

## HINBOOSTAN.

are reached. Here are found the loftiest elevations on the surface of the globe. The number of peaks of the Himalayas which exceed 20,000 feet in hight are very numerous. The most lofty, Mt. Everest, probably the highest point of the earth's surface, has an elevation of 29,000 feet; Mt. Kunchinjinga an elevation of 28,156 feet. The greater peaks are not generally found on a continuous ridge, but grouped together in masses which are separated from each other by deep depressions, through which flow rapid streams. The East Ghauts commence in the south, about latitude 11° 20' north and, pursuing a north-east direction across the country, extend to the banks of the Kistnah, in latitude 16° north, separating the Carnatic from the table-land of the Deccan. The utmost hight of this range does not exceed 3,000 feet. The West Ghauts extend from Cape Comorin to the river Taptee, about latitude 21° north, extending through about 13° of latitude, and running parallel to the west coast, from which they are seldom more than 70 miles, and generally only about 40 miles distant. Their highest elevations reach to from 5,000 to 6,000 feet above sea-level. An offset of this range, however, stretching north-east, has an elevation of 7,364 feet. This summit, called Mount Permaul, is north-west from Dindigul, in the southern Carnatic, and it is believed that there are higher elevations farther west. The Vindhyan Mountains run east and west across the central part of India, constituting a base to the triangle, of which the East and West Ghauts form the other two sides and complete the boundary of what is called the tableland of the peninsula. The greatest hight of the Vindhyan

Mountains, however, is not supposed to exceed 3,000 feet.

The surface of the Deccan is between 3,000 and 4,000 feet above the sea, and is a collection of plains, interspersed with ridges of rock and insulated flat-topped hills, which are numerous, especially in its north-east parts. These solitary and almost inaccessible hights rise abruptly from the plains, with all but perpendicular sides, which can only be scaled by steps cut in the rock, or by dangerous and winding paths. Many are fortified, and have been strongholds from remote antiquity. South of the Deccan is the table-land of Mysore, 7,000 feet above the sea, surrounded by the Nilgherry or Blue Mountains and their branches, which rise 3,000 feet higher.

The sea-coasts on the two sides of this part of the peninsula are essentially different; that of Malabar, on the west side, is rocky, but in many parts well cultivated, and its mountains, covered with forests, form a continuous wall of very simple structure, 510 miles long and rather more than 5,000 feet high. On the coast of Coromandel the mountains are bare, lower, frequently interrupted, and the wide maritime plains are, for the most part, parched.

Along the whole of the southern face of the Himalaya, from the mouth of the Indus to that of the Brahmapootra, extends a vast, almost unbroken plain, which is prolonged southward to the Bay of Bengal, taking in the delta of the Ganges, on the one hand, and on the other following the course of the Indus through the Punjaub and Scinde to the Indian Ocean. The whole area thus covered is estimated at about five hundred thousand square miles. The highest portion of this plain is that between the rivers Sutlej and Jumna, and its elevation along the foot of the mountains is there probably about 1,200 feet above sea-level. The plain of Hindoostan comprises the extensive valleys of the Ganges and Indus, and the tract of the great Indian Desert. The lower portion of the plain of the Ganges is annually submerged by the inundation of that

The Great Indian Desert extends from the south-east confines of the Punjaub to the Runn, a distance of about 500 miles, and is connected on the north-east with the high country which separates the plain of the Ganges from that of the Indus. It stretches in a direction parallel to the latter river, but divided from it by a fertile tract of land from 10 to 15 miles in width. It contains several large oases, of which considerable portions are under cultivation. The southern part of this desert embraces nearly the whole of the delta of the Indus, across which river it is continuous with the desert of Beloochistan, and with that wide band of sandy and sterile regions stretching from central Africa north-east over the whole center of the Asiatic continent.

