which run across its medial ridge; the main Syrian streams are those which follow those slopes between the chains, thus running either north or south for most of their courses, and only finding their way to the' western sea by making sharp elbows at the last. Syrian orography, therefore, is simple, being composed of nothing but these two parallel systems. That on the west, which rises behind the Mediterranean littoral, springs from Taurus in the well-afforested Mt Amanus (Giaour Dagh), and is continued by Jebel Bereket and J. Akhma, ^>ver the northern end of which runs a single easy pass (Beilan) to the north-east angle of the Levant coast (Alexandretta), while at the southern end is a gap through which the Orontes turns sharply to the sea. South of this, with J. Akra (the Bald Mountain, anc. *Gasius)* begins a further section, rounded and grassy, called J. Ansariya, which presently springs up into a high chain of Jurassic limestone with basaltic intrusions, whose peaks rise. to. ιo,ooo ft. and whose passes do not fall under 6ooo ft. Here it is called J. al-Gharbi or Libnan (see Lebanon). Thereafter it broadens out and becomes the high table-land of Galilee, Samaria and Judaea, and gradually sinks into the plateau of north Sinai.

The eastern system springs from the Tauric offshoot (Kurd Dagh, &c.), which shuts off the Commagenian basins, and as the triple chain of J. al Ala,.it defines the Orontes valley on the east. Like its western parallel it springs up presently into a higher chain and is known as J. es-Sharld,.or Anti-Libanus, which culminates in a knot on the south, to which is given the name J. es-Sheikh, or Hermon (8ooo ft.). Thereafter it loses much of its distinctive character, but may be traced southwards in J. IJauran and the Moabite hills to Horeb and the Midianite Mountains of the Hebrews, which run into Arabia.

*Hydrography.—*Between these systems run the main rivers; and these naturally rise near the medial ridge, in the lacustrine district of el-Buka'a, or Coelesyria, and flow in opposite directions. That following the northern slope is the Nahr al-rAsi (see Orontes) into which, when it has turned sharply towards the sea, flow some tributary streams from the Commagenian divide on the north. The main stream flowing south is the Jordan, which fails to reach the sea, being absorbed into the great rift of the Ghor: but a smaller stream, the North Litani (called Kasimiya in its lower course), whose source lies very near that of Jordan, repeats the course of the Orontes on a minor scale and gets through the western mountain system to the sea near Sur (Tyre). Outside the basins of these rivers and their bordering mountain systems there only remain to be considered the following: (ι) The Mediterranean littoral strip (the ancient Phoenicia), with a few torrent-like streams. (2) The shut-off district in the extreme north, ancient Commagene, which consists of two basins divided by a low ridge, running from south to north. These basins belong, one to the Cilician river-system, and the other to the Euphratean. In the first lay the ancient Germanicia (mod. Marash); in the second the ancient Samosata (mod. Samsat), whose importance has. now passed to Adiaman. The southern boundary of both basins is a low chain which leaves the Euphrates near the mouth of the Sajur tributary, and runs west towards Mt Amanus, to which it is linked by a sill whereon stood the ancient fortified palace of Samal (Sinjerli; see Hittites). (3) A succession of oases lying east of the eastern mountain system on the edge of the steppe, and fed by short local streams. Of these the most important are, from north to south, (a) the Saltpan of Jebeil, fed by the North al-Dahab; (δ) the oases of Kinnesrin and Aleppo, fed by the North Kuwaik; and (c) that of Sham or Damascus, fed by streams from Hermon, of which the Barada (Abana) and the Awaj (Pharpar) are the chief.

Since these streams had in no case originally easy access to the sea, we naturally find lakes on their course, and several of them terminate in tracts of more or less permanent inundation. Those which occur on the course of the principal rivers are described under Orontes and Jordan. The ethers, which terminate streams, are the Bahr el-Ateiba, which receives the waters of Damascus; the Mat, into which the Kuwaik flows below Kinnesrin; and the Ak Deniz, or Bahrat Antakia, the ancient Lake of Antioch, which collects the waters of the Kara Su and Afrin, the southward from the watershed which shuts off Commagene. The last-named lake has now been almost entirely dried up by the cutting of a channel, which conducts its feeders directly to the Orontes.

