

them migrated north-eastwards to the basins of the Kama and Byelaya, and thus the Meschers divided into two branches. The western branch became Russified, so that the Mescheryaks of the governments of Penza, Saratoff, Ryazan, and Vladimir have adopted the customs, language, and religion of the conquering race; but their ethnographical characteristics can be easily distinguished in the Russian population of the governments of Penza and Tamboff. The eastern branch has taken on the customs, language, and religion of Bashkirs, with whom their fusion is still more complete. They can be distinguished from their neighbours only by their more peaceful character. This Bashkir-Mescheryak branch was estimated by Rittich in 1875 to number 138,000. They make 6 per cent. of the population of the government of Upa, and 22 per cent. in the district of Birsik. The number of the western Mescheryaks is unknown, and could hardly be estimated on account of their mixture with Russians. It is only in the government of Penza that they have maintained their national features; there they make 3 per cent. of the population.

MESCHOVSK, a district town of Russia, in the government of Kaluga, 45 miles to the south-west of the capital of the province. It is an old town supposed to date from the 13th century, and it is often mentioned in Russian annals under the names of Mezetsk, Mezechevsk, or Meschorsk. About the end of the 14th century it was embraced in Lithuania, and it was ceded to the Moscow "great principality" in 1494. It was often pillaged by Tartars in the 16th century, and during the great disturbances of 1610 all its inhabitants were killed by the Zaporoghi Cossacks, and the fort was taken by Poles, who returned it to Russia only after the treaty of Deulin. The country round Meschovsk is not fertile; but, from its position on old established routes to the south, the town has become a centre of considerable trade. Its annual fair, which takes place on the grounds of the very old Petrovsk monastery, is important to the surrounding districts for the export sale of horses, grain, hemp, hempseed oil, and coarse linen, and for the import trade in cottons, woollens, and earthen and glass wares, the whole turn-over reaching about £100,000. Population, 7400.

MESHED (properly Mesh-hed, i.e., "place of martyrdom," "shrine"), a city of northern Persia, capital of Khorásán, 472 miles east of Tehrán, 201 miles north-west of Herat, 36° 17' 40" N., 52° 35' 29" E., lies on a plain watered by the Keshaf-rúd, a tributary of the Heri-rúd, and is surrounded by mud walls 4 miles in circumference, with a dry ditch 40 feet deep at some points, which could be flooded from the neighbouring reservoir and watercourses. Within this enclosure is a strong citadel, with good walls 25 feet high, residence of the prince governor of Khorásán. There are five gates, from one of which, the Bala Khábán, the Khábán main street runs right through the city, forming a fine boulevard planted with plane and mulberry trees, and with a stream of dirty water running down its whole length. In the centre is an open parallelogram 160 yards by 75, encircled by double-storied cloisters, and pierced on the long side by a high arched porch leading directly to the great mosque, whose gilded dome rises above the shrine of the famous Imám Rizá.¹ The marble tomb of the saint,

¹ Ali Rizá (or el-Ridá), the eighth imám of the Shí'a, is the 'Alí ibn Músá from whom the party of Alides had such hopes under the caliphate of Mamún (see MOHAMMEDANISM). He died at Tus, 818 A.D., and was buried by Mamún's orders in the vicinity of that town beside the grave of Hárún el-Rashíd. To the Alides he was a martyr, being believed to have been poisoned by the caliph. Ibn Batáta, who describes both shrines (iii. 77 sq.), tells how the pious visitors to the shrine of 'Alí ibn Músá used to spurn with their feet the tomb of Rashíd. In his time a considerable town had been formed around the shrine under the name of Meshed el-Ridá and ultimately the new town eclipsed the older city of Tus.

which is the most venerated spot in the whole of Persia, and yearly visited by from 80,000 to 100,000 pilgrims, is surrounded by a silver railing, and approached by a flight of inlaid marble steps. Eastwick, the only European before O'Donovan who penetrated as far as the parallelogram, describes the mosque as large enough to contain three thousand people. It is flanked by two gilded minarets, one of which, 120 feet high, is extremely beautiful, with an exquisitely carved capital, built by Sháh Abbás. The façade is entirely covered with blue and white enamelled tiles. To the mosque are attached as many as two thousand attendants and retainers of all sorts, including no less than five hundred mollahs. Beyond the dome is Gauhar Sháh's handsome mosque, surmounted by an immense blue dome, and also flanked by two minarets. In the main street is a public kitchen supported by the enormous revenues of the shrine, where eight-hundred devotees are daily supplied with food gratuitously. The only other notable buildings in the place are some colleges and twenty-two caravanserais, one of which is of great size. Meshed does a considerable local and transit trade to the yearly value of about 600,000 tománs, and its bazaars are always well stocked with silks, velvets, felts, cottons, shawls, carpets, lacquer work, lambskins, hardware, glass, china, and other goods from South Persia, India, Turkestan, and Russia. The European trade is now entirely controlled by Russia, and European manufactured articles are mostly all from that country. The chief manufactures are silk; satin, velvet, and checked-cotton fabrics, carpets, shawls, noted sword blades, shagreen, and turquois jewellery. Within the enclosures are extensive cemeteries far exceeding the local requirements, large numbers of the faithful being brought from all parts of the Shí'a world to be buried in the vicinity of Rizá's shrine under the belief that their eternal salvation is thereby ensured.

Some 10 miles west of Meshed is a powder factory, formerly under Colonel Dolmage, where powder of excellent quality is produced. The district, although fertile, does not produce sufficient for the inhabitants, so that much grain has to be imported from Kurdistán and Nishápúr. The climate is very severe in winter, with much snow; in summer it is less sultry than might be expected, the temperature ranging from 76° F. to 90° or 92° F., and in exceptional years 94° to 98° F. The population is variously estimated at from 45,000 (Connolly) and 60,000 (Ferrier) to 80,000 and 100,000 (Eastwick). The settled residents, exclusive of pilgrims and foreign traders, are estimated by O'Donovan at 50,000.

