtropical area which lies at a distance from any ocean, and therefore are of a semi-arid type, although an appreciable amount of rain falls in the winter months. In the winter the atmospheric pressure is comparatively high over Northern Syria and Mesopotamia, since they lie on the outskirts of the great high-pressure system of Central Asia; and while the air-currents at this season are somewhat variable in their directions, winds from the north-west predominate in all parts of the country.

Rain occurs during the passage of cyclonic depressions, some of which come from the Eastern Mediterranean, and others probably pass across Asia Minor, but at other times the north-westerly winds descending from the high plateau to the northward arrive at the low-lying Jezîreh as dry and comparatively warm winds. In summer this effect is more strongly marked, and these north-westerly winds, warmed by their descent from the plateau and in their passage to lower latitude, sweep over the valley of the Tigris and Euphrates as hot, dry winds, which blow fairly continuously from May until October. At this season the great low-pressure area of North-West India, which is related to the monsoon of the Indian Ocean, extends to the Persian Gulf, and the pressure gradient which exists from the Eastern Mediterranean to the Persian Gulf maintains this flow of air over Mesopotamia throughout these months.

Consequently the land depends on the waters of its two great rivers for its fertility, since the rainfall alone is insufficient to maintain vegetation through the summer. Drawing their supply largely from the snowfall in the mountains of Armenia, the levels of the Tigris and Euphrates increase in the spring months, and begin to diminish as midsummer draws nigh. As in Egypt, the cultivator is dependent on the water of the rivers for bringing his crops to maturity, but in Mesopotamia they are at their highest in April and May, whereas the

rains of Abyssinia from June to September produce the annual Nile flood of Egypt in August and September.

In a region so sparsely inhabited and so little civilized as Mesopotamia the places at which meteorological observations have been made are naturally few. Some have been carried on for short periods among the foot-hills of the Taurus in the northern portion of the basin of the Euphrates, while others have been made for longer periods at Baghdad and Basra, and have been published in the Meteorological Reports of the Indian Government. Besides these, a series of observations which extends over five to six years has been provided by the activity of an archaeological mission engaged upon investigations on the site of the ancient city of Babylon.

We have therefore meteorological observations from the following places in Mesopotamia, but they are too few in number and extend over too limited periods to represent adequately the extensive basin of the Tigris and the Euphrates:

Place.	*Period of Observations.*	*Altitude.*	*Latitude N.*	*Longitude E.*
Upper Mesopotamia:	*Years.*	*Feet.*		
'Aintāb . . .	32	3,200 2,755*	37° 4′	37° 35′
Urfeh	7	1,870	37 13	38 47
Diarbekr . . .	2–4	1,950	37 54	40 22
Mosul	3–4	980 830*	36 22	43 14
Lower Mesopotamia:				
Baghdad . . .	21	120	33 21	44 26
Babylon . . .	5–6	100	32 30	44 20
Basra	11	25		
Mohammareh . .	½	?	30 26	48 13
Persian Gulf:				
Bushire . . .	33	25	29 0	49 50
Bahrein . . .	8	18		
Jask	18	13	25 47	57 48
Muscat . . .	18	20	23 37	58 35

* The altitudes of some stations are uncertain. Those marked with an asterisk are taken from the Royal Geographical Society's map of 1910, the other value being that quoted in the observations.

Of these twelve stations 'Aintāb, Urfeh, and Diarbekr represent the climate of the hilly country which lies immediately to the southward of the mountain ranges which extend from the Gulf of Iskanderun on the west to Lake Van on the east, where they join the mountains of

Western Persia which form the eastern boundary of Mesopotamia. This region, which forms a part of the upper basins of the Euphrates and the Tigris, lies at an altitude of 1,500 to 3,000 feet, while many of the hills rise to greater heights. At 'Aintāb the observations, which relate to rainfall only, extend over thirty-two years. At Urfeh and Diarbekr the periods are shorter, being seven (1900–6) and two to four years (1901–5) respectively, but the observations are more complete and include all climatic factors.

Situated on the banks of the Tigris about 100 miles farther south than Diarbekr and more to the eastward, is Mosul, where observations have been made for three to four years (1908–11). This town, which is about 900 feet above sea-level, represents the climate of the southern part of Upper Mesopotamia, where more arid conditions prevail than in the foot-hills. At Mosul itself the winter rainfall is considerable, but in the Jezīreh it decreases gradually as the hill-country is left behind.

Upper Mesopotamia

Temperature (Tables I–VII, pp. 28 ff.)

The coldest month is January, while the hottest is July or August, there being but little difference between these two months. The mean temperature of the day (Table I) varies from about 40° F. in January (31° F. at Diarbekr) to about 90° F. in July and August, the increase being at the rate of about ten degrees per month from April onwards. September sees a definite reduction of temperature after the summer heat, while in October and November the temperature diminishes rapidly.

The difference between the temperature at Mosul and that of the stations in the hills is not very apparent in the mean temperature but is clearly seen in the daily and monthly extremes (Tables II–VI). The mean daily maximum temperature in Mosul in July is 110° F. or 11° higher than at Diarbekr, while the mean monthly maximum, the highest temperature which may ordinarily be expected in the month, is 116·6° F. or 11° and 12° above that recorded at Diarbekr and Urfeh respectively.

Fairly low temperatures occur at all these stations annually, the mean daily minimum being 26·4° F. at Diarbekr and 32° F. at Mosul in January, but occasionally much lower readings are recorded. The mean monthly minimum in January is 27·1° F. at Urfeh, 19·2° F. at Mosul, and even 10·9° F. at Diarbekr. This severe cold at Diarbekr is doubtless due to its position in a basin into which the cold air drains from the surrounding mountains.

The lowest and highest temperatures which have been recorded show the same wide range, though the observations have not yet extended over a long period, seven years being available for Urfeh, but from two to four for Diarbekr, and from three to four years for Mosul.

Place.	*Highest Temperature recorded.* °F.	*Month.*	*Lowest Temperature recorded.* °F.	*Month.*	*Range.* °F.
Urfeh . . .	110·7	July	22·1	February	88·6
Diarbekr . .	107·8	August	−0·4	January	108·2
Mosul . . .	118·8	July	4·3	,,	114·5

This represents the extreme range of temperature which has been recorded for each place during the period for which observations are available. If, however, the difference between the lowest mean monthly minimum and the highest mean monthly maximum (Tables III and VI, pp. 28 and 30), that is, between the lowest and highest temperatures which may ordinarily be expected in any year, be taken, the annual range is: for Urfeh, 77·1° F.; for Diarbekr, 94·4° F.; and for Mosul, 97·4° F.

Rainfall (Tables IX and X, pp. 34–5)

In Upper Mesopotamia the rainfall is moderately plentiful at stations in and near the mountains, but it diminishes rapidly towards the alluvial plain of the Euphrates and Tigris.

The station of ʿAintāb, which is situated in the hills about 60 miles to the north of Aleppo, has an average annual rainfall of 22·05 inches, as deduced from a series of observations which extends over 32 years (Table IX, p. 34). The greatest amount of rain falls in December (4·13 inches), while more than 3 inches are recorded in November, January, and February. The months of July, August, and September are rainless, while the average rainfall in June is only 0·24 inch.

At the other stations the observations are probably too few as yet to furnish satisfactory averages, but they all show the heaviest rainfall as occurring in March, with a secondary maximum in December at Urfeh, and in November at Diarbekr and Mosul. This approximates to the yearly distribution of rainfall at stations in Western Persia. The number of rainy days show maxima in the same months (Table X, p. 34), and call for no special remark.

Snow occurs in Upper Mesopotamia in December and January and

sometimes in February and March as well. It is recorded on eight days on the average at Diarbekr and two at Urfeh during the winter.

Humidity (Table VIII, p. 32)

The mean relative humidity at Urfeh is remarkably low, and, if the figures are correct, must be ascribed to the *föhn* effect when the winds blow from the northward over the high mountain ranges of Asia Minor and descend to the much lower level of the basin of the Euphrates as warm and dry winds. In summer the humidity is particularly low, being from 26 to 29 per cent. At Mosul it is considerably higher, especially in December and January.

Thunderstorms (Table XII, p. 38)

Thunderstorms are moderately common, and occur most frequently in April and May, when the average number for the month is 4 at Diarbekr and 3 at Urfeh, the total number in the year being 14·6 at the former and 10·3 at the latter place.

Cloud (Table XIII, p. 38)

Observations of the amount of cloud are available from Urfeh, and also from Mosul, where observations were made three times daily. While the summer months, June to September, are almost cloudless, the amount increases rapidly in the autumn, until during the winter months the mean amount is from 4 to 5, Mosul showing a maximum of 5 to 6 in April (Table XIII, p. 38) on a scale in which 10 represents a completely overcast sky.

Lower Mesopotamia

The northern portion of Lower Mesopotamia extends from about Baghdad on the Tigris to Kurna at the junction of the Euphrates and the Tigris, and its extremely hot and dry climate is represented by the meteorological observations which have been taken at Baghdad and Babylon. At Baghdad these extend over a period of twenty-one years, while at Babylon they were made regularly for six years by an archaeological mission which was carrying out excavations there.

To the south of the junction of the two rivers at Kurna the climate becomes very damp as well as hot, and heavy dews are of frequent occurrence, the conditions approximating to those of the Persian Gulf. Basra, a station where meteorological observations have been

made for eleven years past, represents this portion of the country, while some observations made during four months in the summer of 1885 at Mohammareh are also available.

Temperature (Tables I to VII, pp. 28 ff.)

In Lower Mesopotamia the mean temperature ranges from 47° F. in January to 95° F. in July, while at Baghdad and Basra the range is somewhat less. January is the coldest month, and February is only slightly warmer, but from March onwards the temperature rises steadily at the rate of about 10° F. per month until June. June, July, and August are the hottest months of the year, the maximum usually falling in July or August.

As is to be expected in this semi-arid region, the maximum temperatures are very high. The mean daily maximum is from 57° F. to 60° F. in January, and rises to 110° F. and 111° F. in August at Baghdad and Babylon, and to 104° F. at Basra. The mean monthly maximum temperature for August is considerably higher, being 119·5° F. at Baghdad, while the highest temperatures which have been recorded at these four stations are 121·3° F. at Babylon and 121·0° F. at Baghdad in August. While such high temperatures are annually experienced in the summer, frost occurs occasionally in December, January, and February. The mean monthly minimum temperature in January is 27·5° F. for Baghdad, and 26·1° F. at Babylon, while the lowest temperature which has been recorded is 20·8° F. for both of these places.

The extreme annual range of temperature is hardly so great as in Upper Mesopotamia, although the maximum in August is higher, since the minimum in January is not nearly so low as, for instance, at Diarbekr.

Place.	*Highest Temperature recorded.* ° F.	*Month.*	*Lowest Temperature recorded.* ° F.	*Month.*	*Range.* ° F.
Baghdad . . .	121·0	August	20·8	January	100·2
Babylon . . .	121·3	,,	20·8	,,	100·5
Basra . . .	111·4	July	23·7	,,	87·7

The greatest range of temperature which may ordinarily be anticipated, i.e. the difference between the mean monthly maximum and mean monthly minimum temperatures, are 97·0° F., 91·9° F., and 76·5° F. for these three stations.

Rainfall (Table IX, p. 34)

While the rainfall of Lower Mesopotamia is less than that of Upper Mesopotamia, still an inch of rain usually falls in each of three months of the year. At Baghdad and Babylon the largest rainfall is in February, while at Basra the total for January is the highest, being thus intermediate between the later date of the maximum rainfall at places in the upper reaches of the river, and December, when the heaviest rainfall at places in the Persian Gulf is recorded. The total amount is not large at any station, ranging, on the average, from 4 to 7 inches. June to September are practically rainless, and in April, May, and October the amount which falls is small. The rainy days are consequently few (see Table X, p. 34), the highest average number being 3·6 in March at Baghdad and 5·0 in December and January at Babylon, while at Basra it is 2·6 in January.

Snow falls occasionally, and as many as four days of snow were recorded in January, 1912, at Babylon.

Humidity (Table VIII, p. 32)

The mean relative humidity at Baghdad lies between 60 and 80 per cent. from November to April, but falls much lower in the summer, and is only 38 per cent. in June, from which it rises slowly to 44 per cent. in September. At Babylon the values are lower. Here, even in the winter, very low relative humidities occur, 10 per cent. or less having been recorded in every month except December and January during the period 1907–11.

Thunderstorms (Table XII, p. 38)

Thunderstorms appear to be rather frequent, for at Babylon, which is the only place at which they have been regularly recorded, they show a well-marked maximum in April and May, when nearly five occur on an average. During the five years over which the observations extended 8 occurred in April of one year and 10 in May of another. In July, August, and September none occurred, and only a few in the autumn, which thus exhibits in this respect a marked difference from the spring.

Cloud (Table XIII, p. 38)

Cloudiness is naturally much less in the arid climate of Southern Mesopotamia than under the somewhat moister conditions of the

country to the north of Baghdad. Both that station and Babylon, however, show a well-marked cloudy season from December to April, while from June to September the sky is almost cloudless. A similar annual variation of cloudiness is noticeable at the northern end of the Persian Gulf, while at places nearer to the Indian Ocean, such as Jask and Muscat, July and August are months of much cloud.

Winds (Table XI, p. 36)

The winds of Mesopotamia have been observed at five stations, viz. Urfeh, Mosul, Baghdad, Babylon, and Basra; but at Baghdad and Basra the observations have been made at 8 a.m. only, while at the other places three observations daily—at 8 a.m., 2 p.m., and 7 p.m. or 8.30 p.m.—are available, and give a better representation of the air movement.

The mean wind directions for each month, expressed as percentages of the total directions observed in the month, are given in Table XI, p. 36, where it will be seen that the dominant wind direction in all months is the north-west, inclining at one time more to the west and at another to the north. In the summer the north-west wind shows the greatest steadiness at all stations, when it reaches a percentage frequency of 70 to 80. In winter and spring the southerly and easterly winds attain their greatest frequency, but there is a recognizable difference at the different stations. At Urfeh calms are not indicated in the observations, and in the winter months easterly and southerly winds have each about half the frequency of the north-westerly. At this station southerly winds are fairly frequent at all seasons, but, as elsewhere, are at the minimum in the summer months.

At Mosul calms are few, and the north-westerly winds are still predominant, reaching 77·7 per cent. in the summer months. At that season southerly winds are comparatively rare, but they reach 30·3 per cent. in the winter months, and as south-easterly winds continue into April and May. At Baghdad the observations were made at 8 a.m. only, and a very high percentage of calms was recorded—from 58·4 per cent. in December to 22·9 per cent. in July. This high proportion may be due to local conditions, but also the light airs of the winter mornings have probably been recorded as calms, since Dr. A. Schläfli, who resided there in 1862–3 and made careful meteorological observations, notes that calms are comparatively rare. Even though very light airs prevail in the early morning, the wind

rises steadily in the forenoon, and by the early afternoon is blowing freshly to drop again at sunset, and this diurnal variation in the strength of the wind is a normal condition in all the months of the year except during periods of cold and rainy weather in winter.

Southerly winds are frequent in the winter, but they fall to a very small number in the summer months. At Babylon, some seventy miles south of Baghdad, where observations were taken three times daily for more than five years, hardly any calms were recorded. Southerly winds were frequent in the winter months and in April and May, but were always greatly inferior to the north-westerly winds, which in the summer months reached the proportion of 85·5 per cent. At Basra the proportions do not differ greatly from those of the stations higher up the river, but southerly winds have a rather greater prevalence in the summer months than farther northward.

The general character of the air circulation over Mesopotamia is well indicated by these observations. Throughout the year a prevailing current from the north-west sweeps over the country from the hilly country in the north to the shores of the Persian Gulf. This air has for the most part descended from altitudes of 4,000 feet or more on the plateaus of Asia Minor and Kurdistan, and therefore reaches the northern part of Upper Mesopotamia as a dry wind. This is clearly indicated by the low value of the relative humidity of Urfeh. Passing southwards and entering successively warmer regions, the air of Mesopotamia is everywhere dry, except in the delta, where the climatic conditions agree closely with those in the Persian Gulf. The frequent occurrence of easterly winds in the northern part of Upper Mesopotamia during the winter and spring is probably connected with the occurrence of depressions in the Levant, many of which pass over Northern Syria or Palestine into Mesopotamia. Data bearing on the velocity of the wind are very scanty.

There is probably a well-marked diurnal variation in both the direction and the force of the wind in all parts of the country, but the wind directions at the three hours of observation have been published for Babylon only. Here the north-westerly wind of the morning becomes more northerly and even passes to the east of north by the afternoon, especially in the summer months. Except in the cold weather or during the passage of depressions, the increase of wind velocity during the day is usual and is especially marked during the hot months. From light airs at sunrise the wind increases to a moderate breeze by about 10 a.m., and by 2 p.m. to

4 p.m. has become a fresh or even a strong breeze. It is strong enough to raise dust and even sand, so that in the afternoon the horizon is usually obscured. About sunset the wind drops, to rise again an hour or two later as a light breeze which may continue during the night, falling to a calm before sunrise.

Gales are said to be rare, but probably high winds occur when depressions pass over the country in the rainy season. In the summer the afternoon wind is said occasionally to reach gale force, but this seems to be exceptional.

Sand Storms

The occurrence of sand storms during 1911 and 1912 was noted at Babylon, 12 and 4 being recorded respectively. They seem to be most common in the spring months, but the observations were too few to support any definite conclusion. It appears that these sand storms were strong winds carrying dust and sand similar to the *Khamsin* of Egypt, and not the *Simoom* (the hot wind accompanying a cloud of sand and dust which sweeps across the arid country as a disturbance of comparatively slight depth and short duration). Preceded by dull or cloudy weather of great heat and oppressiveness and usually by a light southerly wind, the squall of the Simoom itself, accompanied by a dense sand cloud which it has raised, advances with great rapidity, and often blows with extreme violence. After its passage the air quickly clears and a cooler period with northerly winds follows.

Conditions affecting Aviation

Density.— The density of the air in Mesopotamia has been computed for four months of the year, including those of mid-winter and mid-summer, and the results are given in the following table:

Table of Density in Grammes per Cubic Metre

Place.	*January.*	*April.*	*July.*	*October.*
Mosul	1,233	1,170	1,089	1,149
Baghdad . . .	1,254	1,194	1,127	1,172
Babylon . . .	1,260	1,166	1,121	1,177
Basra	1,250	1,185	1,130	1,176

Visibility.—In all hot countries where the ground is heated to a high temperature in the summer months, the air in contact with it is much hotter than that at a short distance above the ground. The density of this layer which is in contact with the ground is consequently less than that of the upper layers, and all objects seen through these heated layers appear to be below their true position. This effect, known as mirage, leads to a part of the sky being seen as though on the surface of the desert, where it appears to be a sheet of water, and to hills, rocks, and other objects being distorted. Visibility is thereby greatly interfered with whenever the line of sight is inclined at a small angle to the ground; for a line of sight from any considerable height this form of interference would not be serious, but when the ground is highly heated, as in the case of a semi-arid and subtropical region, the ascending hot air and the cooler air which descends to take its place will probably produce a general haziness throughout the hottest time of the day. Further, the increased velocity of the wind after midday raises a considerable amount of fine dust which remains in suspense until sunset, and diminishes the visibility of objects at a distance.

Clouds are rare in the summer months, and the few that do occur are cirrus clouds which are situated at high altitudes. Occasionally, when unsettled weather is imminent, overcast skies are experienced, but these are uncommon and do not usually last for any time.

Temperature.—The difference between the highest and lowest temperatures in any month is very considerable; the mean range, or the difference which is ordinarily experienced in the course of the various months, is given in the following table:

MEAN MONTHLY RANGE OF TEMPERATURE

Month.	*Mosul.* °F.	*Baghdad.* °F.	*Babylon.* °F.	*Basra.* °F.	*Bushire.* °F.
January	41·2	41·1	43·0	37·3	35·2
February	40·8	41·9	45·9	37·7	30·7
March	36·4	45·0	48·8	37·7	35·5
April	45·2	43·5	54·0	37·6	36·9
May	41·8	46·5	50·8	38·0	33·5
June	44·7	42·5	49·2	30·9	26·7
July	44·3	42·7	47·5	32·3	24·8
August	44·1	45·4	49·4	33·8	27·0
September	47·7	47·7	53·1	39·8	27·1
October	44·8	47·4	51·0	39·8	30·0
November	44·1	45·5	51·4	40·3	34·5
December	34·8	40·3	46·3	33·5	33·3

The average range of temperature in a single day is naturally much less, and is given below for the same places.

AVERAGE DAILY RANGE OF TEMPERATURE

Month.	*Mosul.* ° F.	*Baghdad* ° F.	*Babylon.* ° F.	*Basra.* ° F.	*Bushire.* ° F.
January . . .	18·0	21·3	20·3	16·2	13·0
February . . .	17·7	22·8	24·6	16·4	12·6
March	18·9	23·3	26·7	17·3	13·4
April	22·5	24·7	26·8	18·8	14·1
May	27·0	25·4	29·0	19·6	13·5
June	28·9	28·4	33·6	18·9	11·2
July	29·6	29·8	35·1	21·5	11·0
August . . .	31·5	30·8	36·3	23·5	13·0
September . . .	31·1	30·8	36·4	24·6	14·8
October . . .	28·4	29·3	31·7	22·7	16·3
November . . .	22·5	24·6	27·9	18·3	15·6
December . . .	18·0	20·5	23·0	13·7	13·3

Winds.—The prevalent winds are shown in Table XI, p. 36, for the different stations at which observations have been made. The north-westerly and northerly winds blow with great steadiness, especially in summer, when there is a steep pressure gradient from the north of Mesopotamia to the Persian Gulf. In consequence of heating, the lower layers of air which are in contact with the ground rise, and in this way a mixing of the lower and upper air takes place as the day advances. The result is that the more rapid motion of the upper layers is imparted to the lower layers with which they are being mixed, and increased velocity of the surface wind in the midday and afternoon hours is thus brought about.

Observations of atmospheric pressure have been made at few places in Mesopotamia, but from these and others in the Persian Gulf, in Syria, Egypt, Arabia, and India the general trend of the isobars can be deduced for the summer months May to October, when there is a well-defined pressure gradient towards the Persian Gulf. In the winter months the gradient is slight, and the data are insufficient for reliable deductions to be made of the velocity of the upper air currents. An approximate value can, however, be obtained for the summer months, and the estimated velocity of the winds at from 1,500 to 4,000 feet (gradient wind) is given in the following table :

ESTIMATED VELOCITY OF THE GRADIENT WIND IN LOWER MESOPOTAMIA, BAGHDAD TO BASRA

	June.	*July.*	*Aug.*	*Sept.*	*Oct.*
Metres per second . . .	9·4	7·0	5·4	5·4	10·9
Miles per hour	21·0	15·7	12·1	12·1	24·4

Further eastward these velocities appear to increase to 30·0, 25·6, 24·8, 23·7, and 24·4 miles per hour respectively.

In the summer half-year the change of pressure (reduced to sea level) is comparatively rapid as the Tigris or Euphrates is ascended, and the average increase of pressure for Mesopotamia may be taken as being about 1 mb. for 125 kilometres or 77·7 statute miles, in going from the head of the Persian Gulf to Upper Mesopotamia. In the months before and after July the gradient is less, but from October to April the distribution of pressure is too imperfectly known for isobars of any reliability to be drawn.

