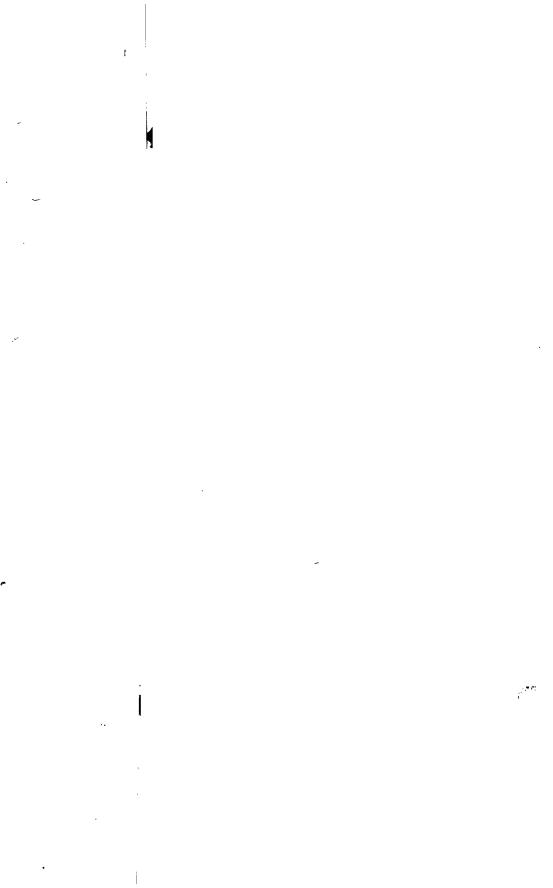
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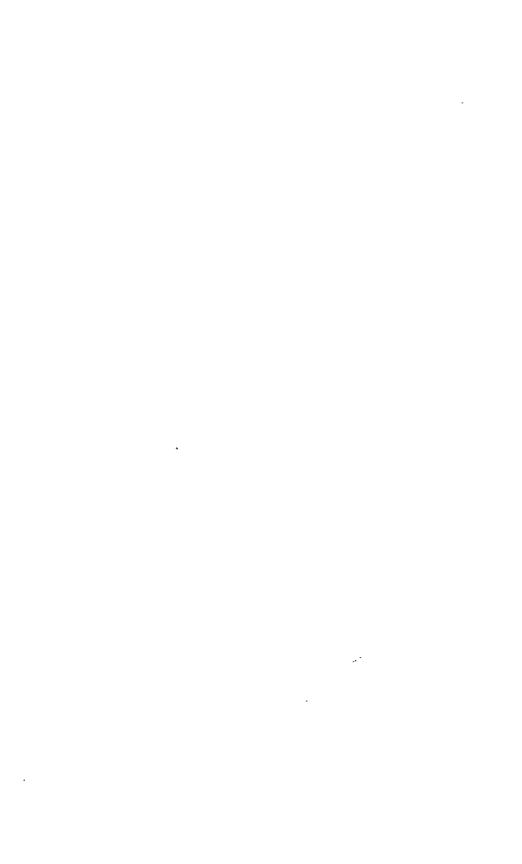
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# PREFACE.

I CANNOT acknowledge too fully my obligations to the Chittagong Survey and Settlement Report (1900) by Sir Charles Allen, much of which has been reproduced in this volume. I am also much indebted to Mr. H. Luson, i.c.s., Commissioner of the Chittagong Division, for revising the proofs and for many valuable suggestions.

L. S. S. O'M.



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# GAZETTEER

OF THE

# CHITTAGONG DISTRICT.

# CHAPTER I.

# PHYSICAL ASPECTS.

The district of Chittagong, the most southerly district of General the Province of Eastern Bengal and Assam, is situated between TION.

20° 35' and 22° 59' north latitude and 91° 27' and 92° 22' east longitude. It comprises an area, according to the latest survey, of 2,492 square miles, and contains a population, as ascertained at the census of 1901, of 1,353,250 souls. The chief town, which is also the principal civil station as well as the administrative headquarters of the Commissioner of the Division, is Chittagong, situated on the right bank of the Karnaphuli river, about 10 miles from its mouth, in 22° 21' north latitude and 91° 50' east longitude.

The origin of the name Chittagong is doubtful. The Origin Buddhist version is that it is a corruption of Chait-kyaung or of name. Chaitya-grām, i.e., the land of chaityas or Buddhist monuments. Another account is that the Hindu name of Chittagong was originally Chattala, and that the Muhammadans changed it to Chātigāon with reference to the chāti or earthen lamp which the saint Pir Badar lit to drive away the evil spirits infesting the place. According to Burmese tradition, one of the kings of Arakan having invaded the country in the ninth century A.D. and erected a pillar at Chittagong, the latter took its name Tsit-tagung from a remark of the conqueror "To make war is improper." Bernouilli, in the Description historique et géographique de l' Inde (1786), derives the name from the Arabic shat or delta (which he translates as the end or extremity), and Ganga the Ganges. explaining that it was a name given by the Arabs, meaning the city at the mouth of the Ganges. Sir William Jones, writing

in 1786, says that "the province of Chatigan (vulgarly Chittagong) is so called, I believe, from the chatag, which is the most beautiful little bird I ever saw." The name is more probably a form of the Sanskrit Chaturgrāma or the four villages, and it may be added that such a derivation is consonant with the present spelling of the name in the vernacular, which is Chattargrām.\*

Boundaries. The district is bounded on the west by the Bay of Bengal; on the north and north-west by the Fenny river, which divides it from the districts of Noākhāli and Tippera; on the east by the Chittagong and Arakan Hill Tracts; and on the south by the Akyab district of Burma, from which it is separated by the Nāf estuary. In shape, it resembles an acute-angled triangle wedged in between the Bay of Bengal on the west and the hills of the Chittagong and Arakan Hill Tracts on the east, its base resting on the river Fenny and its apex terminating in the promontory of Teknāf. Its breadth along the northern boundary is 26 miles, while it is only 4 miles at its southern extremity.

General configura-

The district consists of a long narrow strip of coast, valleys, and low ranges of hills, running approximately from N. N. W. to S. S. E. and lying between the Bay of Bengal and the Chittagong and Northern Arakan Hill Tracts. Its length is 166 miles from Rāmgarh on the Fenny river to St. Martin's island near Teknāf, and its average breadth is about 15 miles. The low ranges of hills run almost parallel with each other and with the coast-line, but towards the north and south they spread out farther apart forming long valleys, which seem to have been the result of erosion from water running into the rivers which fall into the Bay The most important of these rivers are the Karnaof Bengal. phuli, on which the town of Chittagong is situated, the Sangu south of Chittagong, and the Mātāmuhari, which empties itself into the Bay of Bengal still farther to the south. On its approach to the sea, the last river divides into many mouths, which pass through a deltaic tract consisting of mangrove swamps with cultivation in some portions.

Opposite this tract, and separated from it by narrow channels navigable by small craft, are the islands of Kutubdiā (about 13 miles long and 2 to 3 miles broad), Matarbāri (9 miles long and 3 to 4 miles broad), Maiskhāl (16 to 17 miles long and 7 or 8 miles broad), and other smaller islands. The central and eastern portions of Maiskhāl are high, one hill being 288 feet above sea-level, but elsewhere, it is low-lying like the other islands. These low tracts, as well as most of the mainland

<sup>•</sup> See also article on Chittagong in Hobson-Jobson, by Yule and Burnell.

opposite them, are generally protected by embankments, without which cultivation would be impossible.

The central part of the district is a wide plain of rich soil Natural built up by the silt of the Karnaphuli and Halda rivers, which divisions, come down from the Lushai hills in the north, and of the Sangu from the Shendu hills in the south. The valley of the Halda extends northward and the valley of the Dolo southward from this tract, while outside the westernmost range of hills an alluvial belt of land lies along the sea coast. The southern portion of the district is walled off from the central plain by the broken ranges and spurs of the Lama hills, but the general appearance is the same, broad and well-cultivated valleys, thickly studded with villages, gardens and tanks, alternating with low ranges of hills, which for the most part run parallel to the coast. and are covered with an evergreen tropical forest. of the Matamuhari river towards the south is intersected by numerous large tidal creeks opposite the islands of Maiskhāl and Kutubdiā, and in vegetation and general appearance bears a great resemblance to the Gangetic Sundarbans. Here new land is constantly forming, which soon becomes covered with mangrovescrub and palms. Large areas are under natural jungle, but cultivation is steadily extending.

The prominent characteristic of the tract of country lying to HILL the north-east of the Bay of Bengal is a succession of low ranges SYSTEM. of hills, running in a south-easterly direction parallel with each Hill ranges. other and with the coast line. The Chittagong district comprises a section of the three most westerly of these ranges and of four valleys intersected by them. The first of the ranges, which contains the Maiskhāl, Cox's Bazar and Teknāf hills, rises almost from the sea at the northern extremity of Maiskhal island, of which it forms the backbone. After traversing the centre of this island, it reappears at Cox's Bazar on the east of the Maiskhāl channel, and forms precipitous cliffs along the whole length of the coast until it terminates in the promontory of Teknaf. The central range forms the Sitakund hills in the north of the district, and proceeding southwards is named successively the Diyang, Bānskhāli and Garjaniā range. This range traverses the district from end to end, and is the most important of the three. But little of the eastern range is in the Chittagong district. Entering the district a few miles north of the Karnaphuli river, it forms the Patiyā hills between the Karnaphuli and Sangu rivers, and then disappears again into the Hill Tracts.

It will thus be seen that the hills form four long valleys. Of valleys. these the most westerly, i.e., that to the west of the Maiskhāl.

Cox's Bazar and Teknāf range, is entirely under sea-level, with the exceptions of Kutubdiā and Matarbāri islands, the western portion of Maiskhāl island, and a narrow strip of littoral in Cox's Bazar and Teknāf. The second valley, proceeding eastwards, is also littoral in character as far south as Cox's Bazar. The littoral portion comprises the Mīrsarai and Sītākund thānas, part of the Chittagong thāna north of the Karnaphuli river, a small strip of the Patiyā thāna and Anwāra outpost lying west of the Diyang hills between the Karnaphuli and Sangu rivers, and, south of the Sangu river, the Bānskhāli sea-board and the delta of the Mātāmuhari river in Chakariā thāna and Rāmu outpost. South of Cox's Bazar the valley changes in character, being protected from the incursion of tidal water by the Cox's Bazar and Teknāf hills, and here it forms the fertile Rāmu and Pālang plains.

With the exception of these plains, the third group of valleys, which lies between the central and eastern ranges of hills, contains all the best land in the district and supports a population of more than 750,000 souls, or three-fifths of the inhabitants of the whole district. It comprises the Phatikcharī, Hāthazāri and Rāojān thānas and a portion of the Chittagong thāna north of the Karnaphuli river, the Patiyā thāna between the Karnaphuli and Sangu rivers, and the Sātkaniā thāna south of the Sangu. Between the eastern range of hills and the foot-bills of the next range in the Hill Tracts lies the Rangoniā valley, which also contains much fertile land.

Principal peaks.

The following are the principal peaks in each range. In the Sītākund range the loftiest peaks are Lakimūrā overlooking the Fenny river in the extreme north of the district, with a height of 521 feet above sea-level, and Chandranath or Sītākund, in the centre of the range, which, with an altitude of 1,155 feet, is the highest hill in the district. A third summit, Nagar-Khānā, a few miles north of Chittagong town, is 289 feet high. The Goliasi range contains the Harla peak, between Rangonia and the Halda valley, with a height of 253 feet. The Sātkaniā range has its highest points in Ngātong near Mānikpur in Chakariā, 545 feet high, and Jangalia, about halfway between the coast and the Sātkaniā police station, which has an altitude of 295 feet. Maiskhāl range culminates in Garamchori, 288 feet high, and runs through the centre and along the coast-line of Maiskhāl island; on the east side, opposite to Chakariā on the main land, the hills have been secured away into steep cliffs; on the west and north their sides are fringed with a belt of mangrove swamps and creeks. The Teknāf range has its chief peaks in Pymo or

Baraganj (390 feet), Taungangā (880 feet) and Nyting (551 feet).

In all the above ranges, the hills are formed of strata usually dipping to the north-east, and consist of sand, blue clay, and clay shale, a hard grey sandstone, and occasionally laterite and red sand impregnated with iron. In some places small quartz gravel is mixed with the sand. Marsh gas is emitted from the shale in the Sītākund range, and there are saline springs in several places. The surface is generally covered with loam, but the southern slopes of the outlying hills are composed of red sandstone or sand. In the immediate vicinity of cultivation they are bare or covered with thatching grass or scrub jungle only, but the more remote hills are clothed with bamboos and valuable timber.

These sandy jungle-covered hills, and the rivers, meandering through verdant plains interspersed with groves of bamboos and betel-nut palms, present some very picturesque scenery. They are found in every thana, and the total area covered by them and by the Sundarban jungle of the Mātāmuhari delta in Chakariā is no less than 859 square miles, or considerably more than one-third of the whole district.

The district is divided into long valleys bounded east and RIVER west by hills, each valley being drained by affluents of the main SYSTEM. rivers. The latter traverse the district in a south-westerly direction, the water-shed lying in the higher hills of the more

There are also numerous streams and creeks along the coast, which are navigable by large boats throughout the year, while smaller water-courses intersect the district in every direction; except in the hilly tracts, there is hardly a single village which has not communication by water with other parts of the district.

easterly ranges in the Hill Tracts and the South Lushai Hills.

The beds of the rivers are sandy in the hilly parts of the district, but towards the coast consist of sticky mud. The banks of the large rivers are generally high and shelving, except near the sea, and are usually covered with thick jungle, but in many parts, they have been cleared and cultivated. Wherever the current is checked by another stream running in, or when high tides and strong winds combine to back up the water, the rivers are apt to alter their course more or less, cutting away the bank on one side or the other. The beds of most of the rivers are higher than the plains through which they flow, and houses are built along their elevated banks. In times of flood the banks are often breached and new streams formed. Sometimes the course of a river is purposely diverted in order to pour its silt-laden waters into the lower parts of a plain, and so raise it by deposit to a better

level. Several of the large loops which the maps show in the rivers have been obliterated by new courses cut across the chord, and other bends in an opposite direction have often formed. In consequence of such movements in the Fenny river, numerous villages have been transferred from the Chittagong bank to the Noākhāli side. Hill streams and rivers flowing in opposite directions very often pass within short distances of one another. The Koilā, which joins the Fenny river, at one point in its course is within a furlong of the Bālu Khāli, a tributary of the Haldā, and the Dolo, running into the Sangu, similarly approaches within about 400 yards of the Bornu, a tributary of the Mātāmuhari. There are no lakes, but marshes, locally called depha, are numerous in the hilly parts of the district.

The following is a brief account of the principal rivers proceeding from north to south:—

Fenny.

The Fenny (vernacular Pheni) nowhere enters Chittagong, but forms the boundary between it and the district of Noākhāli to the north. Rising in 23° 20' N. and 91° 47' E., in Hill Tippera, it flows south-west, marking the boundary between Hill Tippera and the Chittagong Hill Tracts, which it leaves at Ramghar. Thence it flows west and south, dividing Chittagong from Noākhāli on the north, and ultimately falls into the Sandwip channel, an arm of the Bay of Bengal, in 22° 50' N. and 91° 27' E., after a course of 72 miles. During its course through the hills, its banks are abrupt and covered with heavy grass jungle and bamboo coppices, and it is of little use for navigation; but in the plains it is navigable by large boats for a distance of 30 miles. is of considerable depth during the rains, but is rendered dangerous by rapid currents, whirling eddies and sharp turns. The Fenny is joined on the right bank by the Muhari river; and the Little Fenny, which flows almost direct south from its source in Hill Tippera, falls into the Bay close to its mouth. It has, however, no important affluents in this district.

Karnaphuli

The Karnaphuli is the most important river of Chittagong. It rises in a lofty range of hills beyond the border of the Chittagong Hill Tracts, in 22° 53′ N. and 92° 27′ E., and enters Chittagong from the east. It traverses the district, following a circuitous direction to the west and south-west, and finally falls, after a course of 121 miles, into the Bay of Bengal in 22° 12′ N. and 91° 47′ E., 10½ miles below the town of Chittagong, which is situated on its right bank. It is navigable throughout the year by sea-going vessels as far up as Chittagong, by shallow draught steamers as far as Rāngāmāti, the headquarters of the Chittagong Hill Tracts, and by native cargo boats as far as Kāsālang in the

Chittagong Hill Tracts, a distance by water of about 96 miles from its mouth. Small craft can ply as far as the Barkal rapids, 14 miles further up, and river steamers can go up to these rapids in the rains. The river is largely used for floating cotton and forest produce from the Hill Tracts to Chittagong.

The approaches to the mouth are lit by lighthouses at Kutubdiā and Norman's Point, as well as by a light-ship on the "South Patches" shoal 60 miles below the mouth, and the channels in the river are buoyed by the Port Commissioners of Chittagong. The mouth of the Karnaphuli river, as of all the rivers in the northern half of the district, is deflected to the south by the current of the great Meghnā estuary, while the reverse happens in the southern half of the district, the river channels on the coast-line being directed northward by the sand ridges, which the sea during the south-west monsoon is perpetually building up. The central space between these two contending influences is known as the Ujantaid, ie., the place of confused tides, and is the site of the islands of Kutubdiā and Maiskhāl. The principal places along the banks of the Karnaphuli are Chittagong, Rangoniā and Chandraghonā.

In this district the river, which is known in the Hill Tracts as the Kynsa Khyoung, receives almost simultaneously on its right and left banks the Ichāmatī and Sylok streams, which water the two portions of the Rangonia valley to the north and south of the Karnaphuli. After intersecting the eastern range of hills, it next receives on its right bank the important Halda river, which, entering the district near the extreme north-east corner, meanders through the Phatikehari thana, and forms the boundary between the Rāojān thāna and the Hāthazāri and Chittagong thanas; it is navigable by native boats for 24 miles throughout the year. The last important tributary is the Boalkhali, which flows in from the left bank opposite to the town of Chittagong. This stream is artificially connected with the Chandkhali tributary of the river Sangu, and also with the Murari affluent of the Chandkhali, and thus forms the entrance from Chittagong to the important water-ways leading to the south of the district.

In the year 1875 the Magistrate reported that the water on the right bank of the Karnaphuli (the port side), within port limits, was yearly becoming more shallow. "About 2 miles above Chittagong the current appears," he wrote, "to make a decided set against the right bank. Broad strips of land yearly vanish into the river, and a large island has in consequence formed in front of the upper portion of the town, on the right

bank, which, however, is artificially well protected." The river was, it was feared, then forming a new channel, leaving a great sand-bank betwe—it and the shipping. To prevent the formation of such a channel and the erosion of the right bank, on which three river jetties have already been erected, extensive stone revetments are being constructed on the bank, and a combined bucket and suction dredger has been built to remove the bars, which at present impede navigation for vessels of deep draught, and to maintain a constant channel for the largest steamers.

The name Karnaphuli means literally ear-flower and is said to be derived from the local name for a species of citron.

Sangu.

The Sangu rises in the range of hills which divide Arakan from the Chittagong Hill Tracts in 21° 13' N. and 92° 37' E. and pursues a generally northerly and very circuitous course as far as Bāndarban. Leaving this place, it enters Chittagong about a mile above the confluence of the Dhopacheri, and then takes a tortuous direction through the district, which it traverses from east to west; it finally empties itself, after a course of 168 miles, into the Bay of Bengal in 22° 6' N. and 91° 51' E., about 10 miles south of the Karnaphuli. It is connected with the latter by some channels, partly artificial in origin. The Sangu itself is tidal as far as Bandarban, where its bed is sandy. Though shallow at ordinary times, this river becomes deep, dangerous and rapid during the rains, but it is navigable by large cargo boats for a distance of 30 miles throughout the year. In its upper reaches it is called by the hillmen the Rigray Khyoung, and lower down the Sabak Khyoung, a Magh word meaning the Sabāk river, of which Sangu is said to be a Bengali corruption.

The principal tributary of the Sangu is the Dolo, which drains the Sātkaniā plain. This river rises in the Hill Tracts, and after flowing in a north-westerly direction through Chittagong, falls into the Sangu on its southern bank. It is navigable for about 7 miles all the year round, and for about 14 miles during the rainy season. The Sangu also receives the drainage of the Patiyā thāna on its right bank through the Chāndkhāli; and on its left bank it receives, in addition to the Dolo, the Kumirā Khāl west of the Bānskhāli hills. The stream last named has an artificial connection with the Jaliakhāli, which flows into the head of the Kutubdiā channel, the system being known as the Bānskhāli canal.

Mātāmu∗ hari. The Mātāmuhari rises in the range of hills dividing Arakan from Chittagong in 21° 14′ N. and 92° 36′ E., in the neighbourhood of the sources of the Sangu, and follows a course roughly

parallel to that river. It flows north-west through the Chittagong Hill Tracts, and, turning westward as it leaves the hills, forms a broad delta as it pours into the Bay of Bengal, in 21° 45' N. and 91° 57′ E., after a course of 96 miles. The delta thus formed extends from the Bhola Khāl on the north midway down the Kutubdia channel, and close to the boundary between the Banskhāli and Chakariā thānas, to the Khutakhāli on the south. is of Sundarban character, consisting of groups of islets intersected by a network of tidal creeks and covered by mangrove jungle. This is rapidly being cleared, and the lands are being embanked to exclude salt water. The creeks are also silting up, and rich crops of rice are grown, with but scanty tillage, on the virgin soil built up with river silt. In its upper reaches the Mātāmuhari is navigable only by small boats, but throughout its extensive delta the largest boats can ply. The principal river-side village The name Mātāmuhari is a Bengali corruption of is Chakariā. the Magh name Mamuri.

The Nāf is an elongated estuary or arm of the sea in the Nāf. extreme south of the district, which divides Chittagong from Arakan. It is steadily silting up, and will probably in time form an alluvial plain, like the valley of the Haldā in the north and the valley of the Chhāgalnaiyā in Noākhāli.

The tract of country in which the Chittagong district is inclu- Geology. ded appears to consist of a sub-stratum of Tertiary rocks, which were covered to a considerable extent by alluvial deposits. sub-stratum was exposed to a warping movement, probably connected with that which formed the Himālayan chain of mountains, which caused it to buckle up into parallel anticlines, tending to run from north to south. In the neighbourhood of Sītākund, 24 miles north of Chittagong, where the hills attain an elevation of 1,155 feet, the warping movement appears to have been very intense, so far as this district is concerned. These hills are capped with laterite, a land formation of sub-recent age, possibly of organic origin.\* Near Sitākund, huge boulders of laterite occur in the overlying deposit of alluvial soil. source of this deposit is not entirely known, but the fact that it is largely composed of sand, and that it is frequently of red colour, thus betraying the presence of iron, seems to indicate that it does not owe its origin to any river system now in existence. The same stiff red clay formation is found in Northern Bengal and in the western part of the Assam Valley. It does not extend to the south of the Chittagong district, where the exposures are

<sup>#</sup> Geol. Mag. Decade IV, Vol. X, p. 59.

purely alluvial; and in Akyab and down the Burma coast the laterite is exposed.

An examination of the overlying deposit shows that it consists of successive layers of clay and sand. This formation is everywhere observable in the hills, but the plains have been covered with a coating of alluvial silt. This silt is recognizable owing to its grey colour, and to the fact of its being composed of pure clay. The littoral soils are composed almost entirely of this silt, and further inland the soil consists of admixtures of it with the sand and debris of the hill ranges scoured out by the currents of the rivers and their tributary streams. The soils farthest from the sea contain the least clay, until on the eastern confines of the district sandy soils predominate.

The Arakan coast, including the district of Chittagong, was subjected to considerable seismic disturbance within the memory of man. Extensive alterations of level are known to have occurred within the last 350 years. An interesting proof of this is given in "Mohit," a Turkish work on navigation in Indian seas, written in 1554.\* In this work the writer alludes to the dangers of navigation amongst the islands on the coast of Chittagong—islands which have since disappeared. The great earthquake of April 2nd, 1762, which raised the coast of Foul island 9 feet, and the north-west coast of Cheduba island 22 feet above sea-level, is said to have caused a permanent submergence of 60 square miles near Chittagong.†

BOTANY.

The higher portion of the Chittagong hills is covered with dense, often rather dry, forest; while the lower portion is to a great extent under brushwood. Between the hills themselves lie cultivated river-valleys, and between these hills and the sea is a narrow level strip of rice-land, with a muddy sea-face towards the north as in the adjacent portion of the Sundarbans. Further to the south a series of low flat islands skirt the coast, while the shores have the same mangrove vegetation and sea fence as the western Sundarbans. Owing to this variety of conditions, the vegetation of Chittagong is extremely rich and diversified. It is mainly that characteristic of Arakan, with a considerable admixture, however, of species characteristic of Cāchār and not a few special forms.‡

<sup>\*</sup> Journal, Asiatic Society of Bengal, Vol. XII, p. 1055; and Journal, Asiatic Society, Vol. V, p. 466.

<sup>†</sup> Manual of Geology of India, p. 12. I am indebted to Mr. G. de P. Cotter, Assistant Superintendent, Geological Survey of India, for the above account of the Geology of Chittagong.

<sup>‡</sup> Prain's Bengal Plants.

The forests contain much valuable timber, but an account of the trees of economic importance will be found in Chapter VI. and it will suffice to mention here the  $t\bar{u}n$  known locally as surajbed (Cedrela Toona), qurjan (Dipterocarpus turbinatus), järul (Lagerstræmia Flos-Reginæ), nāgeswar (Mesua ferrea), gamhār (Gmelina arborea) and chāplās (Artocarpus Chaplasha). The chekarishi (Chickrassia tabularis) used to be exported to Madras and elsewhere under the name of Chittagong wood or Indian mahogany; and several species of oak, an elm and a chestnut are noticed by Roxburgh amongst many scores of large handsome trees. A small species of white-ant infests many of the trees and drops a chocolate coloured powder, which goes by the cant name of Chittagong pepper. Canes and bamboos grow luxuriantly; among these, the curious berry-bearing bamboo (Melocanna bambusoides) is worthy of notice. The hill bamboos, it may be mentioned, flowered all along the eastern boundary in 1880-81; and this unusual supply of flood resulted in a plague of rats in the hill country next season. Wild flowers are more numerous than in most parts of India. Lilies and creepers are especially varied, and wild begonias are found. Ferns and orchids grow everywhere, and tree ferns in some places, as well as some beautiful mosses. Wild plantains (Rankela, ram being the hillmen's word for forest), several palms, including wild areca palms (Ramgora) and the  $\bar{u}m$ , which is cultivated in Cox's Bazar for the toddy which it yields, canes and rattans, reeds and water plants grow in profusion. In short, the vegetation is that of a moist tropical climate.

The scenery in some places, where the forest is still in its natural state, is most beautiful; and not the least noticeable feature of the forest growth is the number of gigantic gurjan trees, with silvery stems springing straight up for 50 or 60 feet to the first branch, and 18 feet in girth near the ground. "The mountains," writes Sir Joseph Hooker in his well-known Himalayan Journals, "abound with the splendid timber trees of the Cachar forests: they have, besides many others, magnificent gurjan trees, the monarchs of the forests of these coasts . . . This is the most superb tree we met with in the Indian forests; it is conspicuous for its gigantic size, and for the straightness and graceful form of its tall, unbranched, pale grey trunk, and small symmetrical crown. Many individuals were upwards of 200 feet high and 15 in girth."