The main caravan routes from Khiva, Bokhara, Samarkand, and Herat converge at Meshed, whence lines of traffic radiate to Kúchan for the Atrék valley and the Caspian, to Nishápúr and Bostam for Tehrán, to Tabas for Isfahán, to Khaf for Sistán and Kirmán. It thus occupies a position in north-eastern Persia analogous to that of Tabriz in the north-west.

MESHED-ALI, i.e., the shrine of the "martyr" Ali, is a town of Asiatic Turkey, province of Baghdad, 50 miles south of Kerbela, close to the ruins of Kufa, and 2 miles west of the Hindiye branch of the Euphrates, the reputed burial-place of the caliph Ali.² It stands on the east scarp of the Syrian desert, and is enclosed by nearly square brick walls flanked by massive round towers dating from the time of the caliphs. Under the gilded dome of the great mosque, which occupies the centre of the town, is the shrine of Ali, which is held by the Shí'a as at least as holy as the Kaaba itself. Any Moslem buried within sight of the dome being certain of salvation, large numbers of bodies are yearly sent from all parts for interment here. Besides the mosque with its richly decorated façade, the only noteworthy building is a good bazaar supplied from Baghdad and Basra. The town itself, which Lady Anne

² Whether the place really contains the grave of Ali was long disputed, and the story given in defence of its claims is doubtless apocryphal. The dome was built under the Abbasids, and the resting-place of the caliph unknown or concealed under the Omayyads (Ibn Haukal, p. 163).

Blunt describes as "an ideal Eastern city, standing in an absolute desert, and bare of all surroundings but its tombs," consists of narrow gloomy streets lined by houses closely packed together. The locality is properly named Najaf, and gives its name to the neighbouring lake, a large depression filled by an eruption of the river, and ranging from 6 to 20 feet in depth. The accumulated treasures of the shrine were carried off by the Wahhábités when they captured this place early in the present century. The population is estimated at 7000, including several Indian Mohammedans under the protection of the British resident at Baghdad.

The aspect of the shrine in the 14th century is described by Ibn Batáta, l. 414 sq. A plan of the town and description of its splendour before the Wahhábités pillaged it is given by Niebuhr. See also Ibn Jubair, p. 214; P. Teixeira, *Itin.*, cap. iv.

MESHED HOSEIN, properly MESHED HOSEIN. See KERBELA, vol. xiv. p. 48.

MESMER, MESMERISM. See vol. xv. p. 277.

MESOPOTAMIA, the "country between the rivers," is a purely geographical expression, the countries which it comprehends never having formed a self-contained political unity.¹ It was first introduced by the Greeks at or after the time of Alexander, but probably had its origin in the earlier Aramean name *béth nahrín* (the country between the rivers), to which again corresponds the Biblical *Aram Naharayim*.² As early as 700 B.C. "the country of two rivers" is mentioned on the Egyptian monuments under the name Naharina, but no such designation appears in the cuneiform inscriptions (though the territory formed part of the Assyrian as it afterwards did of the Persian empire). The most settled period in the history of Mesopotamia was probably under Persian-Greek rule. Xenophon applies the name Syria to the extremely fertile district which he traversed after having crossed the Euphrates at Thapsacus. The country beyond the Araxes (Chaboras?) he calls Arabia, — a desert region in which his army had to suffer great hardships until it reached the "gates of Arabia." Even in later times Mesopotamia was included under the name Assyria, or was reckoned part of Babylonia.

These statements of Xenophon already indicate a demarcation of the territory afterwards called Mesopotamia, as well as its division into two sections. The fertile portion, inhabited by agricultural Arameans, stretched from the Euphrates to the Chaboras; the desert portion, the home of wandering tribes, extended to the Tigris. It would be rash, however, to conclude from this that Mesopotamia designated the whole territory between the Euphrates and Tigris; indeed it is possible that *Aram Naharayim*, the Aram of the country of the two rivers, originally meant only the main portion of the fertile country inhabited by Syrians. In this case the two boundary rivers must have been, not the Euphrates and the Tigris, but the Euphrates and the Chaboras. After the final occupation of the country by the Romans (156 A.D.), the political province of Mesopotamia was practically confined to this more limited district. Though in ordinary usage the Euphrates and Tigris are considered as the two rivers which bound Mesopotamia, the one bank of the river cannot be geographically separated from the other, and consequently narrow strips of country on the right bank of the Euphrates and on the left bank of the Tigris must be reckoned to the country "between" the rivers. On the other hand, the country between the sources of the Euphrates and the Tigris has from early times been

¹ *Μεσοποταμία*, more exactly *ἡ μέση τῶν ποταμῶν*, scil. *χάρω* or *Συρία*.

² In the more recent parts of Genesis Padan Aram takes the place of Aram Naharayim. But this perhaps is the name of a smaller district in the neighbourhood of Harran.

reckoned not to Mesopotamia but to Armenia. In this direction the Masius range forms the proper boundary, and it is only on rare occasions that theoretical geographers extend the name Mesopotamia over the more northern districts, Sophene, &c. Purely theoretical too, and not to be approved, is the extension of the definition so as to include the land of Babylonia (Irák 'Arabi), that is, the country as far south as the confluence of the Euphrates and Tigris, or even as far as their embouchure in the Persian Gulf.