TABLES

SUMMARY

TABLE I

Mean Temperature

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Upper Mesopotamia :						
Urfeh	*40·3*	47·8	52·3	62·6	71·2	81·7
Diarbekr	*30·9*	40·5	47·5	58·5	68·2	78·8
Mosul	*41·0*	46·0	52·0	62·6	76·5	86·5
Lower Mesopotamia :						
Baghdad	*48·8*	52·8	59·2	68·0	78·8	87·3
Babylon	*46·6*	53·8	61·9	76·1	84·0	91·3
Basra *	*51·8*	55·6	63·0	72·9	81·9	87·3
Mohammareh †	—	—	—	—	86·4	90·1
Persian Gulf :						
Bushire	*57·5*	58·8	64·5	72·9	81·1	84·9
Bahrein *	*61·2*	62·2	67·2	74·3	83·1	87·2
Jask	*66·7*	67·9	71·3	79·0	84·3	88·2
Muscat	*69·3*	69·8	73·2	81·9	87·6	**89·7**

TABLE II

Mean Daily Maximum Temperature

Upper Mesopotamia :						
Diarbekr	*39·0*	48·2	56·1	67·6	78·6	90·3
Mosul	*50·0*	54·9	61·5	73·9	90·0	100·9
Lower Mesopotamia :						
Baghdad	*59·5*	65·8	72·9	82·8	93·7	104·5
Babylon	*57·2*	66·7	75·4	85·6	97·7	106·3
Basra	*59·9*	65·4	73·6	83·8	93·9	99·7
Persian Gulf :						
Bushire	*64·4*	65·5	72·4	81·2	89·1	91·8
Bahrein	*66·7*	67·5	73·8	81·4	90·7	93·9
Jask	*73·8*	74·8	79·2	86·5	92·2	95·9
Muscat	*73·5*	73·9	78·4	86·5	93·7	**95·9**

TABLE III

Mean Monthly Maximum Temperature

Upper Mesopotamia :						
Urfeh	*53·2*	60·1	71·4	82·0	90·9	100·6
Diarbekr	*47·5*	54·7	65·3	77·4	87·1	99·9
Mosul	*60·4*	64·8	70·9	84·9	97·0	108·7
Lower Mesopotamia :						
Baghdad	*68·6*	75·9	85·0	93·7	106·1	113·4
Babylon	*69·1*	76·8	87·3	99·9	109·6	114·3
Basra	*70·0*	75·1	83·2	93·3	103·2	106·3
Persian Gulf :						
Bushire	*75·4*	75·6	86·2	94·3	101·2	100·9
Bahrein	76·6	*75·2*	85·7	92·6	102·6	101·4
Jask	*78·7*	81·4	87·9	92·0	101·6	**104·5**
Muscat	80·7	*79·2*	89·4	96·5	104·5	**106·6**

* Deduced from $\frac{\text{Max. Min.}}{2}$ —a correction derived from the observation of Baghdad and Bushire respectively.

† For 1885 only.

July.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	
						Upper Mesopotamia :
88·9	**88·9**	**80·4**	**70·0**	55·4	46·0	Urfeh.
87·4	87·3	**76·5**	**63·9**	50·4	40·1	Diarbekr.
94·8	93·4	**85·5**	**73·2**	59·0	48·2	Mosul.
						Lower Mesopotamia :
92·1	**92·5**	**86·0**	**76·3**	61·5	52·5	Baghdad.
94·8	93·7	**88·0**	**77·2**	61·3	50·9	Babylon.
90·2	**90·7**	**85·3**	**77·4**	64·9	56·0	Basra.*
94·8	92·1	—	—	—	—	Mohammareh.†
						Persian Gulf :
88·5	**89·4**	**85·8**	**78·2**	69·6	61·6	Bushire.
90·3	**91·2**	**87·8**	**80·9**	73·7	65·0	Bahrein.*
89·0	88·2	**86·3**	**81·8**	75·4	70·2	Jask.
88·2	85·0	**84·4**	**82·2**	77·1	72·4	Muscat.

						Upper Mesopotamia :
99·0	98·1	**86·0**	**73·8**	58·1	48·0	Diarbekr.
110·1	109·0	**101·1**	**87·4**	70·2	57·4	Mosul.
						Lower Mesopotamia :
109·4	**110·0**	**103·3**	**92·3**	75·1	63·1	Baghdad.
110·5	**110·7**	**105·8**	**93·0**	75·7	62·4	Babylon.
103·3	*104·5*	**99·5**	**89·1**	75·3	63·3	Basra.
						Persian Gulf :
	96·9	**94·0**	**87·6**	77·9	68·5	Bushire.
95·3	**98·4**	**94·6**	**88·5**	79·9	70·8	Bahrein.
97·7	**94·3**	**93·0**	**90·3**	83·4	77·6	Jask.
96·0	**89·1**	**89·1**	**88·2**	82·5	76·9	Muscat.
93·2						

						Upper Mesopotamia :
		95·5	**87·4**	**72·5**	**59·2**	Urfeh.
104·0	**104·2**	**92·8**	**83·3**	**68·2**	**59·9**	Diarbekr.
105·3	**105·1**	**109·8**	**96·1**	**81·0**	**65·7**	Mosul.
116·6	**115·0**					**Lower Mesopotamia :**
		112·6	**101·8**	**86·9**	**72·1**	Baghdad.
116·8	**119·5**	**114·1**	**101·7**	**86·5**	**73·2**	Babylon.
116·4	**117·0**	**106·0**	**97·5**	**86·8**	**72·0**	Basra.
108·5	**109·2**					**Persian Gulf :**
		99·7	**94·0**	**88·2**	**79·0**	Bushire.
102·3	**104·4**	**100·7**	**95·2**	**89·2**	**79·7**	Bahrein.
102·7	**103·8**	**99·8**	**96·8**	**88·7**	**82·8**	Jask.
103·6	**101·3**	**98·3**	**97·0**	**90·1**	**83·1**	Muscat.
103·1	**98·8**					

TABLE IV

Absolute Maximum Temperature

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Upper Mesopotamia :						
Urfeh	*59·0*	69·1	83·1	89·4	97·3	106·3
Diarbekr	*51·1*	60·1	65·7	79·7	91·6	104·9
Mosul	*62·6*	66·4	71·1	87·6	103·5	110·3
Lower Mesopotamia :						
Baghdad	*79·9*	84·8	98·8	99·1	109·9	119·2
Babylon	*75·4*	81·7	95·7	105·3	114·1	120·7
Basra	80·1	83·3	91·9	99·9	114·2	111·4
Mohammareh *	—	—	—	—	98·4	106·3
Persian Gulf :						
Bushire	*80·0*	84·6	104·7	102·5	106·5	109·3
Bahrein	*83·1*	83·2	95·2	96·5	**108·8**	106·7
Jask	*82·2*	88·3	92·3	102·2	110·2	109·8
Muscat	85·9	*85·3*	96·8	103·3	110·3	**114·3**

TABLE V

Mean Daily Minimum Temperature

Upper Mesopotamia :						
Diarbekr	*26·4*	33·4	38·8	49·3	58·5	65·5
Mosul	*32·0*	37·2	42·6	51·4	63·0	72·0
Lower Mesopotamia :						
Baghdad	*38·2*	43·0	49·6	58·1	68·3	76·1
Babylon	*36·9*	42·1	48·7	58·8	68·7	72·7
Basra	*43·7*	49·0	56·3	65·0	74·3	80·8
Persian Gulf :						
Bushire	*51·4*	52·9	59·0	67·1	75·6	80·6
Bahrein	*56·4*	57·6	63·0	69·7	78·0	83·1
Jask	*60·6*	62·0	66·6	73·2	78·4	83·3
Muscat	*67·1*	67·5	72·0	79·7	85·7	**88·5**

TABLE VI

Mean Monthly Minimum Temperature

Upper Mesopotamia :						
Urfeh	*27·1*	31·3	35·6	44·6	52·7	61·2
Diarbekr	*10·9*	22·3	29·5	39·6	51·8	55·9
Mosul	*19·2*	24·4	34·5	39·7	55·2	64·0
Lower Mesopotamia :						
Baghdad	*27·5*	34·0	40·0	50·2	59·6	70·9
Babylon	*26·1*	30·9	38·5	45·9	58·8	65·1
Basra	*32·7*	37·4	45·5	55·7	65·2	75·4
Persian Gulf :						
Bushire	*40·2*	44·9	50·7	57·4	67·7	74·2
Bahrein	*46·7*	49·6	54·4	60·7	70·3	76·1
Jask	*50·6*	54·3	58·5	65·4	72·3	78·1
Muscat	*60·6*	62·8	65·7	71·5	79·3	**83·2**

* For 1885 only.

July.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	
						Upper Mesopotamia :
110·7	108·5	101·8	90·5	78·8	61·7	Urfeh.
106·2	**107·8**	93·2	84·9	69·8	62·4	Diarbekr.
118·8	117·7	113·9	97·0	86·5	71·8	Mosul.
						Lower Mesopotamia :
120·2	**121·0**	117·2	108·0	95·3	81·0	Baghdad.
119·3	**121·3**	116·1	104·4	90·9	80·8	Babylon.
114·4	113·9	109·4	101·4	92·4	*76·6*	Basra.
110·5	**113·2**	—	—	—	—	Mohammareh.*
						Persian Gulf :
109·5	**115·0**	107·5	101·0	91·3	86·6	Bushire.
105·7	107·5	105·4	104·7	92·4	84·1	Bahrein.
111·8	106·7	104·8	102·2	92·3	86·3	Jask.
110·3	105·3	102·8	102·3	96·3	88·3	Muscat.

						Upper Mesopotamia :
75·0	74·8	64·0	53·2	44·4	36·1	Diarbekr.
79·5	77·5	70·0	59·0	47·7	39·4	Mosul.
						Lower Mesopotamia :
79·6	79·2	72·5	63·0	50·5	42·6	Baghdad.
75·4	74·5	69·4	61·3	47·8	39·4	Babylon.
81·8	81·0	74·9	66·4	57·0	49·6	Basra.
						Persian Gulf :
84·3	83·9	79·2	71·3	62·3	55·2	Bushire.
85·4	**86·1**	82·5	76·0	68·4	59·7	Bahrein.
85·5	84·1	81·1	75·9	69·0	64·0	Jask.
87·5	84·0	83·1	80·6	75·2	70·3	Muscat.

						Upper Mesopotamia :
69·8	69·4	57·4	51·6	41·4	32·7	Urfeh.
69·3	**69·4**	55·8	44·2	36·5	29·1	Diarbekr.
72·3	70·9	62·1	51·3	36·9	30·9	Mosul.
						Lower Mesopotamia :
74·1	**74·1**	64·9	54·4	41·4	31·8	Baghdad.
68·9	67·6	61·0	50·7	35·1	26·9	Babylon.
76·2	75·4	66·2	57·7	46·5	38·5	Basra.
						Persian Gulf :
77·5	77·4	72·6	64·0	53·7	45·7	Bushire.
80·0	**80·5**	76·4	69·1	60·8	51·0	Bahrein.
82·3	79·9	75·4	69·2	62·1	58·0	Jask.
81·7	78·7	79·2	75·3	69·7	65·6	Muscat.

TABLE VII

Absolute Minimum Temperature

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Upper Mesopotamia :						
Urfeh	23·0	22·1	30·2	39·2	45·5	53·6
Diarbekr	*−0·4*	17·2	26·1	36·5	46·0	52·9
Mosul	*4·3*	5·2	34·5	37·6	53·2	61·9
Lower Mesopotamia :						
Baghdad	20·8	29·8	33·5	43·8	50·0	62·8
Babylon	20·8	25·9	32·9	41·7	57·7	61·3
Basra	*23·7*	31·1	39·7	52·3	59·1	70·3
Mohammareh *	—	—	—	—	67·8	71·8
Persian Gulf :						
Bushire	*32·0*	37·2	45·4	50·4	57·7	67·2
Bahrein	*40·8*	44·8	51·3	57·3	65·3	72·3
Jask	*41·8*	51·3	47·3	61·3	69·3	73·7
Muscat	*57·5*	62·7	62·1	70·6	78·1	**78·3**

TABLE VIII

Relative Humidity (Mean of Day)

Upper Mesopotamia :						
Urfeh	50	53	48	43	36	29
Mosul	87	87	78	76	65	43
Lower Mesopotamia :						
Baghdad †	80	72	71	60	52	38
Babylon	67	55	47	42	34	26
Basra †	79	76	71	66	61	58
Persian Gulf :						
Bushire	78	77	71	66	62	66
Bahrein	80	80	78	74	68	66
Jask	74	75	73	68	68	71
Muscat	68	69	68	59	59	64

* For 1885 only.

† 8 a.m. only.

July.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	
						Upper Mesopotamia :
66·2	67·1	51·8	48·2	37·6	*19·4*	Urfeh.
67·5	66·2	54·3	43·5	32·9	16·3	Diarbekr.
71·2	67·1	58·3	48·9	29·1	27·9	Mosul.
						Lower Mesopotamia :
71·1	68·9	56·0	47·5	29·5	*18·6*	Baghdad.
60·1	63·0	57·2	46·0	27·1	*18·9*	Babylon.
70·7	68·7	59·7	52·5	35·7	29·9	Basra.
80·8	75·9	—	—	—	—	Mohammareh.*
						Persian Gulf :
74·0	69·1	63·2	55·4	46·3	39·4	Bushire.
76·8	79·3	74·4	55·9	52·9	43·0	Bahrein.
76·2	76·8	70·0	65·2	52·3	53·8	Jask.
77·3	77·1	77·3	74·7	67·1	63·5	Muscat.

						Upper Mesopotamia :
26	28	29	34	49	50	Urfeh.
40	*64*	61	72	80	86	Mosul.
						Lower Mesopotamia :
		44	52	66	80	Baghdad.†
	42	25	35	51	67	Babylon.
39	22	62	68	71	79	Basra.†
24	59					
59						**Persian Gulf :**
		67	65	68	75	Bushire.
	68	74	77	79	82	Bahrein.
67	74	74	69	69	72	Jask.
68	77	75	66	66	68	Muscat.
74	81					
75						

TABLE IX

Mean Monthly Rainfall (inches)

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Upper Mesopotamia :						
'Aintāb	3·23	3·54	2·76	2·36	1·30	0·24
Urfeh	2·64	2·64	**2·91**	1·18	0·87	0·04
Diarbekr	2·05	1·97	**4·10**	2·84	1·54	0·16
Mosul	2·49	3·06	**3·37**	2·09	0·48	0·11
Lower Mesopotamia :						
Baghdad	1·04	1·37	**1·41**	0·81	0·23	—
Babylon	0·95	0·36	**1·09**	0·20	0·02	—
Basra	**1·17**	1·05	1·09	0·48	0·46	—
Persian Gulf :						
Bushire	2·68	2·06	0·91	0·48	0·02	—
Bahrein	0·37	0·59	0·38	0·17	0·10	—
Jask	0·79	0·86	0·77	0·06	—	0·05
Muscat	**1·08**	0·78	0·76	0·11	—	0·15

TABLE X

Rain Days (>0·2 mm. or 0·008 in. of rain)

Upper Mesopotamia :						
Urfeh	7·9	9·2	**11·3**	8·8	5·9	0·6
Diarbekr	7·0	7·0	**13·0**	12·0	6·0	2·5
Mosul	8·0	**11·0**	9·3	9·6	5·3	0·5
Lower Mesopotamia :						
Baghdad	2·2	2·4	**3·6**	2·1	0·7	—
Babylon	**5**	4	4	3	1	—
Basra	**2·6**	2·5	2·1	1·5	1·2	—
Persian Gulf :						
Bushire	**4·2**	3·8	2·2	1·1	—	—
Bahrein	0·9	**1·7**	1·1	0·9	0·2	—
Jask	**2·2**	1·8	1·7	0·2	—	0·1
Muscat	1·8	1·6	**1·9**	0·4	—	0·2

July.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	
						Upper Mesopotamia :
0·08	—	—	1·06	3·35	**4·13**	ʿAintāb.
—	—	0·16	0·47	1·81	2·72	Urfeh.
—	—	0·04	0·71	3·15	2·68	Diarbekr.
—	—	0·31	0·26	2·10	1·91	Mosul.
						Lower Mesopotamia :
—	0·05	—	0·08	0·79	1·17	Baghdad.
—	—	—	0·40	0·45	0·78	Babylon.
—	—	0·19	0·08	0·89	0·82	Basra.
						Persian Gulf :
—	0·01	—	0·10	1·56	**3·25**	Bushire.
—	—	—	0·01	0·04	**0·81**	Bahrein.
0·01	—	—	0·04	0·32	**1·27**	Jask.
0·02	—	—	0·07	0·35	0·62	Muscat.

						Upper Mesopotamia :
—	—	0·8	3·2	7·8	9·5	Urfeh.
—	—	2·5	4·5	10·0	12·0	Diarbekr.
—	—	0·7	2·5	6·0	7·0	Mosul.
						Lower Mesopotamia :
—	0·1	—	0·3	1·5	3·1	Baghdad.
—	—	—	2	3	**5**	Babylon.
—	—	0·3	0·2	1·8	2·5	Basra.
						Persian Gulf :
—	—	—	0·2	2·4	4·1	Bushire.
—	—	—	0·1	0·3	**1·7**	Bahrein.
—	—	—	0·2	0·6	2·1	Jask.
0·1	—	—	0·1	0·8	1·3	Muscat.

TABLE XI

Wind Directions as Percentages of Total Observations

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Urfeh :						
N.	14	11	9	9	11	11
NE.	10	13	12	6	11	4
E.	10	13	12	6	4	2
SE.	9	11	14	12	4	4
S.	3	7	6	7	2	2
SW.	6	8	9	10	15	13
W.	14	15	19	16	12	20
NW.	34	22	19	34	41	44
Mosul :						
N.	13·9	14·6	8·4	14·7	23·1	21·9
NE.	8·4	4·9	3·3	3·4	5·1	3·9
E.	10·2	15·0	14·7	10·2	10·7	3·0
SE.	15·4	15·3	23·7	20·6	13·8	4·5
S.	6·6	11·7	11·4	6·1	4·5	1·1
SW.	5·5	5·2	4·0	5·9	2·9	6·7
W.	11·7	13·7	14·4	12·1	13·5	19·8
NW.	28·2	19·5	20·1	27·0	26·4	35·7
C.	—	—	—	—	—	3·4
Baghdad:						
N.	12·9	12·4	15·6	13·6	18·1	30·8
NE.	0·3	1·9	1·7	4·4	4·8	5·0
E.	1·0	1·9	3·7	2·1	1·9	0·7
SE.	1·7	4·3	5·7	1·7	1·3	1·0
S.	7·5	9·3	10·1	7·0	3·2	0·6
SW.	2·7	—	1·3	1·7	2·2	—
W.	7·5	5·4	3·7	7·0	5·6	2·0
NW.	12·2	11·6	8·1	13·6	15·8	34·2
C.	54·0	53·1	50·1	49·0	47·0	25·8
Babylon :						
N.	13·1	18·6	15·2	17·8	21·8	23·9
NE.	4·9	4·5	5·5	7·7	5·7	2·1
E.	5·9	7·4	6·8	7·2	7·1	2·4
SE.	18·0	20·1	17·3	12·7	9·3	2·7
S.	7·2	5·7	8·7	6·7	7·7	2·0
SW.	4·4	5·7	5·3	5·6	5·1	2·5
W.	17·0	15·5	13·1	13·0	14·7	15·8
NW.	26·7	20·3	26·0	26·3	26·7	47·0
C.	2·6	2·3	2·4	2·9	1·9	1·6
Basra :						
N.	29·3	21·6	19·8	33·4	27·2	27·1
NE.	0·6	2·2	4·5	3·7	2·4	0·7
E.	—	1·3	1·3	1·8	2·4	0·7
SE.	6·4	3·6	8·6	3·7	4·5	1·0
S.	17·7	20·6	23·0	17·8	10·0	4·2
SW.	5·8	6·8	3·1	6·3	3·9	1·8
W.	13·5	14·4	8·9	11·6	15·1	20·1
NW.	14·4	15·8	12·3	11·6	15·7	41·6
C.	12·3	13·7	18·5	10·0	18·8	2·8

TABLE XI

July.	Aug.	Sept.	Oct.	Nov.	Dec.	
6						**Urfeh :**
8	11	12	9	15	15	N.
2	7	8	6	11	15	NE.
3	5	2	2	8	18	E.
4	3	4	8	17	9	SE.
11	2	6	5	3	7	S.
12	14	15	14	5	2	SW.
54	15	12	12	11	15	W.
	43	41	44	30	19	NW.
						Mosul :
18·6	17·8	16·7	14·3	11·6	14·7	N.
2·5	2·0	3·0	4·2	5·9	8·7	NE.
5·9	4·2	3·9	6·0	8·6	5·9	E.
4·5	4·2	6·2	10·0	14·8	10·8	SE.
2·5	3·0	5·3	3·0	4·8	8·5	S.
5·6	7·5	5·9	7·1	7·4	6·2	SW.
20·6	23·6	20·8	21·4	13·9	12·7	W.
39·8	37·6	38·0	34·0	33·0	32·5	NW.
—	—	—	—	—	—	C.
						Baghdad :
18·4	20·2	22·5	20·6	14·4	11·3	N.
1·0	1·7	2·8	3·3	1·7	1·0	NE.
—	1·0	1·0	2·6	1·7	1·3	E.
0·3	0·7	1·4	1·3	1·7	4·9	SE.
—	—	1·0	2·9	6·2	5·9	S.
—	0·3	0·3	1·6	2·0	1·6	SW.
7·1	6·7	6·5	2·0	2·7	4·3	W.
50·3	38·2	22·5	12·5	11·6	11·2	NW.
22·9	31·2	42·0	53·2	58·0	58·4	C.
						Babylon :
15·8	15·0	16·5	18·7	11·0	10·7	N.
1·3	2·1	5·5	6·6	5·0	3·7	NE.
1·3	1·2	2·2	5·2	4·9	4·0	E.
1·2	2·6	3·0	9·9	11·4	11·6	SE.
1·3	1·3	2·5	5·8	3·3	7·0	S.
2·2	1·6	3·9	5·1	4·8	3·1	SW.
18·6	20·6	17·3	12·4	18·3	18·2	W.
56·5	51·8	43·1	30·8	35·9	34·5	NW.
1·6	3·8	6·0	5·6	5·3	5·0	C.
						Basra :
32·8	22·1	6·2	16·1	11·6	15·3	N.
1·2	1·8	4·7	2·6	2·0	1·8	NE.
1·2	1·8	2·3	0·6	1·3	1·8	E.
1·5	2·4	3·1	4·5	10·7	5·7	SE.
5·2	6·7	2·3	9·7	14·0	11·5	S.
3·6	10·7	14·8	3·9	3·0	6·1	SW.
21·3	25·3	40·6	31·0	26·0	28·5	W.
17·9	22·5	13·3	10·3	16·7	18·5	NW.
52	6·7	12·5	21·2	14·7	10·8	C.

TABLE XI (*continued*)

Wind Directions as Percentages of Total Observations

SUMMARY

	Nov.–March.			*April–May.*		
Percentage.	W., NW., & N.	NE. & E.	SE., S., & SW.	W., NW., & N.	NE. & E.	SE., S., & SW.
Urfeh	52·4	24·4	23·2	61·5	13·5	25·0
Mosul	52·6	17·1	30·3	58·4	14·7	17·9
Baghdad	30·0	3·2	13·0	53·3	6·2	2·8
Babylon	58·8	10·5	26·7	60·2	13·9	23·6
Basra	53·3	3·4	29·3	57·3	2·1	23·1

TABLE XII

Thunderstorms

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*
Upper Mesopotamia :						
Urfeh	—	0·4	1·2	2·1	3·0	1·4
Diarbekr	—	0·3	1·0	4·0	1·7	2·5
Lower Mesopotamia :						
Babylon	1·0	2·0	2·4	4·8	4·6	0·8
„ Maximum in any year	2	5	4	8	10	2

TABLE XIII

Mean Amount of Cloud ‡

Upper Mesopotamia :						
Urfeh *	3·9	**4·7**	**4·7**	3·6	2·8	0·9
Mosul *	5·2	5·5	5·1	**5·6**	3·6	1·4
Lower Mesopotamia :						
Baghdad †	2·8	2·7	**2·9**	2·1	1·6	0·3
Babylon *.	**4·3**	3·9	3·6	3·9	3·2	0·9
Basra †	3·6	3·4	**3·9**	2·7	2·6	0·1
Persian Gulf :						
Bushire †	**3·9**	2·7	3·7	3·2	2·2	0·1
Bahrein †	**2·4**	1·8	1·8	1·0	0·9	0·2
Jask †	**2·8**	**2·8**	2·4	1·5	0·5	1·0
Muscat	2·8	2·3	2·3	1·1	0·7	1·8

* 8 a.m. only.
† Three observations, at 8 a.m., 2 p.m., and 7.30 or 8.30 p.m.
‡ 0 = cloudless sky ; 10 = completely overcast.