The following is a brief account of the different botanical species. The low-lying belt of level land and the bottoms of the river-valleys near the sea are under rice cultivation. Along the

coast and particularly on the low islands that fringe it, are found a scanty vegetation of Ischæmum and various other grasses with Aerostichum aureum, Tamarix, Excecaria, Kandelia, Bruguiera, Rhizophora, Clerodendron inerme and other littoral or swampforest species. Guttia (Ceriops Roxburghiana) is abundant and largely exported for firewood; and nunia (Ægliatis rotundifolia) is also common, salt being obtainable from the stems by The lower hills that separate the river-valleys are mainly covered with a dense but often rather dry jungle largely composed of gigantic trees, the most conspicuous being various gurjans (Dipterocarpi), with which are associated many Laurineæ, Leguminosæ, Rubiaceæ, Euphorbiaceæ, oaks. myrtles and chestnuts, Ternstræmiaceæ, Meliaceæ and Urticaceæ. Palms are rather plentiful, and a Cycas is abundant; in the damper forests palms are still more plentiful, and Lythraceæ, Meliaceæ, Leguminosæ, Verbenaceæ, Magnoliaceæ, and species of Figure abound. Casuarina equisetifolia finds its northern natural limit on the southern coast near Cox's Bazar.\*

FAUNA.

Writing in 1786, Sir William Jones described Chittagong as a Mammals. noble field for a naturalist, and this description still applies to it even after the lapse of 120 years, during which the jungle has yielded to the plough year after year. In few, if any, districts in Bengal is there such a range of animal, bird, fish and insect life, the species found being often allied to those of Burma and different from those seen in India proper. Among the larger carnivora are tigers and leopards, which are found throughout the district. Leopards, including black and clouded leopards, are especially common, finding shelter in the numerous hill ranges and being sometimes seen in the outskirts of the town of Chittagong; one was, indeed, trapped within municipal limits in 1906. Bears (Melursus labiatus) are also found, but are rare. Wild cats of various kinds (golden, clouded, marbled, tiger and leopard cats) abound; they are very destructive to small game, and, when in the neighbourhood of man, to sheep, goats and poultry. The Indian bear cat (Articlis binturong) and the large Indian civet are also found, and there are several varieties of the mongoose family, including the crab mongoose, which is often confounded with the badger. Wild dog (known locally as ram-ui from ram, forest, and ui, dog) wander very far in search of deer and other game.

<sup>\*</sup> I am indebted to Lieutenaat-Colonel D. Prain, I.M.S., for a note on the botanical species, and to Mr. R. L. Heinig, Deputy Conservator of Forests, for revising the above account.

Wild elephants are found in the south of the district, where they are very destructive. To the north a small herd crosses occasionally from the Tippera hills, but they remain only during the winter season, after which they go back to Hill Tippera. The elephants of Chittagong are small and are not considered of much value for kheddah purposes. They have been left alone of late years, and have consequently increased in numbers notwithstanding the progress of cultivation. As an instance of the distance to which they will sometimes wander, it may be mentioned that a fine tusker was caught in the station of Chittagong in September 1885 after it had been for some days in one of the compounds.

Wild cattle, also gayāl or mithun (Bos frontalis), are found in the same tracts as elephants, and also cause damage to the crops near the hills; some of them have been domesticated by the hillmen in Chittagong Hill Tracts. Recently a bull gayāl of what is believed to be record size was shot at Hinguli, its height from the base of the hoof to the top of the hump being 8 feet 7 inches. Sāmbar (Cervus unicolor) and barking deer are found throughout the district, and spotted deer in some localities. The Sumatran rhinoceros, which has two horns and a hairy coat, has been caught alive on several occasions; a specimen of the hairy-eared rhinoceros (R. lasiotis) has been sent to the Zoological Gardens in London. The Burmese forest goat has been seen in the hills near Dhobāsarai.

Among the monkey tribe may be mentioned the white-browed gibbon (Hylobates hoolook), the slow lemur and the long-tailed langur. Other mammals are the Indian fox, jackal, hog-badger, marten, otter, and scaly ant-eater. Dolphins and porpoises are found in the rivers and estuaries, and cases have been recorded of whales being cast up on the coast. The dugong appears to have been captured on one occasion, more than 20 years ago, off Maiskhāl island, and has been seen of late years at the mouth of the Mātāmuhari river. Amongst rodents there are several species of squirrels, mice and rats, which are only too numerous. Porcupines are common, and hares are also found.

The birds of the district include vultures, falcons, eagles, hawks, Birds kites and owls, swallows and swifts, among which the palm swift may be mentioned, and nightjars. Rollers of the Burmese type, bee-eaters and kingfishers of many kinds are also found; the brilliant Halcyon fuscus is shot in great numbers, the skins being exported to China. Besides these, there are broadbills, hornbills, known locally as dhanesh, parakeets, the love bird (latkan), which hangs downwards instead of perching, many woodpeckers and

barbets, cuckoos and coucals. Among slender-billed birds the sun bird and the hoopoe are found, while shrikes, king crows and the Indian mocking bird are common. There are many varieties of fly-catchers, some being of great beauty, such as the paradise fly-catcher. The blue rock thrush and white headed shrike are also noticeable; and babblers and laughing shrike thrushes are numerous, as also bulbuls and orioles, chiefly of a Burmese type. There are many robins, stone-chats and warblers, including the tailor bird; the wagtail, tit-lark, and pipit are met with, as well as the tits and flower-peckers of hilly regions. Here, as elsewhere, the Indian corby or carrion crow is found, and the common Indian crow, which, however, is less frequent here than in Western Bengal. The green jay is prized as a cage bird, while the Indian magpie and several kinds of mainas (Indian starling) are common, including the crested mainā and hill mainā. Among finches, the weaver bird, munia and waxbill are fairly numerous. The common sparrow, mountain sparrow, one species of bunting, the rose finch, bush lark and sand lark are also found; and pigeons are common.

The pheasant family includes the Burmese peafowl, the polyplectron or pea-pheasant, and the black pheasant (mathurā). Red jungle fowl are very common, but partridges are rare; among the latter may be noticed the pretty Burmese hill partridge, and among quails the hill bustard quail and larger button quail. Plovers of various species visit the coast in the cold season. Indian lapwings and stone plovers are found, and cases have been known of saras cranes visiting the district. A few woodcock are shot nearly every year. Wood snipe, jack snipe and painted snipe are met with, the pintail snipe is plentiful in season, and the common snipe somewhat less so. Along the sea coast godwits. curlews, whimbrel, stints, and sandpipers of various species (usually classed together under the term snippets) are numerous at certain times; among these birds the curious spoon-billed stint is noticeable. Rails, water-hens and coots frequent the watery hollows near the hills. Storks, herons, egrets, bitterns and ibis are also found.

Of water-fowl there are few. Bar-headed geese and the ruddy sheldrake or Brāhmanī geese visit the coast, and a few teal and duck are met with in the season. Shovellers, gadwall and pintail ducks, and a pochard, have also been shot and identified. The whistling teal, cotton teal, and wood ducks, which breed in the forest country, are always to be found, but are not numerous. The little grebe is common, and one species of petrel has been seen. Besides gulls and terns of many kinds, the curious Indian

skimmer is found, and noddies, boobies and other sea birds have been met with. Pelicans and cormorants are not uncommon.

Of reptiles Chittagong can show a fair variety. All the sea Reptiles. snakes are venomous. Among land snakes the great hamadryad, which grows to a length of 12 feet, and the python, which is sometimes 20 feet long, are noticeable. Cobras are not common. Amongst vipers the daboia and green rattle-snake are to be found. Lizards include the shouting gecko (Gekko stentor) and some monitors, locally called goā sāmp, which occasionally are 7 or 8 feet long; the hillmen and Arakanese prize their eggs. Crocodiles are not very common, except in the estuaries. Turtles are fairly numerous; on Sonādiā island in Cox's Bazar subdivision the taking of turtle eggs is a profitable industry.

The fish of Chittagong are especially numerous, as the district Fish. is bounded throughout its length by the sea, and contains various tidal estuaries, rivers and marshes. Its waters swarm with fish, but the information available is somewhat scanty. Doctor Buchanan Hamilton, who was in Chittagong for two years at the end of the 18th century, made some investigations, but since then there has been but little local research. The best eating fish is said to be the rupchāndā, or a second species known as harchāndā. This is usually called pomfret by Europeans, but it is reported that although the true pomfret is probably found in these waters, the rupchāndā is a different species. Mango-fish are almost always to be had. Here, as elsewhere, they are known as tapsi, a name meaning a penitent or devotee, which is given to the fish because it has whiskers like a Hindu devotee. Mullets known as anwāri and soles, called suliā, though miserable imitations of the European fish, are the only fish which correspond to English table fish of those names. Bummalo is found in great quantities and made into sukhti or "Bombay duck." Bhekti, katlā, chitalā, rohti, pangāsia are also common. Eels are very numerous; some called nahap or naf cause great mischief by burrowing through the sea dykes, and one variety is remarkable for its ferocious armament of teeth. A species of mahseer is found in the hills, and quantities of hilsā (Clupea ilisha) are caught in the Harbhang river and elsewhere.

Sharks (hāngar) and skates and rays (usually called sankus) abound in the sea and estuaries; the ground sharks of the muddy tidal streams being greatly dreaded. Large numbers of hideous hammer-headed sharks are caught at the mouth of the Rezu river and are cut up in strips and dried in the sun. Saw fish are often caught, though not willingly, by fishermen, some of them being of a great size; the snout of one caught in Cox's Bazar was 50½

inches long and 11 inches broad at its junction with the head, and was set with 17 spines on each side,  $2\frac{3}{4}$  inches in length and half an inch thick; its body must have been another 18 or 20 feet long. It is possible that the tales of a mermaid, "with a glass and a comb in her hand," may be traced to these Indian waters, for a dugong half out of water, in the shallows, attacked by hammer-headed sharks, with their hammers shining in the sun, and by saw fish with their comb-like snouts, could readily be taken for ocular proof of the fable. The above end the vertebrate order.

The more numerous orders of invertebrate are equally well represented. Mollusca include the nautilus, cuttle-fish, etc., which are found along the coast in abundance. Molluscoida included the solitary ascidian and borers, which infest the tidal waters to such an extent that unprotected timber is quite gone in a month or two. Oysters are found in great numbers in the south of the district. Jelly-fish, crabs, prawns, and cray-fish are found both in inland and tidal waters and along the coast.

CLIMATE.

The district of Chittagong lies just within the tropics, and its climate is of the usual tropical character, modified in two important particulars by its position. It forms a belt of country. narrow compared with its length, lying along the sea coast and backed by a hilly region to the east, an arrangement favourable for the free play of land and sea breezes. 'The movement of the air from a comparatively cool region towards the more highly heated plains causes a uniformity of temperature more marked than in other parts of India; and another feature of these sea winds is the excess of moisture carried inland, which gives rise, up to some distance from the coast, to heavy dews and occasional fogs. The second important consideration in determining the nature of the climate is the position of the district on the coast-line of the north-east angle of the Bay of Bengal. The moist winds of the south-west monsoon converge in this direction, and the whole district consequently receives heavy rain during the monsoon months. In brief, Chittagong is remarkable for its uniform temperature, high humidity and heavy rainfall from May to October. The climate is thus moist, warm and equable, vegetation is luxuriant, and the country is green throughout the year.

As a rule, January and February are cold and dry, the mornings being frequently foggy in the latter month. March, April and May are hot, but have some wet days, and there are occasional storms from the north-west varied by breezes from the south and south-east. June, July and August are almost

entirely wet, while September is wet and steamy with a hot sun. October has 7 or 8 wet days and is the month of cyclones. while November usually has 3 or 4 stormy days, but otherwise the weather is fine and dry and a northerly wind blows. December is cold and fine, with cloudy weather; and usually a little rain falls about Christmas time.

The average maximum temperature is lowest in December Temperaand January, when it is about 78° and highest in April, when it ture. is 88.6°, giving a variation of less than 11°. The variation in minimum temperature, however, is nearly double as great, rising from 55.4° in January to 76.5° in June, i.e., by about 21°. The smaller variation in day temperature is due to the moderating influence of the sea breezes, in consequence of which the temperature near the coast is not much higher than at sea. From November to February the temperature is 10° to 15° lower than during the monsoon season, when the mean temperature varies from 80° to 82°; during these months the sky is almost cloudless, but owing to the proximity of the sea humidity continues high. daily range of temperature, as given by the difference between the average maximum and average minimum temperatures, month by month, varies from 18.5° to 23° in the cold weather months, and it falls as low as 9° in July. During the monsoon months it is never more than 10.5°, but it increases rapidly after October and reaches its maximum in February. highest temperature recorded at Chittagong since 1870 is 101° in 1888, and the lowest 45° in 1878, giving a total range of 56°.

The humidity of the atmosphere is lowest in January and Humidity. February, after which there is a steady, slow increase till May. With the commencement of the monsoon in June there is a large increase; but though cloud is greatest and rainfall heaviest in July, humidity does not reach its maximum till September, when there is 91 per cent. of saturation. During the whole monsoon period it varies from 80 to 91 per cent.

In October the wind blows most frequently from the north, Winds. and during the next four months there is a steady, slow change of direction, the wind blowing from the west. In March the wind is usually from the north during the night, and from the south during the day, but as the month advances the southerly wind gradually increases until it prevails entirely. The cold weather winds being mostly land winds are comparatively dry, and the moisture in the atmosphere increases very little till the southerly winds set in. During the monsoon months, the wind blows from the south-east, and the air steadily becomes more charged with moisture till September, which is the dampest

month in the whole year. It may be mentioned here that the sounds known as the Barisāl guns are heard at Chittagong.

Rainfall.

Owing chiefly to differences of elevation and the increasing height of the hills towards the east and north-east, the rainfall varies considerably from place to place, the amounts usually diminishing towards the north. Thus the annual rainfall is 140 inches at Cox's Bazar, 105 inches at Chittagong, and 96 inches at Kodálā. For the whole district the average fall is 111 inches, of which 11.5 inches fall in May, 22.5 in June, 28 in July, 21.4 in August, 11.6 in September and 6.7 in October; from December to April it is lighter than in other parts of Bengal. The average monthly rainfall is half an inch from December to February, and from March onwards there is a gradual increase till May, when the effect of the south-west monsoon becomes felt, though the commencement of the heavy monsoon rains occurs at irregular dates. The heavy rain in May is due to the cyclonic storms which originate in the south-east of the Bay, and moving in a north-easterly direction, pass into Burma, where they become diffused, or turn westward towards Bengal. Not unfrequently the rainfall during the first half of the month is heavier than during the latter half, but the average fall from the 1st to the 15th is about 1 inch less than from the 16th to the 31st. A noticeable feature of the May rainfall is its uniform distribution over the district, the variation being only from 10.5 inches in the town of Chittagong to 12.7 inches at Kodālā.

After the establishment of south-west monsoon conditions in June, the rainfall becomes much heavier, and there is a further increase in July, after which the amount diminishes with considerable rapidity. The average fall in July is 7 inches more than in August, and that for August nearly 10 inches more than in September. During the monsoon season rainfall diminishes in amount from the south northwards, and also from the coast The average fall for October is only 6.7 inches, but, as in the case of May, there is often a marked difference between the amount of rain in the first and last half of the month, owing to the fact that it is due chiefly to cyclonic storms from the Bay of Bengal. Towards the end of the season these storms sometimes recurve towards the north-east, and Chittagong is consequently affected by the accompanying unsettled weather, a recent notable case being the fall of 9.3 inches during the passage of the cyclone in 1897.\*

<sup>\*</sup>This account of the climate is mainly a reproduction of a note written by Mr. C. Little when Meteorological Reporter to the Government of Bengal and published in Mr. Allen's Settlement Report.

Statistics of rainfall for the various recording stations are given below for the cold weather (November to February), the hot weather (March and April), and the rainy season (May to October), the figures shown being the averages recorded in each case. It is to be observed that there are considerable variations from year to year above or below these averages; thus the rainfall at Chittagong in the last three years was 141.38 inches in 1905, 101.37 inches in 1906, and 67.21 inches in 1907:—

STATION.		Years recorded.	November to February	March to April.	May to October.	Annual average.
CHITTAGONG	• > •	31	3.64	<b>6</b> ·61	94.81	105.09
Cox's BAZAR		31	3.15	2-83	132.89	139.87
Fenoa	•••	7-8	2.60	9.27	96.30	108-17
Kodala		18	3.22	7.26	85.60	96.08
KUTUBDIA	•••	16	3.30	4.10	106.92	114.32
Mirsarai		8	2 05	7.99	111 44	121.48
Satkania	•••	16	2.23	4.77	90.71	97.71
AVERAGE	***		2.88	6.50	102.68	111.82

# CHAPTER II.

# HISTORY.

EARLY HISTORY.

Prior to its conquest by the Muhammadans, Chittagong, lying on the disputed frontier between the Hinduism of Bengal and the Buddhism of Burma, formed a source of chronic feud between the rulers of Tippera and Arakan. It frequently changed masters, being at one time subject to the king of Arakan, and at another attached to Tippera, a kingdom which at different periods extended from the Sundarbans in the west to Burma in the east and northwards as far as Kāmrūp. In the ninth century A. D. the country was conquered by the Buddhist king of Arakan, who erected a pillar at Chittagong; according to Burmese tradition, the town derives its name from a remark made by the conqueror on this occasion Tsit-ta-gung, i.e., to make war is improper. At a later period it appears to have been lost by the Arakanese, if we may judge by the evidence of a copper-plate found at Nasirābād, a village close to Chittagong, which records the grant of some land in sāka 1165, i.e., 1243 A.D. This inscription refers to a dynasty of kings who were Vaishnava by religion, one bearing the title of Deva, and it has been conjectured that they were the Rajas of Tippera.\*

FIBST MUHAM-MADAN CON-QUEST.

Till the 14th century A. D. the Meghnā proved a strong barrier against the Muhammadan advance. But even as early as the 12th century there was free commercial intercourse between the south-eastern sea-board of Bengal and the Arab ports of Baghdād and Basorah; and it is probable that the commercial activity of the Muhammadans paved the way for Musalmān domination in the district. Fakhr-ud-dīn Mubārak, of Sunargāon, the founder of a line of independent Muhammadan kings, was the first to pass the natural barrier of the Meghnā, and about 1340 he carried the banner of Islām as far north as Sylhet, to the east into Tippera and Noākhāli, and to the south into Chittagong.

For much of the information contained in this chapter, I am indebted to an article, "The Feringhees of Chittagong," by H. Beverley, Calcutta Review, Vol. LIII, 1871. The account of the history of the district given in the Statistical Account of Chittagong has also been largely reproduced.

<sup>\*</sup> Note on the Chittagony Copper-plate, J. A. S. B., Part I, 1874.

Shihāb-ud-dīn Tālish, writing in the latter half of the 17th century, adds that Fakhr-ud-dīn, having fully conquered the country, "built an embankment from Chāndpur to Chātgāon. The mosques and tombs which are situated in Chātgāon were built in Fakhr-ud-dīn's time. The ruins prove it." When Ibn-i-Batūtah visited Chittagong about 1350, it acknowledged the suzerainty of the Bengal king and was an important centre of trade, being described by him as "a great place situated on the shore of the Great Sea."

The conquest appears to have taken place during the reign of the Arakanese king Mengai, who, according to Burmese accounts, courted the alliance of the king of Thu-ra-tan (identified by Sir Arthur Phayre with Sunargāon). Subsequently, about 1407 one of his successors fled to Bengal and was restored to his throne with the help of Bengal troops; but he became "tributary to the king of Thu-ra-tan, and from this time the coins of the Arakan kings bore on the reverse their names and titles in Persian character. This custom was probably first made obligatory upon them as vassals; but they afterwards continued it when they had recovered their independence."\*

About 60 years after Ibn-i-Batutah visited the place, and, it CHINESE may be added, 80 years before the Portuguese discovered the EMBASSY. route round the Cape of Good Hope, Chittagong was visited by a Chinese embassy. An account of the journey of this embassy is given in a work bearing the Chinese title Ying-yai-sheng-lan (a general account of the shores of the ocean) compiled by one Mahuan, an interpreter attached to the suite of Cheng Ho, who was sent to the various kingdoms of the western ocean by the Chinese Emperor Yung-lo. The Emperor feared that Hui-ti, his predecessor, whom he had driven from the throne, was concealing himself in some country over the sea; he wanted to trace him, and at the same time to display his military force in foreign countries, in order to show that China was rich and powerful. Accordingly, in the year 1405, he ordered Cheng Ho, his companion Wang Ching Hung, and others, to go as envoys to the kingdoms in the western ocean. They took with them 30,000 soldiers and a large quantity of gold and silks. The fleet consisted of 62 ships, most of them of large tonnage, some being described as 440 feet long and 180 feet broad. They sailed from Lu-kia-kiang, an inlet of the Yang-tze, to Cochin China, and so on to the various countries in the Straits and India, making

<sup>\*</sup> H. Blochmann, Geography and History of Bengal, J.A. S. B., Part I, 1873 (pp. 234-5).

known at each place the orders from the Emperor. They gave presents to the princes and chiefs, and those who would not submit were compelled to do so by force. Mahuan has left an account of twenty of the kingdoms visited by the expedition, and among others, of Bengal, from which we learn that the embassy visited Cheh-ti-gan, i.e., Chittagong, and that this was a port at which Chinese trading vessels anchored.\* Evidence that Chittagong was at this time subject to the Bengal kings is afforded by the recent discovery of an inscription in the mosque at Hāthazāri bearing a date corresponding to 1416, which shews that a mosque was built there by one Rasti Khān in honour of the saint Ola during the reign of Sultān Bārbak Shāh of Gaur.

Early Muhammadan rule.

According to the Rajmala, the chronicles of the Rajas of Tippera, Chittagong was conquered in 1512 by the Raja of Tippera, who drove away Husain Shah's garrison. Whether the Raja kept it for any time is doubtful, for in 1517, when, as mentioned later, it was visited by John de Silveira, it was a port held by the kings of Arakan, who had apparently thrown off the alliance of the Bengal king and regained their independence. It was reconquered by Nasīr-ud-dīn Nasrat Shāh (1518-32), the son of Husain Shah, at the instigation, it is said, of one Alfa Husaini of Baghdad, a merchant possessing great wealth, many slaves and 14 ships, who frequently visited Chittagong. This merchant, tradition relates, urged the king of Bengal to undertake an invasion and assisted him with ships and materials. The invasion was successful, and Nasrat Shah having taken Chittagong, settled a colony there. The conquest was commemorated by the building of a great mosque and tank at Fathābād, which was so called in commemoration of his victory (fath). by another mosque at Hathazari, and by the foundation of the town of Bhalua; and the historian+ proudly claims that Chittagong became a dār-ul-Islām or home of Islām. From the work of de Barros we know the Muhammadans held the district at least till the rule of Mahmud Shah (1532-38). He says that Nuno da Cunha, the Portuguese Governor of Goa, sent Alfonso de Mello with 200 men in 5 ships to Chittagong, which belonged to Bengal, in order to effect a settlement. The fortunes of this embassy are described at more length later on, and it will suffice

<sup>\*</sup> G. Phillips, Mahuan's Account of the Kingdom of Bengal, Journal of the Royal Asiatic Society, 1895.

<sup>†</sup> Ahādis-ul-Khawānin on Tārikh-i-Hamīdī, by Maulvi Hamīdullah Khān Bahādur, a Persian history of Chittagong published in 1871 and quoted by Block mann in Notes on the Husaini kings of Bengal and their Conquest of Chatgaon, J. A. S. B., Vol. XLI., Part I.

here to say that the embassy sent by de Mello from Chittagong to the capital at Gaur was imprisoned, and that he himself was treacherously seized with thirty of his men and sent to Gaur, where they remained in confinement, because da Silva Menzes had taken reprisals and sacked Chittagong. In the same year (1538) Mahmud Shah was expelled from Gaur by the Afghan usurper who afterwards became Emperor at Delhi under the title of Sher

After this the Arakanese regained possession of Chittagong, for the account of Ralph Fitch's visit leaves no doubt that in 1585 it was held by them, and at the same time that their rule was maintained only by means of constant fighting. "From Satagam (Satgaon)," he wrote, "I travelled by the countrey of the king of Tippara or Porto Grande, with whom the Mogores or Mogen (Maghs) have almost continuall warres. The Mogen, which be of the kingdom of Rogen (Arakan) and Rame,\* be stronger than the king of Tippara, so that Chatigan or Porto Grande is oftentimes under the king of Recon."† How and when Chittagong was lost by the Muhammadans is not known; but it is clear that during the troubles of Sher Shah's revolution, the Mughal invasion, the aggressions of the Portuguese, and the Bengal military revolt, Chittagong did not belong to Bengal.;

The Mughals, however, ignored the reconquest of Chittagong by the Arakanese. Todar Mal, Akbar's finance minister, included it in his rent-roll as if it was an integral part of the Mughal empire and in 1582 fixed its assessment "by estimation," at Rs. 2,85,607. This "estimated" revenue can never have been collected, for nearly 100 years later we find a Muhammadan historian, Shihāb-ud-dīn Tālish, quaintly admitting that "when Bengal was annexed to the Mughal empire, Chatgaon was entered in the papers of Bengal as one of the defaulting unsettled districts. When the mutasaddis of Bengal did not really wish to pay any man whose salary was due, they gave him an assignment on the revenue of Chatgaon!"§

From the mention of Chittagong by Ralph Fitch as Porto Portue Grande it would appear that the Portuguese had succeeded in GUESE gaining a footing there, after some early attempts to establish EXPEDIthemselves on the sea-board had ended in ignominious failure.

<sup>\*</sup> For an explanation of this term, see the article of Ramu in Chapter XV. It probably represents the name by which the eastern sea-board from the Naf estuary to the confines of Bengal was known to the Arabs.

<sup>†</sup> Ralph Fitch, by J. Horton Ryley, 1893.

I H. Blochmann, Geography and History of Bengal, J. A. S. B., Part I, 1873 (pp. 298-9).

<sup>§</sup> Jaduvāth Sarkār, The Feringi Pirates of Chatgāon, J. A. S. B., June 1907.

The first attempt was made in 1517. In that year John de Silveira, who had been sent to the Maldives to obtain permission to build a fort, while returning to Goa with four sail, seized two vessels belonging to Cambay and sent them to Cochin as prizes. This high-handed act did not pass unnoticed by a member of his crew, described as "a young Bengalian." Silveira was next despatched to Chittagong, but, as the event proved, the Portuguese could hardly have chosen a worse representative to obtain for them a footing in a new country. The "young Bengalian" told his story and denounced Silveira as a pirate. "It had been worse with him," says de Sousa, "had not John Coello arrived there with his ship from Pacem, being sent on the same errand by Ferdinando Perez de Andrade to the king of Bengala." Silveira passed the winter with great hardship, for the people of the country would have nothing to do with him. Chittagong at this time was subject to Arakan, and, on the baffled treaty-maker preparing to leave, the king sent him a present and invited him ashore. Silveira, however, shrewdly guessed what was in store for him, and continued his return voyage till he reached Ceylon, where he eventually became Governor of the settlement. Thus inauspiciously ended the first recorded story of Portuguese communication with this part of the coast, the nature of it being but a type of what was to follow, when Chittagong became a nest of pirates.\*

The second attempt of the Portuguese to gain an entry into the country was equally fruitless. In 1527 a vessel commanded by Alfonso de Mello was wrecked on the coast, and some fishermen who had promised to guide them to Chittagong carried them off to Chakariā, where they were detained as prisoners. An attempt to escape was frustrated, and the natives, who had vowed to sacrifice to their gods the handsomest Portuguese that fell into their hands, took their revenge by murdering the nephew of Alfonso before his eyes. Eventually, they were ransomed by a Persian called Coje Sabadim (Khājeh Shihāb-ud-dīn), who was one of the leading merchants at Chittagong. This merchant had a suit pending before Nuno da Cunha, the Viceroy of Goa, about a galleon of his, which the Portuguese fleet had captared; and in order to secure his favour, he promised to obtain permission for the Portuguese to build a fort at Chittagong.

Nuno da Cunha eagerly accepted his offer, and in 1538 sent five ships under Alfonso de Mello to Chittagong with presents of horses and brocades for the Bengal king. Alfonso remained at Chittagong and despatched an embassy to the Lodi king,

<sup>\*</sup> Ralph Fitch, by J. Horton Ryley, 1899.