Rivers.—The rivers of Hindoostan, like its mountains, are on the most magnificent scale. The principal are the Indus, Ganges and Brahmapootra. The Indus, which forms the western boundary of Hindoostan proper, after having passed the Himalaya, flows in a south-west direction. Its sources lie in Tibet, between latitudes 31° and 32° north. Having traversed the Punjaub and Scinde, comprising a course of about 1,600 miles, it falls, by several mouths, into the Indian Ocean. Its stream is foul and muddy, and so full of shoals and shifting sands that it can only be navigated with safety by flat-bottomed boats; with these it is navigable for about 1,200 miles from the sea. It is said to discharge nearly as much water as the Mississippi and four times more than the Ganges. The Ganges, though not the largest, is the most important of the Indian rivers, from the fertility it diffuses around it and the facilities it affords for internal communication. It rises about latitude 31° north, longitude 79° east, and after pursuing a south-east course of about 1,400 miles, enters, by numerous mouths, into the Bay of Bengal. It is held in high veneration by the Hindoos, who consider its waters so sacred that to swear upon them constitutes their most binding oath. The Brahmapootra exceeds the Ganges in size, and probably in the length of its course. It rises in Tibet, at the eastern extremity of the Himalaya Mountains. Here the Zaluka and Zaluding unite to form the Lohit, which, after emerging from the mountain pass in a south-west direction, assumes the name of Brahmapootra. Its total length is about 900 miles, and it falls into the Bay of

Bengal in about latitude 22° 50′ north, longitude 90° 45′ east, in conjunction with the largest branch of the Ganges. For the last 60 miles of its course it has a breadth of from four to five miles, and is studded with islands. Among the other rivers of note in Hindoostan are—the Jumna, Chumbul, Sone, Gunduck, Goggra, Teesta, etc., tributary to the Ganges; the five rivers of the Punjaub—the Sutlej, Bees, Ravee, Chenab and Jailum, affluents of the Indus; and in Peninsular Indiathe Nerbudda and Taptee, flowing westward, and the Kistnah or Krishna, Godavery and Mahanuddy, entering the sea on its eastern side.

Lakes, Morasses, etc.—In remarkable contrast to its mountains and rivers are the lakes of Hindoostan; the latter being few in number, shallow and comparatively small in size. Among the largest are the Chilka and Colair lakes, both on the eastern shore of the peninsula. The former, a salt-water lake, separates the five northern circars, toward the sea, from the district of Cuttack. It is about 35 miles in length and eight miles in average breadth, its general depth being four and one-half feet. It abounds in fish, and large quantities of salt are manufactured on its banks. The Colair, a fresh-water lake, is situated between the Godavery and the Krishna, about five miles east from Elloor. In the dry season is about 25 miles in length and about 10 miles in breadth at its widest part. In the rainy season it greatly exceeds these limits. It contains numerous islands, which disappear as the lake swells and reappear as the floods subside. On a failure of the periodical rains it dries up altogether. To make up, however, for the want of natural reservoirs, the whole surface of India is more or less interspersed with tanks or artificial collections of water made for the purpose of irrigation. Some of these are of such considerable size as almost to merit the name of lakes. On the west side of Hindoostan is a remarkable tract of morass, called the Runn, lying between the province of Cutch and the south-east parts of Scinde, and having communication with the Gulf of Cutch. It is about 150 miles in length, and in greatest breadth about 60 miles, its total superfices amounting, at different periods, to between five thousand and eight thousand square miles. Several considerable rivers disembogue

Coasts, Gulfs, etc.—The coast-line of Hindoostan, having an extent of nearly 3,100 miles, is particularly deficient in islands and inlets; of the latter, two only are of much size the gulfs of Cutch and Cambay, both on the western side. Along all the west coast, Bombay, Cochin and a few less important localities, are the only ones which present any good accommodations for shipping; and on the east coast, from Cape Comorin to Bengal, there is not a single good harbor.