June–Sept.			*October.*			
W., NW., & N.	NE. & E.	SE., S., & SW.	W., NW., & N.	NE. & E.	SE., S., & SW.	
						Percentage.
70·2	9·5	20·2	65·0	8·0	27·0	**Urfeh.**
77·7	14·2	7·8	69·7	10·2	20·1	**Mosul.**
64·9	3·3	1·4	35·1	5·9	5·8	**Baghdad.**
85·5	9·0	6·7	61·9	11·8	20·8	**Babylon.**
75·2	3·6	11·5	57·4	3·2	18·1	**Basra.**

July.	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	
						Upper Mesopotamia :
0·3	0·2	0·6	0·8	0·3	—	Urfeh.
—	—	2·0	1·3	1·5	0·3	Diarbekr.
						Lower Mesopotamia :
—	—	—	1·3	1·5	1·5	Babylon.
—	—	—	3	3	3	„ Maximum in any year.

						Upper Mesopotamia :
0·4	0·4	1·0	2·3	3·8	**4·7**	Urfeh.*
0·2	0·5	1·4	2·4	4·8	5·3	Mosul.*
						Lower Mesopotamia :
0·1	0·3	0·5	1·5	1·9	2·3	Baghdad.†
0·3	0·2	0·6	2·6	3·1	4·2	Babylon.*
0·1	0·2	0·5	1·9	2·2	3·5	Basra.†
						Persian Gulf :
0·7	0·8	0·6	1·1	2·7	3·2	Bushire.†
0·1	0·4	0·1	0·3	0·5	**2·4**	Bahrein.†
2·0	2·7	1·5	0·9	1·9	2·6	Jask.†
3·2	2·8	1·1	0·6	1·5	2·5	Muscat.

CHAPTER III

MINERALS

As might be expected from the configuration of the country, the existence of minerals occurs almost exclusively in the hilly and mountainous borders of the great plains. Where the Euphrates debouches into the Jezīreh, gypsum and fuller's earth abound in the flat plains on both sides of the river. There are extensive salt works at Berareh, where the Jebel Sinjar approaches the Khabūr stream, and sulphur springs at Ras el-'Ain. Further eastwards in the hills of Diarbekr traces of minerals increase, and five mines are known to exist, of which three are at present worked—one by the State and two by lessees. The Government mine, of copper, is situated about 50 miles NW. from Diarbekr on the road to Kharpūt, at Arghana, and appears to have been discovered in A.D. 1096. The ore is a mixture of iron and copper pyrites, one or other predominating as the case may be. The total annual production may be estimated at about 1,200 tons. The ore is either roughly treated on the spot, the working methods being exceedingly primitive, or else it is exported in its natural condition. The two mines worked by private enterprise are a copper mine near Palu, N. of Diarbekr, and a mine producing galena at Tkil, NW. of Diarbekr. Seams of coal are reported at Hazo, NE. of Diarbekr, and at Harbol, across the Tigris, E. of Jezīret-ibn-Omar; the latter are in use. Salt works, yielding about 5,000 cwt. of salt a year, exist at Lijjeh, 50 miles NNE. of Diarbekr, and there are salt-fields and salt works at Samarra. In the hills of the Mosul tract several mines of copper, argentiferous lead, and even of gold were worked in former ages, but owing to the general insecurity of the country have been closed for centuries; in the neighbourhood of Mosul deposits of sulphur, asphalt, and orpiment are still being worked. Sulphur springs are found to the north in the immediate neighbourhood of Mosul; also, on the right bank of the Tigris, about 13 miles down-stream, there are the hot saline springs of Hammām 'Ali, which have markedly medicinal properties. The soil near them is impregnated with bitumen, sulphur, and salt; and close by is a bitumen spring which also

produces oil in considerable quantity and of fairly good quality. 'Shows' of oil and of bitumen are met with at various spots farther south; the Kaiyara naphtha springs, 50 miles from Mosul and 2 miles from the right bank of the Tigris, where a native of Erbil has set up a small refinery for oil which is sold for local consumption at Erbil; again between Erbil and Kirkuk, and the latter place and Salāhiyeh (Kufri). There are also coal workings at Nasaleh, E. of Ṣalāhiyeh, which yield coal of poor quality (deeper borings may produce better results). There are oil wells at Chiah Surkh, N. of Qasr-i-Shirin, where the Anglo-Persian Oil Company has a branch. Farther south-eastwards, along the same submontane region, there is an outcrop of oil at Mandali, on the Persian frontier, and traces at various other points towards Shushtar till the oil-fields of the Anglo-Persian Oil Company at Maidān-i-Naftūn, 30 miles E. of Shushtar, are reached. Springs of white oil are worked by the same company at Naft-i-Safid, about 20 miles S. of Maidān-i-Naftūn. Wells have also been drilled at Ahwāz. The importance of the oil-springs of this region and the extent and value of their output dwarf all the mineral products of Mesopotamia put together.

In the south of the Jezīreh, gypsum is found at Tekrit, Samarra, and Mahmūdiyeh, and a whitish yellow clay, suitable for pottery, is found on the banks of the Tigris. On the Euphrates there is an important deposit of oil and bitumen at Hīt, and of bitumen at Ānah. Large quantities of bitumen can be obtained at these two places, but cost of freight at Basra, and difficulty of shipment thence, have prevented its export from Mesopotamia. The quality of the bitumen produced is poor, owing to inferior methods of extraction and preparation. What is now produced is consumed locally in covering the bottoms and sides of native craft, floors of *hammams*, &c., bridges, &c.

The desert round Baghdad contains good clay for bricks, and on the outskirts of Baghdad city is a small salt-field. Considerable salt-fields exist at 'Azīziyeh, Shatret el-'Amāreh, Kerbela, Nejef, and Nāsirīyeh. Saltpetre is extensively found in the soil of Irak, but no use is made of it.

CHAPTER IV

FAUNA AND FLORA

Fauna

To judge from the reliefs and paintings discovered at Nineveh, Nimrūd, Babylon, and elsewhere, lions must have been very numerous in Mesopotamia, but at present, if they exist at all, a few may be met with near the Khabūr and on the border of Persia. Tigers do not occur, leopards are found in the hill country, and wolves are fairly common in the north, but the latter are comparatively seldom found in Irak. Hyaenas, jackals, foxes, and hares are common throughout Mesopotamia. Bears, black and brown, are not unfrequent in the higher ranges of the borders towards Kurdistan and Armenia. There are many wild pig in the marshes and tamarisk-covered stretches by the river sides, and gazelles abound in the upper Jezīreh, and are also common farther south and in Irak. Throughout the Jezīreh antelopes are to be found, but the wild ass is now rare. The beaver is reported to have been seen on the Euphrates and Khabūr rivers. Various species of jerboas inhabit the plains; porcupines, rats, and mice are common. Of domesticated animals the camel takes the first place; it is of the one-humped species, and presents two varieties: the riding camel, of high breed, slight make, clean limbed, thoroughbred, and capable of great and continuous exertion, ambling at a steady pace of 6 miles an hour for several days consecutively; and the baggage camel, which corresponds to the cart-horse, is of heavy build, carries from 400 to 600 lb., and can march from 15 to 25 miles a day. Without their camels the nomad Arab tribes could not exist. Next come horses, chiefly of Arab stock (for riding mainly); asses, of which a noted white variety is used for transportation by wealthy men and ladies; buffaloes, cattle, goats, and sheep of both the long-tailed and fat-tailed varieties. Dogs of the common or 'pariah' class abound in the towns and villages; shepherds keep a breed of powerful, hairy dog of the mastiff type, and Arabs and Kurds, for sporting purposes, possess hounds of the well-known 'Persian greyhound' class.

Of birds there are vultures, eagles (in the mountains), kites, hawks

and falcons, ravens, crows, owls; in the upper Jezīreh the bustard and the ordinary game birds of the East: partridge (black and grey), quail, geese, duck, snipe are plentiful; while the great marshes teem with herons, bitterns, pelicans, and other aquatic birds in enormous numbers.

Snakes are common, and flies are a plague as in Egypt; in and near the marshes mosquitoes and sand-flies are unpleasantly numerous. From time to time plagues of locusts visit Mesopotamia. The rivers produce fish, but not of many species that are fit to be eaten—by Europeans at any rate. The best known are the *bizz*, which is often 6 to 7 ft. long and over 100 lb. in weight; the *shabūt*, which weighs from 2 to 6 lb.; and the *bunni*, which is a smaller but better tasting fish than the shabūt. Water-tortoises are found in the rivers. Sharks, up to 6 ft. in length, visit Baghdad in the hot season, and are said to penetrate occasionally as far up-stream as Samarra. The marshes harbour frogs in myriads.

Flora

The flora of Mesopotamia is necessarily limited in view of the physical and hydrographical characteristics of the country and its scanty rainfall. Only an account of the wild flora is given here—the description of crops and produce will be found in the section on *Agriculture*, Chap. XI.

In Irak natural wooding hardly exists except upon the banks of rivers and canals, where the Euphrates poplar, a tree that does not attain to any great size, grows interspersed with low tamarisk jungle; there is also a kind of osier and willow, known as *safsāf*, which gives a good shade. The white and black mulberry, the *ber*, the plane and sumach, and various kinds of acacias are among the self-propagating trees of the country, also a mimosa which goes by the name of *shōk esh-shāmi* (camel thorn). An aromatic plant called *shiah* is fairly common. There is no lack of reeds, sedges, and rushes in the great swamps and morasses. A small thorny plant, called simply *shōk*, is common everywhere in the dry tracts, and affords fuel and camel grazing. In the desert to the SW. there are found, in addition to forage plants common to arid Eastern tracts, a shrub called *haram* and a grass called *sahbah*, both of which are eaten by camels. Two vegetable products, natural but possessing a commercial value, are the colocynth and liquorice. The former occurs everywhere, and is obtained in large quantities from the waste between Baghdad and Hilla, the dried pulp only being exported and not the whole fruit. The liquorice plant grows chiefly in river bends on the concave side of the curves, and is said not to be found at more than two miles

distance from the water's edge. It benefits by occasional floods. Liquorice root is a staple article of fuel at Baghdad.

Vegetation in the Jezīreh corresponds with the physical and climatic conditions of this tract as contrasted with Irak. In Lower Jezīreh, except in the river troughs, there are few trees, and those that exist are the same as in Irak. The central desert, lying between the two rivers, bears hardly any vegetation except a little coarse grass and some camel thorn. In Upper Jezīreh matters in this respect improve as the distance to the highlands of Diarbekr decreases. Towards the southern part of Upper Jezīreh the country is steppe, the vegetation of which is that which prevails in similar soil from Central Asia to Algeria, though many arborescent plants that grow in the rockier and more irregular plateaux of western Asia and Persia are missing. Here the cycle of vegetation begins in November: the first winter rains clothe the plain with verdure, and in spring the ground is a carpet of flowers embedded in luxuriant grasses; bulbous plants, especially crocuses, colchicums, and tulips, are most plentiful, and aromatic plants are not uncommon. The full summer development is reached by the end of May, and when August comes everything is burnt up. Trees are entirely wanting. As the spurs of the Taurus highlands are reached, the steppe-like aspect of the country is varied by cultivation and by the presence of trees, both cultivated and wild. Among the latter are most conspicuous the noble *chenār* or Persian planes, which, growing singly or in clumps, tower over the surrounding landscape; other prevailing trees are poplars, elms, and walnuts, which clothe the lower sides of the hills. The northern slopes further up are partially covered with junipers, hill oaks, and stunted cedars; and the peaks and summits are wooded with pines, which on the highest mountains form forests of considerable dimensions.

CHAPTER V

HYGIENE

Diseases

Malaria is the principal disease of the country. In Baghdad it is on the whole comparatively insignificant, though its incidence here becomes fairly serious in years when the country round Baghdad is flooded. It is found in a severe form at Basra, and the marsh-regions and the Mandali and Beled-Ruz districts have a bad name for this disease. Small-pox, diphtheria, dysentery, ophthalmia, typhoid fever, tuberculosis (which is on the increase), syphilis and other venereal diseases are all more or less endemic, especially in the towns, while rheumatism in its various forms is commonly reported from the submontane tracts and from Baghdad and other towns, especially in the winter months. Ankylostomiasis (Egyptian anaemia) is a common disease. Leprosy occurs mostly round Amara. Bilharziasis is found to some extent in the districts N. and NW. of Basra, especially in the region of Samāweh and round the Bahr-i-Shināfiyeh and the Bahr-i-Nejef. The principal epidemic diseases are cholera and bubonic plague. The latter has been less in evidence of late than in former years, when its ravages were often of appalling severity. Irak is, in fact, one of the oldest endemic centres of this disease. There were outbreaks in 1773, 1800, 1832, and 1877. In 1832, 60,000 persons out of a total population of 150,000 perished in Baghdad, the city thereby sustaining a loss which succeeding years have scarcely made good. There has been plague at Basra as recently as 1910: still, plague is no longer the scourge of Mesopotamia, as it used to be; indeed cholera is probably in these days a much more potent evil. It is to be hoped, and there is some reason to believe, that plague has entered upon a dormant period, which, if it last for any length of time, will be of great advantage to the country.

The Baghdad Boil.—The 'Baghdad boil' (the native *Ukht*) is a disease peculiar to the city from which it takes its name, though the same affection under various other names occurs in many towns

of Turkey (e.g. Mosul, Diarbekr, and Aleppo) and Persia. It is a slow, sloughing ulcer, which generally attacks the face, hand, wrist, and ankle, not generally amenable to treatment, but disappearing of itself after a tedious course, perhaps of about one year (hence the Persian name *yalek* meaning 'yearly sore'). With hardly a single exception, Europeans are attacked within a year of their arrival; nor do the indigenous population enjoy immunity, for in the affected towns the children contract the disease when quite young, while the adults who have it mostly come from some place where the sore is not found. Treatment by carbonic acid snow will possibly reduce the boil for a time, but in that case it is likely to return sooner or later. If the boil is left alone, the disease will not come back when once it has run its course. The natives and even some Europeans will inoculate the sore on the arm to avoid the possibility of acquiring a disfiguring sore on the face. The name 'date-mark', which is applied to it, indicates one of the popular, but erroneous, origins ascribed to the disease, namely over-indulgence in dates. The water is also blamed, but the parasite causing it, a flagellate called *Leishmania*, is certainly injected by the bite of some noxious insect, probably a sand-fly, which may itself receive the parasite from dogs. It is doubtful whether even improved sanitary conditions would eliminate the Baghdad boil.

Precautions to be taken against the *sun* are in general the same as those observed in India. The smiting power of the sun in Mesopotamia is very great, and consumption of alcohol should be most moderate, especially in the case of those whose work exposes them to the sun-rays. Alcohol should not be taken before sunset.

Moderation in the use of *cold baths* is advisable. Bathing in the river is best practised only in the early morning and after sunset.

The disease of *Bilharziasis*, mentioned above, is the result of drinking stagnant water left by the river as the floods subside; such water should therefore be carefully avoided in the districts where this disease is prevalent.

Disease and Religious Pilgrimages.—No small part in the dissemination of this and other epidemic diseases is borne by the religious pilgrimages, or caravans of the dead, which converge from all directions upon the shrines at Kerbela and Nejef. It is the ambition of every Shiah, rich or poor, to visit in his lifetime, or at least to be buried after death in, the sacred precincts of the tombs of Husain or Ali. From all parts of Asia, and especially from India and Persia, crowds of pilgrims, the majority of whom have covered long distances on foot, come every year to visit the holy places. Obviously the physical condition of these pilgrims, ill fed and debilitated by constant

journeying, must predispose them to an attack of disease. Their situation is made still more precarious when, as often, they are carrying with them the dead bodies of their relatives.

Sanitary Services

It has been debated whether it would not be better policy to allow these caravans to continue on the march rather than pen them up in quarantine camps. Still, the Turkish Government deserves some credit for the solicitude it displayed for the physical welfare of these pilgrims. There was a sanitary department at Baghdad, controlled by a medical officer (the *mufattish* or inspector) who received his orders direct from the International Board of Health at Constantinople. One of his principal subordinates was a doctor with three assistants at Khanikin, whose duty it was to inspect all corpses entering the country from Persia for interment at the holy places; there were also establishments for the maintenance of sea quarantine at Fāo and Basra. After these the sanitary posts at Nejef and Kerbela ranked next in importance, while *Mamurs* of the department were stationed also at Amara on the Tigris, Samarra, Kazimain, Museyib, and Qatif—all places frequented by Shiah pilgrims. It is worthy of remark that the department also levy a tax upon all corpses transported for burial, with a view to the upkeep of these sanitary services, which tax must be distinguished from the fees charged at the actual places of burial by the religious authorities according to the sanctity of the locality selected.

Sanitation in the Towns.—Except in the matter of quarantine, there is little or no effort towards efficient medical control. Baghdad is a municipality, and as such its affairs are supposed to be regulated by a municipal council working under the supervision of the civil authorities. In point of fact they can do little beyond offer suggestions to the Vali, their powers of expenditure being limited to a sum of £1 12*s*. It is not surprising in these circumstances that few signs of their activity are observable. The streets are ill kept, and generally too narrow for the passage of a wheeled vehicle. In Baghdad every house is a cesspool—not sufficiently emptied. Sewage is carried on donkeys to gardens outside the city, and vegetables such as lettuce are grown on sewage-impregnated soil. Only about 300 houses are supplied with Tigris water in pipes, by the agency of a 20 h.p. oil engine, but even so no attempt is made to filter it or deposit the silt before delivery. Elsewhere water is supplied by carriers, in skins balanced on the backs of donkeys, at a cost which varies according to distance from Rs. 2-8-0 to Rs. 4-11-0 per 100

skins. Private wells exist, but the water they provide is not as a rule fit for human consumption. Water is filtered in the houses through large porous jars called *zeers*, and these and the wells, being left uncovered, form breeding grounds for the mosquitoes (chiefly *culex* and *stegomyia*) which infest the houses. The result of this mismanagement is to preserve in active working order every channel by which contagion can be spread or disease imported, whether it be the myriads of flies that swarm by day or the sand-flies and mosquitoes that render night intolerable. Nazim Pasha, when he was Vali of Baghdad, attempted to exterminate the pariah dogs of the city, but as these had at least performed to some extent the work of scavengers, the measure was unfortunate in its results. At Basra the municipal authorities vie with those of Baghdad in the matter of inefficiency and impotence. The main town is notoriously insanitary; the streets unpaved, strong faecal odours abound everywhere, while the Ashar canal serves the lower orders at once for drinking water, washing, and as a receptacle for filth and sewage of every description. Much the same is true of Mohammareh, though the present Sheikh has erected some fine modern buildings. There are three public baths and a good brick bazaar, but the sanitary condition of the place remains, in spite of what has been done, deplorable—the only method of drainage consisting in a channel down each street, which is generally choked up, except after rain. It is well that the Kārūn river and Shatt el-'Arab provide these towns with a comparatively pure water-supply, for those at least who choose to make use of it. Far too large a proportion of the population rely on creeks and irrigation channels (like the Ashar at Basra) or brackish wells, which expedients are nothing but a standing invitation to disease and pestilence.

CHAPTER VI

HISTORY

THE history of Mesopotamia falls into two clear divisions: first, the period when it contained great independent states; secondly, the period of its subjection to one after another of the great military Powers—Persian, Greek, Parthian, Sassanian, Arab, and Turk—which in succession have held the Near East or Persia, as the case may be, in dominion. The first period dates from before the dawn of history till in 539 B.C. Cyrus the Great conquered Babylon; the second has continued from that date to the present year.

THE KINGDOMS OF ANCIENT MESOPOTAMIA

In considering the first section of Mesopotamian history it must be borne in mind that the physical conditions of the whole country differed greatly from those of modern times. Upper Mesopotamia (the Jezīreh) must have been much more wooded, highly cultivated, and densely populated than (say) after the Arab conquest; while in Irak or Lower Mesopotamia, when recorded history begins, the sea was at Eridu, 125 miles from the present head of the Persian Gulf; the country S. of a line drawn from Kut el-Amara to Sūq esh-Shuyūkh was a huge lagoon or shallow prolongation of the gulf, and the great swamps of the Euphrates at Kūfeh did not exist; the culturable area of Irak was less in extent, but was much better adapted for irrigation works and for cultivation.

The early history of Mesopotamia is that of Babylonia and Assyria. The strength of Assyria lay in the Eastern Jezīreh and the uplands of the mountainous regions to its east and north; the root of Babylonia was firmly planted in Irak; at first in its lower half, but from the year 2100 B.C. onwards permanently in its upper portion, where for the past 4,000 years the cities of Babylon, Seleucia, Ctesiphon, and Baghdad (all lying within a circle of 30 miles radius at the point where the Tigris and Euphrates approach each other) have, one after the other, been the capital cities of Mesopotamia and the chief commercial centres and emporia of the Near East. Babylonia was incomparably the more important; Assyria was only an episode in

comparison. Indeed Babylonia has undoubtedly exercised an even greater influence in moulding the conditions in Nearer Asia than the civilization of the Nile basin. In the remotest antiquity we find it encroaching on Palestine, Syria, Asia Minor, even Arabia and the rugged countries to the east—Elam, Persia, and Media. All the surrounding nations looked up to and were attracted towards the seat of this ancient civilization, whether they were under its supremacy or whether they imposed their own rule on it. For over a thousand years cuneiform writing and the Babylonian language were the medium of diplomatic and commercial international correspondence throughout the countries from Egypt to Armenia, from the Mediterranean and Black Sea to the Persian Gulf. Babylonian religion, Babylonian weights, measures, and currency, astronomy, divisions of time, and banking system profoundly influenced the successors of Babylonia in culture and civilization.

The existence of a vast alluvial plain with a soil of astonishing fertility, an inexhaustible supply of water for irrigation, and a hot climate, favoured the creation of a wealthy and populous agricultural and industrial community. The growth of international communications, the main routes of which crossed each other in Mesopotamia from west to east, from the Mediterranean to Central Asia, and from north to south, from the Black Sea and Asia Minor to Arabia and the Persian Gulf, stimulated commerce and the development of a commercial state with the concomitant characteristics of the policy of such: stability, caution, tenacity of purpose, moderation, tact, and a marked preference for the employment of diplomacy rather than of force. Assyria, on the other hand, was and ever remained a purely military community, relying on violence, and subject to a sudden and total collapse when violence failed.

The very earliest records show Lower Irak in the possession of an apparently Turanian people already in a high state of civilization. They seem to have come from Central Asia originally. In their final home between the Tigris, the Euphrates, and the sea they must have spent thousands of years before they had reached the point of having introduced an elaborate system of canalization; industries had made much progress; they had invented cuneiform writing; had evolved an elaborate religious system and ritual; they lived in cities around which the population was grouped in a series of small city states independent of and warring with each other; complicated laws and customs, which had been reduced to writing, regulated social and commercial relations and transactions. It is impossible to be sure of the origin of this comparatively advanced civilization; only one thing is certain, that before 3000 B.C.

it was in full vigour and flourishing. Sumer, as this country was called, and its inhabitants, the Sumerians, were defended from aggression to the south by the lagoons and marshes then existing at the head of the Persian Gulf, and to the east by the mountains of the Persian plateau, though these from time to time gave passage to the irruptions of barbarians. These, however, had first to penetrate the territory of Elam, an ancient and semi-civilized power which acted as a buffer on the eastern flank of Sumer, and although Elam was rarely friendly to the Sumerians it saved them from worse. On its other sides Sumer was indeed open to attack; but it must have had a long and prosperous existence and a dense population prior to its contact with the peoples of Arabia—the Semites. The Arabian desert has been well described as one of the earth's great reservoirs of men. At various dates, in prehistoric times, its overflow must have found its way *via* Palestine and Syria, acquiring some civilization and agricultural habits on the road, slowly eastwards to the Upper Euphrates and Tigris and down these streams, leaving a detachment in Assyria, to Upper Irak and to the neighbourhood of rich and fertile Sumer.