Mahmud Shah, at Gaur. Suspecting that the Portuguese had come merely to spy out the land, and incensed, it is said, by discovering that some of the presents had been taken from an Arab merchantman by Portuguese pirates, Mahmud Shah detained the embassy and had Alfonso and thirty of his men made prisoners. Cunha thereupon sent a small fleet of nine vessels under Antonio da Silva Menzes to effect the ransom of the prisoners. at Chittagong, Menzes opened negotiations by sending a letter, with a rich present, to the Bengal king, but no answer being received for a long time, he concluded that his messengers had been made prisoners, and proceeded to burn Chittagong and other places on the coast. No sooner had he done this, and set sail for Goa, than Mahmud Shah's answer arrived; but the latter hearing of Menzes' filibustering raid, retained his prisoners and treated them with even greater harshness than before.

At this juncture, de Barros goes on to say, Sher Shah made war on Mahmud, and the king asked his Portuguese prisoners to assist him in the defence of Gaur. At the same time Rabelo arrived with three ships sent by the Goa Governor, to demand the release of the captives, and Mahmud after securing their co-operation sent them to take part in the campaign, in which they valiantly, though in vain, opposed Sher Shah. Mahmud. pleased with their prowess, applied to Nuno da Cunha for further assistance; but when Perez de Sampayo came with nine vessels, he found Gaur in the hands of Sher Shah and heard that Mahmud had been killed.\*

Subsequently the Arakan Rājā, in order to maintain his power Portuagainst the aggressions of the Muhammadan rulers of Bengal, MERCEN. enlisted the help of the Portuguese and maintained in his employ ARIES. a number of adventurers and runaways from the Portuguese The leaders of these renegade bands won their way, by their superior seamanship and desperate courage, to high posts in the Raja's fleet, and maintained themselves by piracy. They waged a more legitimate warfare on the Mughal fleets, and their principal station at Chittagong checked the southern progress of the Muhammadan navy. But besides protecting the Arakan frontier from the advance of Island, the Portuguese adventurers, in conjunction with the Maghs or people of Arakan, penetrated high up the rivers of Bengal, and carried away into slavery the inhabitants of the riverside villages. The character of these adventurers may be gathered from the account given by Van Linschoten in 1595. "The Portuguese," he wrote, "live like wild men and untamed

\* F. C. Danvers, The Portuguese in India (1894), vol. I, pp. 422-32.

horses. Every man doth there what he will, and every man is lord and master. They pay no regard to justice, and in this way certain Portuguese dwell among them, some here, some there, and are for the most part such as dare not stay in India for some wickedness by them committed. Nevertheless, there is great traffic used in those parts by divers ships and merchants."

COMMER-

Owing largely to this Portuguese trade, Chittagong had CIAL ACTIVITY. become a commercial centre by the end of the 16th century, and, as we have seen, had acquired from the Portuguese the name of Porto Grande or the great port, as distinguished from Satgaon. which was known as Porto Piqueno or the little port, the two ports being regarded as situated on the eastern and western branches of the Ganges. This importance it owed to its easy access, its safe anchorage, and its position near the mouth of the Meghnā, which was the principal route to the royal capital of Gaur. Van Linschoten calls it "the chief town of Bengala;" de Barros, writing in 1552, says that "Chatigan is the most famous and wealthy city of the kingdom of Bengal, by reason of its port, at which meets the traffic of all that eastern region;" the Ain-i-Akbari mentions it as "a large city situated among trees on the banks of the sea, which is a great emporium, being the resort of Christian and other merchants;" while Cæsaro Frederici, a Venetian merchant, who travelled in Asia from 1563 to 1581, says that there was much commerce in silver between Pegu and Chittagong. The adjoining island of Sandwip was also a commercial centre of scarcely less importance. According to Cæsaro Frederici, it was densely populated and well cultivated: 200 ships were laden yearly with salt, and such was the abundance of materials for ship-building that the Sultan of Constantinople found it cheaper to have his vessels built there than at Alexandria.

PORTU-GUESE PIRATES.

Though the Arakanese had found it necessary to enlist the Portuguese in their navy, and had given them extensive grants of land on the mainland and in the adjacent islands, they were soon incensed by their piratical raids, and a breach occurred between them and their dubious allies. In 1605 the Portuguese were expelled from the lands given to them and many of them put to death, but a number escaped to the islands at the mouth of the Ganges, where they lived by piracy. From this time Chittagong and the neighbourhood became notorious . for the exploits of the Portuguese corsairs. Fatch Khan, who was in charge of Sandwip, having made himself master of the island, set to work to destroy this nest of pirates. In 1607 he ordered all the Portuguese and other Christians on the

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island to be put to death, and to commemorate his exploit, had a ferocious scroll placed on his banners—"Fatch Khān, by the grace of God, Lord of Sandwīp, shedder of Christian blood and destroyer of the Portuguese nation." He then set sail in pursuit of the Portuguese buccaneers. He found them at anchor off Dakhin Shāhbāzpur, but the superior skill of the Portuguese counterbalanced the advantage of numbers, and after a hard struggle Fatch Khān was killed and his fleet captured. After this unexpected victory the corsairs were joined by their countrymen and Christian converts in large numbers, and having elected a common sailor, Sebastian Gonzales, to be their chief, determined to secure a permanent settlement by taking the island of Sandwīp.

In 1609 the Portuguese force landed on the island, and Fatch Khān's brother, with the Muhammadan troops, took refuge in a small fort, where they defended themselves for some time. The fort was taken by storm, the garrison put to the sword. and the islanders were granted their lives and property on condition that they handed over the Muhammadans. Portuguese then butchered 1,000 Muhammadans in cold blood in revenge for their countrymen who had been put to death by Fateh Khān. Gonzales soon collected a force of 1,000 Portuguese, 2,000 sepoys, 200 cavalry and a navy of 80 wellarmed vessels; and having seized Shahbazpur and Patelganga. was undisputed master of the sea. He was next joined by an exiled brother of the king of Arakan, who induced him to espouse his cause and assist him in an attack on Arakan. Portuguese were so vigorously opposed, however, that the invasion merely ended in a piratical raid. Gonzales married the sister of the Arakanese prince, and when the latter died, possibly from poison, seized his treasure.

In 1610 the Portuguese concluded a treaty with the Rājā of Arakan, by which they agreed to co-operate with him in the invasion of Bengal and to guard the passage of the rivers with their fleet; they also handed over the widow of the prince, whom he at once married to the Governor of Chittagong. The combined forces then proceeded to invade Bengal, and took possession of the country to the east of the Meghnā without opposition; but soon afterwards the Mughal troops signally defeated them, and the Portuguese leaving the rivers unguarded, pursued them up to the walls of Chittagong. At this juncture the treacherous Gonzales invited the captains of the Arakanese fleet on board his ship, seized their vessels, and set sail for Sandwip. He then proceeded to plunder the coast of Chittagong and Arakan.

which was left unprotected owing to his seizure of the fleet, and even ventured to attack the capital. He was repulsed, however, and his raid ended with the Arakan chief impaling his nephew, whom he had given as a hostage for his good faith. The pirate chief, who had hitherto never acknowledged the authority of the Portuguese viceroy, now sent an embassy to Goa to urge upon him the conquest of Arakan, offering his assistance and an annual tribute. The viceroy eagerly accepted the invitation and sent an expedition under Francis de Menzes; but the allied fleet having been defeated by a combined force of Dutch and Arakanese, and de Menzes killed, the expedition was abandoned, and Gonzales returned to Sandwip.

This defeat proved the ruin of Gonzales. The Portuguese officers returned to Goa, and induced a number of the pirates to accompany them. His own followers also, disgusted by his brutal behaviour, abandoned him; and next year the king of Arakan invaded Sandwip, defeated Gonzales, and took possession of the other islands. These islands now became the stronghold of the Arakanese or Maghs, who year after year invaded and plundered the lowlands of Bengal, carrying off the inhabitants as slaves. To such an extent were these depredations carried on that in Rennell's map of Bengal, published in 1794, a note is entered across the portion of the Sundarbans south of Backergunge that "this part of the country has been deserted on account of the ravages of the Muggs." This desolation, however, was also due in a large measure to the changes of the river system of the delta and to the ravages of wild animals; Alexander Hamilton, writing in 1727, says that "very few of the islands are inhabited because they are so pestered with tigers that there is little safety for other inhabitants; and there are also many rhinoceroses on those islands." "The tongue of the rhinoceros," he adds, "is somewhat of a rarity, for if he can but get any of his antagonists down, he will lick them so clean that he leaves neither skin nor flesh to cover their bones."

ABAKA-NESE BULE. The power of Arakan was now at its zenith, and the army and fleet found profitable employment in harrying the lowlands of Bengal. In 1610 it had been found necessary to transfer the capital of Bengal to Dacca nearer the centre of military operations; a powerful fleet was maintained on the Padmā and Meghnā to prevent and meet their incursions, while colonies of Muhammadan chiefs were planted throughout Eastern Bengal to hold in check disloyal Afghān elements and prevent their intriguing with the Magh raiders. These measures did not have much effect at first, and two of the Governors of Bengal,

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Kāsim Khān and Azīm Khān, had to be recalled in disgrace because of their failure to protect the borders of the Province. The power of the Arakan chiefs received a check, however, when opposed by the diplomacy of Islam Khan Mushaddi, during whose administration Matak Rai, a rebellious Magh chief, who held Chittagong for the Raja of Arakan, acknowledged himself a vassal of the Delhi Empire, and made over his territory, nominally at least to the Governor of Bengal (1638). The Arakanese chief, bent on vigorous reprisals, directed his troops to seize the whole coast as far as the mouth of the Ganges, and took into his employment a number of the Portuguese adventurers, whose skill enabled him to construct and navigate vessels large enough to carry With these he extended his ravages over the sea-board and up the Ganges, so that the inhabitants of Dacca trembled when they heard of the Maghs, whose general practice was to kill the men and carry off the women and children as slaves.

The general character of the Arakanese rule is described vividly by a contemporary Muhammadan historian, Shihāb-ub-dīn Talish. "The Maghs did not leave a bird in the air or a beast on the land from Chatgaon to Jagdia, the frontier of Bengal. increased the desolation, thickened the jungles, destroyed the al. and closed the road so well that even the snake and the wind could not pass through. . . From the reign of the Emperor Akbar, when Bengal was annexed to the Mughal empire, to the time of the conquest of Chatgaon during the vicerovalty of Shaista Khan, Arakan pirates, both Magh and Firinghi, used constantly to come by the water-route and plunder Bengal. They carried off the Hindus and Muslims, male and female. great and small, few and many, that they could seize, pierced the palms of their hands, passed thin canes through the holes. and threw them one above another under the deck of their ships. In the same manner as grain is flung to fowl, every morn and evening, they threw down from above uncooked rice to the captives as food. On their return to their homes, they employed the few hard-lived captives that survived, with great disgrace and insult, in tillage and other hard tasks, according to their power. Others were sold to the Dutch, English, and French merchants at the ports of the Deccan. Sometimes they brought the captives for sale at a high price to Tamluk, and the port of Baleswar. which is a part of the Imperial dominions and a dependency of the province of Orissa. Only the Feringhi pirates sold their prisoners. But the Maghs employed all their captives in agriculture and other kinds of service. Many high-born persons and Saiyads, many pure and Saiyad-born women, were compelled

to undergo the disgrace of the slavery, service, or concubinage of these wicked men. Muslims underwent such oppression in this region of war (dār-ul-harb) as they had not to suffer in Europe.

"As they for a long time continually practised piracy, their country prospered, and their number increased, while Bengal daily became more and more desolate, less and less able to resist and fight them. Not a house-holder was left on both sides of the rivers on their track from Dacca to Chatgaon. The district of Bagla, a part of Bengal, lying in their usual path, was formerly full of cultivation and houses, and yielded every year a large amount to the Imperial Government as duty on its betel nuts. They swept it with the broom of plunder and abduction, leaving none to inhabit a house or kindle a fire in all the tract. came to such a pass that the Governor of Dacca confined his energies to the defence of that city only and the prevention of the coming of the pirate fleet to Dacca, and stretched some iron chains across the nullah of Dacca and set up some bridges of bamboo on the stream of the city. The sailors of the Bengal flotilla were in such a fright, that I may say without exaggeration that whenever 100 warships of Bengal sighted four ships of the enemy, if the distance separating them was great, the Bengal crew showed fight by flight, considered it a great victory that they had carried off their lives in safety, and became famous in Bengal for their valour and heroism. If the interval was small and the enemy overpowered them, the men of the Bengal shipsrowers, sepoys and armed men alike-threw themselves without delay into the water, preferring drowning to captivity."

"Half their booty," the writer says elsewhere, "the Firinghīs gave to the Rājā of Arakan, and the other half they kept. As they were not in need of the help of the Arakan fleet, the king of Arakan did not send his ships to practise piracy in Mughal territory. He considered the Firinghī pirates in the light of his servants, and took the booty they brought as his share."\*

To add to the tale of his misdeeds, the Rājā of Arakan, in 1661, put to death Shāh Shujā, the second son of the Emperor Shān Jahān. This unfortunate prince had been appointed Viceroy of Bengal and had made a brief and ineffectual effort to maintain his claims against his younger and abler brother Aurangzeb. Defeated by Mīr Jumla, who was made Viceroy in his stead, he sought refuge in the territories of the Rājā of Arakan, and fled to Chittagong. His object, we are told, was to find a ship there to take him to Mecca, where he intended to

<sup>\*</sup> Jadunath Sarkar, The Feringi Pirates of Chatgaon, J. A. S. B., June 1907.

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spend the remainder of his life in acts of devotion. His pious purpose was frustrated by the fact that there was no sea-going vessel in the port, and even if there had been one, it could not have faced the violence of the monsoon. Shāh Shujā was therefore obliged to throw himself on the mercy of the Rājā of Arakan, dismissed the troops that had followed him in his flight, and continuing his journey along the coast of Chittagong with a few friends and retainers, at length crossed the river Nāf and made his way to the capital of Arakan. There he and his retainers were massacred by the Rājā, whom his father vaimy denounced as the cursed infidel in 1661.

Three years afterwards, the conquest of Chittagong was MUGHAL resolved upon by the Mughal rulers of Bengal. This determina- CONQUEST. tion was no doubt mainly due to the necessity of putting an end to the raids of the Maghs, but it is probable that the murder of Shah Shuja formed both an ostensible and also a genuine casus belli: -for it would be unwise to neglect the fact that the personal equation was an important factor during the reign of the Mughals. However that may be, Saista Khan, himself an uncle of Shah Shuja, prepared for the campaign soon after he had been appointed Viceroy of Bengal, and in 1664-65 assembled at Dacca a large fleet and an army of 13,000 men. Three thousand of these he embarked on board the boats under an officer named Husain Beg, with orders to clear the rivers of the pirates, and to drive them from the islands of which they had taken possession. remainder of the army he placed under the command of his own son, Buzurg Umed Khan, whom he instructed to proceed by land, and to co-operate with the fleet in punishing the Maghs.

The fleet sailed from Dacca, and took by storm the forts of Jagdiā and Alamgīrnagar at the mouth of the Meghnā, which had been for some time in possession of the Rājā of Arakan. Thence it sailed to the island of Sandwīp, where the enemy had erected several strong stockades. The Mughals were fortunate here in surprising part of the Arakan fleet, which they took with little trouble; but the capture of the stockades was not so easily effected, and several weeks were required to expel the Maghs, who were celebrated for their dexterity in the construction and defence of such fortifications. Husain Beg, having carried out his instructions, then waited for the arrival of the army, which had proceeded by land.

In the meantime, he wrote to the Portuguese settled at Chittagong and to those who were in the employment of the Rājā, offering, if they would enter his service, to give them better terms than they had from that chief and a grant of land

for the settlement of their families in Bengal. He also threatened that if they still adhered to the cause of the Raja, he would, on the capture of Chittagong, destroy every one of them whom he found there. This letter had the desired effect on the Portuguese. They agreed to his proposals, and promised to desert with their vessels at the first opportunity. The negotiations were scarcely completed when one of the Portuguese divulged the secret to the Raja, who resolved to punish their treachery by putting them all to the sword. The Portuguese. hearing of this, hurriedly abandoned their property, and embarked on board their boats during the night. In the morning they set sail, and arrived safe at Sandwip, where they were received by the imperial general, who, having selected the most efficient of them to assist in the expedition against Arakan, sent the remainder to the Governor, who assigned for their residence a place 12 miles below Dacca, still called Firinghi Bazar, where many of their descendants yet reside.

Meanwhile, the army under Umed Khan, having advanced by short marches on account of the badness of the roads, at length reached the river Fenny. Here an army of Arakanese was drawn up to oppose their crossing, but on the appearance of the Mughal cavalry, fled to Chittagong. Thereupon Husain Beg set sail from Sandwip, and endeavoured to form a junction with the army. Opposite Kumiria he was attacked by the Arakan fleet, and although he was at first able to repulse the enemy, owing principally to the assistance of the Portuguese. and to take or sink several of their ships, in the end he was forced to run the fleet close to the shore. Umed Khān immediately sent all his artillery to his assistance; and when the Arakanese, early next morning, resumed the attack in shallow water, the guns opened a heavy and unexpected fire on them and compelled them to retreat.

The united forces then proceeded to the city of Chittagong, to which they laid siege; and although it was well fortified, and defended by a number of cannon, the garrison, alarmed at the retreat of their fleet, endeavoured during the night to make their escape. They were pursued by the Mughal cavalry, and 2,000 of them seized and sold as slaves. The captors found 1,233 cannons and a quantity of stores in the place, but were disappointed in the treasure and wealth they expected to have shared. Umed Khān changed the name of the city to Islāmābād and annexed it to the Province of Bengal, leaving a considerable force to defend it from the incursions of the Maghs (1666).\*

<sup>\*</sup> Stewart, History of Bengal (1847), pp. 187-89.

The above account of the Mughal conquest has been extracted from Stewart's History of Bengal (1847), and another version by a contempory historian, Shihāb-ud-dīn Tālish, will be found in an article, The Conquest of Chatgaon, published, with some extracts from the Alamgirnama, in the Journal of the Asiatio Society of Bengal, June 1907. The latter version gives some picturesque details regarding the Mughal advance by land and sea, including a full account of two battles between the Imperial and Arakanese fleets, and of the final struggle in the Karnaphuli close to the Chittagong fort, which ended in the destruction of many of the Arakanese vessels, either by ramming or by the fire of the Mughal guns, and in the capture of the rest. It also shews what an important share the Firinghis had in the naval victories of the Mughals who were proverbially averse to the sea. The Alamgirnama again tells us that all the Firinghis of Chittagong did not desert to the Mughals, and that after the capture of Chittagong an expedition was sent against the fort at Rāmu, which was reached after 12 days' march across "difficult roads, dense jungles and terrible rivers." The fort was quickly captured, and as at Chittagong the Mughals released many Musalman ryots of Bengal, who were kept captive there, and sent them home. The place was, however, evacuated shortly afterwards, as the roads were closed and the force was cut off from reinforcements and supplies by the setting in of the rains. may be added that Rāmu appears to have been the furthest point to the south-east to which the Mughals ever advanced.\*

The Mughal conquest broke the power of the Portuguese RISE AND in Chittagong; and it will not be out of place to quote Bernier's THE POR. "The kingdom TUGUESE, account (1656-68) of their rise and fall. of Rakan or Mog," he wrote, "has harboured during many years several Portuguese settlers, a great number of Christian slaves, or half-caste Portuguese, and other Franks collected from various parts of the world. That kingdom was the place of retreat for fugitives from Goa, Ceylon, Cochin, Malacca, and other settlements in the Indies, held formerly by the Portuguese; and no persons were better received than those who had deserted their monasteries, married two or three wives, or committed other great crimes. These people were Christians only in name; the lives led by them were most detestable, massacring or poisoning one another without compunction of remorse, and sometimes assas. sinating even their priests, who, to confess the truth, were too often

<sup>·</sup> An abstract of the account of the Mughal conquest of Chittagong given in the Alamgirnama will be found in the translation of the Riyasu-s-Salatin by Maulav Abdus Salam, 1904 (pp. 228, 280, 231).

no better than their murderers. The king of Rakan, who lived in perpetual dread of the Mogol, kept these foreigners, as a species of advanced guard, for the protection of his frontier, permitting them to occupy a sea-port called Chatigon, and making them grants of land. As they were unawed and unrestrained by the Government, it was not surprising that these renegades pursued no other trade than that of rapine and piracy. They scoured the neighbouring seas in light galleys, called galleasses, entered the numerous arms and branches of the Ganges, ravaged the islands of Lower Bengal, and often penetrating 40 or 50 leagues up the country, surprised and carried away the entire population of villages on market days, and at times when the inhabitants were assembled for the celebration of a marriage, or some other festival. The marauders made slaves of their unhappy captives, and burnt whatever could not be removed. It is owing to these repeated depredations that we see so many fine islands at the mouth of the Ganges, formerly thickly peopled, now entirely deserted by human beings, and become the desolate lairs of tigers and other wild beasts."

The conquest of Chittagong was the final blow dealt to their power in this part of Bengal, and they became mere dependants of the Mughals. "In regard to the Portuguese," continues Bernier, after describing the capture of Chittagong, "Chah-hestkan (i.e., Shaista Khān) treats them, not perhaps as he ought, but certainly as they deserve. He has drawn them from Chatigon; they and their families are in his power; an occasion for their services no longer exists; he considers it, therefore, quite unnecessary to fulfil a single promise. He suffers month after month to elapse without giving them any pay: declaring that they are traitors, in whom it is folly to confide; wretches who have basely betrayed the Prince whose salt they had eaten for many years. In this manner has Chah-hestkan extinguished the power of these scoundrels in Chatigon, who, as I have already said, depopulated and ruined the whole of Lower Bengale."

Later, however, the Portuguese appear to have regained something of their old position, for Alexander Hamilton in the beginning of the 18th century writes, in a description of Chittagong and its lawless state, that "the Mughal keeps a Cazee or Judge in it to administer justice among the Pagan and Muhammadan inhabitants, but the offspring of the Portuguese are the domineering lords of it. The Government is so anarchical that every one goes armed with sword, pistol and blunderbuss; nay, even the priests are obliged to go armed, and often use their arms to as bad ends as the licentious laity; and some of

the priests have died martyrs to their villainous actions." To this it may be added that an account of an episcopal visitation to Chittagong by the Bishop of Saint Thomé, written by a Jesuit missionary in 1723, says that the Bishop confirmed 2,000 Christians there, and that the Portuguese were divided into three colonies, each of which had its captain, its church and its missionary.

There is very little on record regarding the Mughal Governors MUGHAL who administered Chittagong after its conquest, but a few NORS. facts of interest have been preserved in Sir Henry Cotton's Memorandum on the Revenue History of Chittagona. one of these Governors, Ali Beg Khan, who succeeded Mir Hadi in 1714, is commemorated by a mosque in Chittagong built where the road from Chank Bazar branches off to Katalgani, while that of Zul Kadar Khān (1737-39) is commemorated by the canal now known as the Jalkadar canal. Another Governor was Aghā Bakar (1753-54), who founded the mart known as Backergunge and so gave his name to that district. Though Governor of Chittagong, he resided at Dacca, where he was killed during an émeute in 1755. He was succeeded by Mahā Singh, who held office from 1754 to 1759, and is locally the best known of all the Mughal Governors. He is generally called Diwan Maha Singh. and many of the diwan bazars in the district derive their name from him. Stories are still current of his deeds, and among other things he is said to have broken the power of the Hazāris, till his time all-powerful in the district. He induced eight out of the ten to attend him at Sītākund, where he held his court, and then treacherously made them all prisoners and sent them under guard to Murshidābād. "The descendants of the remaining two Hazāris," says Sir Henry Cotton, "are now settled at a place known as Dohazāri from this circumstance. After this Mahā Singh, in order to increase his influence, distributed many lands rent-free, and most of the present lakhirāj tenures are traceable to his gift. He established his residence at Kanchanagar, in Phatikchari, in the north of the district." Mahā Singh was succeeded by Aghā Nāzim (1759-60), and the last Mughal Governor was Muhammad Reza Khān, who apparently ruled the district from Dacca. When it was ceded to the British in 1760, he personally accompanied Mr. Verelst, the first Chief of Chittagong, and made over charge to him on the spot.

The British had long before this attempted to get possession ENGLISH of Chittagong, the first expedition designed for its capture being EXPEDI-For many years the servants of the Company sent out in 1685. in Bengal had been subjected to the oppression of the Mughal Viceroy and their trade crippled by his exactions; and at last

they resolved to retaliate their injuries and reimburse themselves for the loss of their privileges by an attack on Chittagong. An expedition was fitted out in England, consisting of ten ships of war, under the command of Admiral Nicholson, who was directed to proceed first to Balasore, and bring away the Company's servants stationed there. He was then to deliver an ultimatum to the Nawab at Dacca, and if no satisfactory answer was received, the fleet was to proceed to Chittagong. There, the Court of Directors ordered, "if the fort, town and territory thereunto belonging be not forthwith delivered to our Lieutenant-Colonel Job Charnock, we would have our forces land, seize, and take the said town, fort and territory by force of arms." The place, when captured, was to be made "as the art and invention of man can extend to," and Job Charnock was to be "Governor of our fort, town and territory of Chyttegam."\* A mint was to be established there, and the force was to advance up the Ganges to Dacca and there extort a treaty from the Nawab by force of arms. programme was doomed to dismal failure, for the expedition never reached its destination. The fleet scattered on the voyage, and Admiral Nicholson, with several of the ships, instead of proceeding to Chittagong, entered the Hooghly; and after a skirmish at Hooghly, the English were forced by the overwhelming numbers of the enemy to abandon the factory there.\*

The Court of Directors, however, did not give up the idea of seizing Chittagong, though they had a very faint idea where it was, and imagined that it lay "up the great Ganges." Another abortive expedition followed. In 1688 they placed one Heath in command of a fleet of 10 or 11 ships, and sent him out with orders to sail at once against Chittagong and take it. On arriving in Bengal, he offered to help Bahadur Shah, the new Viceroy, in an expedition against Arakan and then proceeded to storm Balasore. He next sailed for Chittagong, where he arrived in January 1689 with a flotilla of 15 vessels and about 300 soldiers, of whom 150 were Portuguese halfcastes. He found the place defended by 10,000 men, and his council of war were against attacking it and in favour of the expedition against Arakan. After wasting a month in fruitless negotiations, Heath veered round and offered his services to the king of Arakan. His overtures being coldly declined, and his sailors decimated by scurvy, Heath determined to abandon the enterprise and hurriedly set sail for Madras, "giving orders for every ship to make the best of her way so that no more

<sup>\*</sup> C. R. Wilson, Early Annals of the English in Bengal, Vol. I.

time might be lost, and that perchance, if any Moor's ships were in those seas, we might by being scattered meet with them."\*

This was the last English expedition against Chittagong, and it CESSION remained in the possession of the Mughals until 1760, when it was of Chite peacefully ceded to the East India Company. In that year Mir Jafar Khān was deposed from the governorship of Bengal, and his son-in-law, Mīr Kāsim Alī Khān, was elevated to that high office. The districts of Burdwan, Midnapore and Chittagong, which were estimated to furnish one-third of the whole revenue of Bengal. were ceded to the East India Company by the Nawab as the price of his elevation, but nominally to meet the expenses of the army which the Company agreed to maintain for his support and. assistance. The sanad confirming the grant, under the seal of Mīr Kāsim Alī Khān, is dated the 15th October 1760, and sets forth that "the thana of Islamabad or Chittagong is granted to the English Company in part disbursement of their expenses, and the monthly maintenance of 500 European horse, 2,000 European foot, and 8,000 sepoys, which are to be entertained for the protection of the royal dominions." The grant of Chittagong was renewed by Mir Jafar in 1763, when he was restored to the governorship of Bengal, and was confirmed by a furman from the Emperor Shah Alam in 1765. Chittagong at the time of its cession contained an area of 2,987 square miles, and, including the jāgīr grants, it yielded a total revenue of Rs. 3,23,135.