From what has been said it appears that Mesopotamia reaches its northern limits at the points where the EUPHRATES (*q.v.*) and the Tigris break through the mountain range and enter the lowlands. In the case of the Euphrates this takes place at Sumeisát (Samosata), in that of the Tigris near Jezret ibn 'Omar (Bezabdá) and Mosul (Nineveh). Consequently the irregular northern boundaries are marked by the lowland limits of those spurs of the Taurus mountains known in antiquity as Mons Masius and now as Karaje Dágh and Túr 'Abdín. Towards the south the ancient boundary was the so-called Median Wall, which, near Pirux Shapur, not much to the south of Hit (the ancient Is), crossed from the Euphrates in the direction of Kadisiya (Opis) to the Tigris. There the two rivers approach each other, to diverge again lower down. At the same place begins the network of canals connecting the two rivers which rendered the country of Babylonia one of the richest in the world; there too, in a geological sense, the higher portion of the plain, consisting of strata of gypsum and marl, comes to an end; there at one time ran the line of the sea-coast; and there begin those alluvial formations with which the mighty rivers in the course of long ages have filled up this depressed area. Mesopotamia thus forms a triangle lying in the north-west and south-east direction, with its long sides towards the north and south-west. It extends from 37° 30' to about 33° N. lat. and from 38° to 46° E. long., and has an area of some 55,200 square miles. The points at which the rivers issue from among the mountains have an absolute altitude of between 1000 and 1150 feet, and the plain sinks rapidly towards the southern extremity of Mesopotamia, where it is not more than about 165 feet above the sea. As a whole the entire country consists of a single open stretch, save that in the north there are some branches of the Taurus—the Nimród Dágh near Orfa, the long limestone range of 'Abd-el 'Aziz, running north-north-west, and farther to the east the Sinjar range, also of limestone, 7 miles broad and 50 miles long, running north-north-east. Between these two ranges—near the isolated basaltic hill of Tell Kókab (Hill of Stars—runs the defile by which the waters of the Chaboras, swollen by the Jaghjágha and other affluents from the Masius, find their way into the heart of Mesopotamia. The Khábúr proper, the ancient Chaboras, which rises in the three-hundred copious fountains of Rás-ain (the ancient Rhésana), and ultimately falls into the Euphrates near Karkisiya (Circesium), forms the boundary between the two, or more correctly the three, great divisions of Mesopotamia. These divisions are (1) the northern country to the west of the Khábúr, (2) the northern country to the east, and (3) the steppe-land. In the country to the north-west of the Khábúr we must probably, as already mentioned, recognize the true ancient *Aram Naharayim*. Under the dominion of the Seleucids it bore the name of Osrhoene, or better Orrhoene, and was for a time the seat of a special dynasty which at a later date at any rate was Arabian (Abgar). The capital of this kingdom was Orfa (Roha), the Edessa of the Greeks and Romans, the Orrhoi of the Syrians; it was at a later date a Roman colony, and bore also the name of Justinopolis. This once flourishing city lies on the small river Daisan (the ancient Scirtus). South of Edessa lie

the ruins of HARRAN (see vol. xi. p. 454). In the Mongolian period Harran fell into decay, and at present it is a mere heap of ruins. A third town of this region is Serug (Gen. xi. 20); in the Greek period it was called Batne, but the Syrians retained the name Serug, which is still in use (Serúj). The town lies between Harran and the Euphrates, in a plain to which it gives its name. On the left bank of the Euphrates lay Apamea (the modern Birejik), connected with Zeugma on the other side by a bridge, and farther south, at the mouth of the Bilechas (modern Belik), was the trading town and fortress Nicephorium, founded by command of Alexander, and completed by Seleucus Nicator, in memory of whose victory it was named. From the emperor Leo it received the designation Leontopolis. The spot is now known as Rakka (see below). Farther up the fruitful valley of the Belik lay the town of Ichne (Chne). Farther south lay Circesium (*Chaboras* of Ptolemy, *Phateg* of Isidor), not to be identified, as is usually assumed, with Carchemish; from the time of Diocletian it was strongly fortified. The site is at present occupied by a wretched place of the name Karkisiyá. Carchemish probably lay near the bridge of Membij, the present Kalat el-Nejm.

In ancient times a highly flourishing district must have stretched along the river Chaboras (Khábúr) to its principal source at Rás-ain ("Fountain-head," Syr. *Rish áina*, the Rhessena of Ptolemy), a town which was for some time called Theodosiopolis, because after 380 A.D. it was extended and embellished by Theodosius. Justinian fortified it. The strip of completely desert country which now stretches along the lower course of the Khábúr was called in antiquity Gauzanitis, and corresponds to the Gozan of 2 Kings xviii. 6 (Guzana or Guzanu in the cuneiform inscriptions).

The country to the east of the upper Khábúr is in many respects similar to that which has just been described. As the watershed of the Tigris is not far distant, the Masius range sends down into Mesopotamia only insignificant streams, the most important being the Hermas, the Mygdonius of the Greeks. On its banks was situated Nisibis, the chief city of the district, which commanded the great road at the foot of the mountains leading through the steppe, which here from the scarcity of water comes close up to the edge of the hills. In the old Assyrian empire Nasibina was the seat of one of the four great administrative officials. In the time of the Seleucids the site was occupied by the flourishing Greek colony of Antiochia Mygdonia; but the new designation, transferred to the river and the vicinity of Nisibis from the Macedonian district of Mygdonia, afterwards passed out of use. Nisibis was an important trading city, and played a great part in the wars of the Romans against the Persians. Captured by Lucullus, surrendered by Tigranes, recovered by Trajan, again abandoned by Hadrian, once more occupied under Lucius Verus, and strongly fortified by Severus, it was at length raised to be the capital of the province, and remained the frontier fortress of the Romans till in the time of Jovian it was ceded to the Persians. After the loss of Nisibis the emperor Anastasius in 507 founded to the north-west the fortress of Dará or Daras (the modern Dárá), also called Anastasiopolis, which from the reign of Justinian, who increased its strength, remained for a time the residence of the *dux Mesopotamiæ*. Besides these strongholds, many fortified posts were established by the Byzantine empire in this district. Antoninopolis must be mentioned as an important town; this was refortified by Constantine under the name of Constantia, and has left its ruins near Tela between Harran and Nisibis. Mardin too was a fortress of a similar kind, and the town of Singara, at the southern foot of the mountain of the same name, was an advanced post of the Roman power.