The coming of the Semites into Babylonian life seems to include both the chief forms of contact between the nations of antiquity, viz. the bodily migration of a whole people and commercial traffic; the latter probably preceding and leading to the former. What happened before 3000 B.C. it is as yet impossible to say. But that there had been a Semitic immigration *en masse*, in all probability eastwards from Syria and down the rivers, there can be no doubt. For the Semites are found firmly settled and forming the bulk of the population in Upper Irak, at first in small city states after the fashion of the Sumerians, but soon coalescing into a firmly knit, homogeneous nation. Their receptive genius enabled them, in a short time, it seems, to assimilate the Sumerian civilization and religious system to a remarkable extent, and (what is still more remarkable in men who were then of lower development) without losing their national speech, or their national characteristics of superior energy, driving power, and capability to organize, develop, and consolidate. In civilization they became Sumerians; in character, speech, and all mental essentials they remained Semites. First, they proceeded rapidly to annex the Sumerian south, and then were able with united forces to cross the Tigris and occupy Elam. Other campaigns covered the Jezireh up to the foot-hills in the north and opened up trade routes towards Syria, the Mediterranean, and Asia Minor. Both in Sumer and in Elam the Semites succeeded in imposing their own language on their subjects; in Elam only for official purposes (much as Persian

is still used in Afghanistan), but in Sumer to the exclusion of the native tongue, which was preserved, however, for astronomical, antiquarian, and especially for ritual and religious uses; and survived till the times of the Greeks.

A second great wave of Semitic immigration appears to have occurred *circa* 2500 B.C. The immediate consequence of this is seen in the installation of a dynasty of great vigour and prestige in Akkad (Northern Irak). It definitely conquers and incorporates the south, assumes the title of Kings of Akkad and Sumer, borne ever after by the kings of Babylonia, and makes Babylon—hitherto a city of insignificant rank—into the capital of a compact and united kingdom, and a pre-eminent political, commercial, and industrial centre, which was to endure for 2,000 years. Hammurabi (2183–2081 B.C.), king and founder of Babylon and of the united Babylonian state, is famous as the ruler who issued the earliest legal code known to history. In his reign can be first discerned the working of the Babylonian state policy, a stable line of action which steadily aimed at the expansion of commerce, the opening of trade routes, and the spread of civilization. His name may well be included in a list of the greatest men of history. Under him and his successor the Babylonian empire embraced the whole of Mesopotamia, Assyria being held as a garrisoned province, and stretched across the Upper Euphrates to the Mediterranean Sea; Syria and Western Palestine were occupied, relations opened with Egypt, and a firm grip laid on the one side upon the trade routes from the Euphrates through the Syrian desert to the west, and on the other side through Elam and across the now Kurdish range to Persia and Central Asia. The policy thus enunciated by Hammurabi and his dynasty was never dropped by the state of Babylonia, but was reasserted whenever an opportunity offered.

This Semitic incursion which thus led to the founding of Babylon also gave rise to Assyria, at first, as stated above, a province of Babylonia, but afterwards to become the rival and enemy of the southern kingdom. Here the Semites appear to have amalgamated with an indigenous population more barbarous than the Sumerians, to which element may be traced the strain of brutal ferocity which is so marked a trait in the Assyrian character, in contrast to the more humane and statesmanlike bent of Babylon.

The brilliant first epoch of Babylonia was eclipsed by the invasion of the Kassites, who overthrew the Semitic dynasty and reigned in its stead at Babylon, becoming rapidly absorbed in the local population. Who they were is not known; most probably they descended on Mesopotamia from the Persian plateau through Elam. But since

it is at this period that the then civilized world became acquainted with the domesticated horse, there is every reason to believe that the Kassites brought the horse with them and owed their success to this most important factor in war, which must have worked a revolution in the methods of the fighting of the time. It was no doubt the chief weapon of this invasion of nomads.

The Kassites ruled over a diminished Babylonian empire for 400 or 500 years and then their dynasty fell before a third incursion of Semites, which appears to have entered Mesopotamia, *circa* 1500 B.C., simultaneously from the north in the shape of the Aramaic horde, and from the south where the Chaldaeans advanced on Sumer. In the anarchy which followed the collapse of the Kassites came the first chance of Assyria, which, between *circa* 1280 B.C. and 1100 B.C., established an empire that reached the Mediterranean seaboard, penetrated into Asia Minor, and treated on equal terms with the kings of Egypt. At this time the Assyrians attempted to secure their conquests by sending out colonies of the peasantry which composed the bulk of their armies.

Meanwhile Babylonia was assimilating its new rulers. Now again the advanced civilization of the country and its dense population were influences too strong for foreign conquerors to withstand. Shortly after 1100 B.C. the Assyrian empire declined; the causes are obscure, but were probably due chiefly to pressure from Asia Minor and the highlands to the north-east. In proportion Babylonia rose for a time, resisting its Assyrian and Elamite neighbours, eventually falling first under the suzerainty of Elam and then of Nineveh, but apparently never losing its identity as a corporate unit.

About 750 B.C. the Assyrian empire burst forth into another and its greatest period of splendour, in which its kings fought and conquered in Media, Armenia, Syria, Palestine, Asia Minor, and Babylonia. But these victorious wars gradually drained the strength of Assyria, and the second empire fell at the end of the seventh century B.C. before a political combination of Media and Babylonia, the latter having for a century been reduced to a province of Assyria. In its second phase the Assyrian empire had lost what would otherwise have proved a firm base for its continued existence—its peasants. They had been used up in the series of constant wars and colonizations; those who remained in their original home had become serfs, and the state had been driven to the employment of mercenary armies whose pay had to be defrayed by a policy of spoliation and oppression of conquered territories. In consequence the fall of the empire before the allied Medes and Babylonians

was complete and irretrievable. Its territory was divided between them, the former taking the north and the latter the south.

Now comes the final epoch of Babylonian independence and glory, of which Nebuchadnezzar the king is the most notable figure. Apparently some sort of balance of power was arranged, the Medes being given an open door to Asia Minor, and Babylonia reserving for herself Syria with Palestine and the trade routes to the west from Mesopotamia, also the right of dealing with Egypt if thought advisable. The arrangement worked for 70 years, and was then overthrown by the sudden rise of Cyrus the Persian. His policy was one of a political union under the Great King with the concurrent retention of local laws, customs, and religions; a policy, in fact, of political and religious toleration so far as was consistent with the maintenance of a central authority, which was responsible for the preservation of order and the proper employment of the imperial forces. After conquering Media, Cyrus appeared at the gates of Babylon in 539 B.C., and was quietly accepted by the inhabitants as their over-lord, and the indigenous dynasty vanishes. Henceforward the history of Babylonia is that of a province. She had fulfilled her mission. Mainly owing to Babylonian influence and Babylonian policy, the seeds of civilization had been spread far and wide throughout the Near East.

Mesopotamia under Foreign Rule

It must not be supposed that with the extinction of national independence the city of Babylon straightway fell into insignificance and decay. It continued to be the winter residence of the monarch for seven months in the year; the Persians were careful to preserve the ancient system of irrigation which was the life-blood of Mesopotamia; and the evidence of contemporary Greek eyewitnesses testifies that during Persian rule Babylon remained the great market and industrial centre of the world which she had been for thousands of years. The city must have contained over a million inhabitants. In the matter of taxation Mesopotamia defrayed one-third of the expenditure of the Persian empire, and Babylonia was its richest province by far. On the arrival of Alexander the Great, Babylon is still the premier mart of Asia. Whether he meant to make it his capital is not clear, but on his return from India he went to live there, the last months of his life being occupied with plans and preparations for making the city a great port; being a Greek his thoughts naturally turned to the encouragement of traffic by sea, and he may have intended to balance Alexandria at the head of the Red Sea by a similar distributing port located at the head of the Persian

Gulf. However that may be, his death in 323 B.C. put an end to these schemes, and incidentally to Babylon as well, for Seleucus, to whom fell Mesopotamia with the Farther East on the partition of Alexander's heritage, determined to found a city on the Tigris. No doubt he was moved to this step by the deterioration of the Euphrates as a source of irrigation and as a navigable river, and by the superior advantages of the Tigris as a channel for water-borne traffic. But inasmuch as it was always a natural necessity that there should be a centre in Northern Babylonia round which its dense population could gather, and at which merchants, passing along the trade routes that here crossed each other from the four corners of the earth, could meet and do business, he selected a site only 40 miles north of Babylon and 18 miles south of the modern Baghdad, on the right or western bank of the Tigris. Seleucia grew rapidly in size and importance. It was equally suitable with Babylon for the purposes of inter-continental land trade and better adapted for marine traffic; moreover, it was one of the capitals of the Seleucian kingdom. Without any sensible pressure on the part of royal authority, the population of Babylon gradually migrated to Seleucia; and after the lapse of two or three generations only a few mounds of clay were left to mark the site of the older city. Seleucia remained a centre of Hellenism long after Babylonia had reverted to Asiatic rule.

From 312 B.C. Mesopotamia was for 175 years a possession of the house of Seleucus, whose descendants appear to have governed the province well and in no wise to have detracted from its wealth and productivity. The Parthian dynasty, which, originating from Khorassan, had gradually extended its power westwards over the Iranian plateau at the expense of the Seleucid Empire, made repeated attempts to seize Mesopotamia, and succeeded at last, after the Seleucids had exhausted their strength in their struggles with the Romans. Following the usual custom of Orientals, the new rulers chose a capital city of their own making, and founded Ctesiphon, on the left or eastern bank of the Tigris, exactly opposite to Seleucia, which, however, in no way suffered thereby. Arab historians state, 700 years later, that at the time of the Moslem conquest of Mesopotamia both cities were flourishing, of great extent and importance. In A.D. 226 the Parthians gave way to the Persian dynasty of the Sassanids, who thereafter held Mesopotamia till in A.D. 642 the victorious Moslems put an end to the Sassanid kingdom. The monarchy of the Parthians and Sassanids was constantly at war with the Roman Empire which was established in Syria. At first the middle Euphrates was the boundary between the two Powers. There was a long struggle for the protectorate of Armenia, which

ended in a compromise favourable to Rome. Trajan (A. D. 115–117) tried to settle the Eastern question by the conquest of the whole of Mesopotamia down to the Persian Gulf, but his gains could not be maintained, and under his successor Hadrian the original boundaries were restored. In the middle of the second century A. D. a successful war gave Rome the western part of the Upper Jezīreh (region of Urfeh and Harrān), and at the end of the same century the eastern portion of the Jezīreh north of the Sinjar hills also came under her control. A number of Roman fortresses were established in the country, the principal of which was Nisibis. The Upper Jezīreh was thenceforward the scene of numerous campaigns, but though successful Persian invasions were not uncommon and the frontier shifted backwards and forwards, the country was generally under Roman rule. In Northern Jezīreh there are still to be seen memorials of the Roman Empire in city-walls (Urfeh, Diarbekr), and remains of bridges, forts, &c. Under Parthian and Sassanid in the south and Roman rule in the north, Mesopotamia long continued to flourish. Like Cyrus and his successors, the Parthian and Sassanid kings spent their winters at Ctesiphon. The great arch of Ctesiphon belongs to the Sassanid period. Babylonia was still extraordinarily rich: the Jezīreh contained numerous great cities, and, besides fertile irrigated areas, much pastoral wealth. But towards the end of the Sassanid Age, civil and foreign war and weak government were beginning to affect the prosperity of the country.

The last stage but one of Mesopotamian history is ushered in by the advent of the Moslem Arabs. In A. D. 628 Mohammed, then at Medina, dispatched the following letter to the 'Great King': 'In the name of God, the Merciful, the Compassionate. From Mohammed, the Messenger of God to Khuson, son of Hormuzd. Verily I extol unto thee God, beside whom there is no other God. Oh Khuson! Submit and thou shalt be safe or else prepare to wage war with God and with his Messenger, a war which shall not find them helpless. Farewell.' According to tradition the Great King tore up the letter; and on hearing this, Mohammed exclaimed: 'Even thus, oh Lord! rend Thou his kingdom from him!' The necessity for the previous consolidation of Arabia delayed the execution of Mohammed's plans. His death in A. D. 632 was the signal for fresh trouble in Arabia, which was successfully suppressed, and by the end of A. D. 633 Islam went forth on the conquest of Syria, Palestine, Egypt, and the kingdom of the Sassanids. As it happened, the last had just gone through a prolonged period of internal disorder. The king, Khuson Parvez, the same who had been addressed by Mohammed in A. D. 628, was killed in that year as the result of a conspiracy headed by the

nobility and the commanders of the garrison at Ctesiphon. His succession was long in dispute; eventually Yezdigird III, the last of the Sassanid kings, ascended the throne in A.D. 634. He had not long to wait for the determined onslaught of the Moslems, whose relatively small numbers were more than counterbalanced by the fanatical fury with which they set out, to gain treasure in this world and merit in the next. The attacks on Syria and Mesopotamia were delivered simultaneously. On the borders of the latter the result was indecisive; which made it clear to the Moslems that the Persian state possessed a greater power of resistance than they suspected. Fortunately for them, the fall of Damascus in A.D. 635 set free the main Moslem army, which joined the Mesopotamian column. In A.D. 636 the combined forces met and utterly defeated the Persians in a most stubbornly contested battle at Kadisiyeh, on the fringe of the desert, 15 miles west of Kūfeh, on the right bank of the Euphrates. This battle practically settled the fate of the Persian monarchy. That it was a complete rout is patent from the leisurely manner in which the Arabs proceeded to settle and colonize Mesopotamia. Ctesiphon, with Seleucia, fell in A.D. 637, and in the same year Kūfeh and Basra were founded as Arab strongholds; the latter superseding the Sassanian port of Ubuka for the trade with the Persian Gulf and India. There followed a migration *en masse* of Arabs with their families and belongings, who descended upon the country and made it their own. What became of the former inhabitants is not clear: owing to the uncompromising character of Islam and the relatively low standard of civilization of the invaders it was not feasible for the resident population to assimilate and absorb their new masters, as had happened with the three preceding Semitic invasions that have been mentioned above. Many of the resident Mesopotamians perished by the sword; many fled; others fell victims to the floods and to plague and famine, which raged at this period, and many of the remainder embraced Islam. The Arab conquest was eventually carried up to the Taurus range. In Northern Mesopotamia a numerous Christian population continued to exist under Moslem rulers (see p. 87).

The disastrous effect of the Mohammedan conquest on Babylonia was enhanced by an occurrence at this juncture which helped to start the ultimate decay and ruin of Mesopotamia, in spite of the temporary resuscitation of its fortunes under the earlier Abbasid caliphate. The great swamps on the Euphrates are the bane of the country. Their origin appears to date from the end of the fifth century A.D., when a heavy flood in the Tigris burst its banks and overflowed the lands to the south and south-west, probably impeding the current of the Euphrates. The Sassanids, however, repaired the damage, and most of

the flooded lands were brought back into cultivation. But about the year A. D. 629 the Euphrates and the Tigris came down in such floods as had never before been seen. Both rivers burst their banks in innumerable places, and finally laid all the surrounding country under water. The Sassanid king, Parvez, made desperate efforts to reclaim the country, sparing neither money nor men's lives; 'indeed', the Arab historian reports, 'he crucified in one day forty canal workers at a certain breach and yet was unable to master the flood.' The swamps thus formed became permanent, for during the succeeding years of anarchy, when the Moslem armies began to overrun Mesopotamia, and the Sassanian monarchy perished, the dykes, such as still existed, naturally remained uncared for, 'and breaches came in all the embankments, for none gave heed and the landowners were powerless to repair the dykes, so that the swamps every way lengthened and widened'. Nor did their previous training or temperament qualify the Semitic invaders to take the charge of complicated works of irrigation. There is every ground for holding that the three first invasions of Semites were those of sedentary peoples, accustomed to agriculture and inoculated with a certain amount of civilization, whereas the fourth irruption was one of mere nomads, who were not without the ability to appreciate civilized influences, but whose fame and success depended mainly upon the work and genius of their Greek and Persian ministers and administrative staffs. But it must not be supposed that the circumstances of Mesopotamia were even then, and for centuries to come, anything like what they are at the present day. In spite of the floods and swamps a very considerable area still flourished, was still inhabited and irrigated; the Abbasid caliphs, till they lost their vigour and power, attended carefully to what had been saved from the wreck of the older world; and it required six centuries of subsequent Mongol and Turkish misrule and apathy to bring the country to its present miserable condition.

Mesopotamia was but a province of the Arabian Empire from the battle of Kadisiyeh, A. D. 636, till A. D. 762. The Abbasid caliph Mansūr, after the destruction of the Omayyad dynasty, which ruled from Damascus, perceived that a new capital was needed for the new dynasty. The decay of the Arab tribal system, on which the military power of the Omayyads depended, and the support given to the Abbasids by the Neo-Moslems of the former Sassanian territories, decided him to move the seat of government to Mesopotamia. The causes which led to the selection of the sites of Babylon, and subsequently of Seleucia and Ctesiphon, which are mentioned above, were still in force, and accordingly Mansur, in A. D. 762, founded

Baghdad on the Tigris, 20 miles above Ctesiphon. For the same reasons that led to the rapid growth and permanence of its predecessors, Baghdad soon rose to eminence. It was second only to Constantinople in size during the Middle Ages, and was unrivalled for splendour throughout Western Asia. Wars and sieges, the removal by the caliphs for 60 years, on political grounds (A. D. 836 to 892), of the seat of government to Samarra, and even the almost entire destruction of the city by the Mongols in A. D. 1258, have never permanently affected the supremacy of Baghdad, and now after the lapse of eleven and a half centuries it is still the capital of Mesopotamia. The country shared in the general prosperity of the golden age of Islam, which culminated during the reign of the caliph Harūn er-Rashīd, A. D. 786–809. The inevitable decay of the Abbasids set in about A. D. 861 with the assassination of the caliph Mutawwakil, though there is evidence to show that even before that date the central power had passed into the hands of the Turkish bodyguard, who, after the custom of their race, during the dissensions of the various claimants to the caliphate, seized any chance that offered itself for harrying Mesopotamia. In the tenth century the whole of North Mesopotamia became an independent Arab kingdom under the Hamdaneds. Order was for a time partially restored by the advent of the Seljuk Turks, whose chief, Toghoul Bey, was invested, in A.D. 1005, by the then caliph, with what practically amounted to the temporal sovereignty of Iran, Mesopotamia, and so much of Asia Minor, Syria, and Palestine as was in the power of Islam. The caliphs are mere honorary figure-heads living in a mysterious seclusion; the fountains of honour and title like the later emperors of Delhi, but without any temporal power outside of Mesopotamia, although the objects of the deep religious veneration of all Moslems and sacrosanct in their capacity of Successors of the Prophet. The break-up of the Seljuk power enabled the caliphate to assert a brief flicker of independence, which was extinguished in the cataclysm of the Mongols. In February, 1258, Hulaku Khan took Baghdad; the city was sacked, and the last caliph of the Abbasids was taken prisoner and killed. The wealth and treasures of ages were plundered; priceless literary and artistic remains were destroyed. An irreparable blow was delivered at the heart of Moslem civilization. This is the end of Arab rule in Mesopotamia. It was accompanied by the ruin of the whole system of irrigation, and the country which had known prosperity for thousands of years became a waste of unfruitful waters in arid plains of dust and sand. The work of three hundred generations of men was destroyed in a single year; and the desolation of the Mongols has endured to this day.

The destruction of the sources of wealth in Mesopotamia had a profound effect on the Middle East; it was as if the keystone had been taken out of the ancient structure. Though Baghdad continued to exist, shorn of its splendour, Mesopotamia practically disappears from history for the next 300 years. Instead of being the focus of the Oriental world it became a blank. It followed the fortunes of whatever dynasty or tribe rose to be a brief power in its neighbourhood. For a short time it was included in the dominions of Timur. Eventually the Turks laid hands on it in A.D. 1534, and till 1914, with one short interval, it has been at least nominally a Turkish possession. In 1603 Shah Abbas of Persia conquered Mesopotamia, but it was retaken by the Turks in 1638. At this time the fortunes of Baghdad had reached their lowest ebb, and the city contained only 14,000 inhabitants. But Turkish sovereignty could not be vigorously enforced. The Kurds of the northern and eastern hills were practically independent, and in the plains the nomad Arabs, taking advantage of the absence of strong government, the decay of irrigation, and the decline of population, had been gradually encroaching on the settled areas, and could not be brought under control by the Turks. The most important movement of nomad Arabs in this period was the Shammār invasion. About the middle of the seventeenth century the Shammār migrated from Central Arabia to the Syrian desert, pushing before them various smaller tribes into Mesopotamia. Following on their occupation of the tracts west of the Euphrates, the Anazeh came up behind them from Arabia. After a protracted struggle the Shammār were compelled to move on, and, crossing the Euphrates, gradually occupied the whole of Jezīreh, exclusive of the hills, driving out the Tai, the Jebūr, the Baggāra, the Weldi, Hadadin, and other smaller clans who had been their predecessors in this tract, and were now forced either to cross the Tigris or to settle down as cultivators on the banks of the two great rivers. Since then Jezīreh has been practically a country of the Bedouins, and cultivation has only existed on sufferance. Similar incursions took place from time to time in Irak. Till the recent consolidation of Turkish authority, which gradually asserted itself during the last century, the Pashas maintained a semblance of power by playing off one Bedouin tribe against another, Anazeh against Shammār, Muntefiq against Beni Lām, &c. In consequence the status of the nomads, except in the vicinity of the cities and settled tracts along the rivers, varied from semi-independence to complete freedom from all control, a condition of insecurity which for long effectually hampered the development of Mesopotamia. The remaining centres of order and civil life, to

a great extent isolated by the unsettled areas, were beyond the effective control of the Sultan's government. In 1732 Nadir Shah laid siege to Baghdad, but was driven off by the Turkish Pasha, who was for all practical purposes an independent ruler. From the end of the seventeenth to the end of the eighteenth century Mosul was governed by a local aristocracy; and in Basra a powerful native chief, Afrasiāb, succeeded in founding a virtually independent little state, which collapsed in 1779: at this time its inhabitants had shrunk to a few thousands. From 1817 to 1832 Daud Pasha, a Georgian, held office at Baghdad, and under his energetic and intelligent administration the city and province began to recover, in spite of a terrible epidemic of plague during 1830–1, which is said to have carried off 50,000 persons in Baghdad alone. Heavy floods in the Tigris simultaneously swept the country. Famine followed these disasters, and in 1837 there are said to have been only 40,000 inhabitants in Baghdad.

On the conclusion of the Crimean War, the Porte found itself in possession of a large army and plenty of money, and determined to assert itself in Mesopotamia. Omar Pasha, then governor of Aleppo, at the head of a considerable number of troops, marched down the valley of the Euphrates and took possession of Ja'abar and Deir. Deir was then held by fellahin Arabs, who had enjoyed a semi-independence under Anazeh protection. It now became the head of a Turkish province, under the vali of Aleppo. This policy of enforced Turkish authority was carried on by Midhat Pasha, who, among the other important offices he held, was governor of Baghdad between 1869 and 1872, and made great efforts to develop Mesopotamia. His administration was at least vigorous, and, if he sometimes failed rather disastrously, he was certainly honest in intention. He was an enthusiastic reformer on Western lines, but failed in many cases to foresee the cost or consequences of his innovations. He built forts to protect the Euphrates navigation and the route to Aleppo, and he initiated a service of Ottoman steamers on the Tigris. He started the tramway, still running, between Baghdad and Kazimain, and is said to have tried to get the treasures accumulated at Nejef devoted to public improvements. He also endeavoured, with indifferent success, to get Turkish suzerainty recognized by Arab chiefs whose autonomy had hitherto been practically unquestioned, such as the Sheikhs of Koweit and Bahrein. Among his failures must be reckoned his removal of the old walls of Baghdad, which left the city liable to Arab attack, and his irrigation work there, which was so badly conceived that at flood time Baghdad was converted into an island.