The outlying and remote position of Chittagong compelled the EARLY Company to give it a strong local government, Mr. Verelst being British appointed Chief of Chittereng in 1760, and given the applications. appointed Chief of Chittagong in 1760, and given the assistance TRATION. of a Council. The oldest record in the Collectorate is a letter dated the 8th November of that year and signed by Mr. Henry Vansittart and the Council at Calcutta, directing Messrs. Verelst, Marriott and Rumbold to take up the management of the affairs of the Company. Another letter dated the 3rd January 1761 announces their arrival after fatiguing marches at Sītākund. whence they proceeded to Chittagong and received charge from the Thenceforward the Chief and his Nawāb, Muhammad Rezā. Council assumed the direct administration, corresponding direct with Government, and when Provincial Councils were established in 1773, for the management of six out of the seven divisions into which the Company's territories were then formed, it was provided that the seventh division, consisting of the districts of Chittagong and Tippera, should remain, as it then was, under the management of a Chief.

. C. R. Wilson, Early Annals of the English in Rengal, Vol. I.

Although harassed occasionally by the hill-people, Chittagong soon settled down into a well-regulated province, and the early records are devoid of anything like sensational interest. 1782, the correspondence of the Board of Revenue discloses Chittagong as an orderly district, which could be trusted to supply the Resident at Tippera with such military assistance as he might The year 1783 was occupied chiefly with proposals concerning the land-settlement, and with the troubles to which changes in connection with the land revenue always give rise. The subordinate holders (tālukdārs) had loudly complained of the oppressions of the landholder  $(zamind\bar{a}r)$ , who acted as middleman between themselves and the Government, of his increasing their rent and arbitrarily selling their lands. They also, from time to -time, claimed deductions for lands which had been washed away by the sea or damaged by storms. Such complaints formed a source of constant difficulty, but there was a conscientious desire on the part of the Company's officers to preserve the rights of the subordinate holders; and this desire has permanently impressed itself on the land-settlement. At the present day it is a district of innumerable small proprietors and tenure-holders, many of them actual cultivators, who pay their rent direct to Government.

Occasional trouble was caused by the hill-borderers, who practised a sort of nomadic husbandry-clearing a patch here and there by burning down the jungle, taking a rapid succession of crops off it, and then deserting it for fresh plots of virgin. soil. They were always an unsettled class, quick to resent any attempt on the part of the lowlanders to levy rent or cesses of whatever sort, apt to become dangerous in the hands of a borderleader, and penetrated with an aversion to the permanent villages and regular tillage of the plains. Such a border chieftain was found in one Jan Baksh, who in 1784 greatly disturbed the peace of the border. The Collector submitted an elaborate plan for excluding him from all communication with the low country, but the Calcutta authorities recommended moderation and ordered the Collector to report whether the hill-people might not be induced, by a lenient policy, to become peaceable subjects and cultivators of the lowlands. This policy of conciliation was no doubt prompted largely by commercial considerations, for cotton was largely grown by the hill-men. The Jum Mahal consequently received special attention from the servants of the Company, and it was one of their principal duties to collect cotton and forward it to the factory at Dacca, where there was a large weaving population.

39 HISTORY.

The outlying island of Sandwip (now belonging to Noākhāli district) also formed a chronic source of disquiet. It afforded an asylum for the outcastes of all the river districts from Dacca southwards, and had a mixed population of Hindus, Muhammadans, and Maghs, who formed agricultural colonies or fishing settlements, but often also pirate and robber bands. subordinate holders kept up an open war with the landholderin-chief, and every class seemed to have a grudge against its neighbour and some complaint to make to Government. Eventually Government placed the troublesome island under the direct management of the Collector, ordering him to conduct the landsettlement himself, and the steady administrative industry of the British officials gradually produced its effect. .

Besides fulfilling the ordinary duties of civil government, the administration had a curious political and military aspect, which it has long since lost. The Collector was on several occasions indented upon for troops, and more than once was called upon to organize the military defence of his district. Thus, in 1786 the south of Chittagong was invaded by a force from Arakan, with 500 Portuguese under a Pegu General. Major Ellerber was sent against them, but could see nothing of the "Peguers." The Governor-General then commanded an inquiry into the invasion, but meanwhile approved of the measures of the Collector, and directed him to confine himself to defending his frontiers and not to renew hostilities.

One of the most troublesome questions which the Collector The had to deal with in his political capacity was the claim of the French Settle-French to hold a settlement in Chittagong. In December 1747 ment. M. Reneaux, Chief of the French factory at Dacca, had ordered the establishment of a factory at Chittagong, and about 1750 M. Albert, a Member of Council at Chandernagore, had been sent from that place to Chittagong. During his residence there he caused a chapel to be built, which was called "Notre Dame de Guarde Loupe á Comcam" (situated close to the Portuguese cemetery, and, with it, washed away by the river in 1812). M. Albert was succeeded by M. Ticher, but in 1757 the French factor was recalled to Chandernagore, when the war with France was extended to the settlements in Bengal.

Nothing more was heard of the French till the year 1786, when much uneasiness was caused by their claiming to establish a factory and hold certain lands. On the 30th May of that year, M. Dangereux wrote from Chandernagore, announcing that he was sending an agent to resume certain lands belonging to the French nation in Chittagong. A report was called for from the

Kanungos and others as to the validity of the French claims, and they declared that the French had never had a factory or commercial resident at the place, and that the French colours had never been hoisted. Accordingly, the Collector wrote to M. Billon, the French Agent, ordering him to haul down the flag which he had erected over his house, "as the orders of my superiors direct me not to permit of this assumption." M. Billon replied that, unless he received a counter order from his superiors, he could not comply with the request to lower the national flag. A detailed statement of their claims was then drawn up by the French, and on the part of the English it was declared that what M. Billon alleged to be a spacious factory was a miserable strawhut, and that the claim to a factory arose from a Frenchman having, some time previously, made a speculation in cloths, iron and looking-glasses, for the sale of which he erected a hut on ground for which he paid rent. The obnoxious flag, torn by the weather, was lowered, but was again displayed. On this, the Collector's Assistant was sent with a number of peons, who hauled it down; and the Government finally ruled that the land claimed by the French should not be given up.\*

In the meantime, the prosperity of the port had been on the decline, owing to several causes, such as the long domination of the land-loving Mughals, the occurrence of earthquakes, and the rivalry of Calcutta. Abbé Raynal in his History of the Settlements and Trade of the Europeans in the East and West Indies (1777) says that Chittagong sunk into obscurity till the English arrived and settled there, and that the fortifications which they had begun to erect having been thrown down by frequent earthquakes, they had taken a dislike to the place. In spite of this, he urged that the French should effect a settlement there, for, as he sagely observed, "it is better to strive against nature than against man, and to be exposed to the shocks of the earth than to the insults of nations." The same picture of decaying trade is drawn by the author of the Riyazu-us-Salātin (1786-88), who says that "in ancient times Chittagong was a large port. The traders of every country, especially the ships of the Christians, used to frequent it. But, at present, since Calcutta is a large port, all other ports of Bengal have fallen into decay." "It is said," he quaintly adds, "that ships which founder in other parts of the sea reappear there; it rests with the narrator to prove this. And the fighting cocks of that tract are well known."

<sup>•</sup> H. Beverley, The Feringhees of Chittogong, Calcutta Review, Vol. LIII, 1871.

The annexation of the independent principality of Arakan to Magh Burma in 1784 soon led to hostile relations between the Court gration. at Ava and the authorities of Chittagong. The oppression and exactions to which the people of Arakan were subjected by the Burmese conquerors induced large numbers of them to take refuge within the borders of the district, where they were allowed to settle on the extensive tracts of waste land then untenanted. Many of these fugitives became peaceable cultivators; but others, emboldened by the certainty of a safe refuge, availed themselves of the opportunity to harass the Burmese Government, and by • predatory incursions to disturb its peace and impair its resources. The Burmese Court suspected that in these raids the fugitives were abetted by the British authorities, and considerable friction resulted. In 1793, three insurgent chiefs who had been defeated in one of their enterprises fled as usual to the Company's territory of . Chittagong, and a force of 5,000 men was sent across the Naf river to capture them. On receiving an assurance that, if guilty, the men should be given up, the Burmese commander retired; but the surrender of the fugitives, as well as other conciliatory efforts made by the British authorities, only served to confirm the belief in their own superiority which the Burmese already entertained.

From this period commenced an incessant immigration of Maghs from Arakan into this district, which was also selected as an asylum by all the adjacent insurgent Chiefs. Between the years 1797 and 1800, it is said that about thirty or forty thousand persons emigrated from Arakan into the Chittagong district\*; and by 1798, so large a body of emigrants arrived, that comprehensive measures had to be adopted by Government for their support. Captain Cox, who has left his name to the town now called Cox's Bazar, was the first officer appointed to superintend their settlement. The unhealthiness of the climate caused his death before the close of the year, and Mr. Ker, the Registrar of Dacca, took his place. It was necessary to buy up large quantities of grain for the immediate relief of the starving Maghs; and at the suggestion of the Collector, under whose supervision they were ultimately placed, they were employed on the construction of a road from Rāmu to Ukhiā Ghāt.

Meanwhile, difficulties had arisen in Chittagong. The Collector was obliged to continue his gratuitous distribution of food, but the treasury was soon exhausted. In May 1800, he prayed that a remittance of Rs. 20,000 might be immediately sent to him

At that time the boundary of British territory was the Mrothit or Mrosav giver of the old maps, the Arakanese Myothet.

to meet the most pressing demands. The Maghs began to return to their homes, or 'desert,' as the phrase was; and it was thought necessary for the Secretary to the Government to write that "the emigrants from Arakan are under no restrictions, and if they wish to leave Chittagong, they are at liberty to do so." Regular troops, and, on their withdrawal, sibandis or armed police had to be used for the protection of those that remained, and advertisements were issued to calm their apprehensions. These internal troubles gradually subsided, but it was not till 1806 that the Collector of Chittagong could transmit 'a statement of lands for which the Magh emigrants had entered into engagements for the payment of revenue.' Subsequently, Regulation XI of 1812 was passed in connection with the settlements.

The Maghs in the eastern hills still, however, caused great trouble by periodical raids. The Company's troops at intervals penetrated one or two days' journey into the hills, destroyed their stockades, and compelled their garrisons to seek refuge in the more remote jungles; but these small punitive expeditions had little permanent effect, and the incursions of the hill tribes continued. To the south also the country was constantly disturbed, especially by a leader referred to in the early records as King-berring, whose adherents were estimated at 3,000 men. In April 1814, a party of 500 Burman troops pursued this chief into Chittagong, proceeded to Garjaniā, and there fortified themselves, but retreated on the approach of a small force of the Company's troops under Captain Fogo.

"The situation of these fugitive Maghs," says Hamilton, "was in many respects very deplorable. They had fled from Arakan, to escape the unrelenting and undistinguishing fury of the Burmans, into the hills and jungles of Chittagong, where they erected temporary huts and endeavoured to prolong their miserable existence. Here they were assailed by the rebel Kingberring and compelled to join his party or fly. Those who fled were urged by the pangs of hunger to seize the victuals of the British cultivators, and were in consequence attacked by the troops posted there for the protection of the latter. With a view towards the amelioration of their condition, the British Government endeavoured to settle them on the lands of a hill chief in the back parts of Chittagong, but great difficulties attended the arrangement. These refugee Maghs, from a national hatred to the Burmans, still continued clandestinely to join the insurgents, and thereby justified the Ava Government in asserting that the British functionaries had organized a den of rebels for the molestation of the Burman territories; yet it was wholly beyond

the power of the former to eradicate the insurgents, so long as they remained secluded in the remote and insalubrious hills and jungles, seven days' journey from the sea shore; where, after repeated defeats, they were always sure to find an asylum."\*

It was to this Magh immigration that the first Burmese war The first may be indirectly traced. Aggressions by the exiles on the Burmese Burma frontier continued till 1815, and when the vigilance of the local authorities and the want of a popular leader deterred the immigrants from molesting their neighbours, the Burmese on their side began a series of petty and irritating outrages upon British subjects. Repeated attacks were made upon the elephanthunters in the public service, and the people were killed or carried off and sold as slaves, though following their avocations within British boundaries. A claim was set up to the possession of the small island of Shāhpuri (Sāhāpari) at the mouth of the Nāf, although it had been for many years in the undisputed occupation of the British. Tolls were levied upon boats belonging to Chittagong; and on one occasion, the demand being resisted, the Burmese fired upon some boatmen and killed one of them. This act of violence was followed by the assemblage of armed men on the eastern side of the Naf, and universal consternation pervaded the villages in this the most remote and unprotected portion of the Chittagong district. On the night of the 24th September 1823, the Burmese proceeded to enforce their claim to Shahpuri; a thousand men landed on the island, overpowered the guard, killed and wounded several of the party, and drove the rest off the island. As soon as the transaction was known at Calcutta, a detachment of troops was sent to dislodge the Burmese, who, however, had previously retired.

The occupation of Shāhpuri by a military force had the effect of arresting for a time the hostile demonstrations of the Burmese on the Chittagong frontier; but not long afterwards the Raja of Arakan was ordered to expel the English, and Commissioners from Ava proceeded to take possession of the island, which had been temporarily abandoned on account of its unhealthiness. This and other acts of hostility could not be tolerated, and, in a proclamation dated the 24th February 1824, the British Government declared war on the Burmese.

The principal demonstration of British military power was directed against Rangoon, which was deemed the most vulnerable point of the Burmese dominions; and the Court of Ava in the same way directed its main effort against the most feebly defended

<sup>\*</sup> Walter Hamilton, Description of Hindostan (1820).

and easily accessible part of the British frontier. A force cf more than 10,000 men was ordered to move through Arakan upon Chittagong, and the command was given to Mahā Bandula. The assemblage of this large force under a general who bore a high reputation for courage and enterprise was well known both in Chittagong and Calcutta; but the strength of the force was under-estimated, and it was believed that the weak division at Chittagong was sufficient not only for the defence of the Province, but even for the subjugation of Arakan.

A detachment of this division, consisting of about 300 native infantry and several hundred of the local levies, with two guns. had been pushed forward to Rāmu under the command of Captain Norton, and it was this small force which had to sustain the first shock of the Burmese attack. The Burmese army crossed the Naf in the beginning of May, and advanced to within fourteen miles of Rāmu; it then consisted of 8,000 men commanded by four Rajas acting under the orders of Maha Bandula, who remained at Arakan with a reserve. On the 13th of May the Burmese troops advanced to the Bāghkhāli or Khurusiā, a small river flowing past Rāmu, and on the 15th May they effected a passage. On the morning of the 17th they were within twelve paces of Captain Norton's pickets, and his untrained local levies The small force of sepoys was completely surrounded, and although for three days they maintained the struggle, they were at last compelled to retreat, and then fell into the greatest Captain Norton and five other officers were killed. and the detachment annihilated.

As soon as news of the defeat spread, a great panic fell on the whole of Eastern Bengal and extended even to Calcutta. Before, however, the Burmese resumed operations, the monsoon rains had rendered the roads impassable, and reinforcements sent to Chittagong placed it out of danger. The occupation of Rangoon by the British also made it necessary for the Court of Ava to recall the Arakan force; and when the Burmese troops retired, the alarm which the late defeat had inspired yielded to a sense of security. No further operations during the war took place within the district, though one of the British columns marched through it to Arakan, as the Bengal sepoys refused to go by sea.

The Sepoy Mutiny.

At the time of the Mutiny of 1857, the 2nd, 3rd, and 4th companies of the 34th Regiment, Native Infantry, were stationed at Chittagong; and in consideration of their good conduct, were excepted from the prohibition of furlough which had been inflicted on other companies of that regiment, pending an inquiry that was then proceeding at Barrackpore. On the 7th June,

Mr. Chapman, then Officiating Commissioner, informed the Government of Bengal that the sepoys at Chittagong had expressed a desire to be sent to Delhi against the insurgents, and this "declaration of the fidelity and devotion of the detachment" was acknowledged by the Governor-General in Council. Notwithstanding the good conduct and apparent loyalty of the sepoys at Chittagong, they were distrusted by the inhabitants of the town: and on the 13th June the Commissioner reported to Government that 'although the sepoys have done nothing as yet to give rise to any distrust of them, and their officers are all fully persuaded that their desire to be sent to Delhi to act against the insurgent regiments is as great as it is genuine,' still 'the people would be much relieved if the offer of the troops were accepted.' On the day that this letter was written, the fear which existed among the people became more marked; and on the 19th June. Mr. Henderson, the Magistrate, reported to Government that there was 'a panie amongst all classes of East Indian and Portuguese residents that the city is to be attacked, and that murder and plunder will be the consequence. A great many of the families have embarked upon vessels lying at anchor in the harbour, and have left their houses, merely coming occasionally on shore during the daytime.' The panic among the East Indians and Portuguese did not, however, have any immediate effect on the sepoys; for on the 11th July the Commissioner reported that the panic had completely subsided, and that the officer in command felt no anxiety about his men.

The result showed that there was some cause at least for the popular excitement which the Magistrate had reported; but it was not until the night of the 18th November that the outbreak occurred. The Commissioner thus described what took place:—

'The three companies of the 34th Regiment, Native Infantry, rose suddenly at 11 p.m. last evening; they released all the prisoners from the jail, killed one barkandāz (native constable), carried away all the treasure, and left the station at 3 a.m. this morning with three Government elephants, ammunition and treasure. There was no time to give information to any one, and each of the residents had to take care of himself and his family. As far as I have been able to ascertain, all the residents have escaped uninjured. No houses were burnt, only the lines and the magazine, to both of which they set fire before leaving the station. The records and stamps are all safe, as also the salt at the sadarghāt golās (i.e., the storehouses at the principal landing wharf on the river).' On the following day, the 20th November, the Commissioner confirmed his statement that no one was killed

in the station, except the one barkandāz mentioned; and he added that 'the mutiny was evidently planned very suddenly, and as suddenly carried out. Not a person in the station, Christian or native, appears to have obtained the slightest notice. The native inhabitants were just as much taken by surprise as ourselves. Of course, all was in confusion on the night of the 18th; but it speaks most highly for the good feeling and conduct of the inhabitants that not a single case of theft or plunder took place. I cannot record too strong an expression of the good feeling shown towards Government by all with whom I come in contact.'

The mutineers, after leaving Chittagong, marched northwards, and on the 22nd November crossed the river Fenny and entered the territory of the Rājā of Hill Tippera. Their party consisted, in all, of about 500 persons, including women and children, and the prisoners set free from the jail. Although both in Tippera and Chittagong they abstained from plundering the bazars, and paid highly for whatever they could get, they were reduced to the greatest straits for want of provisions, and several of the women are said to have died from the privations to which they were exposed. They then marched along the borders of Hill Tippera into Sylhet and Cāchār, but found that there was no safety for them even beyond the Company's territory; for they were almost all killed or captured by the Sylhet Light Infantry (now the 10th Gurkha Rifles) and the Kuki scouts.

RAIDS OF THE HILL TRIBES.

Shortly after this, the district suffered repeatedly from the raids of the hill tribes, who had for a long time given serious trouble and annoyance. The nature of the country they inhabited . rendered it extremely difficult to retaliate against them with. any effect. The tribes were, in their social condition, but little removed from savages; and for several years the hill country had been the scene of murderous raids committed by them. The Shindus, a numerous and powerful race in the south-east of the district, and the Kumias, were the chief perpetrators of these outrages, and their incursions extended from Manipur to Arakan. The causes of these raids were various. A private quarrel with a neighbouring clan, a searcity of women and domestic servants, and the consequent necessity of procuring a requisite number of captives to supply the wants of the tribe, the simple desire of plunder or of obtaining heads to grace the obsequies of some departed chieftain, were the principal causes which led to the commission of these raids.

When an cutrage of this nature had been committed, it was very difficult to reach the offenders. Before troops could arrive upon the spot, the marauders had retired with their booty to HISTORY. 47

the hills, and pursuit was almost hopeless in a country everywhere intersected with precipices and water-courses, and covered with dense jungle. The villages, too, in which these savages resided, were stockaded, and the paths strewed with caltrops and other devices to render the approaches as dangerous and difficult as possible. Hitherto, it had been the policy of Government to manage these wild tribes as much as possible through the influence of a powerful family called the Poangs, whose authority was believed to extend over the whole country south of the Karnaphuli to the borders of Arakan. Arms and ammunition were distributed to the Poangs, and a considerable remission of revenue was made to enable them to keep up the necessary stockades for the defence of the frontier. To some extent these measures were attended with success. But forays were still made upon our subjects of the plains, and the marauding tribes seldom met with the punishment they deserved. Government accordingly resolved to commence a different policy. In 1860 the hill tracts to the east of the plains country of Chittagong were withdrawn from the operation of the general regulations; and a Superintendent with magisterial powers was appointed, under the Commissioner of the Chittagong Division, to exercise due supervision and control over the numerous tribes which inhabited that then almost unknown country.

In 1861 a military force was sent into the hill tracts which secured the submission of the Kuki Chief, Rattan Puiyā. Between 1866 and 1871 the Howlong clan of the Lushais gave constant trouble, and eventually two military columns were sent against them, one from Cāchār and the other from Chittagong. The operations were completely successful, and comparative peace ensued till 1888, when Lieutenant Stewart, R. E. and a survey party were massacred in the hill tracts not many miles from the border of the Chittagong district. In 1890-92 military expeditions from the Assam and Burma sides, as well as from Chittagong, operated against the offending tribes, with the result that all raiding has been stopped.

Since that time the history of Chittagong has been uneventful, and there is little to record beyond the peaceful progress of civilization, as manifested in the expansion of cultivation, the extension of communications, the development of trade and the growth of education. On the 16th October 1905 the district was transferred from Bengal to the newly-formed Province of Eastern Bengal and Assam.

## CHAPTER III.

## THE PEOPLE.

GROWTH OF THE POPULA-TION.

The first census was taken in 1872 and showed a population of 1,127,492 souls. There is good reason, however, to believe that this census was not altogether accurate and complete, owing to the wild rumours which found ready credence. No opposition was offered to the taking of the census; but there was much uneasiness among the people, and many absurd reports were spread abroad, mostly connected with the Lushai expedition then in progress. It was stated that a number of heads would be required for the purpose of pacifying the Lushai chiefs, or to be examined as an augury of the success or failure of the expedition. Another report was that in every household containing five males, one would be impressed to serve as a cooly in the hills. Some people said that any person not enumerated would be held to have died a civil death and lose all rights of citizenship.

At the census of 1881 it was found that the population was practically stationary, having advanced only to 1,132,341. The total growth was less than one-half per cent., and among the male population there was an actual decrease of 0.82 per cent. This result was ascribed to a series of epidemics of cholera, the rayages of a peculiarly fatal and debilitating type of fever, and the migration of a large number of settlers to Arakan. however, of these adverse influences, there is no doubt that this census would have shown a distinct advance on the figures of 1872 had it not been for the cyclone and storm-wave of 1876 and the cholera which succeeded the inundation. It is estimated that, in the few hours during which the country was submerged. 12.000 persons were drowned, and that nearly 15,000 perished in the cholera epidemic which followed. In some parts, where the storm-wave swept over the embanked villages and washed away the embankments, the land was so injured that the cultivators deserted their holdings and migrated in large numbers. The next ten years, however, were healthy and prosperous, and a considerable increase of population was recorded in 1891, the number of inhabitants being 1,290,167 or 13.9 per cent. more than in 1881. The increase was greatest along the sea-board,

where the people were recovering from the ravages of the cyclone of 1876, and was most marked in Maiskhāl thāna, which includes the island of Kutubdia, which the storm-wave had swept from west to east.

The census of 1901 disclosed a population of 1,353,250, the Census of increase since 1891 being 4.9 per cent. In the earlier years of the 1901decade the crops and public health were good, but on the 24th October 1897 the district suffered from a destructive cyclone. A series of storm-waves swept over the island of Kutubdiā and the villages on the mainland, drowning many thousands of men and cattle, sweeping away homesteads and destroying the standing crops. The loss of life by drowning alone was estimated at 14,000 souls; and to the loss of life was added the destruction of the crops. The district had suffered from two bad seasons, and intense distress was caused by the total loss of the rice crop in the tracts chiefly affected. It is believed that there was no direct mortality from starvation, but want and exposure must have lowered the general health and rendered the people liable to the attacks of The country was covered with corpses of men and animals, and the water-supply was polluted. Cholera broke out in a severe form, and in Kutubdia alone it was estimated that 1,300 persons or more than 11 per cent. of the population died during the epidemic.

To fully appreciate the effect of this catastrophe on the population of the affected tracts, it is necessary not only to compare the figures for the census of 1901 with those for 1891, but also to note the progress made during the previous decade. These tracts form the most fertile part of the district. and in 1891 the Maiskhal than showed an increase of 29.5 per cent., Bānskhāli of 25.4 per cent., and Chakariā of 20.3 per cent. It may be assumed that, but for the cyclone, there would have been a considerable increase between 1891 and 1901. Maiskhāl. however, showed a decrease of 7.3 per cent., and the other two thanas were practically stationary. The difference between their present population and that which they would have attained if they had continued to grow at the same rate as in the previous decade was about 54,000. There was some loss in other thanas also, due partly to the damage caused by the cyclone, and partly to subsequent emigration to Kutubdiā and Maiskhāl, which concealed to some extent the true extent of the loss sustained by the latter tracts. It is probably to these causes that the decline in the population of the Sātkaniā thāna should be ascribed.

The net increase during the decade in the district, as a whole, was 63,083 or 4.9 per cent. It seems probable that this is only about half of that which would have taken place, but for this disastrous cyclone. The greatest growth has occurred in the thanas along the coast which escaped the brunt of the cyclone, viz., Teknaf and Cox's Bazar in the south, and Chittagong, Sītākund and Mīrsarai in the north. The two former are still very sparsely inhabited. In the three latter, the soil is more fertile, there is a much smaller proportion of uncultivated waste than in the inland thanas, and they are now traversed by the railway.

The principal statistics of the census of 1901 are reproduced below:—

		Number of			Popu-	Percentage of variation in
Subdivision.	Area in square miles.	Towns.	Vil- lages.	Population.	lation per square mile.	population between 1891 and 1901.
Cove Regar	1,596 896	1	1,217 233	1,153,081 200,169	722 223	+ 4°6 + 6°5
DISTRICT TOTAL	2,492	2	1,450	1,353,250	543	+ 4.9

GENERAL CHARAC-TERISTICS. Density of population,

Chittagong differs from other portions of Eastern Bengal in that only a small portion of the area is alluvial. It consists of a long narrow strip of coast, valleys and low ranges of hills, lying between the Bay of Bengal and the Hill Tracts; the only alluvial tracts are the islands of Maiskhāl and Kutubdiā, a small tract opposite to them in the centre of the district, and a very narrow line along the coast. The density of population for the whole district is 543 persons to the square mile, but 851 square miles or more than a third of the entire area is covered by uninhabited hills and jungle, and the density in the inhabited area is 825 persons to the square mile. There is an extremely dense population within a radius of 30 miles from Chittagong, surrounded by a fringe of country which becomes less densely populated as the confines of the district are approached. In fact, the port of Chittagong may be regarded as the radiating centre, and population decreases almost in the ratio of the distance from it. The most densely populated than as are Chittagong, with 1,629 persons to the square mile, Mīrsarai (889), Hāthazāri (868) and Patiyā (845), chiefly because they consist almost entirely of level country and culturable lands.

The most sparsely inhabited part of the district is the Cox's Bazar subdivision, which includes the storm-swept islands of Maiskhāl and Kutubdiā, and, in the south, an inhospitable region of hill and jungle with only a few infrequent patches of cultivable land. More than half of the subdivision is covered by hills and

jungle, and the density of the population in the remaining area is less than half that of the Chittagong subdivision. It falls as low as 140 persons to the square mile in the Teknāf thāna, which consists of immense stretches of hill and jungle, with sparse cultivation along the sea coast and the shores of the Naf estuary; while the Cox's Bazar thana, which is the most thickly populated, supports only 310 persons per square mile.