The south or steppe portion of Mesopotamia was from early times the roaming-ground of Arabic tribes; for Xenophon gives the name of Arabia to the district on the left bank of the Euphrates to the west of the Khábúr; and elsewhere it is frequently stated that the interior at a distance from the rivers was a steppe inhabited by Arabes Scenitæ (Tent Arabs). Along the bank of the two great rivers ran a belt of cultivated country, and the rocky islands of the Euphrates were also occupied by a settled population. On the Euphrates, beginning towards the north, we must mention first Zaitah or Zantha, south-east of Circesium; next Corsothe, at the mouth of the Mascash; then Anatho or Anathan, the modern Ana; and finally Is (Hit). On the Tigris the point of most importance is Carnæ (*Kawai* of the *Anabasis*), south from the mouth of the Great Zab near the present Kalat Sherkat; and not far distant towards the interior was Atræ or Hatræ, also called Hatra, the chief town of the Arab tribe of the Atreni. It was besieged without success by Trajan and Severus; by the 4th century it was already destroyed; but the interesting ruins, which can scarcely be visited owing to the plundering habits of the Bedouins, still bear the name of El-Hadhr. They lie in the heart of the steppe, and were formerly well supplied with water.

All these districts came in 640 A.D., or perhaps a little earlier, into the power of the Arabs, who named them Jezira (island) or Jezret Akúr, and divided them according to tribes into three portions, the land of Bekr; of Rebfa, and of Modhar. The district of Modhar ran along the side of the Euphrates, and its chief towns were Orfa and Rakka; the district of Rebfa comprised the plain of Mosul as far as the country on the Khábúr (chief towns Mosul and Nisibis), and the district of Bekr (Diyár Bekr) the more mountainous country to the west of the upper Tigris (chief town Amid or Diarbekr). In general the Arabs consider a part of the mountain territories which lie between the two rivers to belong to Jezira, as is best seen from the following notice given by Abulfeda:—

"El-Jezira is the land between the Tigris and the Euphrates, yet many places on the other side of the Euphrates, which properly belong to Syria, are also included, as well as places and even districts on the east side of the Tigris. The exact boundary line thus runs from Malatia by Sumeisát, Kal'at er-Rúm (Rum-Kala of the maps), and Bire (Birejik) to the point opposite Membij, and then by Bális, Er-Rakka, Karkisiyá, Er-Rahaba (on right bank), and Hit to Anbár. Here the Euphrates ceases to form the boundary, which runs across to the Tigris in the direction of Tekrit, and ascends the Tigris as far as Es-Sinn (Senna) to El-Haditha and Mosul, thence to Jezret ibn 'Omar, then to Diarbekr, and so back to Malatia."

From the Arabic geographers and travellers we gain the impression that a great part of Mesopotamia, with the exception of the southern steppe of course, must at that time have been in a very flourishing condition; the neighbourhood of Nisibis especially is celebrated as a very paradise. In fact it is only since the Turkish conquest of the country under Sultan Selim in 1515 that it has turned into a desert and gradually lost its fertility. As the nomadic Arabs have continually extended their encroachments, agriculture has been forced to withdraw into the mountains; and this is especially true of the western portions of Mesopotamia, the district of Rás-ain, and the plain of Harran and Serúj, where huge mounds give evidence that the whole country was once covered with towns and villages. Under the Turks El-Jezira does not form a political unity, but belongs to different pashaliks.

From this brief survey it appears that Mesopotamia, like Syria, constitutes an intermediate territory between the great eastern and western monarchies,—Syria inclining

¹ Philostratus (c. 200 A.D.) already reports that the Arabs called Mesopotamia *ἡσος*.

more to the west, and Mesopotamia to the east. In virtue of its position it frequently formed both the object and the scene of contest between the armies of those mighty monarchies, and it is wonderful how a country so often devastated almost always recovered. The roads, it is true, which traversed the territory were not mere military highways, but the main routes of traffic for Central Asia, Western Asia, and Europe. It is only in modern times, and since these lines of commercial intercourse have ceased to be followed, that the general condition of things has been so entirely altered.

The number of roads which in ancient times traversed the country was very considerable; the Euphrates formed not a barrier but a bond between the nations on either side; at many places there were at least boat-bridges (*zeugma*) across. One of the most important of the ancient crossing-places must be sought, where in fact it still exists, at Birejik, the ancient Apamea-Zeugma. From this point a great road led across to Edessa (Orfa); there it divided into two branches, the northern going by Amid (Diarbekr) and the other by Mardin and Nisibis to Mosul (Nineveh). In quite recent times, in order to avoid the direct route across the desert and through the midst of the Bedouins, the post-road makes a great circuit from Nisibis by Jezret ibn 'Omar to Mosul. A second route crossed the Euphrates somewhat more to the south, and joined the other *via* Harran and Rhessena. The principal crossing of the earlier times (Xenophon) was at Thapsacus, almost opposite Rakka; and it will be remembered also how important a part Thapsacus (Tiphseh) plays in the Old Testament. Sometimes a route along the Euphrates to Babylonia was followed, as is still frequently done by caravans at the present day; but even in ancient times this course was attended by more or less difficulty, the country being occupied by the chiefs of independent Arab tribes, with whom the travellers had to come to terms.