During the reign of the late Sultan Abdul Hamid (1876–1909) the Turkish administration on the whole effected some progress, in spite of its mistakes and crimes. The Kurds were brought under some degree of control, partly by force, but more by the congenial employment which Abdul Hamid found for them as Hamidiyeh, irregular cavalry in the Sultan's service used for the purpose of repressing such elements in the population of Northern Mesopotamia and Armenia as were suspected of disloyalty. The Hamidiyeh were in fact privileged to behave as they chose; and their excesses, though mainly directed against Christians, did not spare Moslems; yet economic development was not altogether checked by their depredations. The efforts of the Government to control the Arabs were still spasmodic and marked by an impolitic mixture of laxity and oppression; yet, in spite of outbreaks of disorder, Turkish power was growing, and cultivation and trade were developing more or less slowly in the river-valleys. A considerable proportion of the nomad Kurds and Arabs were compelled or induced to take to a more settled way of life. The action of the Sultan in converting into his private property (*Sanīyeh*) 30 per cent. of the best cultivated lands in the vilayets of Basra and Baghdad, and a considerable amount in the northern provinces, although accompanied by much injustice, was probably of some economic benefit to the country. The Sultan's estates were comparatively well managed, and law and order were enforced at least within their limits. The native population generally was living in expectation of greatly increased prosperity which was to be the result of the projected Baghdad railway.

Nevertheless the methods of the Sultan's Government—its corruption, fraud, and violence—aroused considerable discontent throughout Mesopotamia. The Turkish Revolution of 1908 was welcomed by the bulk of the population, as most sections of it hoped to profit by the change. These hopes were generally disappointed by the determination of the Young Turks to carry through a centralizing and levelling policy, and by their methods which were not more scrupulous than those of the old régime. The Government achieved some successes: Ibrahim Pasha, the head of the Milli Kurd confederacy, was put out of the way; Nazim Pasha obtained the submission of the Northern Shammār and appointed a paramount chief in the Turkish interest; and strong measures were taken against the depredations of the Hamawand Kurds near Kirkuk. But there was much disorder in Irak, and the unsuccessful Turkish wars with Italy (1911) and the Balkan States (1912) made matters worse. The permanent ill feeling of the Arabs against the Turks was now taking shape in a Pan-Arab movement, and in this way the

Arab disaffection in Mesopotamia was brought into connexion with the anti-Turkish movement in Arabia. Opposition to the Government grew even in Basra and Baghdad. Ajaimi Ibn Sa'adun, paramount chief of the Muntefiq, who was on bad terms with Ibn Rashid, the comparatively pro-Turkish Emir of Jebel Shammār, was reported to be planning an attack on Basra; the waterways between Baghdad and the Persian Gulf were rendered insecure by the prevalent disorder; and a general rising of the Southern Mesopotamian Arabs was feared, but did not come to a head. Meanwhile, lawlessness was increasing in Kurdistan, where a number of chiefs were entering into relations with Russia. The whole situation was still uncertain when the European war broke out.

The interests of Great Britain in Mesopotamia had grown up before the revival of the authority of the central Turkish Government. A British Resident was first appointed to Baghdad at the end of the eighteenth century. These interests were partly commercial, partly political. Great Britain established and maintained order and security in the Persian Gulf, which she cleared of slavers and pirates, policed, and charted, and in protecting her commerce she established a paramount political influence along the shores of the Gulf and up to Baghdad. She was also concerned to guard the interests of the large numbers of Shiah Indians who made the pilgrimage to Kerbela and Nejef, and the British Indian Government was trustee for a number of endowments founded by Indians at these places. Moreover, British predominance in the Gulf and in Irak was considered necessary for the security of India against attack from without. In the early part of the nineteenth century, before the cutting of the Suez Canal, the possibility of establishing a regular commercial and post route between India and England across Mesopotamia was much discussed, and the famous expedition of Chesney (1835–7) was a reconnaissance made with this scheme in view. The opening of the Suez Canal for some time threw this project into the background. But British commerce continued to develop without serious competition on the Shatt el-'Arab and lower Tigris and Euphrates, British protection was afforded to the practically independent Sheikhs of Koweit and Mohammareh, and British prestige in Irak remained very great. There was, however, much latent jealousy on the Turkish side, and this was stirred to activity about the beginning of the present century, as the result of German influence, by this time predominant in Turkey. The proposed advance of a German-owned railway from Anatolia to Baghdad and Basra was in fact a serious menace to the position of Great Britain in the East, and the British Government was unwilling to see such

a railway extended south of Baghdad. The Turks were beginning to show signs of wishing to increase their power in NE. Arabia and the Persian Gulf at the expense of Great Britain. Their intrigues became more persistent and open after the Revolution of 1908 and the rise to power of the German-controlled and chauvinistic Committee of Union and Progress. An unsuccessful attempt was made to induce the Sheikh of Koweit to renounce his connexion with the British Government, and an encroachment was made on the territory of the Sheikh of Mohammareh, who is ruler of Southern Arabistan, owning a nominal allegiance to Persia. Mohammareh and the Kārūn region had recently become exceedingly important to Great Britain from a military as well as from a commercial point of view, owing to the discovery of the oil wells in the Shushtar region: these are now worked by the Anglo-Persian Oil Company, in which the British Government has acquired a predominant interest. The Turkish intrigues failed, and the troubles of the Turkish administration led to a partial cessation of these attacks. Meanwhile, determined efforts were being made by the Germans to compete with British trade on the Kārūn and Tigris, and the question of the Baghdad railway was still under discussion. Shortly before the present war Great Britain declared herself ready to permit the extension of the Baghdad railway as far as Basra, in return for what was in effect to be British control of the Shatt el-'Arab, of steam-navigation on the Tigris and Euphrates between Basra and Baghdad, and of any extension of the railway that might be made from Basra to the Persian Gulf.

CHAPTER VII

INHABITANTS[1]

Races and Approximate Numbers

In the absence of anything like a census and of any trustworthy official records whatsoever, it is impossible to calculate the population of Mesopotamia with any accuracy. The following figures convey merely a rough estimate :

Jezireh		
	Mutessariflik of Zor	84,000
	Vilayet of Diarbekr	393,000
	,, ,, Mosul	250,000
		727,000
Irak		
	Vilayet of Baghdad	719,000
	,, ,, Basra	792,000
		1,511,000
S. Arabistan	. . . . .	200,000
	'Mesopotamia' Grand Total	2,438,000

Taking the total area to be 180,000 square miles, this gives $13\frac{1}{2}$ inhabitants per square mile. This is a sparse population ; enormous areas in the plains are, however, uninhabited desert (either from all times or in consequence of the destruction and loss of irrigation canals), and in Kurdistan there are extensive uninhabitable and inaccessible mountain ranges.

The succeeding section gives a detailed account of the religions, shrines, places of pilgrimage, and religious leaders in Mesopotamia. But, since religion in this country is mostly a matter of race (for instance, with the exception of a few converts by missionaries, every person of Arab, Kurdish, Turk, or Persian descent is Mussulman, every Armenian or Syrian is a Christian), a religious classification is not out of place as indicating racial factors.

[1] See Map 2.

Province.	Mohammedan Sunni.	Mohammedan Shiah.	Christian.	Jew.	Yezidi.
Zor	82,000		1,000		
Diarbekr	274,000		110,000	1,500	7,500
Mosul	218,000		25,000	5,500	13,500
Baghdad	245,000	420,000	6,000	50,000	
Basra	218,000	553,000	5,000	3,000	
S. Arabistan		200,000			
Total	1,037,000	1,173,000	147,000	60,000	21,000

These figures, it must be remembered, are only approximate. The Mohammedans altogether number 2,210,000; all others 228,000; roughly there are ten Mohammedans to every one non-Moslem. The Sunni Mussulmans, as also the Christians, are found chiefly in the north, the Shiahs in the south. Jews are most numerous in the Baghdad province, principally in the city of Baghdad itself. Sunnis and Shiahs appear to be of about equal strength.

The races which form the composite population of Mesopotamia are: Arabs, Kurds, Turks and Turkomans, Persians, Syrians, Armenians, Yezidis, Jews, Circassians, Sabians, and Chabaks. The numbers of the different races may be assumed to be:

Arabs, 1,650,000
Kurds, 380,000
Turks [1] and Turkomans, 110,000
Persians, 70,000
Syrian Christians,[2] 60,000
Armenians,[3] 57,000
Yezidis, 21,000
Jews, 60,000
Circassians, 8,000
Sabians, 2,000
Chabaks, 10,000
Miscellaneous, 10,000

But this is only a rough estimate. The Arabs are clearly the weightiest element in the population. If they were united in pursuits, disposition, character, religious sect, and interests, they would constitute a very formidable body. The cleavage, however, between Sunni and Shiah, and between sedentary and nomad Arab, is profound; nor do these lines of division coincide: a Sunni Arab is not necessarily a nomad, nor is a Shiah Arab necessarily a cultivator. So far as the Arab race is concerned, it is only the Bedouins or purely nomad Arabs, with some semi-nomads, that present a

[1] *Exclusive* of the troops.

[2] These include Jacobites and Chaldaeans, but not the Syrian Nestorians (see p. 76, note 1), who are chiefly found in the vilayet of Van.

[3] Before the massacres of this year. Probably the Armenians here were less affected than those in Armenia itself.

real difficulty for the administration. Somewhat similar conditions exist among the Kurds, in that it is the nomad and semi-nomad sections who principally give trouble. With the Kurds, though they are all Sunnis, tribal cohesion and a general national feeling appear to be less marked than with the Arabs; blood-feuds and intertribal enmities are strong obstacles to united action, and a general combination of the Kurds seems therefore to be unattainable, or at any rate to be exceedingly improbable. The chief anxiety that the administration has with them arises from the raiding instincts and predatory habits of the nomad and semi-nomad tribes. The other races are politically of no account; the 100,000 Turks being partly real or reputed Turks that live in the cities and towns, and partly peaceful cultivators residing in the northern hills. Persians, Syrians, Jews, and the like have no political influence; and the other races are numerically far too feeble to exercise any effect on a political situation.

Arabs and Kurds

Distribution

As regards their geographical distribution, the matter is simple: the Arab is essentially a man of the plains; in Mesopotamia (as elsewhere, e. g. N. Africa) he remains in the great deserts, or the open country, and penetrates rarely into the montane regions. On the other hand the Kurd prefers the hills and the submontane glacis. The Arabs compose at least 95 per cent. of the population of S. Arabistan, and in Irak probably between 85 and 90 per cent. The desert west of the Euphrates, the alluvial trough itself of the Euphrates in Lower Jezīreh, the desert between the Euphrates and Tigris south of the Jebel Sinjar, and the greater part of the alluvial trough of the Tigris south of Mosul, are firmly in the hands of the Arabs. The Lower Jezīreh is in short effectively possessed by the Arabs, as far as the sloping glacis of the hills and higher ranges to the east and the Jebel Sinjar to the north. Here the Arabs impinge on the Kurds, a virile race always prepared to hold their own and to give back as much as they get, and more if possible. In the main, the issue of perennial conflicts between the two races is determined by the terrain: the Arabs predominate in the plains, the Kurds in the hills. On the east the Tigris is an effectual barrier to collisions on a large scale, neither side caring to cross it in force; and a sort of *modus vivendi* appears to have been established between the two races. In the northern section of the Jezīreh circumstances are different. Till the hills are reached there is no such natural

barrier to combined movements. The Arabs have been unable to reduce the Jebel Sinjar, which is held mainly by Yezidis, or to dislodge the Kurds from the Jebel Tur and the Qarajeh Dāgh and their spurs. The fertile, undulating plain along the foot of these ranges is the subject of contention, the Arabs ever striving to extend their summer pastures as far north as possible, and the Kurds trying to keep the Arabs out of land which is capable of rich cultivation. This standing feud between Arab and Kurd has a most important bearing on the maintenance of peace in Northern Jezīreh. But the antagonism between the two races must not be exaggerated. There is a certain amount of intermarriage between Arabs and Kurds in Northern Jezīreh and along the middle Tigris, and the country west of the Euphrates between Meskeneh and Aleppo is inhabited by a population of mixed Arab and Kurdish blood. Moreover, in Northern Jezīreh it is not uncommon for Arab and Kurdish tribes to ally themselves.

The Kurds are found in Irak, chiefly on the Tigris. Kurdish communities are also said to be at Suweira and ʿAli el-Gharbi on the Tigris, and there are about 5,000 Kurds in Baghdad. Part of the population at Hai and Qalʿat Sikr upon the Shatt el-Gharrāf are Kurds, and Bedrah and Jessān, which lie nearer to the hills, are predominantly Kurdish. The Kalhurs, of mixed Kurdish and Lur origin, inhabit the country on the Baghdad—Kirmanshah road, between the Turco-Persian frontier and Kirmanshah. The Faili Lurs, who live in the Pusht-i-Kūh and descend to the plains of Irak from October to April, are probably to be classed ethnically as Kurdish, though they themselves consider it an insult to be confounded with the Kurds. In the province of Mosul, the population to the east of a line drawn from Qizil Rībāt to Mosul is wholly Kurdish as far as, and beyond, the Turco-Persian boundary. All this tract is a portion of Kurdistan proper. There are also some Kurdish villages in the trough of the Tigris. Kurds are very numerous in the hills immediately north of Mosul, and form a large part of the population in the province of Diarbekr, especially in its southern portion in the Jebel Tur, the Qarajeh Dāgh, and their southern outspurs, and occur mixed with Arabs within the northern border of the province of Zor, but never far from the hills.

Characteristics

The Arab mind is lively, imaginative, and subtle, and Arabs frequently show remarkable power of discussing intelligently any subject within the range of their experience: they are quick to

follow arguments and are sensitive to vivid and telling phrases. Yet in practical issues, where constructive ability, energy, and dexterity are needed, they often seem to the European more or less incompetent and lazy. A contempt for manual labour as degrading is common among them. The pure-bred tribesmen and the urban Arabs of the upper class have generally an aristocratic ideal of conduct which includes courtesy, dignity, hospitality, and generosity, and they admire, in themselves or in others, actions which display such qualities. On the other hand they are often apt to evade the spirit of their code of honour while satisfying themselves by observing the letter of its rules. The Arabs seem to have a natural bent for intrigue. They are inclined to think lightly of a promise, at least when it has not been made with solemn forms of oath or under circumstances which appear to them as peculiarly affecting their honour (as in the matter of defending a guest). They are exceedingly fond of money, and not very scrupulous in their efforts to obtain it. Moreover, they are in general time-servers; their loyalty to any cause which they think lost is easily dropped: and on the other hand they are not likely to change sides till they have reason to believe that they can do so safely. The Arab tribesman is used to continual but fairly harmless warfare, made up of raids, loose skirmishes, and running fights. He frequently commits acts of treachery and he is generally ready to rob or blackmail a weaker neighbour; but in inter-tribal warfare he does not show himself bloodthirsty, and surrenders are readily accepted. In warfare with regular troops he usually confines himself to guerilla methods, the harassing of retreats, or sudden but not very determined attacks. The Arab is said to be an inferior horse-master and a poor shot. A really strong wave of religious fanaticism, which is always to be counted on as a possibility in a Mohammedan country, might make the tribal levies far more dangerous; but in modern times the Mesopotamian Arabs have had the reputation of being comparatively free from fanatical religious feeling.

The Kurds are a heterogeneous race including many groups of tribes which differ widely in character, mode of life, and physical appearance. The Kurdish language (Kermanji) is a patois of Persian, but several peculiar dialects are spoken in secluded districts by tribes usually considered Kurdish. The lowest Kurdish tribes (for the most part nomadic) have been given a bad character as cruel, cowardly, treacherous, and stupid. But most of the semi-nomadic and sedentary Kurds who live east of the Tigris or descend at certain seasons into the plains of Upper Jezīreh, have won the respect of European observers. These people, though not nearly so

intellectual and imaginative as the Arab, have a shrewd appreciation of practical issues, and are far superior to the Arab in energy, enterprise, and industry. Though a large part of the race are robbers by tradition, most Kurds are hard workers. The sedentary Kurds are generally good agriculturists, and many of the semi-nomadic tribes east of the Tigris are capable weavers, smiths, &c. They treat their women well and do not veil them. They are usually generous and very hospitable. They are continually engaged in blood-feuds, inter-tribal skirmishes, raids, &c. As fighters they are brave and determined, and cooler and steadier than the Arab. The semi-nomadic Kurds are admirable horsemen, and it has been thought that they might provide material for an excellent mounted infantry. The Kurds are at all times callous and reckless in taking human life—far more so than the Arabs—and they may at times act with extreme brutality. Their disregard of the laws of war has given them an extremely bad reputation for treachery. Their simplicity, courage, energy, predatory instincts, and savagery have made them very useful instruments of misgovernment and massacre in the hands of the Turkish administration. It may be noticed that the Kurds are looked down on by the other races of the Turkish empire, and they themselves seem to accept the idea of their inferiority at least to other Moslem races.

Occupations

As regards mode of life, both of these races fall into the same classes and almost in the same proportions—urban, agriculturist, semi-nomads, and nomads pure and simple. There is no need to enter at length into what is meant by 'urban' or 'agriculturist'—the former term explains itself; the latter applies to cultivators who do not move away from their habitations at any time of the year. Probably something like one-half of the Arabs and Kurds are included in these categories. 'Semi-nomads' may be defined as sections that own and cultivate land, but, having large stocks of domestic animals as well, spend part of their time at or on their cultivated lands, and the rest of the year move with their flocks and herds to more or less distant pasture lands. With such classes the degree of 'nomadism' varies widely. Some live in permanently built houses and huts, and are absent from their fields for only a few weeks or months every year. Others, again, erect temporary shelters of reeds and bushes, or else simply pitch their tents near their fields and move off on finishing agricultural operations—these latter classes have naturally the nomad instinct more strongly

developed than the house-owning tribes. Among the semi-nomad Arabs may be classed the marsh-dwellers who are found among the great swamps of Irak. The last class are the 'nomads', who are wholly graziers, who own no land and have no habitations except their tents, and who are prepared at any moment to wander to any distance. It is these nomads and semi-nomads that constitute the most difficult element with which an administration has to deal in Mesopotamia. With little or no immovable stake in the country, they are from an administrative standpoint like birds of the air. For the Bedouins, the deserts of Jezīreh and the great Syrian wastes have ever been a secure refuge; to the nomad Kurds either Persia or Turkish territory is a safe asylum, according as they generally live on one or the other side of the boundary. Where, as in Kurdistan or in the river-valleys of Mesopotamia, nomads or semi-nomads move through country inhabited by a sedentary population, there is naturally much plundering and blackmail practised on the latter. Fortunately the numbers of pure nomads are relatively few in either case; probably not more than one-fifth of the non-sedentary sections. In the matter of domestic animals there is an important difference between Arabs and Kurds: both keep horses, sheep, and goats in great numbers, but whereas much of the wealth of the non-sedentary Arabs lies in their herds of camels, the Kurds keep no camels, but their consequently inferior mobility has a compensation in the inaccessible nature of the higher portions of Kurdistan and the proximity of the Turco-Persian boundary. Both nomad Arabs and nomad Kurds have with about equal success been able to defy authority, and to retain a semi-independence which, according to the vigour or feebleness of the Turkish administrators, has at times merged into actual independence. Moreover, though the nomads and semi-nomads on the whole give most trouble to the administration, not all the communities of sedentary cultivators are law-abiding. The villagers of the Kurdish hills, for instance, are accustomed to tribal fighting and raiding. It is noticeable, however, that since the Crimean War, but more especially since the accession of the late Sultan, the grasp of the Turks on Mesopotamia has steadily and materially strengthened: many tracts that were insecure have been opened up to traffic, and tribes that were rebellious brought into some kind of subjection. To some extent, and especially in the case of the Arabs, the task of the administration has been facilitated by the need of the nomads to visit the towns from time to time in order to procure such supplies as they do not produce for themselves or cannot obtain by raiding. In a

number of cases nomad communities have been induced or compelled to settle down. Latterly there has been little real independence, though much lawlessness and disorder. Tribal feuds and petty raiding have continued both on the Mesopotamian plains and in the Kurdish hills: taxes have been irregularly or never paid by many tribes, and skirmishes—sometimes successful—fought from time to time with Government troops. Nevertheless the increase in the Government's authority during the last half-century has been very great.

In Irak, with the important exceptions of the cities of Baghdad *cum* Kazimain and of Kerbela, the Arabs form the bulk of all the urban communities; and in Irak (except in the eastern districts of Irak where there are Kurds) and in S. Arabistan practically all the agriculturists are Arabs. In Jezīreh the Arabs prevail in the towns and villages of the lower portion; in the upper half they have no hold on the soil, but are found in the larger towns such as Mosul and Diarbekr. The town Arab has naturally lost much of the national 'tribal' characteristics and qualities: he is described as not fanatical, but grasping in money matters: he suffers from a rooted disinclination for hard work. Arab agriculture is said to be shifting and desultory, as might be expected. Semi-nomad Arabs are of course very numerous in Irak and S. Arabistan. Nomad Arabs are comparatively rare in Irak and S. Arabistan—apparently they constitute only one-tenth of the population; but in Jezīreh probably half of the Arab population is Bedouin, and they are a political factor of great importance.

As regards the Kurds, they occur in Irak as urban dwellers in the cities and towns mentioned above and as cultivators in villages towards the east, and are described as being among the finest classes of men in the country. A sturdy and capable race and well represented in the army and military police, they have also been known to rise to posts requiring some intellectual ability, such as judgeships. They are said to be hasty in temper and quick in revenge, but, in the plains, peaceable and law-abiding subjects. In the north the sedentary semi-nomadic and nomadic Kurds form the greater part of the population in the belt of land from the plains flanking the Tigris to the higher ranges. In this area there are a number of country towns and large villages which are inhabited entirely or mainly by Kurds, such as Kufri, Sulei-māniyeh, Chemchemal, Kirkuk, Altun Köprü, Erbil, Raniyeh, Rowanduz, Köi Sanjaq, Zakho, and Jezīret-ibn-Omar. There are many Kurds also resident in Mosul. As far up-stream as Jezīret-ibn-Omar the Kurds do not cross the Tigris. The semi-nomad and

nomad Kurds spend the winter (October–February) in villages or camps in the Tigris plains, to the east of the river, and in the cultivated belt just mentioned. In March the semi-nomad villagers usually go into tents and remain there till June, when, the harvest being over, they migrate with their flocks and herds to the lofty pastures of the backbone of mountains, which from the Argot Dāgh in the north, 10,500 feet high, to the Avromān Dāgh in the south, forms the boundary between Mesopotamia and Persia. The pure nomads seem to leave the plains or lower valleys somewhat earlier. Similar movements take place from the rolling plains and lower valleys of Mosul to the high Armenian plateau round Lake Van. The sedentary mountain Kurds are industrious agriculturists, and active fighters and hunters. They spend the summer either in tents close to their villages or on the roofs of their houses. Their villages often contain a double-bastioned block-house. In the province of Diarbekr the Kurds are a considerable section of the population in the towns of Diarbekr, Mardīn, and Nisibin, and almost entirely people the towns of Arghana, Palu, and Veirān Shehr. Kurdish villages and semi-nomad and nomad settlements abound throughout the province. The Jebel Tur and Qarajeh Dāgh buttresses of the higher ranges are special strongholds of the Kurds, whence they endeavour with varying success to hold the plains of the Upper Jezīreh against the Bedouins. The more hilly portions of this rolling country appear to be in their permanent possession. The great confederacy of the Milli Kurds spends the months from January to April on the lower slopes of the Qarajeh Dāgh. In April they come down to the plains to the south of that mountain, in order to take advantage of the spring pasture. From June to September they are on the move northwards towards Diarbekr: from October to December they are moving southwards again to the Qarajeh Dāgh. Other tribes similarly descend from the hills to the plains every spring.