The district receives few immigrants, but the number of Migraemigrants is very large. At the census of 1901 it was found that tion. 106,000 natives of Chittagong were enumerated elsewhere, while only 11,340 persons born outside the district were resident in it. The immigrants are mostly labourers from up-country, and include a number of coolies recruited for the tea-gardens, but there are also many traders who come from the adjoining districts of Eastern Bengal. The emigration which takes place is, to a great extent, of a temporary character, the emigrants being mostly men who leave their wives in Chittagong and have a permanent home there.

The most marked feature of this movement is the annual exodus for the Arakan rice harvest, where the reapers earn as much as a rupee a day. All through the cold weather thousands of labourers flock to the south to harvest the rice crop of Arakan; large numbers go by steamer direct to Akyab, but the majority, especially those from the south of the district, travel by road or by road and steamer. At the time of the census over 79,000 natives of this district were found in Burma, of whom all but 14,350 were males. There are also a large number of lascars on sea-going vessels, and other emigrants are cooks of the Baruā Magh class and clerks working in Rangoon and the Burma ports.

The great majority are only temporary absentees, who return home after they have accumulated some savings; but the number of females amongst the Chittagonians enumerated elsewhere shows that there is also a good deal of permanent emigration, especially to Arakan, where nearly 14,000 of the total number were found. Most of these are Maghs, whose ancestors sought refuge in the district about a century ago, and who are now gradually finding their way back to their old home; they also include many families who left the district to settle permanently in Arakan after the cyclone of 1897. The sparsely populated parts of Tippera, Hill Tippera and the Chittagong Hill Tracts also attract a number of temporary emigrants, mainly wood-cutters.

The population of Chittagong is almost entirely rural. There Towns and are two towns, Chittagong and Cox's Bazar, containing 22,140 villages. and 3,845 inhabitants, respectively. The total urban population

therefore amounts to 25,985, and the rural population accounts for 1,327,265 souls congregated in 1,450 villages. There are no village sites such as are found in Bihār, for Chittagong is a district of peasant proprietors, who live on their own land and are not drawn together in villages like tenants under large The villages, such as they are, consist of clusters of homesteads, each surrounded by a most and an impenetrable fence of cane or cactus. These groups of houses are called pāras, and the village may contain any number of pāras, each of which has no social ties with any other pāra. Round the pāras lie the rice plains, and the village boundary sometimes cuts straight through a pāra, sometimes pursues a devious course through a rice plain, and in no case represents the limits of land occupied by the villagers. There are no village officials, except the chaukidars and village panchāyats appointed under the Chaukidari Act, though almost every Muhammadan pāra has its elders, called matabars, whose decisions in case of dispute command respect.

Sex.

Chittagong alone of all the districts of Eastern Bengal shows a preponderance of females over males, the proportion of females being 1,100 to every 1,000 males enumerated in the district. This predominance is due to the temporary immigration mentioned above and to the large number of lascars from Chittagong found in sea-going vessels.

Language.

Chatgāiyā, a corrupt dialect of Bengali, which derives its name from that of the district, is spoken by 98 per cent. of the The Muhammadans, who form the majority of the population, have interlarded this dialect with a number of Persian and Arabic words, and there is also an admixture of Arakanese words. Arakanese, which is merely the dialect of Burmese spoken in Arakan, is the language of the Maghs settled in the district, and is most common in Rāojān and Patiyā thānas, and in the Cox's Bazar subdivision, where the majority of the Maghs are found. Many of them, however, returned Bengali as their language at the census of 1901. In the village of Dohazāri a kind of debased Hindi is still spoken by the people, who are said to be descendants of some up-country soldiers, who came over with a Hindu captain who had taken service under the Muhammadans. Their ancestors were established there as wardens of the marches to protect the passage of the Sangu river against the incursions of the Arakanese and the inroads of the wild tribes from the hills.

In the district, as a whole, one rarely hears anything but Bengali spoken, or rather a corrupt form of it, which is almost unintelligible to a native of Central Bengal. The most noticeable feature which strikes a stranger is the extreme tendency of the natives to slur over constants, to clip syllables, and to substitute aspirates for sibilants.

The constituent elements of the population reflect to a certain RACES. extent the four periods into which the history of Chittagong is divided, the rule of the Tippera Rajas, the Arakan domination, the Muhammadan occupation, and the British administration. related in the preceding chapter, Chittagong before the Mughal conquest was no secure possession and seems to have been alternately in the hands of the Muhammadan Sultans of Bengal, the Hindu Raias of Tippera, and the Buddhist kings of Arakan, each of whom left traces of their occupation. There are still some Tipperas to be found in Phatikchari on the border line between Chittagong and Hill Tippera, and the Hindu population is in some parts distinctly Mongolian in feature. A shrine at Sītākund, a temple at Mahāmuni, and the names of villages, such as Nuapāra (the pāra of cows) and Kuipāra (the pāra of buffaloes), still testify to the Arakanese occupation. The early Muhammadan rule is attested by various Afghan or Pathan remains, and there are numerous people in the district who claim to be Afghans or Pathans by descent. In 1666 Chittagong was annexed by the Mughals, by whom the district was given out in jāqīrs. The Muhammadan settlers, spreading wherever they found arable land, cleared away jungle and brought fresh lands into cultivation, and in 1760 it was found that the district was almost wholly peopled by Muhammadans.

During the Muhammadan period a large number of Hindu immigrants also settled in the district; some were soldiers. others men who had followed in the train of the invading army, or ministerial officers and clerks introduced to carry on the work of Government, while others were traders. A small minority were responsible officials who helped in the civil administration, while many were the slaves of those officials. The early days of British administration witnessed a considerable volume of immigration from the south. In 1783 Arakan was conquered by the Burmese, and the Arakanese fled to British territory in large numbers between the years 1783 and 1800. The immigrants were permitted to settle in tracts of untenanted land on the borders of the Naf river and in Maiskhal island, but most came to what are now the Hill Tracts. So troublesome did this immigration of Maghs become that we find the Company enacting a regulation to prevent them from settling in this district (Regulation XI of 1812). The tide of migration now flows in exactly the opposite direction, and the Maghs are beginning to return from Chittagong to Arakan,

Briefly, it may be said that the traces of the Tippera conquest are faint, probably because of its antiquity. The Arakanese occupation, with the later immigration of Maghs at the end of the 18th century, accounts for the number of Buddhists in the district and also explains the presence of the Firinghīs, the descendants of the Portuguese pirates and mercenaries employed by the Arakanese. To the Muhammadan connection with the district since the 14th century must be ascribed the predominance of Musalmāns, and their occupation accounts not only for the introduction of the conquering race, but also for the immigration of Hindus. Finally, with the advent of the English, the consequent security of life and property, and an increased demand for clerical labour, the Hindus began to migrate in larger numbers, while thousands of Maghs came in to escape the oppression of the Burmese.

Relicions.

As in other Eastern Bengal districts, Muhammadans form the great majority of the population, no less than 968,054, or 72 per cent. of the total number, being followers of Islam. Hindus, including aboriginal and semi-aboriginal tribes which have embraced Hinduism as a religion, number 318,245 or 24 per cent. of the population, a smaller percentage than in any other district of Eastern Bengal except Bogra and Rajshahi. Buddhists number 64,973, and there is a small community of Christians numbering 1,237 souls. The Hindus are most numerous in Patiyā and Rāojān, the Muhammadans in Cox's Bazar, Chakariā, Teknāf and Chittagong, and the Buddhists in Teknāf and Cox's Bazar, a result which might have been expected owing to their nearness to the Arakan frontier. The population of Cox's Bazar subdivision is, in fact, almost entirely composed of Musal-In the headquarters subdivision the mans and Buddhists. Buddhist element is strongest in Rāojān and Patiyā, both of which are old Magh settlements supporting a large colony of Barua Maghs. There are practically no Christians in the interior of the district, and most of them live in the town of Chittagong and its environments.

Muhammadans,

The preponderance of Muhammadans may be ascribed partly to the conversion of low caste and aboriginal people to Islām, partly to the fact that they conquered and colonized the district at a comparatively late date, and partly to their superior capacity for clearing jungle lands. A noticeable feature is the large number found in comparatively remote thānas, such as Phatikcharī, where they number 72.58 per cent. of the population, and in Sātkaniā

and the Cox's Bazar subdivision, where they account for no less than 80 per cent. of the population. Sītākund (74 per cent.) and Hāthazāri (77.68 per cent.) naturally attracted the early settlers owing to their proximity to Chittagong and to their situation on the north bank of the Karnaphuli river. The former thāna has also received immigrants from the neighbouring island of Sandwīp, as has also the Chittagong thāna (78.72 per cent.), where, moreover, there is a colony of descendants of Arab traders.

The Muhammadans are of mixed descent, and considerable physical differences are noticeable among them. The high cheek-bones, hook noses, and narrow faces of many of the inhabitants of the town of Chittagong proclaim their Arab extraction. Again the muscular, bull-necked, strong-featured and thick-bearded dweller on the chars is a very different creature from the fleshless, featureless and hairless inhabitant of the interior of the district. The differences are racial, the former being descendants of Afghān and Mughal soldiers, while the latter are probably of mixed origin, their ancestors having intermarried with converted Tipperas and other aborigines.

Persons of Pathan and Arab blood are in a very small minority, however, and nearly all the Muhammadans of the district are converts or the descendants of converts drawn from the same races that are now classed as Hindus. One of the best known instances of conversion is that of the family of Asad Alī Khān of Barauthan in Anwāra, who are by origin a branch of the Srijukta family of Nuapāra. The story goes that the ancestor of the Muhammadan branch of the family. Syam Rai Chaudhri, who was a military officer in the service of the Mughals, entered the Governor's presence one day during the season of the Ramzan fast, and found him inhaling the perfume of some flowers. The Hindu had the imprudence to reproach the Mughal for breaking his fast, for "in our Sastras," he said, "it is written that smelling is half eating." took a grim vengeance. At the ensuing Muharram he had a savoury banquet prepared of beef and onions, and summoned the unfortunate Hindu to the room where the feast was laid, Hindu entered, his face wrapped in his cloth to shut out the polluting odour. His attempt was vain. "Let me remind you," said the Nawab, "that according to your Sastras smelling is half eating." The Hindu's caste was gone, and he was obliged to turn Musalman.

A strong prejudice exists among the Chittagong Muhammadans against immigrants from the island of Sandwip. This island was throughout the first half of the 17th century in the possession

of piratical Arakanese and Portuguese, who drew to their standard all the masterless men of the surrounding districts, and raided their women from the coasts of Bengal. Consequently, the men of Sandwip are looked down upon as homeless folk of no reputable origin. Moreover, a chronic preponderance of males, which reached a climax after the cyclone and storm-wave of 1876. formerly compelled them to purchase or steal women from the mainland. Immigrants from the Dandra parguna of the Noakhali district, who are found in considerable numbers in Mirsarai and the north of Sītākund thāna, are also regarded with disfavour by the exclusive natives. Their patois differs considerably from that of the Chittagong men, and another distinction is that they have introduced into the villages which they occupy the Noākhāli unit of area, known as the Shāhi or royal kani, which is equivalent to four of the Maghi or Arakanese kani in use throughout the rest of the district.

The Muhammadans of Chittagong are nearly all Sunnis, but some have joined the strait puritanical sect of Farāzis, which has attained great strength in Eastern Bengal. Their religious enthusiasm is at once evinced and stimulated by visits to Mecca and other places of pilgrimage, and some of the lower classes among the Hindus are converted every year. Mosques and adgahs are, however, not so frequent as might be expected, and on the whole the local Muhammadans are ignorant about the tenets of their religion, and practices not founded on the Korān have crept in.

As an instance of this may be mentioned the adoration of Pir Badar. He is the guardian saint of sailors, and is invoked by the boating classes, Hindu as well as Muhammadan, when they start on a journey by sea or river as follows: - Amarā āchhi polāpān. Gāji achhē nikhamān. Shirē Gangā dariyā. Pānch Pīr Badar Badar Badar. The invocation may be translated thus:-" We are but children, the Ghazi is our protector, the Ganges river is on our head. Oh Five Saints, oh Badar, Badar, Badar!" Badar Pir. who is said to have arrived at Chittagong floating upon a stone slab, is, according to the late Dr. Wise of Dacca, one Badruddin, who was for many years a resident of Chittagong, died in 1440, and was buried in the Chhota Dargah of Bihar. The local story is that Chittagong was at that time the abode of fairies and hobgoblins, and that no one could live there. The saint begged a space for his lamp. This was granted, and when he lit it, its magic power was so great that the spirits were frightened away. An old Portuguese resident of Chittagong who died recently used to aver that the saint was a Portuguese sailor,

the survivor from a shipwreck, who floated ashore on a raft and became a Muhammadan. There is a hillock in front of the Commissioner's house which is reputed to be the place where Pīr Badar lit his lamp, and here candles are burnt nightly, the cost being met by contributions from Hindus, and even Firinghīs, as well as from Muhammadans. It has been suggested that Pīr Badar is the same as Khwāja Khizr, a pre-Islamic hero of the Arabs, who is believed to reside in the seas and rivers of India and to protect mariners from shipwreck. In Chittagong, it has been pointed out, Badar is a religious exclamation used to invoke a blessing, and this identification explains why the name of Khwāja Khizr is not known locally.\*

In the Cox's Bazar subdivision there is a curious group of Shām-Muhammadans called Shāmbunis, a hardy race, who live by bunis. fishing and are semi-amphibious in their habits. They appear to be an isolated class, as they are looked down upon by other Muhammadans and can only marry among themselves. The Shāmbunis have no traditions of their origin, but their appearance gives rise to the supposition that they are of mixed descent, half Bengali and half Magh; the fishing nets they use, the huts they live in, and the clothes they wear are like those of the Maghs. Many speak the Magh language, while those who profess to talk Bengali speak it in such a corrupt form that they are barely intelligible even to their immediate neighbours.

Hindus constitute nearly one-fourth of the population and Hindus. are found in greatest strength in the thanas round Chittagong. Thana Patiya, where they number 34 per cent. of the population. is the principal centre of the Hindu community, and next in importance comes the Rāojān thāna with 31 per cent. Pativā was the first great settlement of the Hindu clerks who came with Shaista Khān's army; and it still maintains its reputation as the thana which produces the greatest number of pleaders and office clerks. Rāojān again was a settlement of the Hindu clerks who came with the English in 1760, and, next to Patiya, it is the centre of the greatest intellectual activity. Here, too, as in Pativa, a large proportion of the Hindus are descendants of the ministerial officers who first settled in the district. North of the Karnaphuli the highest percentage of Hindus is to be found in Mīrsarai, viz., 29.76 per cent.; it is probable that the shrines at Sītākund have drawn a large number of Hindus to this thana. and the traffic along the Trunk Road has also attracted a number from other districts. Only 16,000 Hindus are found in the Cox's

<sup>\*</sup> E. A. Gait, Bengal Census Report of 1901.

Bazar subdivision; here they nowhere exceed 12 per cent., and this proportion they reach only in the island of Maiskhāl, where the shrine of Adināth is situated.

The Hindus are rarely actual cultivators. When they own land, they either let it out and realize the rents in kind, or sublet and draw only money rents. They are, on the whole, better off than the Muhammadans, and consequently emigrate to Arakan in smaller numbers. They usually marry their daughters between the ages of 5 and 10, and their sons between 15 and 20. In matters of religion they are apathetic; one rarely sees that display of enthusiasm over religious festivals which is so common in other parts of Bengal. They are more litigious than the Muhammadans, but are equally, if not more enterprising; it may be mentioned that the well-known Tibetan traveller and scholar, Rai Sarat Chandra Das Bahadur, c.i.e., is a native of Patiya in this district. All the leading Hindu families are descendants of Diwans, Kanungos and other officials connected with the revenue administration under the Mughals and in the early days of British rule; but there are also a few up-country Hindus, descendants of soldiers in the old military battalions, called Hazāris. They are, as a rule, better educated than the Muhammadans.

Buddhists.

The Buddhists consist of two main classes:—descendants of Arakanese immigrants, who have settled in the district from time to time, and Barua Maghs, who call themselves Rajbansis and are mostly descendants of the offspring of Magh or Arakanese mothers They are most numerous in Cox's Bazar by Bengali fathers. subdivision, where there is an old Magh settlement composed nearly entirely of pure Arakanese. Their immigration dates from the close of the 18th century, when the kingdom of Arakan was conquered by the Burmese. Great efforts were made by the East India Company to induce these immigrants to settle down reaceably, and lands were allotted to them in Cox's Bazar. The section of the Magh community in the town of Cox's Bazar are now in poor circumstances, however, as they are thoroughly lazy, and bad agriculturists; many are small merchants or eke out a meagre subsistence by weaving and fishing. In the headquarters subdivision Buddhists are found in greatest strength in Rāojān and Patiya, where they are mostly Barua Maghs, but a few are hill Maghs who cannot speak Bengali. It is a general rule that in mixed marriages religion goes with the mother, and this is the case with the Barua Maghs, who are Bengalis in everything but They belong to the southern school of Buddhism, and believe that they received the Buddhist faith from Burma and Ceylon within the last two or three centuries. A fuller account of the Buddhists of Chittagong will be found in the appendix to this chapter.

The number of Christians is swollen by the inclusion of the Christians. Firinghi community at Chittagong, who are Roman Catholics. There are a certain number of Europeans resident in the district, but they are very few in number, and the Christian population of the district is almost entirely of mixed descent. The number of native converts is only 49, and the Baptist Mission here does not seem to have met with much success.

The majority of the Muhammadans are Sheikhs, who number TRIBES 954,294, but 9,000 claim to be Saiyids and 2,000 call themselves GASTES. Pathans. The Sheikhs are nearly all Sunnis, and their chief Sheikhs. occupation is agriculture, but they include a large number of petty traders. Numbers flock every season to Arakan to assist the Arakanese in planting and rearing their crops, and then return to their homes after the work is done; others supplement the income derived from their fields by going out to service as ships' lascars or as day-labourers. Marriages between Sheikhs and Maghs are by no means uncommon in the south of the district. The age at which they marry is 15 to 20 years for men and 10 to 15 years for women, the marriageable age for girls being higher than among the Hindus. Divorces are easily obtained, and the husband frequently resorts to this provision of the law; a large number of the serious criminal cases in the district arise out of the Sheikhs' quarrels about women. As a class, they are sturdy agriculturists and keen traders, frugal, if not miserly, in their habits.

The Kayasths, with a strength of 71,400, are the most Hindu numerous Hindu caste. Many of them and of the Baidyas, who castes. number 7,000, are the descendants of revenue officials employed by the early Arakanese, Musalman and British rulers. Next in importance come the Sūdras (57,600), and then the Jugis (35,000). Brāhmans have 24,000 representatives, and congregate most thickly round the shrines of Sītākund and Adināth. Many of the low Hindu castes are probably non-Aryan in origin, and include fishermen, agriculturists, boatmen, weavers, mat-makers, barbers, washermen and the like. Among aboriginal tribes who have become Hinda in may be mentioned the Mongoloid Tipperas, who are found almost end tirely in Phatikehari thana.

The Kāyasths are for the most part descendants of immigrants Kāyasths. no came into the district as revenue agents and clerks in the vice of the Mughals. The Nawabs, of Bengal were particularly id of employing Hindu revenue collectors, the saying being tributed to Mīr Jafar Khān that of Muhammadan was a sieve

which retained nothing, while a Hindu was a sponge which might be squeezed at pleasure. These revenue officers settled down mainly in Patiyā and Rāojān and in the Anwāra out-post, and by degrees acquired large estates in the district. A curious feature of the caste system of the Chittagong Kāyasths is that a Kāyasth father's first effort is to find a Baidya husband for his daughter, and failing a Baidya, he falls back upon a Kāyasth bridegroom.

Sūdras.

The Sūdras include several low castes, such as Gops or milkmen, Malis or gardeners, Telis or oil-men, Tantis or weavers. Madak Mayrās or confectioners, Bāruis or betel cultivators, Kutals or potters, Karmakars or Kamars, the blacksmith caste, and Napits or barbers. Nearly two-thirds of the total number are found in thānas Patiyā, Rāojān and Bānskhāli. Many of these men are called ghulams, and their position is a very interesting one. The majority of them are probably descendants of slaves, who accompanied Hindu revenue officials to the district in the latter part of the 17th century. There is a tradition also that a large number of starving men sold themselves and their families into slavery in time of famine. Many of them hold their lands and houses as nankar, i.e., they render service in lieu of paying rent. This system appears to be in a stage of transition, the services rendered being frequently almost nominal, such as menial service at  $p\bar{u}/\bar{a}$  seasons and the like, but even these nominal acts of service are tending to fall into desuetude.

Jugis.

The Jugis are the weaving caste of Chittagong and are probably of aboriginal origin. They have little cultivation and are generally in poor circumstances. They are almost entirely confined to the headquarters subdivision, over which they are fairly equally distributed.

Maghs.

The Maghs of Chittagong belong to three groups, the Jūmia Maghs, the Roang or Rakhaing Maghs and the Rājbansi or Baruā Maghs. The Jūmia Maghs are found along the banks of the chief rivers in the upper part of their courses and in the low ranges of hills south of the Karnaphuli. They call themselves Khyoungtha or men of the rivers; but the term Jūmia Maghs has come to be applied to them because they practise jūm cultivation—a nomadic form of tillage, which consists of clearing a small tract of virgin soil by barning down the forest, cultivating it heavily for a year, after which the soil becomes exhausted, and abandoning it for a fresh patch of land. The Roang or Rakhaing Maghs, who are found in the Cox Bazar subdivision, are the descendants of refugees who fled to Chittagong at the close of the 18th century after the invasion and conquest of Arakan by the or mese, and also of those who sought

British protection shortly before the first Burmese war in 1824. They are most numerous in the police outposts of Rāmu and Ukhiā, where lands were granted them by Government, at the subdivisional station of Cox's Bazar, and at Harbhang. Those living in the towns and larger villages gain a livelihood by trade, and, where opportunity offers, by fishing. Their language and their names are Burmese; their religion is Buddhism; they do not as a rule understand Bengali, and never speak it among themselves.

Both the Jūmia and the Roang Maghs probably belong to the same original stock, but the former, having long been settled in Chittagong and the hill country to the east, regard themselves as the aborigines of the Hill Tracts, while the latter belong to a more recent stream of immigrants from Arakan; their name Roang being merely a corruption of Rakhaing, the indigenous name for Arakan. The physical characteristics of both tribes are unmistakeably Mongolian. Their stature is low, the face broad and flat, the cheek-bones high and wide, the nose flat and bridgeless, and the eyes small with eyelids obliquely set.

The Raibansi or Barua Maghs are the offspring of Bengali women by Burmese men or, more generally, of Arakanese mothers by Bengali fathers. They live in the plains where they have settled down to avocations similar to those of the people among whom they dwell; and they are largely employed as cooks in Calcutta. They have adopted Hindu customs and the Bengali language, and are now practically Bengalis in all but religion. The external indications of their Mongolian descent have been obliterated by generations of intermarriage with the non-Aryan Bengalis of Chittagong and Noakhali; and they have the glossy black complexion, wavy hair, and abundant beard and moustache which characterize the lower castes of Eastern Bengal, It may be added that their somewhat insolent bearing and excitable manner of speech complete the contrast with the stolid but amiable Mongolians, from whom they are remotely descended. The names Rajbansi and Baruā are convertible, but the latter is the most favoured and is usually claimed outside the district, as by Magh cooks in Calcutta.

The origin of the name Magh is doubtful. According to Wilson and other authorities it is a name commonly applied to the natives of Arakan, particularly those bordering on Bengal or residing near the sea—the people of Chittagong. Sir Arthur Phayre derives the name from "Maga, the name of the ruling race for many centuries in Magadha (modern Bihār). The kings of Arakan were no doubt originally of this race; for though this is

not distinctly expressed in the histories of Arakan, there are several legends of kings from Benares reigning in that country, and one regarding a Brāhman who marries a native princess and whose descendants reign for a long period."\* The name appears to be one of considerable antiquity. Megasthenes,† in speaking of the mountains beyond the Ganges and the chief tribes inhabiting them and dwelling along the coast, mentions the Makkokalingæ among the Brachmanai (Burmese); and these Makkokalingæ have been identified with the Maghs.

Firinghis.

The Firinghist are descendants of the Portuguese adventurers and mercenaries, who played such an important part in the history of Chittagong a few centuries ago. With one exception, however, all the Firinghi families are of mixed descent, and have a large proportion of Magh or Muhammadan blood in their veins. As late as the beginning of the 19th century, they possessed numbers of slaves, often exceeding 50 in one family, and the slave girls were let out as concubines. To this day they form connections with Magh and Muhammadan women, but never marry them unless they consent to be baptized. The result is that the present descendants of the Portuguese bear no resemblance to their ancestors, and, except by their dress, are hardly distinguishable from natives; in fact, the preponderance of native blood and similarity of habits draw them much more to the native than to the European. In appearance, they are darker than Hindustanis, their complexion being of a brownish tint and their hair black and shiny. The men are short, thin, flat-chested, and generally ill-made. The girls are occasionally handsome, and at the great Christian festivals exhibit their fondness for dress by wearing bright damask garments, the crude colouring of which is relieved by a graceful white veil resting on the head and falling down like a mantilla, The native calls them Matti Firinghi (earth-coloured Europeans) or Kālā Firinghī (black Europeans), and regards them as no better than himself. Indeed, by neglect of education, the Firinghis have allowed the natives to outstrip them, and many appointments, of which they formerly had the monopoly, are at present held by Hindus and Muhammadans. The pride of race. however, still lingers among them, and they look down upon natives who are their equals both in energy and education.

From long intercourse with the latter they have adopted many of their customs; and numerous ceremonies, allied to

<sup>\*</sup>According to Burmese tradition, the ancient kingdom of Arakan was founded by a son of a king of Benares, Sakhyawādi.

<sup>†</sup> McCrindle, Ancient India as described by Megasthenes and Arrian, 1877.

<sup>‡</sup> This account of the Firinghis has been compiled mainly from an article, The Feringhees of Chittagong, by H. Beverley, Calcutta Review, 1871,

those practised by natives, have been introduced on the occasion of domestic occurrences. Marriages among the Firinghis are usually arranged by a third party. The children always inherit the names of their fathers, whether they are the offspring of concubines or not; if illegitimate, public acknowledgment by the father and mother entitles them to aliment and recognition. They adopt English Christian names, but the surnames are still Portuguese, such as De Barros, Fernandez, De Souza, De Silva, Rebeiro, De Cruz, Da Costa, Penheiro, Gonsalvez, etc. Another trace of their Portuguese descent is found in the number of debased Portuguese words contained in their vocabulary. By religion they are Roman Catholics, and there is an old Catholic church with a convent, where Firinghi boys and girls are educated. They are mostly found in the town of Chittagong, where they find employment in the Government offices and in the port. Some also serve on sea-going steamers and seem still to retain that taste for a sea-faring life for which they were distinguished in the 17th and 18th centuries. In the mofussil they practise agriculture on a small scale, and also manufacture country liquor. Of late years they have improved considerably under the care of the Roman Catholic priests and nuns.