The ancient condition of things must consequently be considered as essentially analogous to that of the present day; the central districts away from the rivers were occupied at certain seasons, according as they yielded pasture, by nomadic cattle-grazing tribes, the physical character of the country being then and now the same on the whole as that of the Syrian desert, which belongs not to Syria but properly to Arabia. On the banks of the rivers were settled half-nomadic Arab tribes,—tribes, that is, which were more or less on the way to the agricultural stage, or which, having become altogether agricultural, had nevertheless, owing to frequent intercourse with the Bedouins, lost little of their original character, and even maintained their independence. The same movement takes place over and over again: Arab tribes migrating from Arabia, that *officina gentium*, gradually settle down wherever circumstances prove favourable, and by this very change in their mode of life make their first step towards civilization. In this way a continual stream of Arabs has flowed into the civilized countries of Mesopotamia. On the Assyrian monuments are figures of Arabs riding on camels; evidently the Assyrians had carried on war against the Bedouins settled in their territory. At an early period the Tai Arabs were the neighbours of the Aramæans, and consequently all Arabs bear in Syriac the name of Tayóyé. The district between Mosul and Nisibis received the name Béth 'Arbáyé from its being occupied by Arabs. These Tai Arabs, whose original home was Central Arabia, are still settled partly near Nisibis and partly east of Mosul; but they have to some extent lost their old noble Bedouin manners. The wandering Arab tribe which at the present time is dominant in Mesopotamia is the Shammar; they have driven back the Aneze, the most powerful tribe of the

Syrian desert. It is only two or three generations ago that the Shammar came from Nejd; but they have already broken up into two great parties. The head of the one division is Ferhán, who has more or less completely submitted to the Turks, and has consequently obtained the title of pasha; to him adhere the Shammar tribes between Mosul and Baghdad, and those also to the east of the Tigris. The head of the tribes who roam over the greater part of Mesopotamia—pasturing their camels and sheep to the east of the Chaboras in the colder season and to the north in the hotter—is the chivalrous Fâris. These western tribes are totally independent of the Turkish Government, and have offered determined opposition to the attempts of the authorities at Dér to force them to a settled way of life; they still lay the peasants of Mesopotamia under contribution by exacting Khuwwe, "brother-money," or a portion of grain. The Shammar live in almost perpetual feud with their relations to the east, and especially with the Aneze on the Syrian bank of the Euphrates, the so-called Shamiye. Many other Bedouin tribes might here be mentioned; but it may be enough to name the Delem or the Euphrates as an example of a tribe just in process of becoming agricultural. In the northern parts of Mesopotamia there are a number of tribes of mingled Kurds and Arabs which have to a greater or less degree abandoned their tents for fixed habitations and the tillage of the ground; such are the Beraziye near Orfa, the Milliye between Orfa and Mardin, and the Kikiye nearer Mardin and also in the neighbourhood of Mosul. It is extremely hard to obtain trustworthy statistical information about the number of the Bedouins; the Shammar may have a total strength of some 3500 tents. In the difficult contests which it has to carry on with those independence-loving tribes, the Turkish Government acts in general on the principle *divide et impera*.

The Kurdish element only appears sporadically in the true Mesopotamian plain; but the Yezidis, who form the population of the Sinjar range, may be referred to this stock. He who encounters the uncanny figure of one of these people will hardly be able to restrain a slight shudder, especially if he remembers the graphic descriptions of the Yezidi robbers in Morier's *Ayeshah*. Of the old Aramæan peasantry there are no longer any important remains in the plain, the Aramæans having withdrawn farther into the Kurdish highlands, where, in spite of their wild Kurdish neighbours, they are more secure from exactions of every kind. The plain of the northern country of the two rivers was at one time richly cultivated, and owed its prosperity to this industrious people, who formerly played so distinguished a part as a connecting link between the Persians and the Roman empire and afterwards between the Western and the Arabian world, and whose highest culture was developed in this very region. Quite otherwise is it now. In the plain there are almost no remains of the common Aramæan tongue. Apart from the scattered areas in which Kurdish prevails, the ordinary language is a vulgar Arabic dialect; but both Kurdish and Aramæan (Syriac) have exercised an influence on the speech of the Arab peasant. Finally it must be mentioned that certain Turcoman hordes roam about the Mesopotamian territory.

In climate and in the character of its soil, as well as in its ethnographic history, Mesopotamia holds an intermediate position. In this aspect also we must maintain the division into two quite distinct zones. The southern half consists mainly of grey, dreary flats covered with selenite; and gypsum everywhere makes its appearance a little below the surface; bitumen is not unfrequent, and here and there it rises in petroleum wells. In the solid strata of gypsum and marl the rivers have carved out valleys, from a quarter to half a mile broad and from 40 to 50 or even 100 feet deep, which with their arable soil contrast with the barren surface of the more elevated desert (chól). Especially below Bális there are marl-hills capped with gypsum, and alluvial plains (so-called *hadyé*) of considerable extent

have been formed. The banks of the rivers are there lined with a luxuriant growth of tamarisks. Occasional swamps and small lagoons occur; and the marl shows a more or less marked efflorescence of salt. In this part of the country frost is rare even in winter; in summer the heat is of extraordinary intensity, and during the whole season from May to the close of October it is but slightly modified by the night-dews. During the sand storms which frequently blow from the West Arabian desert, the temperature may rise to 50° C. (122° Fahr.), and this same excess of heat will then prevail through seven degrees of latitude in the whole valley of the Euphrates and Tigris from the Persian Gulf to the foot of the mountains. For, considering the strong radiation which takes place over what is now the uniform surface of the Mesopotamian soil with its almost complete absence of evaporation, there is nothing to hinder this warm zone extending in summer to the upper half of the country. In winter, on the other hand, this latter region has quite a different climate. From the mild coasts of the Mediterranean the cold increases from west to east. In the spurs of the Taurus, consequently, the winter cold extends far to the south, and the influence of the snow-covered ridges spreads far into the Mesopotamian plain. Snow and ice are thus not unfrequent in the higher part of the plain, and the temperature may fall as low as -10° C. (14° Fahr.), especially if the cold north winds are blowing. That inland region too is cut off from the influence of the mild air of the Mediterranean by the coast ranges. For this reason the vegetation is of a less southern character than that of the Mediterranean countries in the same latitude. In the spring the green is soon parched out of existence. In this way the northern district of Mesopotamia combines strong contrasts, and is a connecting link between the mountain region of western Asia and the desert of Arabia. On the other hand the country to the south of Mesopotamia, or Irāk, has a warm climate, and towards the Persian Gulf indeed the heat reaches the greatest extremes.