Tribal System

A complete list, even if obtainable, of Arab and Kurdish tribes, clans, sections, and subsections, and of their infinite ramifications, would run into hundreds of names and could serve only a purely statistical object. For reasons given immediately below, these tribes are not final units, without capability of expansion or reduction, as for instance in Albania or on the Pathan borderland of India, but are in a constant condition of flux. Nor in political affairs and great movements do the smaller clans exert any power or

influence. A relatively small community may strike the match that sets the train on fire, like the Madda Khel in the Indian frontier rising of 1897, or the Montenegrins who started the Balkan War of 1912; but they can act only with the permission of the big tribes, and by their express or tacit consent.

The tribal system of the Arabs, and still more so that of the Kurds, is not so exact, so rigid, and so well ascertainable as those, for example, of the Highland clans in Scotland, or of the Pathan tribes on the North-West Frontier. Among the latter, descent of all the clansmen from a common ancestor is either an actual fact or else is so firmly believed in as to come to the same thing. The tribal bond is one of blood. A man is born a fellow clansman; outside communities may in rare cases be brought into the tribe, but obviously they can never share the link of joint paternal descent from the first ancestor. With the Arabs, the tribal names in many instances show a patronymic character; in others they are evidently names adopted by confederacies of tribes who, beginning as associates for offence or defence, have become welded into large compact bodies like the Shammār, and are now to all intents one single tribe; in others again the tribal appellations are clearly territorial. Among the Kurds, the idea of common descent appears to have been obliterated in the course of time, if it ever existed as a vital principle. Kurdish tribes seem to be agglomerations of families and sections that have lived together for long periods in the same locality or have grouped themselves for protection or aggrandizement round some prominent family or leader, in either case gradually acquiring the tribal feeling and tie. These ties and feelings are naturally non-existent or very weak among the urban Arabs and Kurds; less weak among the agriculturists: they are stronger and more vivid in the semi-nomad tribes and live in full force among the nomad sections. The consequence of the local weakness of the tribal idea, as compared with clan systems elsewhere, is that at one moment an Arab or Kurd tribe may consider itself an independent unit, and at another may represent itself or be considered to be a subsection of some other tribe; and *vice versa*, subdivisions separating from the parent bodies. Outside sections are freely received into tribes. There is, too, a tendency to class a small tribe which depends upon the assistance of a larger tribe in war as a section of the larger. The political alliances which thus determine classification are unstable and fluctuating; in consequence there is much confusion. The tribes are managed through their chiefs, whose power depends almost entirely upon their qualifications for the office, and is therefore a variable quantity, contingent on the individual himself, and his near relations, if he possesses the art of

carrying them with him. To some chieftainships a religious authority is attached, and in such cases the chief's influence usually extends beyond a single tribe. The Moslem Kurdish Sheikhs of Neri and Suleimāniyeh and the head of the Nestorian Christian tribes in the Hakkiari country have wide secular influence based largely on religious authority. Chiefs must as a rule belong to one particular family; but succession to office is not necessarily hereditary, although in the case of a powerful chief with a capable eldest son the office would no doubt descend to him without question. Ordinarily, however, on the death of a chief his successor is chosen by the headmen of the tribal subsections, who are not bound in their selection by the wishes or even by a nomination of the late chief. In deciding between claims they pay great attention to fitness and experience. If they disagree, the tribe is as likely as not to break up and form two distinct tribes under the rival claimants. Disputes in ordinary life which neither side feels inclined to submit to the arbitrament of the vendetta are settled by the chiefs, or by holy men agreed upon by the litigants, or by tribal councils, or by all three sitting together. There is, however, nothing to prevent a dissatisfied 'party' to a case which he has lost from clinching matters by murder. He would labour under the disapprobation of public opinion no doubt, but that is a matter for him and his relatives to consider; the public or the chief would not stir to interfere actively. Although this is so, it must not be inferred that public opinion in tribal society is not a powerful force; it has many ways of making itself felt, and it can and does exercise a very real pressure, but only towards the preservation of ancient custom. An obstinate minority, which is determined to go to any lengths in the vindication of its views, can in any tribe paralyse the authority of a chief, however powerful, as well as defeat the wishes of the majority, since no one, unless under extreme pressure, cares to incur the blood feud which would be the inevitable sequel to a forcible coercion of the recalcitrant minority. Hence the interminable length and tortuous ways of tribal councils. The blood feud and ancient custom are the chief, if not the only, sanctions of tribal society, the vendetta being a sacred and honourable obligation. The two stringent articles of the unwritten tribal code relating to protection and assistance are a more pleasing feature of tribal life. A person throwing himself on the protection of another must be defended, and may not be given up whatever it costs; and a guest formally claiming assistance is entitled to full support. This latter injunction would prove intolerable were it not that pride and custom forbid a tribesman from availing himself of it except as a last resource. A

blood feud may be composed by the payment of a fixed sum of blood money, the amount of which varies locally. But, since the payment is a confession of weakness, and pride a conspicuous tribal characteristic, it is a point of honour not to compose a blood feud, but to fight it out to the end. A temporary suspension of the vendetta may take place for such sufficient reasons as inter-tribal war, a rising against the Government, &c.

Turks and other Races

The *Turks* being the governing race, a few are met with everywhere in official positions, but otherwise Turks are not found in Irak in any numbers outside the city of Baghdad, where a few thousand of the inhabitants claim to be of that race; many of these, however, are Turks only in name, being of very mixed lineage. In Irak the Turk is not a trader or agriculturist; but in Upper Jezīreh, and especially in the province of Diarbekr, he appears in both capacities; there are some Turks in the city of Mosul, more in Diarbekr, but most of them are peasants in the Diarbekr vilayet, where they bear a good character. About one-third of the total number of Turks live in Irak and two-thirds in Upper Jezīreh. *Turkoman* villages and nomad sections exist in the province of Diarbekr, also near Erbil and Kirkuk: relics of former migrations of peoples, and now of no significance. There are Turkoman elements in the population of Kirkuk itself and of Altun Köprü. These people are Sunni Mohammedans and speak a form of Turkish.

All the *Persians* in Mesopotamia live in cities and towns; about 40,000 in Kerbela, 12,000 in Nejef, 7,000 in Basra, 5,000 in Baghdad; and the remainder are scattered in Kazimain and among the towns near the Persian frontier. They are of course all Shiahs, and gain their livelihood by trade, as carriers to Persia, and in ministering to the wants of the numerous pilgrims to the great Shiah shrines of Kerbela, Nejef, and Kazimain.

The *Syrian Christians* (Jacobites, or West Syrians and Chaldaeans) have their homes in the vilayets of Diarbekr and Mosul, and are mostly agriculturists; but they are also found as artisans and traders in the towns of Upper Jezīreh, and the Chaldaeans (especially those of Talkaif) enjoy a complete monopoly as deck hands and firemen on the river-steamers of Irak, and also work as raftmen on the Tigris. The Syrian Christians speak Syriac.[1]

[1] The East Syrians, or Nestorians, are Syriac-speaking Christians who live for the most part the ordinary life of sedentary or semi-nomadic tribesmen in the hill-country between Lake Van and Mosul. They are good fighters, but have

The *Armenians* are found almost exclusively in the Diarbekr province as agriculturists, traders, bankers, and artisans. They are all Christians. Relatively few occur in Irak, and only in the large cities, especially in Baghdad and Basra, where they are often wealthy men of business. But latterly they have lost ground here owing to Jewish competition.

Yezidis may be considered as a branch of the Kurds. They speak a dialect of Kurdish ; many of their sections are undoubtedly of Kurdish blood ; and in great racial questions they might possibly range themselves with the Kurds as against Arabs or Turks. But on the other hand their religious tenets (see page 93) very markedly separate them off from the Kurds generally, and it may be best to assign to them a distinct position of their own. Their principal chief or Mir lives at the Ba Idri. Their chief shrine is at Sheikh 'Adi, 30 miles NNE. of Mosul ; and their main stronghold is the Jebel Sinjar, which they have defended successfully against the Arab tide of encroachment. Of the (estimated) number of 21,000 Yezidis in Mesopotamia (there are also some near Van), about 13,500 live in the province of Mosul, principally in the Sinjar range and SW. of Mardīn, also round about Sheikh 'Adi ; and 7,500 in the province of Diarbekr near Midiat. They are mostly of sedentary pursuits, cultivators and artisans ; but have a few nomad sections who move in summer with pastoral Kurds to the Bohtan Su and winter in the neighbourhood of Jebel Sinjar. Outside Jebel Sinjar they have the character of being quiet, peaceful, intensely clannish men—a disposition which is not unnatural in view of their small numbers and the surrounding population, to whom their beliefs are, theoretically, detestable. The Yezidis of the Sinjar are a wilder people and more capable of self-defence.

Of the *Jews* it may be said that they live exclusively in cities and towns—about 50,000 (or possibly more) in the city of Baghdad, 3,000 in Basra and Mohammareh, 1,000 in Diarbekr, and 5,000 in Mosul itself and Jezīret-ibn-Omar. They follow the occupations, trade and money-lending, common to Jews all the world over ; some of the richest men of Mesopotamia belong to their community. They are an important element in commercial affairs : the trade of Baghdad and Basra is much under their control ; many Jews from there visit England, and some have remained as agents for partners

recently suffered much through the inferiority of their weapons to those of their Kurdish neighbours and enemies. Their secular head is also their patriarch, who lives at Kochannes. Their tribes are under *Maliks*, and each village has its *Rais* or headman. See further, pp. 66, 91. It may be noted that in Upper Jezīreh 'Syrian' is used as equivalent to 'Christian'.

and relations in Baghdad. The local native Christian merchants of Baghdad are reported to have mostly disappeared during the last twenty years, in consequence of Jewish competition, and Mohammedan merchants in Baghdad have felt it advisable to take Jews into partnership as a measure of self-defence. The leading native firms at Basra are also mainly Jewish. The Jews, here as elsewhere, were strong supporters of the Revolution of 1908.

The *Circassians* are found chiefly at and in the neighbourhood of Ras el 'Ain, where they were planted by the Turkish Government after the Russo-Turkish War of 1877–8, to act as a buffer between the Arabs and the Kurds. According to the common fate of buffer interpolations, they have suffered much and impartially at the hands of their more powerful neighbours; nor were their reckless, turbulent, and criminal propensities such as to make them popular. They are much reduced in consequence. They are all Sunni Mohammedans.

The sect or community of the *Sabians* is located in Irak, dispersed in small bodies, but united everywhere by a common religion, the exact nature of which is not yet clearly ascertained (see page 93, below). Sūq esh-Shuyūkh on the Euphrates is now their head-quarters, but they are numerically strongest at Amara; some live in Nāsirīyeh and Shatrat el-Muntefiq; and a few are met with in S. Arabistan. In dress they are indistinguishable from Arabs, but have a peculiar and striking physiognomy, and are said to speak Syriac in their homes. Few or none are agriculturists, the majority working in silver and antimony; many are boat-builders and carpenters.

The *Chabaks* or *Shabaks* are another community living scattered in small villages south of Mosul, along the eastern bank of the Tigris. They are cultivators, speak a dialect which is more closely allied to Persian than to Kurdish, and in matters of religion are believed to have some affinity with the 'Ali Illahi sect of Persian Kurdistan.

Foreigners in Mesopotamia are European, American, or Asiatic. Of the former two classes, before the war, there were barely two hundred in the whole of Mesopotamia: a few British officers of the Political Service at Baghdad, Basra, Mohammareh, and Ahwāz; about 150 are accounted for by business men and their families at the same places; and the employés of the Anglo-Persian Oil Company at Maidān-i-Naftūn, near Ahwāz, and 'Abbādān below Mohammareh; the balance were missionaries in Basra, Baghdad, and in the provinces of Mosul and Diarbekr. The Asiatic foreigners, exclusive of Persians, are generally natives of India, Afghanistan, and the Indo-

Afghan frontier, who have been attracted to the country by the sacred places of the Shiahs or by the Sunni shrine at Baghdad, and the descendants of such. The ubiquitous Afghan and Pathan adventurers, by their superior physique and force of character, command respect, like the Albanian farther west; and in Baghdad there is a considerable body of them in service as doorkeepers, orderlies, and watchmen.

In this chapter no attempt has been made to describe in detail the Arab nomads of the Jezīreh and the Syrian Desert, since they are not tied to the soil, and are regarded by the Bedouins of Arabia as forming a social aggregate with themselves. Certain constituents of the great Anazeh group, for example, still pass at regular seasons southward into the Arabian peninsula, while others have their home ranges in the peninsula itself. Moreover, many tribes, among them the Ruweileh, Dhafīr, and Huweitāt, move habitually from one side to the other of the border-line; and some, such as the Mesopotamian Shammār, though they stay to the north of it, are integral parts of larger tribal units still at home in the south. The northern nomads have therefore been treated with the Bedouin tribes of the Arabian peninsula, in the *Handbook of Arabia*, vol. i, chap. iii, pp. 43 ff., where full details as to their numbers, distribution, and organization are given, based on native information obtained since the outbreak of the war with Turkey.

CHAPTER VIII

RELIGIONS

Of the 2,438,000 persons composing the population of Mesopotamia, as shown in Chapter VII, the vast majority, that is to say 2,210,000, profess the Moslem religion. Christianity comes next with 147,000 adherents, and Judaism third with 60,000. Yezidis (21,000), Sabians, Chabaks, and Hindus complete the list—all, except the Yezidis, of comparatively slight importance.

Islam

The preponderance of Islam in Mesopotamia rests even less on numerical superiority than on the historic part played by Irak in the development of the Mohammedan power and faith. It was here that the events occurred which gave birth to the Shiah schism, here too was the seat of the Baghdad Caliphate, and here—at Kerbela, Kazimain, Nejef, and Kūfeh—are shrines venerated at least equally with Mecca and Medina in Shiah Moslem estimation.

The tenets of Islam, which claims to be a divinely revealed religion, given to the world by Mohammed as the last of a succession of inspired messengers, may be briefly summarized under (i) *Doctrine*, (ii) *Worship*.

The doctrine and practices are to be found in (*a*) the Book of God—the Koran—which was sent down from the highest heaven to Gabriel in the lowest, who revealed it in turn by sections to Mohammed; (*b*) the collections of tradition (*hadith*) containing the sayings and manners of life (*sunna*) of the Prophet; (*c*) the use of analogy (*qiyas*) as supplied to (*a*) and (*b*); (*d*) the universal consent (*ijma*) of the believers. Orthodox Islam recognizes the Koran as the work not of Mohammed, but of God; but Moslem theologians recognized some revelations as inconsistent with others, and so developed the doctrine of *nasikh* and *mansukh* (abrogation), whereby it is taught that in certain definite cases a later revelation supersedes an earlier. Upon the nature of God Islam is very explicit. God is one and universal from the beginning, His unity being emphasized as against the Christian Trinity. The cosmology of Mohammedanism is too elaborate to be here reproduced, but some reference to its ethics is

essential. These latter are based on belief (*iman*), good works, complete surrender to God's will (*islam*) as the necessary condition of religious life, and fear of His judgement. The eschatology of the Koran includes resurrection, last judgement, paradise, and hell. *Qiyas* is the process by which a belief or practice is justified on the ground that something similar is expressly enjoined by the Koran, tradition, or *ijma*. *Ijma* is the universal consent, which is held to justify practices or beliefs, although they are not warranted by the Koran or tradition, and may be inconsistent with the teaching of one or both. Law in Mohammedan countries is in theory essentially religious, based on the Koran and the traditions, but in the Ottoman Empire much civil and criminal law has been borrowed from Europe.

The acts of worship enjoined by Islam are five in number: (*a*) the recital of the creed; (*b*) observance of the five daily prayers; (*c*) fast in the month of Ramadan; (*d*) giving of alms; (*e*) the pilgrimage to Mecca. The *creed* ('there is no God but God, Mohammed is the messenger of God') is the main article of belief, to be professed without hesitation at any time until death. The *prayers* consist of prescribed ejaculations, petitions, and recital of parts of the Koran, accompanied by certain gestures of the body, at the following five stated times: dawn, just after noon, before sunset, just after sunset, and after the day has closed. The worshipper must be in a state of ceremonial cleanness, for which certain ablutions are required. In order to prevent contact with anything unclean prayer is usually performed on a praying-carpet. The extent to which this obligation is discharged varies greatly in different places, and with social and other conditions: it is on the whole more scrupulously observed in the towns than in the desert, and by the poor than by the rich. Where prayer is offered in assembly, there is a leader who repeats the formulae in front of the congregation. The *Mosque*, where public prayer is offered, has one or more minarets, from the top of which the *Muezzin* call the devout to prayer at the appointed time. Attendance at public prayer is theoretically obligatory on Fridays at noon, when a short sermon of about 5 minutes length is delivered. The presence of strangers at these services is usually keenly resented, and in some places hostility may be aroused by Christians who at any time enter, or show curiosity in, a mosque. The Shiahs at Kerbela and Nejef exclude unbelievers from their holy places. The *fast* is in the month Ramadan, 'wherein the Koran was revealed': it is perhaps borrowed from the Jews or Eastern Christians. By fasting is meant abstinence from food, solid and liquid, and from smoking from sunrise to sunset. Owing to the fact that the Moslem calendar is lunar, Ramadan falls at different periods in different

years. In 1916 it lasted from June 21st to July 21st. The fast, when it comes in summer, is a cause of great suffering to those who observe it, who are the same class as those who perform their prayer with regularity. So far as is possible the inconvenience is met by sleeping in daytime. The fast is thought not to be incumbent on those who are travelling or on service, though they should compensate for such neglect by fasting at another period of the year. The day which follows the end of Ramadan is one of the great feasts of the year, the other being the tenth day of the month of pilgrimage. That month in 1916 will begin on September 18th (other feasts are not common to the whole Moslem world, but are merely sectarian). *Alms* are of two kinds, legal and determined (*zakat*), and voluntary (*sadaqat*). The *pilgrimage* is to be performed once by every Moslem 'if he is able', that is, if he can provide or obtain the means to support himself on pilgrimage and his family during his absence, and if he is physically capable.

Food and Drink Taboos.—The pig is as much of an abomination to the Moslem as to the Jew, from whom his taboo seems to have been taken over by Islam. The normal sentiment is also very strongly against the use of wines, spirits, &c., though there is a certain amount of laxity in this matter among Moslems accustomed to European ways. The use of tobacco is very widespread, though it has been condemned by certain of the more recent sects, and opinion in religious circles has recently been setting against it.

Mohammedan Denominations

The two chief denominations of Islam are the Sunni and the Shiah sects. The Sunnis of Mesopotamia include the Arabs of the Jezīreh, the Kurds, the Turks, the Turkomans, and the Moslems of Syria. Most of the Arabs of Irak and S. Arabistan and the Persian element in the population are Shiah. Though a line drawn from Baghdad to Fellūjeh may be taken as the boundary between the portions of Mesopotamia in which Sunnis and Shiahs respectively predominate, there is a considerable Sunni element in the population of Basra and Zobeir, and certain sections of some of the Irak tribes are of this sect. On the other hand the population of the left bank of the Tigris above Baghdad to Samarra is mainly Shiah. The numerical proportions (see p. 66) are estimated as follows: Sunni, 1,037,000 persons; Shiah, 1,173,000. The historical occurrences which gave rise to these two denominations having occurred in Irak itself, and a proper comprehension of them bearing directly upon the subject of Shiah pilgrimage, it will be advisable to review them briefly at this stage.

The Shiah Sect

The division between Sunni and Shiah is based primarily on political theory. The Sunnis regard as legitimate successors of the Prophet the first three Caliphs who ruled as heads of the Moslem community, whereas the Shiahs hold that they and all the Caliphs who followed them were usurpers, the rightful succession lying in their view with 'Ali, the cousin and son-in-law of the Prophet, and with 'Ali's descendants. 'Ali himself, who was assassinated at Kūfeh, his son Hasan, who is said to have been murdered at the instigation of the Caliph Mo'awīyeh at Medina, and above all Husein, the second son of 'Ali, who with his followers was slain at Kerbela by the troops of Yazid, Mo'awīyeh's successor, are venerated by the Shiahs as martyrs and even as semi-divine. These persons, in the sentiment if not in the theory of the Shiahs, almost take precedence of the Prophet himself. Shiah religious feeling centres especially round the story of Husein's death. The inspiration and semi-divine powers that belonged to the true head of the Moslem world were continued in a series of Imāms or Mahdīs, the last of whom is believed to have disappeared mysteriously either at Nejef or Samarra in A. D. 873. This Imām, or a reincarnation of Husein, is expected to return some day to establish the true faith among men. Meanwhile the Shiahs may give their adhesion to the constituted temporal authorities of the countries in which they live. The Sultan of Turkey may be obeyed as Sultan, though not as Caliph.

The Shiah system of belief, which arose in Irak and spread to Persia and India, has accumulated round it much mystical theology and philosophy which are abhorrent to Sunnis as perverting or, in their view, contradicting, the revelation of the Koran. The sects also differ in a number of points connected with ceremonial: e. g. whereas the Sunnis recognize meat slaughtered by Jews and Christians as lawful, the Shiahs do not.

Shiah Shrines in Mesopotamia.—The Shiah shrines of Mesopotamia may be divided into three groups: those connected with the death of 'Ali, those connected with the battle of Kerbela, and those connected with Imāms later than Husein.

i. *Sacred places associated with the death of 'Ali.*—The spot where 'Ali received his mortal wound is still shown at Kūfeh, enclosed by iron gratings, in the great mosque, 1½ miles from the present town. His reputed tomb is at Nejef, though some authorities maintain that he was buried where he fell, at Kūfeh. The tomb rises in the centre of the town of Nejef, and surpasses in splendour even the shrine of

Husein at Kerbela. The town about it contains a population of 30,000, most of whom live on doles from pilgrims.

ii. *Sacred places connected with the battle of Kerbela.*—The authenticity of the shrines at Kerbela is not disputed. They are five in number:

(*a*) The tomb of Husein, called Dargah Hazrat Husein, stands in the old town towards its western end. It consists of a large enclosure (*Sahn*) with seven entrances, in the midst of which stands the *Haram* or sanctuary proper, surmounted by a lofty dome. The 72 martyrs (*Shuhada*), who died with Husein, are buried in the same place.

(*b*) The tomb of 'Abbās, half-brother of Husein, is situated farther E. It is similar to, but smaller than Husein's.

(*c*) The *Khaimahgah* marks the site of Husein's tent before the battle. It is small and unpretentious.

(*d*) The tomb of Aun, Husein's sister's son, is 7 miles NE. of Kerbela on the road to Museyib.

(*e*) The tomb of Hurr, who joined Husein from the ranks of his enemies just before the battle, is 3 miles to the NW.

iii. *Sacred places connected with the later Imāms.*—At Kazimain is the burial-place of the 7th and 9th Imāms, Musa-bin-Tafar and Mohammed-bin-'Ali (*Kadhim*, 'the self-restrained'). The tombs of the 10th and 11th Imāms, 'Ali-bin-Mohammed and Hasan-bin-'Ali, are to be seen at Samarra, where also a well is exhibited, said to be the scene of the disappearance of Mohammed-bin-Hasan-el-Mahdi, 12th Imām. Other minor shrines are those of Abul Qasim and Seyyid Ibrahim at Museyib; Hamzah and Yasim at Hilla; and Ibn el-Hasan, the Banat el-Hasan, and Ibn el-Hamzah near Tawarīj.

The management of these Shiah shrines is vested in the *Auqaf* or Department of Religious Endowments. At each principal shrine there is a custodian (*kiliddar*), chief attendant (*sarkhidmah*), and lesser attendants (*khadim*). The Auqaf are responsible for the finances of the shrines, which are supported partly by large endowments in the shape of lands, houses, and shops, partly by special contributions; and for the sacred treasure, the value of which is not known even approximately to outsiders.