Sir H. Ricketts, when Commissioner in 1848, wrote: "I am CHARACafraid that the people of this district deserve the character they TER OF have so long borne for litigiousness. It is not only that they will PEOPLE. litigate to the last for a rightful advantage: they will litigate though any ultimate advantage is impossible; and, more than that, they will litigate, incurring certain loss, in order to disturb and injure a neighbour. It is impossible to mix at all with any class of the people without observing the undisguised ill-will which they bear to each other. Mistrust, suspicion, uncharitableness prevail: misfortune can find no sympathy." The lapse of years has made very little change in the disposition of the people. The cultivators are generally simple folk but easily led, and are often under the influence of men who have a little education and a reputation for sharpness in the courts. These persons are known all over the district as "torneys," and the mischief they do is beyond calculation. Open fraud and the stupidest acts of fabrication and forgery in even the pettiest matters are more common than could be readily believed. To resist legal process and to use every mode of trickery and artifice in the tedious process of law is traditional with them; and these pettifogging arts excite admiration and are regarded as a high form of ability. A householder's pride lies chiefly in his roll of faislas or decrees. and the height of his ambition is to have made a motion or appeal

in the High Court at Calcutta. The people are keen traders, however, and adventurous. They make the best elephant-hunters in Bengal, having plenty of resource and self-reliance. They are good seamen, and are patient at clearing and reclaiming waste land: but they are indolent and slovenly cultivators of their own farms, because the soil is good and rain is certain, so that their crops grow with little ploughing and less weeding. They are, moreover, remarkably abstemious and, as a rule, thrifty.\*

Their character has undoubtedly been very largely influenced by the former isolation of the district. Having but little connection with the other districts of the Division to the north, its eastern frontier consists of the Hill Tracts sparsely inhabited by hillmen, while on the south the Naf estuary and broad tracts of dense jungle separate it from Burma. It is with the Arakan district that communication chiefly takes place, but even this is principally of a migratory character. Even the railway and steamer communications have as yet done but little to break through this isolation, which explains many of the most striking peculiarities of the Chittagong people, such as their suspicion of strangers, their illiberality and absence of intelligence and culture, as compared with their neighbours in the Dacca The Chittagong people are completely absorbed in their own affairs, and spend much of the money they acquire by trading, harvesting, and the like, not in comforts and luxuries, but in litigation and land speculation.†

<sup>\*</sup> This account of the character of the people of Chittagong has been prepared from a note submitted by a former Collector for the revision of the Statistical Account of Bengal.

<sup>+</sup> C. G. H. Allen, Chittagong Survey and Settlement Report (1900), p. 34.

# APPENDIX TO CHAPTER III.

### THE BUDDHISTS OF CHITTAGONG.

CHITTAGONG is the only district in Eastern Bengal in which Buddhism still survives as the religion of a large proportion of the population—a survival due partly to its proximity to the Buddhist country of Burma and partly to its isolation. This isolation has only been broken into in recent years, and in earlier days Chittagong afforded a shelter to Buddhist refugees from other parts of India. In course of time, the Buddhism of its people became corrupted, but there is now a revival, and the Buddhist leaders are striving to shake off the influence of Hinduism and to put a stop to the Hindu superstitions and observances which have crept in. The following account of the Buddhists in Chittagong, which has been prepared from a note by Bābu Nabin Chandra Dās, M.A., B.L., Deputy Magistrate and Deputy Collector, a well-known poet, scholar and antiquarian of Chittagong, may therefore be of some interest.

Rai Sarat Chandra Dās Bahādur, c.i.e., a brother of Bābu History Nabin Chandra Das, has given the following account of the history of Buddhism in Chittagong: - "Buddhism is a living religion in Chittagong proper, in the Hill Tracts, and in Tippera. It was introduced in these districts about the ninth century A.D. direct from Magadha, when the eastern provinces of Bengal, extending from Rangpur down to Rāmu (Romya Bhumi) in Chittagong, were under the sway of a Rajput prince named Gopipāla. The Mahāyāna Buddhism, which about that time prevailed in Magadha and Tibet, was preached in Chittagong by Bengali In the 10th century A.D. Chittagong, in a manner, Buddhists. became the centre of the Buddhism of Bengal. The chief feature of Mahāyāna Buddhism is that it has taken in the entire Hindu pantheon and added innumerable fancied deities to it. In this enlarged pantheon the ruling deity is Arya Tara (a personification of Nirvana), who is identified with Sakti or the female principle. In Tibet she is called Yum-chenmo, the great mother; in Nepal she

is personified as Prajnā Pāramitā or transcendental wisdom; in the dialect of the Rāmu Magh of Chittagong she is called Phrā Tārā. Phrā being the Burmese equivalent of Aryā. The Chittagong neople called her Phora Tārā, the Magh goddess. From the 10th to the 13th century A.D., Chittagong possessed a mixed population of Buddhists and Hindus, the former being distinguished from the latter by the name Magha, meaning the excellent or blessed, a term which is still preserved in Bihār in its original signification. Then came Islam to convert the whole district of Chittagong. About this time, the more earnest Buddhists took shelter in the Hill Tracts, and then converted the hill tribes In the 17th century, when the Mughals extended their conquests to Chittagong, Hindu settlers from Bengal poured in in large numbers and founded Chaksālā (Chakrasālā). which is now called Patiyā pargana. The Hindu settlers mostly occupied the places which had been left vacant by the flight of the Maghs. In the beginning of the 19th century, the remnant of the Chittagong Maghs, who had almost forgotten the tenets of their religion, largely took to the worship of Hindu deities. offering them sacrifices of fowls and pigs in the place of goats and This they continued to do for upwards of fifty years, until at last a Buddhist priest coming from Burma led them back to Buddhism. The degenerate half-Hinduized Maghs had, in the meantime, adopted Hindu and Muhammadan names and They had entirely forgotten the Mahāyāna doctrines of Buddhism, which their ancestors followed. The modern Maghs have no idea of the goddess Phrā Tārā and do not worship her, though she has been given by the Chittagong Hindus a place a little outside their pantheon, is propitiated by them with animal sacrifices, and is worshipped under the name of Magheswari, the goddess of the Maghs. The Brāhmans of Chittagong now identify her with the goddess Kali, in the form in which, according to them, she was known in Magadha, and call her Magadheswari. The earlier headquarters of the Chittagong Buddhists were at Mahāmuni in Pahārtali and the later ones at Rāmu."

It may be added that, according to the Buddhists, the name Chittagong is a corruption of Chait-kyaung or Chaitya-grām, i.e., the land of chaityas, and that recently a large image of Buddha was unearthed from the Rangmahāl hill in the centre of the town, on which the General Hospital stands. This image appears to be of a Burmese type, and was probably brought to Chittagong during the rule of the Arakan kings; it has now been assigned a place in the Buddhist temple in the town.

Buddhism is still a living religion in the south and east BARUA of Chittagong among the Barua Maghs, though they have Magus. adopted some Hindu customs and ceremonies. These Baruā Maghs also call themselves Rajbansis or scions of the royal race, because they claim to be descended from the kings of Arakan who migrated from Magadha, the modern South Bihār. name Magh is said to be derived from that of the country of their origin, and even the most illiterate Maghs call themselves Magadha Kshattriya on the ground that their ancestors were Kshattriya princes of Magadha.

They date back their residence in Chittagong to the time of THEIR confusion and anarchy following the death of Srī Sudhamma, ORIGIN. king of Arakan, in 1638, when one of his ministers Narapati (Nga Ra Padi) usurped the throne and put to death several nobles and members of the royal family. According to the Mahārājāwang, "during these troubled times, the son of Srī Sudhamma. Nga Tun Khin, made his escape from the town and lived in the wilderness; and certain members of the royal family and other nobles left for Kantha, a place in Chittagong, and settled down Of the 100,000 guards who were stationed in Mychammy, 50,000 deserted the king and left the capital, taking with them Nga Lut Roon, who was then a priest, and settled down in Kantha under Nga Tun Khin. Then the Kātās called the governor of Kantha the king of Mramagri." The Baruā (i.e., great) Maghs claim descent from these immigrants and are still called by the Arakanese Mramagri or great Maghs, a word which is a corruption of Brahmagri (Mrama or Brahma, i.e., the first inhabitants of the world, a term applied to the inhabitants of Burma by the Aryan settlers, and gri, i.e., great).

When Chittagong was annexed to the Mughal Empire in 1666, BUDDHIST many of the Maghs left Chittagong and took refuge in Arakan. REFORMA-Those who remained in Chittagong were separated from their co-religionists, and in course of time adopted many Hindu customs. But about 40 or 50 years ago a great Buddhist priest of Arakan, generally known by the title Sangha Rājā, landed at Chittagong on his return journey from Bodh Gaya, and subsequently visited Chittagong three or four times, with the object of reclaiming the Maghs and inculcating a purer form of Through his exertions they began to give up the Buddhism. practices which they had borrowed from their Hindu neighbours; and the reformation which he commenced was continued by the Punyachari Dhammadhari, a member of the Baruā Magh community, more commonly known by the name Chandra Mohan Thākur.

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HINDU OBSER-VANCES.

Before the reformation effected by Sangha Rājā, the Baruās used to worship many of the Hindu deities, and in some villages the more ignorant still carry on the worship of the planet Sani or Saturn, of Lakshmī, Durgā and Saraswatī, of Aswinī Kumār or Katyanbrat, who is invoked by them in the hope of offspring on the first day of Kartik, and of Satyanarayan or Satvapir, who is worshipped in order to avert disease from Ganak Brāhmans or astrologers officiate at the their cattle. Sani Pūjā, while the other ceremonies are conducted by the Baruas themselves, the Buddhist priests not taking any part in them. In these ceremonies flowers, fruit, uncooked rice, molasses, sugar, etc., are offered; goats also were formerly sacrificed in the Hindu Kālībāri. No image is made of the deities, who are represented by an earthen or metal pot, filled with water and covered with a mango twig. They also used to sacrifice she-goats and make offerings to Magadheswari, a special spot, called sebākholā, on the outskirts of the village being reserved for this purpose; no image, however, was made and no priest officiated. It may be noted here that the worship of this goddess is not in vogue in any other district, except Noākhāli and the south of Tippera, even among the Hindus; and it is said that it must have originated with the Maghs, the sacrifice of she-goats being repugnant to Hindu religion. The Baruas of the present day have almost entirely given up these practices, as they are advancing in the knowledge of the tenets of their religion. The educated class have now formed a Buddhist Association with the object of introducing a purer form of Buddhism and of improving their social condition. In imitation of the Hindu Hari Sankīrtan, they commenced about ten years ago the singing of Buddha Sankirtan to the sound of cymbals.

While the Maghs have adopted some observances of the Hindus, they have failed to imitate them in other respects. Thus they eschew beef, which they consider impure, but eat fowl and pork; and there is no distinction of caste among them. At the same time, they have influenced the Hindus to a certain extent. The local Hindus light candles and present pice before the image of Buddha in the temples at Mahāmuni, Thegarpuni and Chakrasālā. It is admitted, moreover, by the Hindus themselves that the worship of the goddess Magadheswarī has been adopted by them from the Maghs.

THE PRIESTS

The Buddhist priests are called Bhikshus or more commonly Thakurs, and by the Hindus and Muhammadans Raulis (Rahinda or Arhat). They shave their heads and wear garments coloured

yellow and stitched with ninety pieces of cloth. Their underclothing consists of a piece of cloth, also composed of several patches, which they wear loose. They are prohibited from taking any food or drink after noon except water, tea, betel-nut and tobacco, and from making up their beds from the full moon of Ashārh to the full moon of Aswin. Every Baruā has to be initiated and to live as a Sāmanera (Srāmana) or novice for at least seven days, and some of them also take vows to be a member of the priestly order for some years after the period following their initiation. When any priest returns to his home after giving up his yellow robe, he can marry and is then called a Lothak. The priests do not live in their homes, but in the kyaungs or monasteries which are maintained in almost every Barua village at the cost of the villagers. There the priest not only performs the daily worship, but also teaches the boys of the village and gives them religious instruction.

There are four orders of priests in this district, viz., (1) Mahāthero or Mhātechera (Sans. Mahāsthavīra), (2) Kamethero or Kamechera (Sans. Kamasthavīra), (3) Panjyang or Upasamada, and (4) Maisang or Sāmanera (Sans. Srāmana). The Samanera or novice is in the lowest order of priesthood, and when he attains the age of twenty and acquires sufficient knowledge of the Buddhist scriptures, he is elevated to the higher order of Panjyang. The promotion to each order is decided by an assembly of priests; and a Mahāthero or a priest of the highest order cannot revert to the position of a householder.

The Baruas celebrate four great festivals during the year. FESTI-Baisākhi Pūrnimā or the full moon of the month of Baisākh is VALS. the most sacred day to the Buddhists, as the three most important events in the life of Buddha took place on it, viz., his birth, his attainment of Buddhahood, and his Pari-nirvana. Asharhi Purnima or the full moon of Asharh marks the commencement of the Buddhist Lent, which lasts for three months. This period commemorates the three months of the rainy season which Buddha spent not in wandering and preaching, but in meditation and in giving instruction to his disciples. The Buddhist monks accordingly follow his example and live in a vihāra or monastery giving religious instruction to the people. The third great festival is Aswini Pürnimā or full moon of Aswin, when that period ends; and the fourth is the Chaitra Sankranti. This day and the first day of the Bengali new year are days of great rejoicing and are celebrated by religious observances. Besides these, all days

on which there is a full moon or new moon, and the 8th and 14th days of the moon, are regarded as holidays. On all these occasions the Baruās go to the temples and vihāras in their best attire, offer flowers to the images of Buddha, light candles before them, and receive religious instruction from their priests. These offerings are accompanied by feasts given to the priests and alms distributed among the poor.

FUNERAL CERE-MONIES. After death, the bodies of adults are burnt, but children below the age of five years are buried. When any rich or influential person or a priest dies, the corpse is not immediately cremated. It is enclosed in a coffin called along, which is put on a wheeled vehicle called a ratha (chariot) with images of ducks (called hansa-hansi) at both ends. Long ropes are tied at each end, and the assembled people divide into two sides and pull at the ropes, each party trying to drag the bier over to them. One party represents the angels of Heaven and the opposite one the Jamadūt or guardians of Hell; and it is arranged that the party of angels must just win. The corpse is then taken and placed on the funeral pyre. Here the assembled people hear Mangal Sūtra recited, and themselves recite the Pancha Sila dictated by the priest, who also delivers a homily about the vanity of the world. The fire is then lit by a son of the deceased.

All persons resident in the same quarter are burnt in the same spot, except priests and rich men, for whom a sedi is erected. This is a masonry structure, resembling a temple in shape, erected over the place of cremation. A vacant space is left within it, and on an auspicious day a small image of Buddha is placed in the niche. Gold, silver and cloth are put in front of it, after certain sūtras have been repeated, and the opening is then closed up with bricks. The sons and widows of the deceased abstain from taking meat for seven days, and on the 7th day after cremation the srāddha or karma ceremony of the deceased takes place. On that day the sons are shaved, and a bamboo pole. with a flag on it, is erected on the cremation ground; certain sutras are dictated by the priests, and food, brass utensils and clothes are offered, in order to release the deceased from his pretajoni or spirit life. Pindas or funeral cakes of cooked rice are also offered, and a feast is given to which the priests and neighbours are invited. This ceremony is repeated on the 15th day after cremation, and then every month for one year, and after that annually.

The death of a pregnant woman is considered a great calamity; it is believed that her soul becomes a ghost, and for its redemption the offering of pindas at Bodh Gayā is necessary.

Such women are not burnt with the fœtus; the latter is taken out of the womb and buried, and the corpse is then cremated.

The Baruas believe in spirits and ghosts; persons who die Believ in unnatural deaths are supposed to become ghosts, and for this SPIRITS. reason the relations of the deceased offer pindas at Bodh Gaya. They resort to exorcism, especially when any one is believed to have fallen ill owing to the influence of an evil spirit. afflicted person is made to sit before the ojhā or exercist holding a jabā flower in both hands. The ojhā then murmurs some mantras, and after some minutes the possessed person commences to shake his head and hands, and gets a fit; at this juncture the ojhā loudly chants some spells, beating time by striking a gong or brass dish. Questions are then put to the afflicted person, enquiring the nature of the evil spirit and the means by which it may be expelled. When the medium becomes tired, the oihā stops his work for that day, and repeats the process again the next day, and continues it for five or six days, until the answers to his questions are considered satisfactory or the victim recovers. In cases of a less serious nature, amulets or charms are given to the afflicted persons to wear on their body, and charms or medicines are sometimes buried round the compound of the haunted place or affixed in the house. In case of epidemic disease the Baruas sing Buddha Sankirtan, and in case of cattle disease Satyapir is worshipped.

There are several temples of special sanctity, at which annual TRMPLES fairs are held—in some on the Maghi Purnima day (the full moon AND of the month of Magh) and in others on the Phalguni Purnima. Bishuva Sankrānti and Baisākhi Pūrnimā. On these occasions they light candles in the temples and present clothes and money before the image of Buddha; some Hindus and Muhammadans even do the same. The Chakmas and other hill tribes also present their offerings and hang up long flags, especially at the Mahāmuni temple in village Pahārtali, which is more easily accessible to them than other shrines; here the fair is held day and night for seven days and sometimes more. This village contains three temples, with large images of Buddha, two of which belong to the Baruas and the third to the Mong Raja. a hill chief in the Hill Tracts. The shrine of Pharachin at Chakrasālā has especial sanctity, because it is believed that Buddha left his footprint there; and the Chandranath hill is sacred both because the Maghs revere a footprint of Buddha traced on a stone lying behind the temple, and also because a Buddhist temple once stood there.

The following is a list of the principal Buddhist temples and of the fairs held at them; the first three are in thana Rāojān and the remainder in thana Patiyā:—

Place.	Name of temple.	Date of fair.
Pahērtali	(1) Mahāmuni (2) Sākyamuni (3) Chandamuni	Bishuva Sankrānti.
Rangoniā	Sākyamuni	Ditto.
Dabuā	Chūlāmuni (Sans, Churā- mani).	Māghi Pūrnimā.
Bagahara or Thegarpuni	Buragosain	Ditto.
Haidgāon in Chakrasālā	Pharachin	Bishuva Sankranti.
Uninepāra	Buddha Pada	Phalguni Pūrnima.
Alha or Baidyapāra	Sākyasingha	Baisākhi Pūrnimā.

## CHAPTER IV.

### PUBLIC HEALTH.

AT the end of the 18th and the beginning of the 19th century CLIMATE. Chittagong was considered a sanatorium, and in Hamilton's Hindostan (1820) it is stated that "this maritime tract is much resorted to by the European inhabitants of Bengal on account of the beneficial effects experienced from the sea air and the saltwater bathing." Fifty years later it had acquired an unenviable reputation as being one of the most unhealthy districts of Bengal for Europeans and natives alike. In 1872-73 we find the Commissioner referring to the evil effects of the climate in no uncertain terms. "I will not," he said, "attempt to describe the supreme unhealthiness of Chittagong, for I could not do it justice. I believe I should be warranted in asserting that no European has made any lengthened stay, who has not subsequently had constitutional reasons for regretting it during the rest of his existence." For this unhealthiness several causes were ascribed, of which two only need be quoted here, viz., the insanitary conditions in the interior and the bad drainage of Chittagong. "There are," it was observed, "an extraordinarily large number of tanks scattered over the district, which are never cleaned or well kept. and which are almost invariably choked with weeds and decaying vegetation. The tidal creeks and khāls are simply a series of open sewers, without the advantage of ever being well flushed. Although they are regularly traversed by tidal water, yet, from the slight outfall, the sewage and other refuse matter, after being carefully washed up to the most remote branches, recede but slowly as the tide falls, leaving the greater part of the solid matter behind to rot and ferment on the banks. This operation is repeated regularly every six hours."

It is probable that a good deal of this unhealthiness was also due to the reclamation of jungle and to carelessness in matters of hygiene among the Europeans, who were opening up waste lands for tea; but these remarks no longer apply to Chittagong, which is now as healthy a district as others in Eastern Bengal, though the climate is undoubtedly a relaxing one for those who are sickly or debilitated. The town of Chittagong, in particular, has

outgrown its evil reputation, and the mortality there is, as a rule, below that in other parts, the death-rate of the town in 1905 being only 15.7 per mille as compared with the average of 26.4 per mille for all the towns in the Province and of 35 per mille for both urban and rural areas. The systematic extirpation of jungle now undertaken will, it is hoped, do still more to make the town more healthy, and the boring of artesian wells will, if successful, remove one of the chief causes of disease.

VITAL STATIS-TICS.

A comparison of vital statistics for any lengthy periods is rendered impossible by the changes in the system of registering births and deaths which have taken place from time to time. In 1869 the duty of reporting deaths was imposed on the village chaukidars, and in 1876 the system was extended to births; but the returns received were so incomplete that they were soon discontinued, and, except in towns, deaths alone were registered until 1892, when the collection of statistics of births as well as of deaths was ordered, and the system now in vogue was introduced. Under this system vital occurrences, both in urban and rural areas, are collected by the chaukidar. He reports to the police, who submit monthly returns to the Civil Surgeon, by whom the statistics for the district are prepared. These returns, though not perhaps altogether complete, are sufficiently accurate for the purpose of calculating the approximate growth of the population, and of showing the relative healthiness and unhealthiness of different years, as well as the mortality due to different diseases.

From these returns it appears that the highest death-rate (49·4 per mille) was recorded in 1897, the year of the great cyclone, which was followed by a severe epidemic of cholera. In that year the mortality reached the appalling figure of 153 per mille in Chakariā, where 5,377 persons perished during the cyclone; in Bānskhāli it was 68·5 and in Maiskhāl 58·5 per thousand of the population. The lowest birth-rate was recorded in 1898, immediately after the devastation caused by the cyclone, when it fell as low as 29·9 per mille. The lowest death-rate is 24·6 per mille, registered in 1899, and in the same year the highest birth-rate (43·5) was recorded, owing apparently to the fact that the people were recovering from the effects of the disaster.

PRINCIPAL DISEASES. Malarial fever.

According to the returns submitted year by year, by far the greatest mortality is due to fever. Under this head a large number of different diseases are indiscriminately classed by the chaukidār, who is primarily responsible for the diagnosis of disease—a task for which he is eminently unfitted,—but there is no doubt that a very large proportion of the deaths ascribed to fever are really due to malarial affections, and that the latter are

very common. Regarding the types of fever found in Chittagong and the prevalence of malaria, the Civil Surgeon, Lieutenant-Colonel E. A. W. Hall, 1.M.S., writes as follows:—

"The district consists of low ranges of hills running from north to south with valleys containing tidal rivers between. These tidal rivers are connected by many waterways or khāls, and the valleys also contain innumerable tanks; some, constructed in the days of Muhammadan supremacy, are of large size, but the vast majority are small and very dirty. Nearly every homestead possesses one, and within the municipal limits of the town of Chittagong alone there are no less than 1,300. These numerous waterways and tanks form excellent breeding places for mosquitoes, and in consequence malarial fever is very prevalent. the year 1904 the total number of deaths in the district was 41,411, giving a death-rate of 30.6 per mille; of these, 37,177 or 27.4 per mille were due to fever. In 1905 the total number of deaths was 41,267 and the death-rate 30.4 per mille; fever caused 36,091 deaths, giving a death-rate of 26.6 per mille. In 1906 the total number of deaths was 40,018 and the death-rate 29.5 per mille: of these, 32,717 were caused by fever, giving a death-rate of 24.1 per mille. It is a well-known fact that all deaths reported as being caused by fever are not really due to malarial fever, but after discounting this fact, the loss of life due to the prevalence of malarial fever must be considerable.

"The commonest forms of malarial fever are the simple tertian and the double tertian. These are seen extensively amongst the natives throughout the year; the worst seasons being immediately after the rains and during the succeeding winter months. fevers, as seen clinically, are always of a mild type easily cured by quinine, and when left untreated lasting for years with quiescent intervals and not materially interfering with the patient's daily life and usefulness. Natives of other parts of India suffer more severely than the natives of the district; amongst Europeans there is often a tendency to head symptoms, and after recovery a temporary loss of memory is not uncommon. The severe type of fever is the malignant tertian, which prevails after the cessation of the rains and during the winter months. It is remittent in character, produces great enlargement of the spleen, does not respond readily to quinine, and is very fatal both in the case of natives of the district and of natives of other parts of India. Kāla asar has not been definitely reported, but in the south of the Chittagong subdivision there are waterlogged valleys in which a very fatal fever akin to Kāla azār is said to be prevalent. This is. in all probability, a severe type of the malignant tertian fever.

"The town of Chittagong has long been notorious as a very malarious place. The main native town is situated along the banks of the silted-up Chaktai  $kh\bar{a}l$ , while numerous perennial springs issue from the small hills within the town limits; this  $kh\bar{a}l$ , the beds of the many streams issuing from the springs, and the numerous tanks in the town afford ideal breeding places for the anopheles mosquito, and as a result malarial fevers are very prevalent."

Cholera.

Cholera occasionally breaks out in a virulent epidemic form, especially after the occurrence of cyclones and storm-waves has polluted the water-supply. Thus, nearly 15,000 persons died during the outbreak which followed the cyclone of 1876, and after the storm-wave of 1897 there was another terrible epidemic. number of deaths from cholera in 1897 and 1898 was 21,000, the death-rate in these two years being 8.3 and 7.9 per mille, respectively. These epidemics were due to special causes, but the district is at any time liable to suffer from the disease. Tanks are almost universally used for drinking water, and as a rule they are extremely dirty, no steps being taken to protect them from contamination. In the hot weather the water becomes polluted, and if there is a prolonged drought, its condition is necessarily worse. Besides this, if there is any great rise in the price of food-grains. the people seem to make up for the deficiency of their ordinary food, such as rice, dal and vegetables, by consuming an excessive quantity of the unsavoury dried fish which is so much used in the district. Taken in moderate quantities, this does not seem to be productive of any harm, but when consumed in large quantities, it appears to produce diarrheea and other disturbances. and must predispose the consumers to the attack of cholera.

Other diseases and infirmities. The other diseases most prevalent are skin diseases, ear diseases, and intestinal worms. Insanity is unusually common, and at the census of 1901 it was found that 77 out of every 100,000 males and 56 out of every 100,000 females were insane; in this respect, only three other districts in Bengal and Eastern Bengal have a worse record. The precise causes of the prevalence of insanity in the district are not known, but it is noticeable that insanity is very prevalent in the Patiyā thāna, which is the most highly educated part of the district and the centre of the greatest mental activity. Many of the people are strongly addicted to drugs, such as opium and ganja, and the correspondence between the excessive use of these intoxicants and the prevalence of insanity seems more than a mere coincidence.

Leprosy is comparatively rare, only 18 males and 4 females out of every 100,000 being returned as suffering from the disease.

The popular opinion is that leprosy is not affected by food. consumption of unwholesome meat and putrid fish does not appear to render the people more liable to contract the disease, and the natives to the south of the Cox's Bazar subdivision seem to indulge in the use of gnāpi or dried fish with impunity. is also far less common than elsewhere, but 79 males and 57 females out of every 100,000 were returned as blind at the census of 1901. On the other hand, deaf-mutism is unusually frequent, no less than 83 males and 53 females out of every 100,000 being deaf and dumb: the number of the latter is greatest in those parts of the district which contain the greatest proportion of lunatics.

Vaccination is compulsory within municipal limits and in Vaccina-The people are not averse to the operation. Tion. certain rural areas. and the number of vaccinations performed every year is unusually large. In 1904-05, 77,000 persons were successfully vaccinated, representing 58 per thousand of the population, as compared with the average of 36 per mille for the whole Province, while the proportion of infants receiving protection against small-pox was

28 per cent.

Thirty years ago the only charitable medical institution in MEDICAL the district was the dispensary at Chittagong, which was estab- INSTITUlished in 1840. There are now 12 dispensaries, in addition to the General Hospital at Chittagong, four of which have been started within the last ten years. These dispensaries are situated at Banigrām, Cox's Bazar, Hāthazāri, Idgāon, Kutubdiā, Mahājan's Hāt, Patiyā, Phatikcharī, Pomāra, Rāojān, Sātkaniā and The General Hospital at Chittagong has accommodation for 52 indoor patients (40 males and 12 females); the dispensarv at Cox's Bazar has beds for 10 indoor patients (6 males and 4 females); and that at Sītākund for 4 indoor patients (2 males and 2 females); the rest afford outdoor relief only. The popularity of these institutions is steadily on the increase; the returns for the quinquennium ending in 1904, as compared with those for the five years ending in 1894, show that the average annual number of in-patients treated increased from 472 to 741 and of out-patients from 28,733 to 131,057, the daily average of in-patients rising from 89 to 188 and of out-patients from 651 to 2,538.