In Upper Mesopotamia, strictly so called, agriculture has suffered an extraordinary decline; in spite of excellent soil, very little of the land is turned to account. In the western district the fertile red-brown humus of the Orfā plain, derived from the lime of Nimrud Dāgh, extends to about 12 miles south of Harran. With a greater rainfall, and an artificial distribution of the water such as existed in older times, agriculture would flourish. If spring rains are only moderately abundant, wheat and barley grow to a great height, and yield from thirty to forty fold. Rice is also grown in the richly watered hill-encircled district of Serūj and on the banks of the Khābūr. Next, millet and sesame are the chief crops,—the latter being grown for the sake of its oil, as the olive does not succeed in this region. The abundance of wheat may be estimated from the fact that during Layard's residence in Mosul a camel-load of 480 lb was worth four shillings. Durra (*Holcus Sorghum* and *H. bicolor*), lentils, pease, beans, and vetches are also grown, as well as cotton, safflower, hemp, and tobacco. *Medicago sativa* furnishes fodder for horses. Among the fruits the most noteworthy are the cucumbers, melons, and water-melons planted in great abundance on the banks of the smaller streams. The figs of the Sinjar mountains are celebrated for their exceptional sweetness. Timber trees are few; plane trees and white poplars are planted along the streams, and a kind of willow and a sumach flourish on the banks of the Euphrates. The palm-trees which appear on the banks of both the rivers farther south do not come so far north. On account of the hot dry summer the orange does not succeed. Of the great forest which existed (?) near Nisibis in the time of Trajan no trace remains; but the slopes both of the Masius mountains and of the Jebel 'Abd-el 'Aziz, as well as, more especially, those of the Sinjar range, are still covered with wood.

The wide treeless tracts of the low country of Mesopotamia are covered with the same steppe vegetation which prevails from Central Asia to Algeria, but there is an absence of a great many of the arborescent plants that grow in the rockier and more irregular plateaus of western Asia and especially of Persia. This comparative poverty and monotony of the flora is partly due to the surface being mainly composed of detritus, and partly to the cultivation of the country in remote antiquity having ousted the original vegetation and left behind it what is really only fallow ground untouched for thousands of years. Endless masses of tall weeds, belonging to a few species, cover the face of the country,—large *Cruciferae*, *Cynareae*, and *Umbelliferae* disputing the possession of the soil in company with extraordinary quantities of liquorice (*Glycyrrhiza glabra* and *chinata*) as well as *Lagonychium* and the white ears of the *Imperata*. In autumn the withered weeds are torn up by the wind and driven immense distances. Among the aromatic plants, which even Xenophon mentions in Mesopotamia, the first place belongs to the species of wormwood (*Artemisia*), which cover wide areas, and the second to *Labiatae*, such as species of thyme and *Salvia*, which, however, become rarer in the low country. With few exceptions there are none but cultivated trees, and these are confined to the irrigated districts on the Euphrates and the Shatt; a few willows, a *Fyrus*, tamarisks, a *Rhus*, a *Rubus*, on the banks of the rivers, and the willow-like *Populus euphratica*, which grows from Dzungaria to

Morocco, make up the list of the indigenous kinds. In the wide belt of swamp which lines the Shatt el-'Arab in the low country of Irāk Arabi there are boundless reaches of gigantic sedge inhabited by a rich fauna, especially of birds such as pelicans and flamingoes. From the south, or in other words from the true desert and oasis country of Arabia, the date-palm spreads up the valley to some little distance above Baghdad; and especially along the Shatt it yields rich crops of fruit, which are exported to India. With the exception of a few truffles, capers, liquorice, and such like, there are few wild food-plants. The cycle of vegetation begins in November. The first winter rains clothe the plain with verdure, and by the beginning of the year a number of bulbous plants are in bloom—*Anaryllidæ*, *Liliaceæ*, and *Colchicum*. The full summer development is reached in June; and by the end of August everything is burnt up.

The lion is said to roam as far as the Khābūr; but in any case it is at least much less frequent than in the time of the Assyrians, when the lion-hunt was a recognized form of sport. The wild ass too is very rare; but on the other hand wild swine, hyænas, jackals, cheetahs, and foxes are extremely abundant. Wolves are said to exist in the plain, and among others a variety of black wolf (*Canis Lycæon*). Particularly numerous in the steppe are the antelope species; and herds of gazelles are frequently met with. Beavers are said to have been observed on the Euphrates. Jerboas, moles, porcupines, and especially the common European rat, abound in the desert; bats are numerous; and the long-haired desert hare is also found. Among the domestic animals in this steppe country the camel holds the first place; and next come goats and sheep; but the Bedouin sheep is not the ordinary fat-tailed variety. The common buffalo is often kept by the Arabs and Turcomans on the Euphrates and the Tigris; and on the Euphrates we also find the Indian zebu, which is still more frequent in the districts farther to the south. Bird-life is very rare in the southern parts of the plain; though on the Euphrates there are vultures, owls, ravens, &c., as well as falcons (? *Finnunculus alaudarius*) which are trained to hunt. Among game-birds are some kinds of doves, francolins, partridges, wild ducks and geese, and in the steppe bustards. The ostrich seems almost to have disappeared. Large tortoises are numerous.