*Geology.*—Geologically, Syria belongs to two distinct regions of the earth’s crust, the northern and smaller portion lying within the great belt *of* folding of southern Europe and central Asia, and the southern and larger portion belonging to the Indo-African area, which, . though often faulted, is usually free from crumpling. According to Μ. Blanckenhorn the boundary between the two regions runs from the Bay of Jebele along the Afrin River to Aintab, and thence to the Euphrates above Birejik.. ln the southern region which is by far the better known, the oldest rocks are granites, crystalline schists and other rocks of Archean aspect. These are overlaid by conglomerates, tuffs, sandstones and arkoses, which perhaps do not all belong to the same period. In Palestine a lime­stone containing Carboniferous fossils is found in the midst of the sandstone series, and here the sandstone is immediately succeeded by limestones with Hippurites and other fossils belonging to the Upper Cretaceous. . Farther north, however, Jurassic beds are met with, but of very liπiited extent. Cretaceous limestones cover the greater part of Palestine and rocks of the same period form Mt Lebanon, the Casius Mons, &c., farther north. Nummulitic lime- stone (Eocene) overlies, the Cretaceous in Philistia, and north of Lebanon Eocene and Miocene deposits cover the greater part of the country. The Pliocene deposits are not very widely spread and are generally of fresh-water origin excepting near the coast, but marine Pliocene beds have been found at el .Forklus in the Palmyra desert. Jebel Hauran, east of the Jordan, is capped by a great sheet of basalt; and many other basalt flows are found, especially in the country north of Lebanon. They are mostly true felspar basalts, but a few contain nepheline in addition to the felspar. In most cases the eruptions appear to be of Pliocene or later date, but in the extreme north some of.the basalt seems to belong to the Miocene period. There is historic evidence of mud eruptions in some of the volcanic areas. The most striking feature in the structure of Syria is the existence of long *Graben,* or narrow depressions formed by faulting. The best known of these Graben is that of the Jordan, but the upper part of the Orontes lies in a similar depression, which is, indeed, very probably the continuation of the Jordan-Araba trough. The faulting which formed the depressions is certainly later than the deposition of the Cretaceous beds and probably belongs to the later portion of the Tertiary era. Little is known of the part of Syria which lies within the folded belt, and includes the Amanus and Kurd mountains. The rocks do not appear to differ very markedly from those farther south, but the Devonian is believed to be represented. The folds are approximately parallel to those of the Taurus, and geologically these mountains may be said to belong to that range.@@1

*Climate.—*Within historic times the climate, and with it the pro- ductivity pf the country, cannot have greatly changed; at most the precipitation may have been greater, the area under wood having been more extensive. Except for Jerusalem, we have hardly any accurate meteorological observations; there the mean annual temperature is about 63o F. ;in Beirut it is about 68o. The rainfall in Jerusalem is 36∙22 in., in Beirut 21∙66. The heat at Damascus and Aleppo is great, the cooling winds being kept off by the moun­tains. Frost and snow are occasionally experienced among the mountains and on the inland plateaus, but never along the coast. Even the steppe exhibits great contrasts of temperature; there the rainfall is slight and the air exceedingly exhilarating and healthy. The sky is continuously cloudless from the beginning of May till about the end of October; during the summer months the nights as a rule are dewy, except in the desert. Rain is brought by the west wind; the north-west wind, which blows often, moderates the heat. On the other hand, an ozoneless east wind (sirocco) is occasionally experienced—especially during the second half of May and before the beginning of the rainy season—which has a prejudicial influence on both animal and vegetable life. On the whole the climate of Syria—if the Jordan valley and the moister districts are excepted— is not unhealthy, though intermittent fevers are not uncommon in some places.

The general character of the country, resultant on these conditions, varies according to elevation and latitude. Owing to the high barrier which shuts off almost all Syria from the sea, and precipitates vapours mainly on the western slope, little of the land is highly productive without irrigation, except the narrow littoral strip which was the ancient Phoenicia, and the small deltas, such as that of Latakia (Laodicea). .Palestine, being less shut in and enjoying a comparatively large general rainfall, would be still a land “ flowing with milk and honey ” had its forests not been destroyed, and the terracing, which us⅛ to hold up soil on the highlands, been main- tained. As it is, it has very fertile patches of lowland, such as the plains of Esdraelon and Jaffa; and the high levels, largely composed of disintegrated igneous rock, west of Jordan, over which the sea- wind carries the rains, offer excellent com-land. In the extreme south Palestine begins to be affected by the Arabian dryness.. For the rest, Syria needs irrigation ; and since neither of its larger rivers, Orontes or Jordan, flowing as these do in deep beds, is of much use for this purpose, all Mid-Syria, except the lacustrine oases, is a region mainly occupied by pastures, and yielding only thin cereal crops. Commagene, where not rocky, and the district lying along the southward drains from its divide (anc. *Gyrrhesticaλ* is in better case, enjoying perennial streams which can be utilized, and the fringe of the Tauric rainfall. The latter dies away over the plains east and south-east of Aleppo, making them afford good spring Casture, which has attracted the nomads from farther south: but elow the latitude of Rakka-Homs thin steppe begins, and quickly degenerates into sheer desert broken only by a chain of poor oases, south of a low ridge running from Anti-Lebanon to Euphrates. Of these the principal are Kanetein and Tadmor (Palmyra), through which passes the trade from Damascus to the east, ln ancient times,

@@@1 See O. Fraas, *Aus dem Orient,* pt. ii. (Stuttgart, 1878) ; C. Diener, *Libanon* (Vienna, 1886); M. Blanckenhorn, *Beiträge zur Geologie Syriens* (Cassel, 1890, &c.), and *Grundzüge der Geologie und physi­kalischen Geographie von Nord-Syrien* (Berlin, 1891). See also the references under Palestine. A summary by M. Blanckenhorn will be found in *Monatsschr. f. wirtschafte Erschliessung Palästinas,* pp. 289-301 (Berlin, 1904)·