Shiah Pilgrimages.—A pilgrimage to the shrines of Irak is considered by Shiahs to be highly meritorious, more especially because it is voluntary, instead of being obligatory like the Hajj to Mecca or Medina. There is no fixed time for these pilgrimages, though certain days of the Mohammedan year are considered more auspicious than others for the performance of the ceremonies prescribed for visitors to the holy places; consequently pilgrims arrive and depart at all seasons of the year, preferably however in winter, between November and April. Two routes are commonly followed: pilgrims from

NW. Persia cross the frontier at Khanikin; those from S. Persia, India, and the Persian Gulf mostly arrive by sea at Basra. The influx of pilgrims varies considerably from year to year—there were 57,567 officially returned in 1890 as having entered Irak from all directions. Probably far more have made the journey in recent years, and there is also an immense pilgrim traffic from within the bounds of Mesopotamia itself. Some aspects of these migrations have already been discussed, for instance their share in the dissemination of disease (p. 46), and they supply a considerable stimulus to trade both external and internal. It remains to describe the procedure generally followed on arrival. Each pilgrim band has a conductor, who carries a flag inscribed with a text from the Koran or with the names of the Imāms. Pilgrims coming by land from Persia ordinarily visit Kazimain first from Baghdad, thereafter proceeding to Kerbela and Nejef; this is in fact the course followed by most of the pilgrims from the Gulf also, who take the river steamer from Basra to Baghdad. Arrived at the shrine, the pilgrim first purifies himself by certain prescribed ablutions. At the threshold he seeks the saint's permission to approach, circumambulates the grave three times, and finally prostrates himself twice before the tomb, to an accompaniment throughout of prayers and recitations. The visit to the shrine is called *ziyāret*: and the pilgrims provide themselves at the shrines with rosaries, tablets of sacred earth (*turbah*), and shrouds for future use, stamped with texts from the Koran.

Consecrated Shiah Cemeteries.—The desire for burial in sacred ground at one or other of the holy places in Irak is based upon the belief that the protection of the saint, whose tomb adjoins, is thereby assured. The principal Shiah cemeteries, apart from the shrines themselves, in whose precincts burials also take place, are the following: the Wādi es-Salām ('vale of peace') at Nejef; Wādi el-Aoman ('vale of security') at Kerbela; Maqabir el-Quraish at Kazimain; and Tarmah at Samarra. Corpses are brought for interment in one or other of these places by caravan in wooden coffins covered with thick felt. A pack animal with a coffin slung each side of it is one of the commonest objects to be encountered on a journey from Kerbela to Baghdad. The cost of burial in this way is by no means nominal. Apart from the expense of carriage, the Turkish Government charged the equivalent of nine shillings for an import pass, half this sum being levied in addition for sanitary purposes. Corresponding fees, but on a lower scale, were levied on the transportation of Ottoman Shiah subjects. Quite independent again were the charges for actual interment, which varied from £40 (at Ruwaq in Nejef) to 7*s.* 2*d.* (at Samarra).

The introduction of bodies from countries where epidemic diseases prevail has been from time to time interdicted by the Porte, and since 1897 the importation of bodies from India has been prohibited on account of bubonic plague in that country.

Shiah Mujtahids.—The term Mujtahid was originally applied to any Mussulman divine who had attained the highest eminence in his profession. But at the present day it is in use only among Shiahs. The modern Shiah Mujtahid combines in himself several functions: lecturer on Mohammedan law and theology, judge of ecclesiastical suits, and registrar of wills and other documents. The ascendancy they enjoy is very remarkable. Among Shiahs their word is law: they disburse large sums received from their co-religionists for sacred and charitable purposes; and occasionally they exercise strong political influence, even in opposition to the established government of the country. The Mujtahids of Nejef and Kerbela are the most distinguished, their power predominating throughout the entire Shiah world over that of all other Mujtahids: collectively they are known as *Atabah*, 'the Threshold'. Though some 2,000 claimants to the title exist at Nejef and 200 at Kerbela, inquiries made in 1903 elicited the fact that not more than 41 enjoyed undisputed authority.

The Sunni Sect

The historical origin of the differences between Sunni and Shiah has been noted above (p. 83). To the Sunnis the Caliphate, or headship of the Moslem world, now belongs to the Sultans of Turkey. The Sunnis profess an unquestioning faith in the Koran, and in the accepted Tradition (*sunna*), which is a record of the sayings and doings of the Prophet that serves as a supplement to the Koran. On this basis various systems of Sunni law have arisen, the differences between which are merely trifling. The official code of the Ottoman Empire, in so far as it is still truly Moslem, is that of Abu Hanifeh. The Shiahs in theory reject the authority of the Sunni Tradition altogether, but in fact their law is to a great extent borrowed from the Sunni schools.

The Arab Sunnis of Mesopotamia are said to be on the whole not fanatical. Sunni feeling is now very much stronger among the Kurds. The Government of Constantinople has done much in recent years to encourage Sunnism among the Kurdish tribes, in the hope of increasing their respect for the Sultan as Caliph. This policy apparently had a considerable measure of success in Abdul Hamid's reign. The most important Sunni shrine in Mesopotamia is that of Sheikh Abdul Qadir Gilani, at Baghdad. This Abdul

Qadir (A. D. 1077–1165) was a Sufi preacher of renown in his day, being credited with miraculous powers. His mosque and tomb, honorifically known as 'Janab Ghauth el-Adham Dastgir', form not only one of the principal sights of Baghdad, but a religious centre frequented by Sunni Mussulmans from regions as remote as Afghanistan and India. Poor pilgrims are gratuitously supported, and sometimes as many as 4,000 loaves of bread issue in a single day from the kitchens of the Pir-i-dastgir. Other Sunni shrines exist in Irak, but none comparable with that of Sheikh Abdul Qadir, such being the Maqam Yunas at Kūfeh and tomb of Ezekiel at Kifl, though the latter is more venerated by Jews than Mussulmans. Much the most influential Sunni in Mesopotamia is the Naqib of Baghdad, the official head of the Arab community in that town. Appointments to the Naqibat have been made by the Sultan heretofore, but in practice the succession is treated as hereditary: nor can there be any doubt that the importance of the Naqib in the present day depends much less upon Turkish recognition than upon his descent and position as the custodian of the shrine of Sheikh Abdul Qadir Gilani. It is worthy of note that extreme deference is paid to the Naqib of Baghdad and his family by many of the most influential and wealthy, as well as the humblest and poorest, of Indian and Afghan Moslems. Compared with this high dignitary of Baghdad, the Sunni Naqib of Basra is an inferior being, whose importance depends chiefly on his wealth and employment by the Turkish Government in political affairs.

Christian Sects

Some information regarding the numbers, distribution, organization, &c., of each of the various Christian sects which are represented in Mesopotamia and Kurdistan will be found on pp. 90 ff.

The great majority of Christians living in this area are to be found in the Vilayet of Diarbekr. A considerable number live in and near Mosul, and there are Christian communities in Baghdad, Basra, and some other towns of Irak. It is said that many Christians have recently been driven by the attacks of the Kurds to migrate from the north to the towns of Irak. In Northern Mesopotamia the term 'Syrian' is equivalent to 'Christian'.

It will be noticed that the Christian bodies dealt with on pp. 90 ff. may be divided into three groups: (i) the independent Asiatic Churches (the 'Gregorian' Church of Armenia, the Nestorian or East Syrian Church, and the Jacobite or West Syrian Church); (ii) the bodies called Uniate, which, while they are derived from

one or other of the independent Churches, are now in communion with the Roman Catholic Church (Armenian Uniates, Chaldaeans, Jacobite Uniates, or Syrian Catholics); (iii) a miscellaneous group, including Protestant converts from the independent and Uniate Churches (chiefly Armenian), and secessionists like the New Chaldaeans, and Orthodox Armenians.

Origin of the Independent Asiatic Churches.—(*a*) The Church of Armenia derives its name Gregorian from St. Gregory the Illuminator (A. D. 255–326), who brought about the conversion to Christianity of the main part of the Armenian nation. As Armenia was a country over which the East Roman Empire of Byzantium exercised only a loose and intermittent protectorate, it was natural that the Armenian Church should gradually lose connexion with Byzantine ecclesiastical organization and doctrine; and finally, in the middle of the sixth century, when the heretics called Monophysites (who denied the human element in Christ) were actively proselytizing in Syria and Mesopotamia, their doctrine found general acceptance in Armenia. The Gregorian Church is still Monophysite.

(*b*) The Nestorian Church is a remnant of the great body of Nestorian Christians who in the Middle Ages were to be found throughout Asia. The 'Nestorian' doctrine had arisen in the East Roman Empire during the fifth century, its general position being that Christ was not one person, but had two distinct natures, a divine and a human. The Nestorians were condemned as heretics at the Council of Ephesus in A. D. 431, and were forced to take refuge beyond the borders of the Roman Empire. In Mesopotamia and Persia their form of Christianity spread with great rapidity. Nestorian missionaries made converts in Malabar, China, and the Mongolian plains (hence probably the mediaeval legend of 'Prester John'). The Arab conquerors on the whole treated the Nestorians with toleration, and though they increased and flourished till about the year 1400, Timur Lang (Tamerlane), the Mongol, persecuted them with wholesale massacre. Of the isolated remnants, one of the most considerable was that which lingered in the plains of Assyria round Mosul and in the mountains south of Lake Van and Urmia. This body of Nestorians was, however, reduced in the sixteenth century by the adhesion of the majority of the plain-dwelling part of the community to the Church of Rome. The East Syrian Church, which still maintains its independence, is now confined to the mountains.

(*c*) The West Syrian or Jacobite Church traces its origin to the work of a certain Jacobus Baradaeus ('James of the horse-cloth', so called from the appearance of his dress), who in the sixth century was successful in establishing a large number of Monophysite com-

munities in Syria and Mesopotamia. In spite of persecution by the Byzantine Government, this Monophysite Church maintained its existence near the borders of the East Roman Empire, until it was able to enjoy the modified tolerance extended to all Christian sects by the Arab conquerors. The Jacobite Church is still Monophysite.

Uniatism.—There are three Uniate Churches in Mesopotamia—the Armenian Uniate, the Chaldaean or East Syrian Uniate, and the West Syrian or Jacobite Uniates—and these communities have only three points in common, viz. that they acknowledge the spiritual supremacy of the Pope, and that they accept the decrees of the Councils of Ephesus, A. D. 431, and of Chalcedon, A. D. 451, which respectively condemned the heresies of Nestorianism and of Monophysitism. In other matters—ritual, liturgy, ecclesiastical laws and customs—each community is independent of the others and of the Roman Catholic Church; each has its own separate hierarchy, although the Pope exercises some limited power in the appointment of the bishops and patriarchs. Within the Uniate Churches there is apparently a tendency to resent an assertion of Roman authority.

Millets.—From time to time the most important of these Christian religious bodies have obtained recognition from the Turkish Government, and have been constituted into millets. Each of these millets has its own civil head, appointed by the Turkish Government; in practice the Turkish Government appoints to this post the spiritual head of the Church. Originally the head of the millet was responsible for the civil government of his people, collecting taxes from it and administering civil justice. Of late years the administrative functions of the heads of millets have been much reduced. Collection of taxes has been taken over by Turkish officials, and though a Patriarch, who is respected, may still be much appealed to as an arbitrator by his own people, Christians appear recently to have been made liable, at least in most respects, to the Turkish Courts, where law modelled on Occidental models has to a considerable extent replaced in practice the old Mohammedan code. Probably the Patriarch who wields most secular authority at the present time is Mar-Shimum, as he is the hereditary chief of the Nestorian highlanders. But in all Churches the Patriarch is still highly influential in secular matters; and as head of the millet he is still primarily responsible to the Government for the political management of his millet.

French Dominican Mission in Mosul.—An Italian Dominican mission was established in Mesopotamia in the thirteenth century, which had its head-quarters at Mosul in the sixteenth century. This mission was abandoned in A. D. 1730, and was re-established in 1750 by

three Dominicans. This, too, was abandoned in its turn from 1805 to 1840, but from the latter date the Dominicans have continued their mission either at Mosul itself or in its near neighbourhood. At the present time there are a Dominican community and some nuns at Mosul, together with schools for boys and girls, and a printing-press from which religious books are issued in various languages. For the neighbourhood of the town there are a dozen or more schools conducted by this mission. They carry on educational work among the Chaldaeans and other Uniates. The Dominicans of Mosul are French, and apparently include a considerable number of Alsatians. As a result of their work, a fair number of Chaldaean priests can speak French.

Protestants.—These are mostly Armenians, but there are also a few converts from the Chaldaean, Jacobite, and Nestorian Churches. Protestantism is the result of American mission-work, and Oriental Protestants can often speak some English, which they have learnt in American mission schools. On the whole the Oriental Protestants of Mesopotamia seem to have made an unfavourable impression on travellers; but it must be remembered that the judgements of the latter have usually been based on superficial observations.

The Sects.—(i) The Gregorian Church is the national Church of Armenia, and represents and fosters Armenian national aspirations. To it belong the great majority of Armenians in Mesopotamia. The total number of its members is perhaps 3–3½ millions, of whom nearly 2 millions are in Russian and Turkish Armenia, and the remainder scattered over the rest of the Russian and Turkish Empires, Persia, India, and other countries. The Church constitutes a millet in the Turkish Empire. Of the four patriarchates, the chief is that of Echmiadsin, about 15 miles west of Erivan. The chief Patriarch is selected by the Tsar from two candidates chosen by the General Assembly of the Church. The Patriarch of Constantinople ranks next to the chief Patriarch. A college education is obligatory on the Gregorian monks, some of whom have the title of Vardapet; from these bishops are selected. The parish priests, who are allowed to marry, are elected and supported by their congregations. The deacons are also allowed to marry. The General Assembly is composed of Bishops, Vardapets, and one layman and one priest from each see. The Gregorian Church is Monophysite and not in communion with Rome.

(ii) Armenian Uniates are a much smaller community (perhaps 70,000 in all), and are found in Western Kurdistan and in the SE. corner of Anatolia. As their name implies, they are in communion with Rome. They have an archbishop at Mardīn in Upper Jezīreh

and bishops elsewhere. There are some Armenian Uniates at Baghdad. The Church is recognized as a millet.

(iii) Armenian Protestants (perhaps some 45,000 in all; a few thousand in Mesopotamia) are found mostly in the Armenian highlands. Armenian Protestantism is the result of the proselytizing work of the American missionaries—mostly Presbyterians. Many Armenian Protestants have been educated at American mission schools and can speak English. It may further be noted that a considerable number of leading Armenians belonging to other sects have been educated at the American College—Roberts College—at Constantinople.

(iv) Some Armenians belong to the Greek Orthodox Church, but they do not appear to be represented in any appreciable numbers in Mesopotamia.

(v) The Nestorians or East Syrians (also called by foreigners Assyrians, and by themselves Easterns or Syrians) form a fairly united body in the mountains of Central Kurdistan, between Lake Van and Urmia in the north, and Mosul in the south. They are highland tribesmen of the ordinary half-civilized type. For their history see p. 88; see also p. 76, foot-note. They constitute a millet in the Turkish Empire. Their Patriarch (called Mar-Shimum) is over-chief of the tribes, into which they are divided. He is elected from the members of a family in which the office is hereditary. The present Patriarch is a young man, but is said to have shown himself a capable and conscientious ruler. He resides at Kochannes, near Julāmerk. The parish priest is usually the chief man in his village, and is held in great honour. Priests and deacons are allowed to marry. There are a few monks and nuns. Fasts are long and severe, the chief being the Advent Fast (25 days) and the Lent Fast (50 days), 3 days at the end of the winter, and Fridays. An English mission has been established among the Nestorians for about 30 years (the Archbishop of Canterbury's Mission to the Assyrian Christians). Its efforts have been directed towards education, medical work, and support of the Nestorian Church. In recent years the Nestorians have shown signs of wishing to put themselves under Russian protection. The Nestorians form an independent Church not in communion with Rome. Their language is Syriac.

(vi) The Chaldaeans (East Syrian Uniates, see p. 89) are in communion with the Roman Catholic Church. Their numbers are perhaps about 30,000. They are found chiefly in and around Mosul, where their Patriarch resides, though he retains the title of Patriarch of Baghdad and Babylon. A community of Chaldaeans exists at Baghdad. Many of their priests have been educated at the Dominican

mission at Mosul and can speak French. For the occupations of the Chaldaean laity, see p. 76. Their language is Syriac.

A body of some 2,000 Chaldaeans seceded in 1869 on the question of Papal Infallibility. It does not seem certain whether this so-called New Chaldaean community still exists.

(vii) There are a very few converts to Protestantism from the Nestorian and Chaldaean Churches. Most of them live at Mosul. They have been proselytized by American Baptist and Congregationalist missionaries.

(viii) The Jacobites or West Syrians are found in the country in and near Mosul, in the Vilayet of Diarbekr, and in the northern part of Syria. There is a Jacobite community at Baghdad. Their Church is independent, professing Monophysite doctrine, and is recognized as a millet. The Patriarch (called Patriarch of Antioch) resides at Mardīn, while the Maphrian, or first bishop, has his see at Mosul. The Patriarch is generally chosen by the bishops, though there have been cases of election by lot. Bishops elect must be monks or widowers. There are three orders of priests—monks, parish priests, and chor-episcopi (the leading priests in large towns). Parish priests must marry before ordination, and may not remarry. As the popular feeling is strongly against unmarried parish priests, a widower, unless he becomes a bishop, usually retires into a monastery. A priest is chosen by a council, composed of the deacons and lay representatives of his congregation. He is usually influential. The order of deacons is large and important. Education is provided by the Church, and most of those who remain in Jacobite schools till the age of fifteen become deacons, but the greater number do not become priests, but are occupied in secular business. Jacobites keep five yearly fasts. Their language is Syriac.

(ix) Jacobite Uniates (or Syriani) are found in Mosul, Diarbekr, and Baghdad, as well as in Syria. They have a bishop at Mosul. Their Patriarch resides at Baghdad.

(x) There are a few Protestant converts from the Jacobite Church (mostly Congregationalists and Baptists) who have been proselytized by American missionaries.

The Yezidis

The Yezidis are found SW. of Mardīn, in the Sinjar Mountains W. of Mosul, and again in the low hills NE. and E. of that town. These Yezidis (the name is probably derived from the Kurdish and Persian *Yazdan*, God) number some 21,000, of whom all but 6,000 live in the Mosul vilayet, and the rest in Diarbekr. Their language suggests a Kurdish origin. A Shiah theory that their

founder was Yazid, the murderer of Husein, is doubtless based on little save a desire to discredit them in the eyes of Mussulmans. The oldest Yezidi traditions centre round the shrine of Sheikh 'Adi, their saint and prophet, in the hills 30 miles NNE. of Mosul. The Sheikh appears to have been outwardly a Moslem, but his shrine is built on the site of an old Nestorian church, which may account for some of the Christian elements in their sacred writings.

The Yezidis have suffered much persecution, and are still regarded as idolaters beyond the pale. Yezidism has points of resemblance with old Iranian and Assyrian beliefs, as well as with Manichaeism and Nestorianism. Thus they regard the Devil as the creative agent of the Supreme Being, a reinstated fallen angel who is the author of evil. He is never mentioned except as the Peacock King (*Malik-i-tāūs*). As for their traditions regarding the Deluge, Creation, and Judgement, they appear to be appropriations from Biblical sources, overlaid with a mass of fable. They regard Christ as an angel in human form, and recognize Mohammed as a prophet with Abraham and the patriarchs.

Rites and Customs.—The Yezidis have no central ecclesiastical authority, but a hierarchy of castes and sects, of whom the highest are *Mirs*, or princes. Next come the *Sheikhs*, *Mullahs*, *Qawals* (preachers), *Pirs* (who exercise priestly functions); and lastly the *Kicuchcks* and *Faqirs*, who tend the shrine of Sheikh 'Adi. The ritual practised by the itinerant Qawals is of a highly esoteric nature, having to do with the worship of the Peacock King, and strangers are rigidly excluded. Both baptism and circumcision are customary in the case of infants. Divorce is permitted only upon proof of infidelity. In the matter of fasts they follow Moslem customs. The pilgrimage to Sheikh 'Adi is an annual affair, accompanied by much ceremonial and festivity: there are lesser shrines, such as Mohammed Resham, Khasia, Sitt Nefisse, and Abdi Resho, also much in favour. The dress of most Yezidis is white, with a short brown cloak. Some of their religious leaders wear black.

The Sabians

The Sabians are a remarkable people, dispersed in small communities over parts of Irak and Arabistan, but united everywhere by the bond of a common religion. Their head-quarters are at Sūq esh-Shuyūkh, but they occur in considerable numbers at Amara, Qal'at Sālih, and Nāsirīyeh also. The Sabians were mentioned in the Koran together with Christians and Jews, and like them entitled, in the view of older Mohammedan theologians, to tolerance as the possessors of a written revelation. The exact nature of their religious

beliefs has not been properly determined. Baptism is one of their principal rites, and frequent ceremonial ablution is enjoined: they are said to venerate Yahya, or John the Baptist, as being a reincarnation of Seth, but consider both Moses and Christ to be false teachers. They place Paradise in the Pole Star. They are an uncircumcized, but not monogamous race. Their ceremonies are said to be conducted in Syriac and closed to strangers. They possess scriptures of their own.

The Jews

The connexion of the Jews with Mesopotamia dates from the Captivity (597 B. C.), when large numbers were carried away into Babylonia by their Assyrian conquerors. Many of the exiles accepted their lot with resignation, initiating under the guidance of the prophet Ezekiel that strong religious development which was to remain for all time characteristic of Babylonian Judaism. The dynastic changes of the next seven centuries affected the Jews but little on the whole—Persians, Greeks, and Romans alike found them submissive and obedient. For the Jews responded to the influences of their environment and won the respect of the aliens, whom they despised, while the law which they cherished kept them at once united and conscious of their unity. Even the destruction of Jerusalem in A. D. 70, which meant for the Jews of Palestine national annihilation, hardly disturbed the even tenor of religious life in Babylonian Jewry. Mesopotamia was to prove a field more fruitful to the growth of orthodox Judaism than Palestine itself. In the first centuries of the Christian Era the Jews of Babylonia, racially of purer extraction than those of Judaea, gradually arrived at a position, if not of opposition, at least of friendly rivalry, towards the land of their origin. Here, rather than in Palestine, was reared the enduring edifice of rabbinism. The population of S. Mesopotamia was at this time mainly Jewish, practically independent, with an exilarch or prince of the Captivity to rule their community as a vassal of the Persian throne. Great rabbinic academies grew up at Sura and Nehardea, of supreme importance to the Jewish world. These Babylonian academies combined the functions of specialist law-schools, universities, and popular parliaments. They were a unique product of rabbinism: and the authors of the system were also the compilers of its chief literary product, the Talmud, better known and more influential (A. D. 500) than the Palestinian version.

Judaism and Islam.—The stimulus to this religious activity was in part provided by the pressure of an alien and unsympathetic government. Under the Sassanians the Jews suffered much from the

fanaticism of the Magi. Islam, on the other hand, was at first curiously accommodating. It would seem as if the earlier Caliphs originally cherished the idea of incorporating Jewry in the Moslem fold. For Islam had no place in theory for tolerated religions; its root principle was fundamentally intolerant: in the presence of the mosque there was no room for church or synagogue. Its efforts towards reconciliation unrewarded, the Caliphate proceeded to regularize the relations of Islam with Judaism by definite enactments not at all to the advantage of the Jews. The Caliph Omar (A. D. 634–44) instituted a code which required Jews among other things to wear a peculiar dress, denied them the right to hold State offices or possess land, inflicted a poll-tax upon them, and refused permission to enter mosques or even build synagogues for themselves. From time to time these ordinances were re-enacted in subsequent ages, and intolerance for Jews is still a feature of Mohammedan law. Yet Islam has often shown itself milder in fact than in theory, and the mediaeval Jews lived under the Crescent a life on the whole fuller and freer than was permitted to them under the Cross. As regards doctrine, the Jews of Mesopotamia continued on the exclusive and uncompromising lines which distinguished them from the first. The rise of the Karaite sect, which occurred at Babylon during the eighth century—it still survives in small numbers at Hīt on the Euphrates—typifies this tendency in Babylonian Judaism. As 'sons of the writing' (*Bene mikra*) these schismatics insisted, like the Sadducees, on the written word and rejection of 'all oral testimony'. There is a strain of gloom in Karaism, which was moreover in its attitude towards doctrinal opponents frankly polemical. In their rigorous interpretation of law and obligation, especially as regards marriage and observance of the Sabbath, the Karaites reflected, and indeed exaggerated, the essence of the religion to which they professed allegiance.