In conclusion it is necessary in supplement to the article IRAK to say something of the district of Babylonia, often (though wrongly) included under the name Mesopotamia. Here we have to do with a fundamentally different region, for it consists in the main of alluvial formations, a few scattered reaches of sand only now and then appearing in the level depression not filled up by the alluvium. The mass of solid matter which the rivers bring down and deposit is very considerable; it has been ascertained that the maximum proportion for the Euphrates in the month of January is $\frac{1}{3}$, and at other times $\frac{1}{4}$; for the Tigris the maximum is $\frac{1}{5}$. As regards the physical character of the alluvia, in the most northerly portion the soil is pebbly, the pebbles consisting almost solely of variously coloured flints and occasional small fragments of gypsum. This is succeeded by a continuous formation of clayey soil, in part argillaceous and argillo-calcareous, but covered with mould and sand, or the more tenacious clay of frequent inundations.

In general, the northern plains of the interior have a slight but well-defined southerly inclination with local depressions. The territory undulates in the central districts, and then sinks away into mere marshes and lakes. The clay, of a deep blue colour, abounds with marine shells, and shows a strong efflorescence of natron and sea-salt, the latter derived from the decomposition of vegetable matter. When the soil is parched up the appearance of the mirage (serāb) is very common. As extensive inundations in spring are caused by both the rivers, especially the Tigris, great alterations must have taken place in this part of the country in the course of thousands of years. It has been asserted that it former times the alluvial area at the mouth of the river increased one mile in the space of thirty years; and from this it has been assumed that about the 6th century B.C. the Persian Gulf must have stretched from 45 to 55 miles farther inland than at present. The actual rate of increase at the present time is about 72 feet per annum. For this reason we cannot decide much in regard to the former physical configuration of southern Babylonia; but it is at least certain that the Euphrates and the Tigris reached the sea as independent rivers. Ritter estimates that in the time of Alexander the Great the embouchures were still separated by a good day's journey; and, though they cannot now be traced, great alterations have probably taken place in the upper portions of the rivers as well as in the country near the mouths. Assyriologists tell us that more than thirty-five canals are known by name from the Babylonian period; but it is extremely difficult, or rather it has proved hitherto impossible, to identify them either with those actually existing or with those mentioned in classical authors, in the Babylonian Talmud, or in Arabian writers. To the west of the Euphrates was to be found the Pallacopas channel, and we still have the Hindiye channel in the same quarter. The country between the rivers more particularly was traversed by such secondary branches. Beginning

from the Euphrates we must mention the Saklawiye channel (Nahr Isā), the Nahr Melik, the Nahr Zemberāniye, and especially the Nahr-en-Nil, constructed by the famous Omayyad governor Hajjāj. Eastwards from the Tigris strikes the great Nahrwan channel; and right through the country of the two rivers runs the Shatt-el Hai from Kūt-el-Amāra, almost due south to the Euphrates, parallel with the Shatt-el-Kehr. Many of these have been silted up; from those, however, which are still maintained there is derived a considerable revenue, and by the restoration of many of the old channels, traces of which are met with at every step, the country might be again raised to that condition of high civilization which it enjoyed not only in antiquity but partly even in the time of the later caliphs. The classical writers are unanimous in their admiration of this country; and it is at least certain that nowhere else in the whole world was the principle of the application of canals to the exigencies of agriculture worked out so successfully. The most luxuriant vegetation was diffused over the whole country; and three crops were obtainable in the year. It is this alone which makes it intelligible how this region in the most remote antiquity attained a high civilization, and for centuries played, it may be said, one of the principal parts in the history of the world. In the matter of civilization, indeed, no country of the ancient world was its equal; a multitude of great cities once flourished within its borders. Even the Arabic writers are unanimous in regard to the extremely favourable influence which the character of the country exercised on the intellectual activity, spirit, and capacity of its inhabitants. We need not here discuss the question recently started as to whether the Biblical garden of Eden is to be sought in this locality, two canals of the Euphrates and Tigris being identified with the Gihon and Pison of Gen. ii.; but it is certain at least that this lower country of the two rivers might well pass in antiquity for the *ne plus ultra* of civilization, and exercised the most powerful political and intellectual influence on the surrounding regions. The question often raised as to whether the Semites were derived from this district may also be left untouched. From the Bible we know that an ancient name of the district was Shinar, though this has not hitherto been discovered in the cuneiform inscriptions. The name Kush is applied in the Bible to its oldest non-Semitic inhabitants. The northern half of the country was called Akkad, the southern Sumer. But it must not be forgotten that the rivers never formed ethnographic and political boundaries; and thus Sumer extended to the coast of the Persian Gulf and Akkad as far as the Lower Zab, the eastern affluent of the Tigris. As a less ancient designation of the whole country may be reckoned *mat Kaldā*, the country of the Chaldeans (Hebr., *eret Kasdīm*); originally Kaldā is said to have designated central Babylonia. Of still later date is the name derived from the capital, the country of Babel (*eret Bābel*), as an equivalent of which *mat Bābilā* appears in the cuneiform inscriptions (in the Darius lists *Babru*). From this was developed the Greek designation Babylonia, *Βαβυλωνία* (as early as Xenophon). That the country was densely peopled may be gathered from the fact that about 704 B.C. eighty-nine fortified towns and eight hundred and twenty smaller places in the Chaldean country were captured during one military expedition. Of separate districts of the country we may mention Karduniash, the district in the vicinity and especially to the north of Babylon; and southward by the sea-coast the important country of Bit Yakin, governed by kings of its own. At a later date we find on the coast and at the mouth of the Pallacopas canal the maritime town of Teredon, which is also mentioned by the classical writers. Besides Babylon and Borsippa, the larger cities were the double city of Sippar (Sefarvayim, 2 Kings xvii. 24, 31) and Akkad on the left bank of the Euphrates on the present Nahr Isā; Erech, *i.e.*, Warka, on the left bank of the Euphrates; Ur on the Pallacopas, not far from the place where the Shatt-el-Hai falls into the Tigris; Nippur, *i.e.*, Tell Niffer; Kutha (2 Kings xvii. 24), Kalne (Gen. x. 10); in the north, Opis at the junction of the Adhem (Physeus) with the Tigris. Huge mounds give evidence of the extent of these cities. A number of the canals were navigable, and at the same time, when the bridges were destroyed, they formed defensive moats against the incursion of enemies from the north. And the same purpose was served by the great wall (afterwards the Median Wall of the Greeks) which ran across the country from river to river between the points of their nearest approach.