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## CHAPTER V.

### AGRICULTURE.

From the account given in Chapter I it will be seen that the Chittagong district is a long narrow strip lying between the Bay Formation of Bengal on the west and the Chittagong Hill Tracts on the east, with several long ranges of hills running parallel to the coast and a number of rivers debouching into the sea. All the main rivers in their passage through the district are heavily laden during the rains with a burden of sand, clay particles and vegetable debris. The sand is deposited for the most part in the upper reaches of the rivers, and also to a less extent in the lower reaches and on the sea-shore. The clay particles, on the other hand, are carried lower down and deposited in the tideway, an immense quantity being also washed down from the river Meghna. and carried on the tideway as far south as Kutubdia: the volume of Meghna silt deposited on the shores and tidal reaches of the district is, indeed, probably far greater than that issuing from all the district rivers together. Each flood-tide carries the clay particles back and deposits them on the beds of the rivers just before the ebb, when the tide is slack; and during the rains the whole littoral is submerged, except so far as it is protected by embankments.

> The result is that the sea-board is composed of hard clay deposited originally by the tide, and where the tide still has access to it, the soil is salty. This salty clay soil, which is found along the whole length of the sea-board of the district in a narrow strip from half a mile to 5 miles broad, is the worst in the district for rice cultivation, which is only possible if the salt tidal The prominent characteristic of such soils is water is excluded. their tendency to rapid deterioration. When first brought under cultivation they may be extremely fertile, as is the case with the Sundarban tract of Chakaria, where the land when first cleared and embanked yields as much as 32 maunds of rice to the acre. But as the land receives no fertilizing silt to replace the ingredients consumed by these heavy crops, it rapidly becomes exhausted. Even in the littoral valleys, however, the eastern

portion near the foot hills is sweetened by hill streams, which have the double effect of washing out the salt and of mixing their deposits of sand and vegetable debris with the clay.

Throughout the district, the soil out of reach of the tideway consists of a fertile mixture of sand and clay, in every way adapted for rice cultivation. The two main kinds of soil in the district are therefore the hard and more or less salty clay of the sea-board and the loam soils of the interior, locally known as dorasia, which vary from a heavy clay loam to a light sandy loam in proportion to their distance from the sea and their proximity to The hard and salt clay soils grow but one crop of winter rice, generally an early ripening variety, such as giring or The loamy lands of the interior, on the other hand, grow two, and sometimes three crops of rice, or as an alternative irrigated cold-weather crops of vegetables, tobacco, hemp, pan, etc., which will not grow in salty clay lands. Add to this difference in fertility the fact that the poorer lands require expensive embankments to keep out the salt water, and the superior value of the latter is apparent.

From the preceding account it will be seen that embankments Embankplay an important part in the cultivation of rice all along the seaboard, except in a few places where the land is protected by dunes of blown sand. These embankments are of two kinds, a bank built along the shore or river bank, parallel with the flow of the tidal current, being called a khāti, while a dam across a stream is a godhā. The height of an embankment depends on the depth of the land it protects below high spring-tide level; those on the sea-shore vary from 4½ to 9 feet in height. Embankments over 41 feet in height are rarely built by ordinary tenants, while the big dykes are either built and maintained by Government or by some large landholder. The embankments maintained by Government in this district are those round the island of Kutubdiā, along the Bānskhāli sea-board from the mouth of the Sangu river southwards to the Balukhali, round the village of Gandāmāra in Bānskhāli, and in mausa Barumcharā.

The three principal crops are winter rice (āman), autumn Bainfall rice (aus), and winter crops (rabi). Winter rice is usually sown in July and August, transplanted in August and September, and reaped in December. The critical period for this crop is the transplantation season, when copious rain is required; but at the end of September and in October rain is also urgently necessary to swell the grain. For the autumn rice crop (aus) ploughing commences with the premonsoon showers, which fall in March and April; and the crop is sown in May, some weeks

before the regular monsoon rains commence. For a successful crop there should be some rain in March, April and May, and the monsoon should commence in June with moderate showers. with frequent intervals of fine weather to permit of weeding operations, and to enable the young seedlings to put forth a vigorous growth before the heavy rainfall which usually follows Excessive rain in May and June is extremely injurious to the young crop. During July and August the rainfall should be heavy, but with intervals of fine weather. crop flowers in August and stands in need of rain at this time, in order that it may be enabled to throw out shoots, and in order that the grain may fill out. Want of rain in August is on this account very harmful to the prospects of the crop. The aus paddy crop is mostly reaped by the middle of Septem. ber, and, except where it is sown late, it is not influenced by the character of the rainfall after the middle of September. rabi crop depends to a great extent on irrigation, and a prolongation of the rains in September and October and showers at Christmas time are exceedingly beneficial to it. It was estimated at the last settlement that about 31 per cent. of the net cropped area bears two crops in the year.

Irrigation.

Owing to its copious and regular rainfall, irrigation is less necessary in Chittagong district than elsewhere. No arrangements are made for irrigating the lands grown with the ordinary autumn and winter rice crops, unless the distribution of the rain-water by means of the field ridges (ails) can be so described. Irrigation is, however, employed for raising the early rice called panya aus before the rains break, and also for crops grown in the cold weather. The chief part played by irrigation in the cultivation of rice consists of saturating the seed beds for the aus crop, and watering the land for the early panyā aus crop. the former purpose the water is scooped up from a tank or ditch with the hichen, a triangular mat basket swung by two men from ropes tied at the corners. The water is lifted into a shallow pit, and thence conveyed by channels to the field to be irrigated. For the panyā or irrigated aus crop a hill stream is embanked by a temporary dam (godhā). The water thus dammed is conveyed by runlets from field to field.

A considerable area of country is irrigated by these means, and the dams are costly. They are usually constructed by public subscription, but a few of them are built by zamindārs, who charge the cultivators for the water. Of recent years local officers have discouraged irrigation by these methods, as it causes injury in three ways. By using up the supply of drinking-water, it

exposes the tract of country below a dam to the ravages of cholera at the season of the year when the disease is most prevalent; it interferes with the drainage of the country, as the level of the tract irrigated is raised, thereby preventing the flow of water in the stream dammed; and it causes friction between the villagers, because it benefits some at the expense of others.

Irrigated lands are locally known as paundi. These lands are to be found in strips and patches all over the district, along the banks of streams and ditches, and in the neighbourhood of tanks. The higher lands of this description are used for the cultivation of the pān creeper, and for sugarcane. In the remainder, vegetables of all kinds—pumpkins, tobacco, arum, and chillies—are grown. The usual method of irrigation is by the scoop (hichen). Where the water requires to be raised to a greater height than can be conveniently reached by the ordinary scoop, a scaffold (dhawan or dāyan) is used, which consists of two crossbars resting on trestles set up in the bed of the stream. Two men sit on the higher bar and rest their feet on the lower bar, and can thus use a larger scoop with longer ropes.

The question of levels is a most important one in determining Levels. the relative fertility of rice fields in a country of abundant rainfall such as Chittagong. It has already been explained how the district is traversed throughout its length by parallel ranges of hills, the rice plains forming mere depressions between them. These valleys have been gradually reclaimed from jungle within comparatively recent times, and the process of reclamation includes much levelling. The slopes of the foot hills are terraced, and are suitable only for seedlings, while the general level of each of the valleys slopes both towards its centre line, and also in the direction of its drainage flow. Moreover, the level of each plain is disturbed by a number of obstacles to the drainage, such as raised village sites, embanked roads, tank-banks, etc.

The general effect of the variety of levels found in every rice plain is to fertilize the lower at the expense of the higher fields; for the silt, composed to a great extent of light particles of organic matter, is held in solution as long as the rainwater is in motion, and is only deposited when the water lies stagnant. Every man's desire is to hold back the water in his own field, and to compel it to discharge its silt there; and with this object each field is surrounded by a small embankment (ail) in order to retain the water in a stagnant condition. But during heavy rains, the water must be let out, or; even if no opening is made in the embankment, the water tops it. In this way the bulk of the rain-water with its rich silt finds its way to

the lowest levels of each small saucer-shaped depression, taking with it the silt which it has collected from all the higher fields over which it has passed. It follows, therefore, that the lower the field, the more fertile it is. There is another consideration also in favour of the lowest fields, viz., that they need less embanking in order to retain the water, and therefore cost less to cultivate. A large exception to this general rule occurs in the case of swamps, which are especially common in the vicinity of the hills. They are produced by under-ground springs, which cause an unhealthy accumulation of sub-surface water, which rots vegetation. In such a swamp the higher fields are naturally the best.

Soil composition. Even if levels alone had to be considered, it is evident that with the enormous variety of levels which prevails in every rice-plain in Chittagong, it would be difficult to find two fields of precisely equal fertility. But to this cause of variation must be added the composition of the soil. For if the admixture of sand exceeds the due proportion, the soil will not retain moisture; if, on the other hand, there is too much clay, the surface cakes and cracks, and is difficult to till. The admixture of sand is due to the action of the hill streams, which, when in spate, scour the sand from their beds, and sweep it on to the plains below. It is thus in the immediate neighbourhood of the sandy hills that the soil is most sandy: indeed, in such places cultivation is often rendered impossible after heavy rain by deep deposits of sand on the fields.

The formation of chars in the large rivers calls for special mention. Some back-water or curve of the river bed sets up an eddy in the current, which thereupon becomes sufficiently stationary to deposit a portion of the sand which it holds in solution. The char, which is so far nothing but a heap of sand, rises to ordinary tide-level, and then embankments are made so as to retain the water on its surface. The effect of the water lying stagnant is for the clay particles and vegetable debris to be deposited, and the rich deposit of silt deepens at every high flood-tide until at last the char rises above the high flood-level. The soil of such a char is extremely fertile, and grows magnificent crops of hemp, tobacco, and vegetables. But if the growth of the char be arrested by the river altering its course, so that the flood-water does not cover it during the second stage of its formation, the char remains sandy and barren.

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In many parts of the district one of the most difficult tasks of the cultivator is the protection of his crops from birds and wild animals. A great part of the cultivable area consists of narrow valleys (ghonā) running in all directions into the jungle-covered hills, and the crops are consequently exposed to the raids of the denizens of the jungle. Along the skirts of the foot-hills immense injury is done to rice by the depredations of deer, wild pig and monkeys, and in the remote parts to the south-east by wild elephants; but perhaps the most deadly enemies of the crops are parrots, jungle fowl and other birds. Hence the cultivators are forced to watch their ripening crops from the high platforms called tanges, which are a familiar feature in the landscape as the rice approaches maturity. As an instance of the difficulties which the peasant has sometimes to face may be mentioned the plague of rats which followed the flowering of the bamboos along the eastern frontier in 1880-81.

Generally speaking, lands in Chittagong may be divided into Soils. (1) low lands suitable for winter rice only; (2) higher lands growing a crop of aus, followed by a crop of winter rice, or a crop of aus rice, followed by mustard, kalai, or vegetables; (3) high lands only suitable for seedlings; (4) irrigable lands suitable for hemp, tobacco and pumpkins, or for sugarcane; and (5) irrigable lands on a higher level, suitable for pan cultivation.

The first class consists of poor land, generally a heavy clay, Salty clay. locally known as mahinā (from mahi, earth), and more or less affected by salt saturation. Such soils are found all along the seaboard, where they have been formed by the deposit of fluvial silt, mainly of the Meghna river, unmixed with sand. They have to be carefully protected from the access of salt tidal water by embankments built both along the sea face and along the banks of every tidal khal, and also by dams (godhās) across the courses of smaller channels. Without such embankments, the construction and maintenance of which is exceedingly costly, rice cultivation is impossible, as the young plants are killed by salt water, and will not grow in a soil covered with a deposit of salt. The favourite crops in this area are giring and lhembru, both early varieties of rice, which are transplanted in June or July and reaped in October and November. This is the worst soil in the district, for it receives no moisture but rain-water, and the ingredients taken from the land by the crops are never replaced by any river deposits of vegetable matter.

Leaving the sea-board and approaching the hills, the soil com- Loam pletely changes in quality. Salt saturation first diminishes and soils. then ceases, and the hard clay is converted into a fertile loam, by the intermixture of sand brought down by streams from the hills. Such loam soils are called dorasia, i.e., doubly fertile, and receive a rich deposit of organic matter from the same source, which also supplies water for irrigation. Consequently, they are extremely

fertile, and grow fine crops of autumn rice and vegetables, or of early irrigated aus (panyā aus) and winter rice. The higher lands round the homesteads, where manure is plentiful, grow sugarcane, while those on the banks of streams grow pān. Irrigable lands of this description are locally known as paundi (irrigated), and grow rich crops of chillies and vegetables. When in close proximity to the hills, however, such lands are frequently spoilt by bad levels, and are liable to deposits of sand when the streams are in flood.

The soils of the interior plains, i.e., all those east of the Sītākund range and of its continuation south of the Sangu river. and those east of the Cox's Bazar and Teknāf hills, are entirely composed of loam, varying from light sandy soils to a clay loam. according to their accessibility to the sandy deposits of hill streams. Such lands, when not irrigable, commonly grow two crops of rice, an autumn and a winter crop. When they are irrigable, they will grow an autumn crop of rice, followed by a erop of tobacco, hemp, vegetables, etc. Sandy soils on chars and on the low banks of rivers grow valuable crops of melons of many varieties. Autumn rice is much grown in Raojan, where the level of the lands is somewhat high, and where the soil is very rich, being well watered by the Halda river and its tributaries. Chillies are grown in large quantities in the Hathazari plains west of the Government road, and on the banks of the Sangu and Hingūr rivers in Sātkaniā. Hemp is grown principally along the banks of the upper reaches of the Sangu river, and of the Tankabati stream, a tributary of the Sangu river in Sātkaniā and in the neighbourhood of Sītākund. Arum (kachu) is grown to a large extent near Patiya, and is planted out in small plots on the inner banks of almost every tank in the district.

PRIN. CIPAL CROPS. The principal crops, in order of importance, are (1) winter rice (āman), (2) autumn rice (aus), (3) cold weather crops, including hemp (shan pāt), tobacco, mustard, lentils, melons and vegetables, (4) sugarcane and (5) pān. Besides these, tea is grown; an account of the cultivation will be found in Chapter IX.

Winter rice.

Rice is the all-important crop of Chittagong, being grown on 556,000 acres; and the greater part of it is winter rice, which occupies three-quarters of the cultivated area. The earliest operation is the preparation of the nursery or seedbed (bichānā), for which high ground is chosen, because land too high to grow transplanted rice will still grow seedlings (jālā). The date of commencing ploughing varies with the variety of the crop grown, but most of the varieties of āman are transplanted in August or September and reaped in December or

January: the nursery is first ploughed about 21 months before transplantation, and ploughed several more times at intervals of five or six days. The seeds are then sown, after having been soaked in water for 12 hours, and then kept dry for 12 hours. Six weeks after sowing, the seedlings are ready for transplantation. Meanwhile, the low land upon which the seedlings are to be transplanted has been prepared by repeated ploughings. -seedlings are then pulled up; tied in bundles, four of which make a man's load; and planted out in small clumps of five or ten plants, each clump usually a span apart. A man can plant out one-tenth of an acre (45 gandās) a day. After transplantation, the paddy flowers in 1½ months, forms ear in 2 months, and is ready for cutting in 21 months. The crop is reaped between the middle of November and middle of December, and is frequently succeeded by a cold weather crop, the stubble being ploughed up and a crop of vetch (kalai) or vegetables planted.

The commoner varieties of aman paddy grown in the district are (1) giring, a large white grain, transplanted in July or August and reaped in October and November, which is grown principally on the chars and along the sea-board; (2) thembru, a red grain, transplanted in July or August and reaped in October and November, which is grown on rich lands; (3) kela tail, a black grain, transplanted, as are all the later varieties, in August or September and reaped in the early part of December; (4) bara beti, a late variety with a white grain, which is the fine rice principally grown; (5) daharqua beti, a long-grained variety; (6) bālām beti, a finer, shorter grain; (7) dhuliā beti, a very fine grain.

Next in importance to the winter rice comes the aus or autumn Autumn rice crop. The earliest variety is chinnal, which is sown broadcast rice. as soon as possible after the early rains. The land is ploughed five or six times after the earliest rain in April or May, the ploughings succeeding each other without any interval, as it is important to sow the crop as early as possible. The ground is then harrowed until the clods are pulverized, and the seed is sown dry (dhuliā chhitā, meaning sowing in dust). If the early rains are heavy, the paddy is sown in the mud, the seed being sometimes soaked to allow it to germinate before sowing. Other varieties of aus, such as aus bailam, are transplanted in June and July, and reaped in August and September. After the aus crop has been reaped, a crop of winter paddy is often transplanted on the same land, and if the land is irrigable, this will be followed by a cold weather crop, such as chillies, etc. The rice of aus paddy being coarser than that of winter paddy, the flavour of the latter is

preferred. The outturn per acre of aus is about two-thirds only of that of aman rice.

Panyd aus. A much earlier variety of aus (panyā aus) is grown on lands irrigated from hill streams, a dam (godhā) being built across the bed of a hill stream in March or April; these dams are commonly erected by the co-operation of the villagers, but occasionally a large dam is erected by a zamīndār. The land is ploughed six times as soon as it is sufficiently moist, and the paddy is generally-sown broadcast in the early part of April and reaped in June. The variety known as chimal is frequently grown in this manner. Lands which are thus irrigable may grow three successive crops of paddy.

Another mode of cultivating rice is dibbling (kuchi), which is practised on the high bank of the Sangu river, where water will not lie. Holes having been drilled in the ground, the seed is sown in May, watered and buried, and is reaped in September.

In the Sundarban tract the first crops are taken when the land is only partially cleared, and the stumps which remain make it impossible to plough. The only cultivation consists of scratching the soil by dragging a thorny bush over it.

Pulses.

Other food-grains, including pulses, are grown on 5,700 acres. *Mung* (Phaseolus mungo), *kalai* (Phaseolus radiatus) and *masuri* (Ervum lens) are grown to a certain extent in the north of the district, the two former being often sown among the rice, or, after the crop has been reaped, among the stubble. The expense of fencing and protecting these crops from cattle and goats restricts their cultivation.

Oil-seeds.

Rape and mustard are the only oil-seeds of any importance. Mustard is one of the crops put down in the cold weather in places where water is available, and where other valuable crops, such as tobacco and sugarcane, pay for the expense of fencing and keeping off cattle and goats. It is grown most frequently along the rivers which periodically overflow their banks; and small fields are also seen near homesteads, where it is easy to look after them, as well as round the oathans where buffaloes and cattle are kept. Small quantities of til or gingelly (Sesamum indicum), linseed and castor-oil are also raised, the latter plant being often grown round sugarcane fields.

Chillies.

Chillies are an important crop, being grown on 20,000 acres. A fairly light loam is preferable for this crop, and the field must be irrigable. The seed is sown in October, and the seedlings planted out in November. When the surface has been pulverized and is smooth, the cultivator forms small parallel ridges in it either with his feet or with a bamboo scoop (kaim) or plough. In

the furrows so formed, the seedlings are planted in holes made with a pointed stick; they are watered at the time of planting, and again the next day, unless there is rain. The plants begin to bear in April, and continue to do so till the end of May. Women and children are employed to do the plucking, and they get paid one-quarter of what they pluck.

Sugarcane occupies an area of 9,000 acres and is usually grown Sugaron small irrigable plots near the homesteads, where manure and means of irrigation are available. There are two kinds of sugarcane, chini kushyal, planted in March and April, from which molasses (gur) are made, and patna or turgyali kushyal which is planted in September and October and is used for chewing. Both crops are in the ground for about 11 months before they are ready for cutting. In cultivating chini kushyal, the land is ploughed very fine, and irrigation is required when the plants first strike from the cuttings. For the patna crop, the land is hoed into trenches 3 feet apart, in which the cuttings are planted. The crop is an exhausting one requiring constant attention and much manuring. It also occupies the ground for a long time, for the canes, which grow to a height of 10 feet, are not ready for cutting till February.

Hemp, which occupies 8,000 acres, is grown principally in the Hemp. neighbourhood of Sītākund, on the banks of the Sangu river, and in the south-east of Sātkaniā on the banks of the Tankabati and other streams. It is a cold weather crop, sown in October and cut at the end of January, and is much benefited by rain in December. The hemp stalks, after being cut, are steeped in water for 10 to 15 days, and the fibre is then beaten out on a stone or block of wood in the water—a highly offensive process, rendering the water very unwholesome. The flowers are used for cattle-food, and the stalks for making sulphur matches in Chittagong.

The other fibre crops are unimportant, as the various jungle creepers furnish the villagers with ready-made cords astonishingly long and strong. Jute is grown on only 400 acres and is merely a garden crop. The cultivation of Agave rigida is being undertaken as a bye-product of tea, and the fibre manufactured, on the Chandpur tea estate. It is said to find a ready sale among the fishermen, who use it for making ropes.

Tobacco is raised on 3,300 acres. It is grown as a garden Tobacco crop almost throughout the district, and small patches are seen in nearly every hamlet; it is found in large quantities principally on the sandy banks of the Sangu and Mātāmuhari rivers, where the soil is enriched by constant deposits of silt, rich in organic

matter. The best tobacco grown in the district comes from the valley of the Mātāmuhari river and from Khagoriā, a village on the bank of the river Sangu. It is sown in December and cut in March and April; the yield per acre is from 4 to 5 maunds, and each maund fetches Rs. 6 to Rs. 8.

Fetel.

Betel (pān) occupies 4,000 acres. It is grown in light loamy soils on the banks of streams and rivers, which supply a ready means of irrigation. The land is ploughed 10 or 12 times till the surface is pulverized and is then worked into broad ridges. light thatched roof is next raised over the field to protect the young plants from the sun. The seedlings are planted out in June at intervals of 3 inches, and manured with oil-cake. When the plants show three or four leaves, they are tied with wisps of coarse grass to climbing sticks. Oil-cake is applied twice a month during the rains, and the plants are irrigated in the hot weather. ing commences six months after planting. The plants continue to bear for three years, after which a different crop is grown. Three varieties of pān are grown in this district:—mithā pān, a variety with soft, large, well-flavoured leaves; sānchi pān, a harder, slightly pungent leaf, but sweet-scented; and bangalā pān, the one in common use. Betel is a very valuable and profitable crop, and it is estimated that the profits of cultivation amount to Rs. 500 per acre annually.

AGRICUL-TURAL STATIS-TICS. Less than half the total area of the district is cultivated, whereas in the neighbouring districts of Tippera and Noākhāli more than four-fifths of the area is under cultivation. Reserved forests extend over 286 square miles, besides which there is an area of uncultivable land amounting to 1,075 square miles, which comprises the sandy hills traversing the district and the Sundarban scrub forests in the south. Thatching grass, however, covers about 36 square miles of the hilly slopes, and this is a crop of some economic value requiring little cultivation. The cultivated area is 919 square miles, while cultivable waste other than fallow accounts for 162 square miles and current fallows for 51 square miles.

EXTEN-SION OF CULTI-VATION. At the last settlement (1898) it was found that the cultivated area had increased by 18 per cent. in the preceding 60 years. In the more remote parts the scrub jungle is still being cleared, and reclamation is also spreading in the deltaic country in the south. It has been shown elsewhere how the low hills traverse the district in parallel ridges, so that the cultivated plains are never at any great distance from the hills. The ridges throw out a succession of low spurs at right angles to the watershed, and between these spurs long, narrow valleys penetrate deep

into the lower slopes of the hills. These narrow valleys, locally called ghonās, have been laboriously terraced and levelled, and this process of reclamation still goes on everywhere year by year, the high price of rice driving the growing population to till land where they can find it. Consequently, each cultivator whose holding is contiguous to the hills gradually breaks up fresh land and increases the area of his holding. Another cause of increase is persistent encroachment on roads, wayside lands, and tank banks. But the most important growth of cultivated area takes place on the sea-board, where, owing to the constant deposit of silt from the Meghna and other rivers, the sea is steadily receding. Year by year, too, inland tidal creeks tend to silt up, and the smaller ones are dammed. Embankments are pushed forward, and new blocks of jungle reclaimed and tilled.

Owing to the ignorance of the cultivating classes and their IMPROVEstrong conservative distrust of innovations, there has been but MENTS IN little improvement in agricultural practice. Even the Bihiā iron TURAL roller mills, which have been generally adopted elsewhere for PRACTICE. crushing sugarcane, have not become popular, and the people still use old-fashioned wooden mills, which extract only a fraction of the juice. Some years ago Government established a model farm 3 miles from Chittagong, where experimental work was carried on with selected seeds, new varieties and improved implements; but the experiments were not very successful, and the farm being on a bad site, has been abandoned by the Agricultural Department. Owing to the general prosperity of the people, loans are rarely taken from Government, but after the cyclone of 1897 Rs. 1,15,600 were advanced under the Land Improvement Loans Act for the restoration of embankments which had been breached by the storm-wave.

Plantains and pine-apples grow luxuriantly all over the FRUITS district, while guavas, custard-apples (including both the smooth- AND skinned and the rough-skinned variety), rose-apples (jam) and TABLES. citrons of various species are common. Good oranges and sweet limes are largely grown in the central portions of the district: the jack (Artocarpus integrifolia) and monkey jack (bartā) are abundant; but mangoes do not do well. Other fruits grown in the district are the hogplum (amra), bair (Zizyphus jujuba), tamarind, papaya, almonds and lichis (Nephelium litchi). Peaches also grow well, but are apt to rot owing to the heavy rains in May, when they are ripening. The areca palm or supari grows in most villages, but not so well as in the neighbouring districts of Noakhali and Tippera. Coconuts are grown, but the

palms are usually killed by a grub which bores into the crown of the tree, and this has almost stopped their cultivation.

There are few houses without a garden, and a large variety of vegetables are grown. The commonest is the egg-plant or baigun (Solanum melongena), and tomatoes are also grown for the market. Among other vegetables may be mentioned radishes  $(m\bar{u}l\bar{a})$ , which grow to a large size, several kinds of turnips, beans  $(s\bar{\imath}m)$ , mallow (beneli), aniseed and various herbs. Potatoes, yams, sweet potatoes and a large arum, which grows in damp rich soil, are also raised, besides gourds and pumpkins. Turmeric and onions are grown, but not to any large extent. A number of wild plants are also used for pot-herbs, and the Maghs of Cox's Bazar cook the yellow flowers of the menjuri tree.

The cultivation of melons is a speciality. They are generally grown on sandy river-banks and chars, which have received a deposit of silt from the river. The seeds are soaked for seven or eight days in water, then wrapped up in leaves of the castor-oil plant, and placed in a basket of paddy-husk, where they remain seven or eight days. Those which germinate are then planted out in shallow pits  $3\frac{1}{2}$  feet apart, 8 to 10 seeds being placed in each pit. The young plants are dusted over with ashes to keep off the beetle which attacks all young gourd plants. The seed is sown in November, and the fruit is first plucked in March, but the plants continue bearing till May. Melons, radishes and sweet potatoe sare cultivated with as much care as in a nursery garden in England.

CATTLE,

The local breeds of cattle are poor, and little has been done to improve them. For the most part they are small and stunted, and there is no attempt at systematic breeding. Good-sized buffaloes graze in the forests and on the river flats, and are the most valuable of the domestic animals. Pasturage abounds in most parts of the district, but in the highly cultivated central valleys it is scarce in the neighbourhood of the villages so long as the rice crop is on the ground. Ponies and sheep are reared in small numbers, and goats are common all over the district. The same general type, however, prevails as among cattle, viz., stunted size and short legs.

Poultry.