Climate, etc.—From the vast extent of Hindoostan, stretching, as it does, through no fewer than 27° of latitude, its climate and productions, particularly the former, by position and local influences, can be here spoken of but cursorily and without detail. Generally speaking, however, Hindoostan has three seasons—the hot, wet and cold. The first commences about the middle of March and continues for three months. The heat is, for the most part, intense, and in some places so excessive, especially on the Coromandel coast, as to destroy vegetation, the thermometer ranging, in the sun, from 100° to 110°, and rising as high even as 120° Fahr. The wet season also occurs during the south-west monsoon. The rains are ushered in with a dreadful commotion of the elements lightning, thunder and tempest; and the rain which it brings, though falling for some time at intervals only, gradually becomes a continuous deluge. These rains, however, though excessive, are highly beneficial, refreshing the earth, invigorating vegetation and cooling and purifying the atmosphere. The north-east monsoon blows during the winter months, and the south-west during the rest of the year; but both are subject to various modifications, according to local circumstances, particularly the direction of mountain ranges. In the cold season fogs and dews are common, and the degree of cold is so great, in some places, as to render fires necessary.

Vegetable Products.—The forests of Hindoostan contain an immense variety of large trees, little known in Europe, but capable of yielding valuable timber, and distinguished by their fragrance, luxuriant growth or adaptation for manufactures. Teak of the first quality grows on the West Ghauts. Other forest trees, characteristic of Indian scenery, are—the banian, sappan, saul (shorea robusta), sissoo (dalbergia sissoo), etc., with which are seen the oak, cypress, poplar, etc. Large and beautiful flowering shrubs are in great variety. Forests of bamboo are numerous. Extensive tracts of the country are covered with dense jungles, the resorts of formidable wild animals; mangroves cover the swamps at the mouths of the rivers; and the whole of that wide tract termed the Sunderbunds, at the united delta of the Ganges and Brahmapootra, is a rank forest, inhabited by tigers, deer and elephants, and the rivers traversing which are, in many parts, rendered impassable by ships on account of the obstacles to which its thick vegetation gives rise.

The principal vegetable productions of Hindoostan are-rice, maize, wheat, barley, cotton, indigo, sugar-cane, opium, tobacco, ginger, saffron, cardamoms, pepper, cocoa, areca and other palms yielding nuts, which are extensively consumed by the native population, anise, silk, various dyes, flax, hemp, etc. The principal indigenous fruits are—the mango, the finest of all the Indian fruits, pisang or plantain, pomegranate, citron, date, almond, grape, pineapple and tamarind. In the northern provinces, apples, pears, plums, apricots and other European fruits abound. Oranges and lemons are also to be met with, but are of a greatly inferior quality.

The opium-poppy is cultivated to supply opium for foreign exportation, and is supplied by the cultivators, at fixed rates, to the Anglo-Indian government, to which it continues to yield a large revenue, being almost entirely exported by the British to the markets of China and the Indian Archipelago. Indigo is raised in great quantities in the lower plain of the Ganges, and it forms one of the most profitable of Indian crops. Cotton, of several kinds, is produced, chiefly on the table-land of the Deccan. Benzoin, camphor, sarsaparilla and many other

drugs are indigenous.

Minerals.—The minerals of this vast territory are as various as its other products. The Himalayan Mountains abound in iron, copper and lead; the mines have, however, been only superficially worked. Deposits of coal stretch across India from east to west; from Assam and Sylhet into Burdwan, where some coal mines are wrought for the supply of Calcutta; and along the course of the Nerbudda, as well as in the western district of Cutch. Agates and carnelians abound throughout central India; and at Surat and other places on the west side of the peninsula, carnelians are cut and wrought with great ability by native artists. Nitre and nitrate of soda effloresce in great quantities on the soil in different parts of Hindoostan; and all, or nearly all, the supply of those minerals to Great Britian is now derived from India. Gold is procured by washing the sand of some rivers, and iron is in many parts abundant, but few mines of any metals exist. Diamonds are found at Panna, in Bundelcund, the mines of which, under the name of Panassa, are mentioned by Pliny. They are also found in the Deccan, but few are now produced. The diamond mines of Golconda are now exhausted; but the famous Koh-inor (Mountain of Light), in the possession of the British crown, was found in this locality. A species of carbonate of lime, termed hauhar, and porcelain clays, are plentiful, as are marbles of various colors. Alum is obtained in Cutch in considerable quantities.