During the period of Greek domination a Greek city, Seleucia, which afterwards attained great prosperity, was founded by Seleucus I. in an extremely favourable situation on the right bank of the Tigris. In the south of the country, too, there was a Greek seaport town first called Alexandria on the Tigris and afterwards Antiochia. After the conquest of Babylonia by the Parthians (130 B.C.) a small Arabian kingdom grew up in those parts called Characene or Mesene, after the town of Chare or Maisan. It was under Parthian and for a time under Roman supremacy. The city of Vologesia, founded by Vologeses to the south-west of Babylon, near Ullais, in the neighbourhood of the later Kūfa, was one of the capitals of the Parthian power. In the time of the Sasanids, too, as well as in that of the Parthians, the country of the lower

Euphrates and Tigris played a leading part; it formed in fact the main centre of the Persian kingdom. The city of Ctesiphon, founded by the Greeks on the east side of the Tigris opposite Seleucia, was the winter residence of the Parthian kings, and the imperial capital of the Sasanids. Under the name of Madāin (The Cities) it continued to flourish till the rise of Baghdad in the 9th century. The neighbourhood of Ctesiphon was called in the time of the Sasanids Sūristān, a translation of the Aramean designation Bēth-Arāmāyé, "country of the Syrians," for the land was mainly occupied by Arameans. By a notable substitution the Arabs afterwards gave the name Nabat, *i.e.*, Nabateans, to these Aramean peasantry, who, it may be added, were already found in these parts at the time of the Babylonian empire.

On the west side of the Tigris the Arab kingdom of Hira formed the bulwark of the Sasanid power. As the result mainly of the battle of Kadisiya (east of Hira) in 635 A.D., the whole of this wealthy country fell into the hands of the Moslems, and it soon constituted the centre of their power, especially when the Abbāsids, with true political insight, transferred thither the capital of the empire and founded Baghdad. The chief cities of the older Arabic period were Kūfa (in the neighbourhood of the earlier Hira to the south of ancient Babylon) and Basra (or BUSSORAH, *q.v.*) in the neighbourhood of the earlier Maisan. After these two cities the country was divided into the Sawād, "rich arable district," of Basra and that of Kūfa. Sawād was also employed as a name for the whole country; and more or less identical with this designation is the name Irāk still in use. Sometimes also the term Sawād-el-Irāk is employed; but at a later date the country is distinguished as Irāk Arabi (Arabian Irāk) from the Persian Irāk 'Ajemi to the east, the ancient Media. The Arabian geographer Yakūt makes the distinction that the country called Sawād reaches farther to the north (*viz.*, to the district of the Upper Zab).

Abulfeda gives the boundaries of Irāk as follows:—"In the west of the country lie El-Jezira and the desert, in the south the desert, the Persian Gulf, and Khuzistān, in the east the mountain country as far as Holwān (near the principal pass through the Zagrus range). Thence the boundary runs again towards Mesopotamia. Thus the greatest breadth of Irāk is in the north, and its narrow extremity is formed by the island 'Abbādān in the Shatt-el-'Arab (the united Euphrates and Tigris) to the south of Basra." From what has been said it appears that Irāk extended far beyond the country between Euphrates and Tigris. Abulfeda says clearly that Irāk lies on the Tigris as Egypt on the Nile; for according to this view the Tigris flows through the middle of the country. Irāk consequently lies between 30° and 34° 30' N. lat. and between 44° and 48° 30' E. long.; of its area it is impossible to form an estimate under such varying conditions. For some details see BAGHDAD.

From the union of the rivers upwards, in the case of the Euphrates as far as 26° N. lat. (above Rakka), in that of the Tigris to 35° N. lat., the valleys are known as *ez-zāb*, the depression, in opposition to the more elevated desert-plateau. It has been surmised that in this name is to be recognized the Dūra of the Old Testament (Daniel iii. 1).

Very little of the ancient condition of the country has been preserved; and there are now but few remains of ancient buildings, scarcity of stone having all along led to the use of bricks. Irāk has played its part. It is only by the expenditure of immense sums, far beyond the financial capacity of the Turkish Government, that the ancient canals could be restored and the swamps formed by them drained. The whole land falls into two unequal portions,—an extensive dry steppe with at any rate a healthy desert climate, and an unhealthy region of swamps. There is a good deal more agriculture along the Euphrates than along the Tigris; but swamps, with almost impenetrable reed thickets, composed of a kind of *Agrostis*, are at the same time much more extensive. The slightly more elevated districts are the special habitat of the date palm, which by itself forms dense groves bordering the banks particularly on the lower Euphrates, for a distance of several days' journey. This part of the country consequently has a somewhat monotonous but in its own way imposing aspect. A luxuriant vegetation of water-plants is to be found in the swamps, which are the haunt of numerous wild beasts—wild swine, lions, different kinds of aquatic animals and birds. The swamps are inhabited by a wild race of men, dark of hue, with many negroes amongst them. They live in reed huts, and cultivate rice; and they weave straw mats. In the main they keep pretty free both of the Turkish Government and of the semi-Bedouins and Bedouins of Irāk. The Khazael especially who dwell to the south of ancient Babylon often give the Government trouble, through their passion for independence. Less turbulent are the Bedouins in the interior of the country—the Zobeid, the Afajj, and the Abu Muhammed; but on the other hand the Beni Lām (7500 tents strong), who occupy the great tract of country east of the Tigris to the south of Baghdad, have often been a source of great annoyance to the pashas of that city. A still more difficult task is the management of the Shammar, who come and pitch their tents to the south-east of Baghdad; and also the Muntefich on the southern Euphrates put the whole ad-