The Jews of Baghdad.—Despite the chaos which succeeded the Mongol invasions, when the Jews suffered no less than the Moslem and Christian populations, their community has survived and now enjoys a position of unusual strength and importance. Surrounded (Azair and Kifl) by monuments of the Captivity, with the tombs of Ezra and Ezekiel in their midst, it is not surprising that they still display exceptional bigotry and devotion to minutiae in the interpretation of their religious ordinances. In Baghdad city they amount, at a modest estimate, to more than 45,000 persons, outnumbering even Turks and Arabs. The trade of the place has largely passed into their hands. At Basra the leading native firms are Jewish also. Trade and money-lending are the main

occupation of the Jewish population, many being altogether absorbed in these pursuits.

The Chabaks

The Chabaks are said by some to be Shiahs. Others assert that they have a secret religion; others say that they have some affinity to the 'Ali Illahi sect of Persian Kurdistan; others that they acknowledge a prophet named Baba.

CHAPTER IX

ADMINISTRATION

The Turkish Administrative System

Previous to the beginning of the sixteenth century the Turkish Government was an Oriental despotism, based on force. The Sultan was a feudal War Lord, receiving obedience from a number of feudal sub-chiefs.

In 1517 Sultan Selim, the Grim, usurped the Caliphate, or Papacy of Islam, from the Arabs and united the spiritual and temporal power in the person of the Sultan-Caliph of Constantinople. The Ottoman Government thus became a theocracy, deriving its inspiration from the Koran. At the time of the capture of Constantinople in 1453 the Turkish State already rested on an Islamic basis, and Mohammed the Conqueror decided that the religious and purely internal affairs of the Orthodox Christian communities which had survived the Turkish conquests should be delegated to their respective religious heads, the chief of whom was the Orthodox Patriarch of Constantinople. The Jewish community was similarly dealt with. The Turkish conqueror was too contemptuous of the infidels and their ways to condescend to deal with the affairs of their communities, which were called 'millet', really meaning a 'nation'. The root of this policy was, perhaps, the incompatibility of Koranic law with Christian jurisprudence, as a Moslem court could not admit the testimony of a Christian witness against a Moslem. The Christians, called 'rayah', had no real rights and were treated as helots. Until 1839 there were four such non-Moslem 'millets': the Greek, Armenian, Roman Catholic, and Jewish communities. Subsequently the Bulgarians, Maronites, Nestorians, and Protestants were also recognized. The fact that the Patriarchs and other religious heads were the recognized channels of communication with the Porte in all matters affecting their communities gave them a position of considerable influence and prestige. Foreign Christians had an analogous position. In virtue of the Capitulations they

were subject in common-law cases to the jurisdiction of their own consuls and embassies, but were not allowed to hold real property.

From 1453 to the beginning of the nineteenth century the Turkish State was a loosely jointed structure. The Turk's ideal was to live on his conquests and conquered, and his organization was purely one adapted to the needs of war against the infidel.

The Sultan-Caliph delegated most of his religious authority to the Sheikh el-Islam, who appointed the religious functionaries in the provinces and supervised all matters appertaining to Islam. The Ottoman Sultan similarly transferred a certain meed of his temporal power to his Grand Vizier, through whom all the high officers of State, both in the capital and in the provinces, were nominated. The Empire was divided into immense provinces called Eyalets, presided over by a Pasha of three tails, e. g. the Pasha of Belgrade was Viceroy of all Turkey in Europe south of the Danube; the Pasha of Erzerum ruled all Kurdistan and Armenia; the Pasha of Baghdad exercised authority over the Mosul, Baghdad, and Basra regions; while the Pasha of Damascus controlled all Syria. When Russia's wars for the liberation of 'her Orthodox Christian brethren' from their yoke as rayahs resulted in the shrinkage of the Ottoman Empire, the necessity of internal change on the lines of a more closely knit system was felt. The Janissaries and the feudal chiefs were removed by massacre and a regular army established with a Minister of War. The Eyalets were abolished and replaced by the smaller divisions called Vilayets, governed by a Vali, with an Accountant-General (Defterdar) for finance, a Secretary-General (Mektubji), representative of the Public Works, Public Instruction, and other departments in the capital. The Vali was further assisted by an Administrative Council (Idare Mejlis). Each Vilayet was divided into two or three Sanjaqs, administered by a Lieutenant-Governor (Mutessarif) appointed by Imperial decree. The Sanjaq had a finance officer (Muhassebeji), a secretary (Tahrirat Mudiri), and representatives of the various ministries, with also an Idare Mejlis, as in a vilayet. Each Sanjaq was subdivided into from three to six Kaza, administered by a sub-governor called Kaimmakam, appointed by the Government, while the Kaza was further subdivided into three or four Nahiyes presided over by a Mudir. In each Qariyeh, or village, there was a Mukhtar, or headman.

These and other similar changes were effected during the first half of the nineteenth century and were confirmed and amplified by the Hat-i-Humayun of 1856 after the Crimean War. Equal civil, political, and religious rights were promised, if not actually granted, to all the inhabitants of the Ottoman Empire, without distinction of

race or creed. A Penal Code, a Commercial Code, a Vilayet Law, and other such modern changes were instituted by Imperial decree, while a regular Ministry of twelve members, inclusive of the Grand Vizier and the Sheikh el-Islam, was formed, and a Council of State was established. These changes did not materially alter the character of the Turk or of his administrative methods. They were honoured more in the breach than in the observance. Fresh disorders and massacres of Christians occurred, and the Serbian and Russo-Turkish wars (1875–8) ensued. A desperate effort was made to modernize Turkey by introducing representative institutions in 1876, in the shape of a Senate and Chamber of Deputies with a Ministry responsible to the Sultan. This system was soon found unworkable and unpalatable to the new Sultan, Abdul Hamid II, who in 1878 prorogued Parliament indefinitely and governed through the Palace and Porte for over thirty years. The abuses and disorders continued, and culminated in the Macedonian agitation during the first eight years of this century. In July, 1908, the Turkish army took the situation in hand, forced the ex-Sultan to revive the Constitution of 1876, dethroned him, installed the Young Turk Government in power with the present Sultan as their nominee and creature, and modified the Constitution by introducing Parliamentarism, or responsibility of the Ministry to the Chamber. The Sultan and Senate were shorn of all power, and, as the people were totally lacking in political instinct or education, the Young Turks, who constituted but an infinitesimal minority of the population, found that they could only govern by putting the Chamber of Deputies under the shadow and terrorism of the court martial and the state of siege which they established in the capital in 1909 and have maintained till the present day (1916).

All real power was vested in this secret court martial, whose proceedings were manipulated by the central office of the irresponsible Committee of Union and Progress. This body established branches in all the provincial centres to control the action of the official local authorities, i.e. the Valis, Mutessarifs, Kaimmakams, &c. As the central court martial was composed of officers who, either from having studied in Germany or for other reasons, were under German influence, the German Ambassador and his military attaché became the real arbiters of Turkey, and the directors of its central and provincial administration.

The German aim was to secure for their representative at Constantinople the position which Lord Cromer built up in Egypt, and in this they had partially succeeded when the Great War broke out. The Young Turks, allured by the prospect of freeing their country

from all non-Turkish trammels, proceeded to abolish the Capitulations and the rights of the non-Moslem millets, and then, despite the written assurances of territorial integrity offered them by Great Britain, Russia, and France, boldly plunged into war by attacking Russia and Egypt. Since the inauguration of the Young Turk régime in July, 1908, the Ottoman Empire had up to March, 1916, lost 1,005,460 square miles of directly or indirectly administered territory in Europe, Africa, and Asia, there being some 700,000 square miles (i. e. three times the size of Germany) still remaining.

Administrative Divisions of Mesopotamia

The following table gives a list of administrative sections in each vilayet[1] exclusive of Nahiyes:

Zor, which was not divided into Sanjaqs, was administered by a Mutesarrif, who nevertheless took his orders direct from Constantinople, and it was consequently known as a Mutesarriflik. The Mutesarriflik of Zor appears to have been created in 1874, after the extension of Turkish influence over the desert tribes. The Vali of Baghdad took precedence of the other Governors.

I. Zor—(No Sanjaqs).
Kazas:
Deir ez-Zor.
Achareh.
Ras el-'Ain.
Āl Bū Kemal.

II. Diarbekr—

Sanjaqs:	Kazas:
1. Diarbekr . . .	Diarbekr, Severek, Derek, Silvan, Lijjeh
2. Arghana . . .	Arghana, Palu, Chermuk
3. Mardīn . . .	Mardīn, Nisibin, Jezīret-ibn-Omar, Midiāt, Avineh

[1] See Map 1.

III. Mosul—

Sanjaqs:	Kazas:
1. Mosul	Mosul, Dohuk, Zakho, Zibār, Sinjar, ʻAqreh
2. Shahrizor	Kirkuk, Erbil, Raniyeh, Rowanduz, Köi Sanjaq, Kūfri or Salāhiyeh
3. Suleimāniyeh	Suleimāniyeh, Baziān or Chemchemal, Gulambar, Chāh Bazār, Markeh

IV. Baghdad—

Sanjaqs:	Kazas:
1. Baghdad	Ānah, ʻAzīziyeh, Bedrah, Baghdad, Dileim, Jezīreh, Kazimain, Khanikin, Khorāsān, Kut el-Amara, Mandali, Samarra
2. Diwāniyeh	Diwāniyeh, Hilla, Samāweh, Shāmiyeh
3. Kerbela	Hindiyeh, Kerbela, Nejef, Razazeh (a nominal district only)

V. Basra—

Sanjaqs :	Kazas :
1. Amara . . .	Amara Tawarīj Shatret el-'Amāreh Zobeir
2. Basra	Basra Fāo Kurna
3. Muntefiq . . .	Hai Nāsirīyeh Shatret el-Muntefiq Sūq esh-Shuyūkh

Local Government

Every civil officer from the Vali down to the Mukhtar was assisted by a civil administrative council, of which he was *ex officio* president, composed in part of officials and in part of non-official members who were selected by the local government from short lists of names submitted by the communities concerned. These councils had only advisory powers, and met about four times a year. The head-quarter towns of sanjaqs and kazas were organized as municipalities, and the affairs of each were supposed to be administered by a municipal committee. These committees had no more powers than the administrative councils. Even the municipal committee of so large a city as Baghdad, with at least 140,000 inhabitants, could not of itself expend any sum larger than 200 gold piastres, or thirty-six shillings! Naturally few signs of municipal activity were observable.

On paper the administrative scheme was admirable: the provinces were of an easily manageable size, still more so the internal sections and subsections of each province; the chain of authority and links of responsibility were complete in every province from the provincial chief to the headman of each village therein. The administrative councils that should have enabled the administration to be in close touch with local public opinion provided at least a semblance of representative institutions. As a matter of fact the actual system was bad, quite apart from the vital questions of the quality and qualification of the administrative personnel for their work. In size and population, the vilayets correspond to average 'districts' in India; to place such relatively small units directly under the Central Government was a characteristic piece of centralization on the part of the Ottoman Government, and had all the evils attendant on such a course. The Valis had no power of appointment

over their subordinates. The local councils and committees would, with their limited or rather non-existent powers, have been *nominis umbrae* in Europe, not to speak of the East. A host of spies pervaded the provinces and reported direct to Constantinople. The Valis had no concern with, and no power or control over, one-half of the administrative machine, viz. the Departments of Public Justice, of Land Records, Posts and Telegraphs, Religious Endowments, Customs, Public Debt (which was virtually the Excise Department), the Tobacco and Salt Monopolies, Public Instruction, and Sanitary Service. These departments may be termed the 'Imperial' Departments, in contradistinction to the 'Provincial' Departments which were in charge of the Valis and which are specified below. The local chiefs of the Imperial Departments received their orders direct from, and reported direct to, Constantinople. Copies of such orders were sometimes sent to the Vali for his information, and it was his duty to investigate complaints against the proceedings of any department in his vilayet outside his control—a wise provision, considering what Orientals are. Lastly, in Baghdad the chief vilayet of no less than one-third of the whole cultivated area was the private, personal property of the Sultan (as will be explained below), which was managed by the Sultan himself through his private staff. With this area the Vali would naturally not think of interfering. To some extent the same condition of things obtained in the province of Basra also, where the Sultan owned a considerable private estate. A theoretically good plan of administration was in practice paralysed.

Provincial Departments

The Vali of each vilayet was the head of the non-Imperial, otherwise the Provincial, Departments, which were: (*a*) the gendarmerie, (*b*) the civil police, (*c*) the revenue-collecting establishment and department of general accounts. The Vali was also the political representative of the Ottoman Government in his own vilayet, and the conduct of all dealings with foreign consular officers or foreign subjects, and with the semi-independent tribes of the country (Arab or Kurd), was in his hands. He had no authority over the troops of the regular army in his province, but he could summon the military commander to take such steps as might be necessary for the attainment of political or administrative ends. Occasionally, for very special reasons, the same officer might be invested with the highest civil and military authority in the same vilayet, as was the case at Basra in 1906–7; but as a rule the late

Sultan had far too profound a mistrust of his officers to put much power in their hands.

As regards the Provincial Departments, (*a*) the maintenance of law and order throughout the country in times of peace depended on the force which was officially given its modern name of the gendarmerie, but is more familiar by its time-honoured appellation of zaptiehs. Their organization was military, and the force was under the control of a special section of the Turkish War Office ; but it was distributed under the orders of the civil authorities as a military police. The zaptiehs were half mounted and half infantry, and were commanded in part by officers seconded from the regular army, and apparently in somewhat larger part by civilians who held special commissions. The strength in each province varied with local conditions ; in Baghdad there were supposed to be about 1,500 mounted and 1,000 unmounted zaptiehs ; in Basra 350 cavalry and 400 infantry. As a rule they were scattered up and down the country in small detachments, and, besides their proper duties, were employed on all kinds of miscellaneous work, such as collection of revenue from the tribes, furnishing of garrisons for posts, domestic duties in the establishments of civil officers, escorts for European travellers, &c., &c. The men are described as not smart in appearance, but as useful and hardy. Whether the actual corresponded with the nominal strengths of each troop and battalion is doubtful. Their pay was very often in arrears.

(*b*) In the larger centres of population and in places of administrative importance there existed a purely civil police, whose authority, however, did not extend to the surrounding villages or open country. Its numbers were small, and, when they required men, the officers of the civil police were entitled to make use of zaptiehs.

(*c*) The tax-collecting and revenue account departments were relatively small in numbers, as the taxes of which they held charge were mostly farmed, but they were lucrative posts. A brief statement of the taxes with which they were concerned will not be out of place here.

The tent and hut tax was collected, at the rate of 8*s.* 4*d.* (50 gold piastres) per annum, wherever collection was feasible, from each household of the agricultural population, both settled and semi-nomad. Besides this household tax, a cess of 11*d.* (5½ piastres) was levied as a contribution towards educational and military expenditure. These taxes were farmed.

The various taxes on domestic animals fell principally on the nomad and semi-nomad tribes, and were farmed to the chiefs. Consequently anything like a collection of the full amount was impos-

sible, especially as all reliable statistics on which to base recovery were absolutely wanting. The chiefs collected what they could squeeze out of their clansmen, but, on the other hand, screened them against the Government. If a tribe was powerful, it practically escaped payment of this tax altogether.

The land taxes, which were farmed, were mostly levied in kind, and gave therefore naturally every opportunity for chicanery, bribery, and evasion. Freehold lands were assessed to pay from one-tenth to one-fifth of the gross produce, according to facility of irrigation; exceptionally favoured lands paid up to one-third of the gross produce. The rent charged for the use of State or Crown lands (see below) was a matter of arrangement between the department concerned and the tenant, and varied from one-tenth to even one-half of the gross produce. Taxes on date and orange trees were levied in cash, $3\frac{1}{2}d.$ (7 Rāij piastres) per tree on the former and $1d.$ to $2d.$ (2–4 Rāij piastres) on the latter.

The 'forests', from which a small revenue was derived, are mostly plantations of poplars and tamarisks on the Euphrates and Tigris.

The royalty on minerals varied from 5 to 15 per cent. *ad valorem*, but was practically confined to the copper mines at Arghana in the vilayet of Diarbekr. In the whole of Irak this tax produced only about £180 a year. Municipal taxation consisted largely of octroi, a lucrative impost for the collectors thereof, which may account for the liberal number of municipalities. All local products paid 7 per cent. *ad valorem* on entering a town; there were also a number of other taxes on local industries, trades, and handicrafts; and all these imposts, when not evaded, were further enhanced by the method of affixing stamps to receipts given for them, these stamps having to be supplied by the taxpayer, after the method mentioned in connexion with the Customs.

In connexion with taxation generally it is a significant comment on the system which obtained under the Turks that it has been asserted by good and recent authority that in the vilayet of Basra alone, which was comparatively well in hand and contained a large settled population under the eye of the authorities, seven-tenths of the people escaped scot free of all taxation, and paid nothing whatever, except perhaps in bribes.

Imperial Departments

Of the Imperial Departments there were three classes:

1. Public Justice.
2. Revenue Departments.
3. Departments relating to the convenience of the public.

1. *Public Justice.* There were four kinds of Courts: Ecclesiastical, Criminal, Civil, and Commercial.

Only questions arising under the law of the Koran were cognizable by the Ecclesiastical Courts; the judges were Kazis, recognized and paid by Government, one at the head-quarters of each Vilayet, Sanjaq, and Kaza. Appeals lay from the lower to the higher Kazis, and from the latter to the Sheikh el-Islam at Constantinople. Authorized and officially recognized jurisconsults, or Muftis, existed at the head-quarters of each Vilayet and Sanjaq, whose duties were to resolve legal difficulties and give authoritative opinions under the *Shar'* or holy law, especially in questions connected with inheritance and marriage.

The Civil and Criminal Courts were divided into: Courts of the First Instance, located at the head-quarters of each Vilayet, Sanjaq, and Kaza; High Courts at the head-quarters of each province; and the Supreme Court at Constantinople, which had only appellate jurisdiction. Each of these three tribunals had a civil and a criminal side, the judges in each being distinct sets of individuals. The language of the Courts was Turkish. The civil judges were all Mohammedans; in Criminal Courts non-Mohammedans were included in the Bench. Crime was divided into three categories: petty, ordinary, and heinous. The Courts were assisted by a Public Prosecutor and his subordinates. Courts of the First Instance disposed of petty crime without appeal, except on a point of law. Before charges of ordinary or heinous crime were tried, the accused went before an Examining Magistrate, who, after investigation, either discharged the accused or committed for trial—in the case of ordinary crime to the Court of First Instance, in the case of heinous offences to the High Court. In each instance an appeal lay from the Court trying the case to the Court immediately superior to it. No charge against a British subject could proceed except in the presence of a British Consul, and no sentence on a British subject was valid until concurred in by a British consular representative; differences of opinion between a Court and a Consul were referred for settlement at Constantinople by the British Ambassador and the Turkish Minister of Justice.

Commercial Courts at the head-quarters of vilayets dealt with mercantile suits, causes relating to bills of exchange and promissory notes and matters of the kind, subject to appeal to the local High Court on the civil side. The procedure of these Courts is stated to have been based on the Code Napoléon. If a foreign subject was a party to a suit in the Commercial Court, one or two assessors of the same nationality as the foreign subject were added to the Court; the

proceedings were watched by a representative of the foreigner's consulate, and an appeal lay to the Chief Commercial Court at Constantinople. Such was the scheme of justice, good on paper but incurably vicious in practice by reason of interminable delays and gross corruption.

2. *Imperial Departments of Revenue.*—These were the Customs, Public Debt, Tobacco and Salt Monopolies, and Land Records.

Customs was one of the most important revenue agencies, producing more in Baghdad and Basra than even the land taxes. The Department was under a Director-General at Baghdad, who dealt direct with Constantinople, and had a deputy with his establishment at Baghdad and at Basra; officials of lower rank and clerks were stationed at Khanikin, Qizil Ribat, Mandali, and Bedrah on the Persian frontier, at Nashweh and Kurna on the Shatt el-'Arab, at Sūq esh-Shuyūkh on the Euphrates, and on the Tigris at Qal'at Sālih, Amara, Kut el-Amara, Suweira, and Kazimain. By agreement with the Powers, the import duties were, in 1907, raised to 11 per cent. *ad valorem.* The export duty was 1 per cent. *ad valorem*, and a refund of 10 per cent. *ad valorem* was permitted on goods exported within six months of importation. Without an agreement with the Powers, these duties were enhanced from time to time by the ingenious device of requiring various stamps of different and varying denominations to be affixed to documents presented to the Customs House. Some of these stamps were ostensibly earmarked for the cost of the Hejaz Railway, others were simply revenue stamps. In some cases this imposition entailed as much as 50 per cent. additional on the customs duty proper. That the administration of the customs was highly corrupt goes without saying. It is reported that at Basra the export trade evaded taxation altogether. The import duties actually paid are said to have averaged not more than 6 per cent., including duty, bribe, and porterage, instead of 11 per cent.

The Department of Public Debt existed for the benefit of the European bondholders of the Ottoman Government, and was subject to international control. It was represented by superintendents at provincial head-quarters, with assistants at all more important places, and travelling inspectors. The principal sources of revenue made over to the Public Debt for management were fisheries, liquor, salt, silk, and stamps: it was practically an Excise Department.

The Tobacco Monopoly was in the hands of a company known briefly as the Régie which held the lease or farm of the manufacture, collection of duty, and sale of tobacco throughout the Turkish

Empire. Its offices were at the head-quarters of the vilayets, with branches at the principal centres of tobacco cultivation. The duty appears to have been 1*s.* 3*d.* per $2\frac{1}{5}$ lb. (7·8 gold piastres per kilogramme) of superior quality, and 7*d.* (3·9 gold piastres) per the same weight of inferior quality of tobacco. Persian tobacco, which is largely imported for smoking in 'narghilehs', paid an import duty of 6*d.* per $2\frac{1}{5}$ lb. (3 gold piastres per kilogramme).

The Land Records Department dealt with all lands and buildings, except the private property of the Sultan, to which reference is made below.

There are five kinds of landed property: the first is 'mulk', which corresponds to our freehold and passes by inheritance, gift, exchange, or will; it escheats only on the failure of heirs.

The second is 'mīrī' or Crown lands, not to be confounded with the Sultan's own estates. Such land consists chiefly of pastures and forests, with some arable land.

The third is 'waqf' or lands assigned in religious endowments. Such as were under the Department of Religious Endowments were free from taxation, but those in the hands of private individuals paid land tax like non-waqf lands. The large landed properties, however, which are in the hands of the Naqib of Baghdad have been specially exempted from taxation by an Imperial order, and may therefore be classified as 'waqf'.

The fourth is 'matrūkah' or lands left unoccupied for the public benefit.

The fifth and last is 'mawāt' or dead lands which have remained unoccupied and uncultivated from time immemorial.

The Department of Land Records, of which the offices were at Baghdad, Mosul, and Diarbekr, was divided into two sections: the first, or 'Tapu', registered all transactions in, and arrangements relating to, the ownership of land generally, and managed the second class of landed property, viz. the Crown lands. These were mostly let to tenants whose tenure was undisturbed provided they paid the rent or did not discontinue cultivation for more than three years. The second or 'Amlak' section of the department dealt with similar matters relating to buildings. Both sections levied fees.

3. The *Departments relating to the convenience of the public* were: Posts and Telegraphs, Public Health, Religious Endowments, Public Instruction.

The first two of these are dealt with in other chapters. The Department of Religious Endowments was represented by accountants at the provincial head-quarters. In the Baghdad province