Animals.—The elephant, tiger, leopard, panther, hyena, wild boar and ass, deer, bears, jackals, foxes, marmots, the ourang-outang, and numerous other kind of apes, are natives of Hindoostan. Lions are found in the north, but they are not of the same species as the lion of Africa. The elephant, buffalo, dromedary, horse and ass have been domesticated; the first named has, from time immemorial, formed an important appendage to the retinue of Indian princes, and the right of property in wild elephants was claimed by them as a royal privilege. The mahratta horse is a small and active animal, but ungainly, and Hindoostan has never been particularly famous for its breed of horses. The wild ass is a native of the desert. Troops of pariah dogs infest the cities and towns of Hindoostan. In the lower forms of animated life Hindoostan equally abounds as in the higher. Alligators and gavials are abundant in the tanks and rivers, and some of the most formid-

able serpents known inhabit this region.

People, etc .- The Hindoos are not the aboriginal inhabitants of India; but, having arrived from the north-west, they first occupied that portion of the country to the north of the Nerbudda, called, emphatically, Hindoostan; and subsequently crossed the Nerbudda into the Deccan or "South," where they dispossessed the natives, as before. The native tribes, however, were by no means exterminated; and, under the various denominations of Bheels, Coolies, Catties, Coles, Gonds, etc., they still exist in the peninsula, to the number, it is computed, at the least, of two or three millions. They are mostly of small, active frame, dark colored, and with a peculiarly quick and restless eye; uncivilized, or owning only a few importa-tions of Hindoo superstition or civilization. They have little clothing, and few arms beyond bows and arrows; their ordinary food consists of wild berries and game; they have no repugnance to killing or eating oxen; and they bury their dead instead of burning them. The aboriginal tribes chiefly inhabit the fastnesses of Gundwana, the Vindhya and Sautpoora mountain ranges, and their offsets and continuations, as far east as the hills of Bhaugulpoor (Bengal); they are also to be found in the eastern frontiers of Bengal, and, in considerable numbers, in Candeish, Goojerat and along the West Ghautz.

Although commonly darker in color than the rest of the nations composing the Caucasian race, the Hindoos are held to belong to this great division of mankind. They are wellformed, and, in some parts of India, as in the Deccan and the upper plain of the Ganges, they are even robust, energetic and hardy; but the chief bodily characteristic of the Hindoos is extreme suppleness and flexibility of the animal fiber, rendering them the best runners, climbers, leapers and wrestlers in Asia, though incapable of maintaining exertion or resisting fatigue for any lengthened period. The face of the Hindoo is oval; the eyes are uniformly dark-brown, with a tinge of yellow in the white; and the hair as constantly long, black and straight. The upper classes, especially in Hindoostan proper, are nearly as light in color as the natives of south and central Europe, and they are also far more handsome and taller than the lower classes. In proportion as we proceed toward the southern extremity of the peninsula, the hue of the skin is observed to darken, until, in the lower castes, it assumes almost the blackness of the negro. Subtlety and shrewdness are the most conspicuous mental characteristics of the Hindoos, and they have been properly described as "the acutest buyers and sellers in the world." In their manners they are mild and retiring.

Arts and Manufactures.- In a few arts and manufactures—such as weaving, dyeing, carving, stone-cutting, architecture and sculpture of certain kinds and the fabrication of some metallic articles—the Hindoos have undoubtedly excelled. The cotton, muslin and silk fabrics, the carpets and the shawls of India, have deserved celebrity; and embroidery is an art in which the Mohammedans of Decca display extraordinary skill. They embroider Cashmere shawls and scarfs,

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