Chittagong produces the best poultry in Bengal, short-legged, large-bodied birds very like English fowl. There are several breeds, including one large pale-coloured kind (known locally as yasin) similar to the Cochin China breed, bantams, and a black-plumaged variety somewhat resembling the wild pheasant called mathura. Turkeys are raised to a small extent by the Firinghis, and goese and ducks are common. Eggs are exported by the

ton from Chittagong, especially ducks' eggs, which are shipped in large quantities to Rangoon; many come from the Fenny subdivision of the Noakhali district, where poultry are even more plentiful than in Chittagong.

The disease most prevalent among cattle is rinderpest, 640 Veterinary cattle succumbing to it in 1905-06. Veterinary relief is afforded relief. at a veterinary dispensary at Chittagong, at which 31 ponies and 35 cattle were treated as in-patients in the same year, the corresponding figures for out-patients being 1,200 ponies and 1.700 cattle. The number treated is greater than in any other veterinary dispensary in Bengal or Eastern Bengal. Veterinary Assistants are also deputed to deal with outbreaks of epidemic disease in the interior, and 3,000 cattle were treated in this way in 1905-06.

### CHAPTER VI.

#### FORESTS.

GENERAL DESCRIP.

THE reserved forests of the Chittagong district extend over 286 square miles or  $11\frac{1}{2}$  per cent. of its total area. tional area of 284 square miles is also about to be reserved. and when this has been done, the area of the reserved forests will be 570 square miles or 23 per cent. of the district area. The forests already reserved are distributed over four Ranges, viz., Rāmgarh-Sītākund (167 square miles), Patiyā (47½ square miles). Jaldi-Harbhang (45 square miles), and the Chakaria-Sundarbans (26 square miles). These reserves are all situated in hilly broken country, with the exception of the Chakaria-Sundarbans reserve, which occupies maritime swamps with their characteristic vegetation. The hill ranges over which they extend run from north to south parallel to the coast, rising to a height of 1,200 feet above sea-level; and the bed rock is sandstone belonging to the Tertiary period. The principal rivers down which forest produce is floated are the Fenny, Karnaphuli, Sangu, Mātāmuhari and Baghkhali with their affluents.

The forests consist of mixed timber trees interspersed with bamboos, and also contain numerous patches of sunn grass (Imperata arundinacea) and cane-brake. In the hill forests the principal timber trees are jarul (Lagerstræmia Flos-Reginæ), koroi (Albizzia procera), gurjan (Dipterocarpus alatus, D. scaber. etc.), jam (Eugenia operculata, E. obovata, etc.), rai-batana (Quercus spicata), dulia-batana (Q. Thomsoni), telsur (Drimyracemosus), boilām (Swintonia floribunda), gamhār carpus (Gmelina arborea), tāli (Dichopsis polyantha) and tūn (Cedrela Toona). Associated with these trees are found tetuiya (Albizzia odoratissima), simul (Bombax malabaricum), chakua (Albizzia stipulata), hargesa (Dillenia pentagyna), kom (Adina sessilifolia), chalta (Dillenia indica), banderhulla (Duabanga sonneratioides),

This account of the Chittagong forests has been contributed by Mr. R. L. Heinig, F. L. S., Deputy Conservator of Forests, Chittagong Division.

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moos (Brownlowia elata), chaulmugra (Taraktogenos Kurzii), kanok (Eriodendron anfractuosum) and lat-mel (Sapium insigne).

The bamboos are of the following species:—mitenga (Bambusa Tulda), dolu (Teinostachyum Dullooa), bazali (Teinostachyum Griffithii), kāli (Oxytenanthera nigro-ciliata), and mūli (Melocanna bambusoides). The species last named is the most abundant and generally useful; it does not grow in clumps, like all the others, but with scattered culms arising from an extensively creeping and ramified rhizome. The most useful minor products are supplied by kurujpath (Licuala peltata), pitali-pātā (Phrynium imbricatum) and the following species of cane: -qolak (Dæmonorops Jenkinsianus), javat (Calamus viminalis) and sanchi-bet (C. tenuis).

The principal species found in the maritime swamp reserve are: -sundri (Heritiera minor), keorā (Sonneratia apetala), ora (S. acida), tivan-baen (Avicennia officinalis), dulia baen (A. alba). hawa (Rhizophora mucronata and R. conjugata), guttia (Ceriops Roxburghiana), which is exported in large quantities for frewood. gaon (Excoecaria Agallocha), nunia (Ægialitis rotundifolia). natinga (Bruguiera gymnorhiza), rohinia (Kandelia Rheedei) and shinguri (Cynometra polyandra). Associated with these are found hantāl (Phœnix paludosa), balai (Hibiscus tilliaceus), hargoza (Acanthus ilicifolius) and chu'ia-kānta (Dalbergia spinosa).

The first notification constituting a forest reserve in Chitta- HISTORY gong was issued in 1894, when the Ramgarh-Sītākund forest FORESTS. was notified; while the South Sītākund, Patiyā, Harbhang, Jaldi and Chakaria-Sundarbans forests were reserved between 1901 and 1904. The Ringbhang, Gurjania-Khutakhali and Teknaf forests are now under settlement. They have been delimited and demarcated in accordance with the boundary line selected by the Forest Settlement Officer, and will be constituted reserved forests on the completion of the settlement proceedings.

The western boundary of the South Sītākund reserve forms. at Sītākund, a deep bay or enclare excluding the Chandranath In 1903, in deference to the religious feelings of the pilgrims resorting to these shrines, the forest boundary was placed further back on the north, south and east, an area of one square mile being disforested under section 26 of the Indian Forest Act. At the same time, Hindu devotees proceeding into the reserve, which contains many ancient tirthas or holy places, were allowed certain privileges, such as the kindling and carrying of fire. due care being taken to prevent injury to the forest, besides the collection of fruits and firewood for their own use and consumption, but not for barter or sale.

Since the forests have been reserved, the boundary lines have been kept well defined, the illicit extraction of forest produce has been prevented, the forests have been protected from fire, and a system of management adopted, as described subsequently, by which the requirements of the people have been met and wasteful felling checked. Inspection roads, buildings and bridges have been constructed, and the dhalās or tracks across the hills, over which the public have a right of way, have been kept clear for the use of exporters.

SUPPLY OF LOCAL NEEDS.

The requirements of the people extend to house-posts, beams, scantlings, dug-outs, planks for building coasting vessels or fishing boats, bamboos, canes, firewood, thatching grass, and pasture for cattle. Those who reside in the neighbourhood of a reserve usually purchase direct, and extract from the forest whatever they require, while others are enabled to obtain from unreserved waste land firewood and grass, and in some cases the house-posts and bamboos required for the construction and repair of their huts. Logs, dug-outs, thatching grass, bamboos and canes are obtained at the local marts from traders, who export them from the Hill Tracts in large quantities.

The relations between the people and the forest staff are on the whole excellent, the system of issuing permits on prepayment at the reserve stations, and of realizing royalty at the toll stations being well understood and appreciated; while the extremely low rates on forest produce extracted either for domestic use or for sale afford the people a ready means of earning a livelihood.

System of management.

There are at present no departmental timber operations, and forest produce is extracted entirely by purchasers. Permits for the cutting and extraction of timber and other forest produce from the reserved forests are granted, in accordance with instructions issued by the Bengal Government in 1893, in Forms A. B and C, the same forms as were in use in the Collector's office prior to the reservation of these forests. Form A permit is obtainable on payment of Re. 1, and entitles the holder to cut and remove from the forest for sale one head-load of firewood daily for one year. Form B permit is obtainable on payment of 12 annas, and entitles the holder to cut and remove from the forest for home consumption, but not for sale, one head-load of bamboos, fencing-posts, firewood or sunn grass, and to grase six head of cattle daily for one year. Form C permit is issued for all kinds of forest produce save firewood, and is obtainable on prepayment of the amount due, calculated at the rate sanctioned by the Conservator of Forests. Permits for trees are issued only by the Range Officer or by the Divisional Officer, the trees being

selected and marked under the selection system. Sunn kholās are sold triennially by auction to the highest bidder.

The moist climate and heavy rainfall render special measures PROTEC. of fire protection unnecessary, and it is found sufficient for practical purposes to appoint fire-guards to patrol the boundaries (the average length of their patrol being 15 miles), in order to give early intimation of the outbreak of fire, and to arrange for its extinction.

#### CHAPTER VII.

#### NATURAL CALAMITIES.

CYCLONES. CHITTAGONG, situated in the north-east angle of the Bay of Bengal, is peculiarly liable to be visited by cyclonic storms. eyclones which occur during the rains, i.e., from June to October. are generally small in extent, the barometric depression at the centre seldom exceeding half an inch. while the air motion, though violent, is rarely of hurricane force. The cyclones which occasionally occur in the months preceding and following the full establishment of the south-west monsoon are very different; and it is from these devastating storms that Chittagong has suffered terribly at different times, as their tendency is to move into the north of the Bay and to recurve towards the Chittagong and Arakan coast. Their most striking features are the great barometric depression in the centre and the magnitude of the storm area. These two causes produce a large accumulation of water at and near the centre, which progresses with the storm and gives rise to a destructive storm-wave, when the centre reaches the shelving coast. It then sweeps inland, and wide-spread damage is caused.

Five very destructive storms have visited Chittagong in the last 112 years. On the 3rd June 1795, a severe gale blew from seven o'clock in the evening till past midnight. Heavy rain followed, the Collector's kachahri was totally unroofed, and only five brick-built houses survived in the whole town. Two years later, in November 1797, a furious hurricane passed over the district. Two vessels lying at anchor in the port were sunk, and almost every native hut was levelled to the ground. Again in October 1872 a cyclone passed over the Cox's Bazar subdivision, inflicting considerable damage. Its violence was confined to the tract lying between Chakariā on the north and Teknāf on the south. Here many lives were lost and numbers of cattle destroyed, while a large forest near the Nāf was devastated, only one tree out of every ten being left

Cyclone of On the 31st October 1876 a cyclone and storm-wave swept the sea-board with still more disastrous results. To understand the nature of this disaster, it is necessary to advert briefly to

the physical features of the country. The district lies in the north-east angle of the Bay of Bengal near the mouth of the delta formed by the Brahmaputra, the Ganges and the Meghnā. These three great rivers, under the name of the Meghnā, expand into a noble estuary studded with large islands. which form three lines stretching north and south, between which and the mainland the river finds its way to the sea. These islands are all extremely low, and are merely the crests of an extensive and increasing alluvial deposit at the mouth of the estuary. formed chiefly from the detritus of the Himalayas, deposited over the area in which the tidal and the river waters wage incessant warfare, alternately displacing each other. As soon as they cease to be submerged at high tide, and coarse grass and brushwood spring up, these islands are leased for grazing and fuel-cutting. Next, as the land becomes fit for the plough, cultivation is gradually commenced; and as this advances, the cultivators become resident tenants, digging large tanks for fresh water and raising lofty mounds for the foundations of their homesteads, which they surround with trees. Such was the country submerged by the storm-wave of 31st October 1876, and up till that date the inhabitants of these islands were considered the most prosperous peasantry in all Bengal.

The tidal wave running up the Bay of Bengal reaches the estuary of the Meghna later than any other point of the coast. and there, meeting the large masses of fresh water running down by several channels through innumerable low islands to the sea, the well-known phenomenon of a bore is produced whenever the tide is unusually strong or the river heavily flooded, or when there is a strong south-west wind. On the night of the 31st October 1876 all these three conditions were unhappily in combination, and produced the great flood over the south of Backergunge and the neighbouring districts which was attended with such disastrous, effects. It was full moon on the evening of the 31st October, and there was an abnormally high tide, which flooded all the low lands along the coast at the head of the Bay. From 10 P.M. of the same night to 3 A.M. next day a violent north wind blew, which brought down the waters of the Meghna in unusual volume. After a short interval of calm, the wind veered round, and blowing furiously from the south and west, impelled the storm-wave with extraordinary force into the converging waters of the estuary. The storm-wave, like the ordinary tidal wave. was retarded on the shallows at the entrance of the river. accumulated there, and finally overpowered the mass of fresh water brought down by the Meghna, which had been unable to find an exit seawards during the last six or seven hours. It then rushed forward as a salt-water bore up the Sandwip channel and as a fresh-water bore up the other channels, till the vast mass of water, gradually advancing northwards, flooded the whole area of the islands to a depth varying from 10 to 45 feet. Fortunately the inundation did not last long, and subsided even more quickly than it rose; for, beginning at about 11 P.M., the water continued to rise until about 4 A.M., when it began to subside, and the greater portion of the flood water had flowed off before 8 A.M. on the 1st November.

The effects of this disaster were graphically described by the Lieutenant-Governor, Sir Richard Temple, as follows:-"There was a severe cyclone in the Bay of Bengal on the night of the 31st October 1876. But it was not the wind which proved so destructive, though that was terrible enough. It was the storm-wave, sweeping along to a height from 10 to 20 feet, according to different localities; in some places, where it met with any resistance, mounting even higher than that. In the evening the weather was somewhat windy and hazy, and had been unusually hot, but the people retired to rest apprehending nothing. Before 11 o'clock the wind suddenly freshened, and about midnight there arose a cry of 'the water is on us,' and a great wave several feet high burst over the country. It was followed by another wave, and again by a third, all three waves rushing rapidly onwards, the air and wind being chilly cold. The people were thus caught up before they had time even to climb on to their roofs, and were lifted to the surface of the surging flood, together with the beams and thatches of their cottages. But the homesteads are surrounded by treespalms, bamboos and a large thorny species. The people were then borne by the water on to the tops and branches of these Those who were thus stopped were saved, those who were not must have been swept away and were lost. The bodies of the lost were carried to considerable distances, where they could not be identified. The corpses began to putrify before the water cleared off the ground, so they were left unburied in numbers all over the country. Weather-tossed seamen in the Bay of Bengal saw many corpses floated out from land with the waves. Corpses were flung on to the sea-shore at Chittagong, and living persons were borne thither across an arm of the sea, clinging to the roofs or beams of their own houses, as if upon ratts."

In Chittagong the disaster was aggravated by the fact that the inundation which swept over the sea-board was one of salt water, so that the food of the people was damaged and the water-supply

contaminated. The inundation extended inland to a distance of from 3 to 6 miles, except where the mouths of rivers and creeks afforded the storm-wave an easy entrance, and there the flood passed much further up and spread over the country for miles. It is estimated that, in the few hours during which the country was submerged, 12,000 persons were drowned in the Chittagong district alone, and 14,788 are said to have perished in the cholera epidemic which followed. This outbreak took place almost immediately after the subsidence of the water, extended over the whole area of the inundation, and was of a remarkably fatal type. A storm of wind and rain, the ghost, as it was called, of the cyclone, aggravated the distress of the people, and it seemed as if the survivors of the storm-wave would perish by pestilence.

The lamentable condition of the people in these circumstances may be realized from a report of the Civil Surgeon, who wrote:-"The eyclone, but more especially the inundation by the tidal bore which accompained it, swept away, destroyed, or damaged the greater portion of the grain and other food upon which the people depended for their living. Their cattle were drowned. and the whole coast was strewn with their carcasses. The weather here in the end of October is cold, and the morning of the 1st November saw thousands of people rendered homeless and suddenly exposed to the cold temperature and wet, for during the storm 21 inches of drifting rain fell. The consumption of damaged rice during the first 14 days after the storm was almost universal among the people. In the districts visited by the stormwave little or none escaped contamination. The entire country over which the storm-wave passed was deprived of fresh water. Not only was the water in the tanks rendered brackish with brine. but it was also putrid with dead organic matter. The salt water killed the aquatic plants and fish, and these at once decomposing rendered the water fouler than ever. Carcasses of men and animals likewise added to the corruption of the water, and the stench that arose from this putrid infusion was almost insupportable. So great was the smell that the natives travelling along the roads, more especially along the Sītākund road, covered their nostrils and mouths with their dress. The air for miles was tainted with the odour of decomposing bodies, which covered the country in every direction. We thus had all the elements necessary to bring on pestilence, viz., shock, panic, debility from sudden exposure, large consumption of unwholesome food, impure drinking-water, and a poisoned atmosphere. In a country which is the endemic abode of cholera, and from which cholera is rarely

absent, it is a matter of no surprise that the pestilence assumed the form it did."

Cyclone of 1897.

The last disastrous cyclone was that of the 24th October 1897, which will long be remembered as one of the most terrible on record in Chittagong. This cyclone does not seem to have commenced, as cyclonic storms usually do, within the Bay, but to have crossed from the east into the Andaman sea. where it first became manifest on the 20th October to the south of Tayoy. During the 22nd and 23rd it advanced well into the centre of the Bay, the coast stations giving but little indication of its presence, and on the 23rd it recurved, its centre finally crossing the Chittagong coast on the evening of Sunday the 24th. At 11 A.M. on that day a telegram was received from Calcutta that the centre of the cyclone would pass across the face of the Sundarbans. By 4 P.M. the barometer had fallen from 29.745 to 29.370, and the wind stood at north-east. At 5 P.M. it backed to north-north-east, and the squalls became very severe, with heavy rain. At 6 P.M. the barometer was at 29.20, and the wind veered to north, blowing with increased fury, its velocity being estimated at 80 miles an hour. From 6 P.M. until 10 P.M., when the barometer stood at 28.750 (the lowest reading observed), the wind remained between north-east and north. There was then a lull for about seven minutes, and after that it blew with redoubled violence from the north-west, and the barometer began to rise; the wind gradually went round to west and then to the south-west, from which quarter it was blowing at about 1-30 A.M., when the storm ended. During this short time between 8 and 9 inches of rain fell.

The hurricane reached its maximum intensity about midnight, when a series of storm-waves swept over the island of Kutubdia and the villages on the mainland near the coast, drowning thousands of men and cattle, sweeping away homesteads, and destroying the standing crops. The centre of the cyclone appears to have travelled up the valley of the Karnaphuli, wrecking Rāngāmāti, the headquarters of the Chittagong Hill Tracts. where the native quarters and bazar were swept clean away. main force was felt in a strip of 225 square miles, extending from about 14 miles above Chittagong town on the north to a point some 4 miles below Cox's Bazar on the south, a distance of some 70 miles. North and south of this strip little damage was done. but within it the force of the cyclone was very great. In the southern portion of this tract lies the delta of the Mātāmuhari. and here the cyclone was of extraordinary violence, while the storm-waves which accompanied it one after another were more disastrous than the hurricane itself. The low-lying lands of this delta and of the islands which lie off it were completely swept by the storm-waves, and in many villages half the inhabitants were drowned. The survivors found their houses levelled to the ground, their crops entirely destroyed, a great part of their cattle drowned, and themselves without any stores of food or clothing. The dykes along the sea-board were washed away; at Lhittagong itself the shipping suffered severely; and serious damage was done to public buildings both there and throughout the district.

The island of Kutubdiā suffered most. Storm-waves swept the northern part of the island and killed a large number of people and cattle. They also breached, and in some places swept away altogether, the embankment built round the island in order to keep out salt water and prevent it from damaging the rice lands. The work of repairing it was no easy one, as there was an outbreak of cholera in a virulent form, attributed to all the tanks and wells being filled with sea water, and it was difficult to get men to work. Out of 1,500 men on the embankment, 100 were reported to have died in one day. Kutubdiā light-house, built in 1877, was not much damaged, but the revolving light, erected in 1892, was utterly wrecked, owing not to the direct force of the wind but to the rocking of the light-house itself. The dwelling-houses of the light-house-keepers were completely destroyed; the wooden floor of one of them was carried away to a distance of 60 yards, and the corrugated iron of the roofs was scattered about the fields; while huge stones from the revetment were washed ashore.

The loss of life by drowning alone was estimated at 14,000, and was even greater in Chakariā thāna and the Jaldi outpost than in the more exposed island of Kutubdia, owing to the fact that the storm-wave rushed up the great estuaries of the Mātāmuhari. and was thus particularly fatal to the inhabitants of these parts, who dwell on the banks of tidal khāls. It must be remembered, moreover, that the greatest and severest part of the storm took place during the dark hours of the night, and this circumstance materially increased the loss of life. The loss of property was appalling. The largest trees were uprooted, almost all kachha buildings were levelled to the ground, and the rice crop in the tracts chiely affected was completely destroyed. The houses in which the people lived were blown down, and where the storm-waves had passed, the very materials had disappeared. In some places everything was swept away, the village sites were obliterated, and only the stumps of broken fruit trees, and, here

and there, the remnants of the posts of houses, remained to show that a village had ever existed. The villagers themselves were found clothed with rags picked up in the jungle, eating the half-ripened rice from their fields, and drinking brackish water. The country was covered with the corpses of men and animals, and the water-supply was polluted. Cholera broke out with appalling intensity; in Kutubdiā alone it was estimated that 11 per cent. of the population perished during the epidemic. The total mortality due to cholera was 18,000, and it was two years before the people recovered from this terrible calamity.

Since that time there have been no great cyclones; but in November 1904 a heavy storm caused a number of wrecks in the fishing fleet at Sonadiā, and 143 persons perished; and in March 1905 a tornado passed over Maiskhāl and part of the Cox's Bazar causing some damage to property.

EARTH-QUARRS.

There have been three notable earthquakes in Chittagong. In 1762 there was a severe earthquake, and the earth opened out in many places, throwing up volumes of water and mud from the fissures. According to Captain Lewin, a large river was dried up at Pardāban; and at a place called Bakar Chanāk, near the sea, a tract of ground sank down, and 200 people, with all Unfathomable chasms are described as their cattle, were lost. remaining open in many places after the shocks; villages, some of which subsided several cubits, were submerged with water; and two volcanoes are said to have opened in the Sītākund hills. These places cannot now be identified. Chanāk-khāli, which is entered on some old maps, corresponds with the present Boalkhāli: and there are two or three places called Bāhārcharā, which the name Bakar Chanak may have been intended to represent. Bāhārcharā means an outer strip of land, exposed and abandoned. and a tidal wave accompanying an earthquake would cover any of these places.

The second earthquake occurred in the winter of 1865, when severe shocks were felt, and, though no serious damage was done, a hill at Sitākund opened out and ejected sand and mud. The earthquake of the 12th June 1897 is the last on record. This earthquake was felt throughout Bengal from the South Lushai hills on the east to Shāhābād on the west; and assuming the focus of the disturbance to have been near Cherrapunji in Assam, the shock travelled to the western extremity of Bengal and Bihār in six minutes or less. Its duration varied greatly in different parts, the lowest being six seconds and the highest five minutes; and the latter is said to have been its duration in

Chittagong. The shocks were not severe, and little damage was done, though many masonry houses were cracked.

The rivers have quick access to the sea, and the country is so Floors. much cut up by small hill ranges that no general flood is possible. Local damage is sometimes caused, however, by floods, when a high spring tide keeps back the freshets which come down the rivers in seasons of heavy rain. This usually occurs at least once every year in the tracts within tidal limits; but although some small damage occurs in places, it is amply compensated by the benefit done to the flooded tract, as the rich silt deposited by the receding waters fertilizes the soil. The lands along the seacoast are also sometimes flooded by salt water, and some injury is thereby caused. These inundations used to be a very serious danger, and 30 years ago, even before the devastation caused by the cyclone of 1876, a large portion of Kutubdiā had been deserted owing to the encroachment of the sea. The sea dykes have, however, been greatly extended and improved since that time, and damage only occurs when exceptionally high spring tides and gales of wind combine to make a breach. recent instance of this may be mentioned the flood, resulting from an abnormally high tide, which in July 1904 damaged the crops in some parts of the Cox's Bazar subdivision and in Kutubdiā, and did considerable damage to the western embankment of that island.

The most important embankment is that on Kutubdiā, which EMBANKis 44 miles long; it is in charge of a Sub-Deputy Collector
MENTS.
under the Khās Tahsīldār of Cox's Bazar. Besides this, several
other protective embankments, with an aggregate length of  $30\frac{1}{2}$ miles, are maintained by the Khās Mahāl Improvement Fund;
of these, the longest are the Gandāmārā and Gahirā embankments, each 6 miles long.

The position of Chittagong, between sea and mountain, Famine. ensures a heavy and regular rainfall and guarantees it against those recurring famines to which less favoured tracts are subject. Shut in as it is on one side by the Bay of Bengal and on the other by hills and many hundred of miles of forest country, there is a constant inrush of moist winds from the sea, which, though subject to fluctuation, never fail entirely. There is a further safeguard against famine in the great variety of soils, ranging from high sandy tracts to low swampy marshes; for in a dry season the failure of the crops in the high land is counterbalanced by the fertility of the low land. By terracing the fields as they slope downwards from the low hill ranges and by damming up the small streams which form after a few showers of rain, the

cultivator can generally secure a sufficient supply of water for the irrigation of his fields. Consequently, any failure of the harvests owing to drought can only be small and partial, and an extensive failure of the all-important rice crop is unknown. A season of high prices is, indeed, not altogether unwelcome to the people generally, as most of them are cultivators keeping stocks of rice for their own consumption, and they are benefited by the high price they obtain for their surplus produce.

### CHAPTER VIII.

# RENTS, WAGES AND PRICES.

Rents are very high in Chittagong, partly because the land Rents is fertile and the pressure of population on the soil is often very great—there are 1,900 persons per square mile of cultivated land in the headquarters subdivision—and also because the currency is inflated by the high wages earned in Arakan. Where, however, the tenants make their own embankments to protect the fields from inundation, a deduction of Rs. 4 to Rs. 6 per dron (6.35 acres), i.e., of 10 to 15 annas an acre, is commonly made from their rents on this account, the amount being stipulated in their leases.

The following statement shows the number of ryots of the several classes with the cultivated area of their holdings and the rent they pay as ascertained at the last settlement:—

CLASS OF CULTIVATOR,	Number of holdings,	Aggregate cultivated area.	Average area of cultivated land per holding.	Rent.	Average rent per cultivated acre.		
Posts of Good out on		Acres.	Acres.	Rs.	Rs.	<b>A.</b>	Р.
Ryots at fixed rates or fixed rents!	79,946	54,064	•67	2,29,805	4	4	0
Settled ryots	347,677	201,816	•57	11,50,588	5	11	2
Occupancy ryots	10,588	17,383	1.56	80,986	4	10	6
Non-occupancy ryots	17,088	16,481	•96	74,449	4	8	3
Rent-free holders	11,143	5,786	•51	*****			
Under-ryots	58,897	30,977	*52	2,02,443	6	8	6
Tota	525, 339	326, 507	•62	17,38,221	5	5	2

With regard to this table it must be remembered that each holding does not represent the whole of the land cultivated by an individual, as he will have holdings not only in various tāluks but also in different estates.

According to the custom of the country, which, however, cannot override the provisions of the Bengal Tenancy Act, a ryot

has no rights unless he holds under a written lease. Such leases are exceptionally numerous in Chittagong; they are usually granted at rates fixed in perpetuity, but they also provide for an increase of rent, if the cultivated area is found on remeasurement to have increased, or if the Government revenue payable by the landlord is increased. The ryots holding leases of this kind are known as kāimi (fixed), and there is little real distinction between them and ryots at fixed rates. The kāimi leases are very valuable and command a heavy premium (salāmi), except in parts where it is difficult to get cultivators to settle. Ryots without such leases hold from year to year and are known as eksana (year-to-year) rvots or jotdars. Theoretically, they are tenants-at-will, but many of them cultivating lands in their own village take up the same lands year after year, or move from one part of the village to the other. Tenants of this class have been recorded as settled ryots under the Bengal Tenancy Act, and have, therefore, a right of occupancy, although their position in local estimation is that of mere tenants-at-will.

The number of occupancy ryots is very small, as almost all the ryots with rights of occupancy are settled ryots; while the under-ryots are usually mere tenants-at-will. The average rate of rent paid for occupancy holdings is somewhat lower than might have been expected; and the rate of rent paid by non-occupancy ryots is also comparatively low, while the area of their holdings is large. This is due to the fact that this class includes tenants with whom new settlements have been made of Government land which previously had been unsettled. Such lands are usually inferior in quality and are subject, therefore, to a low rent, while the area leased is frequently large.

WAGES.

Owing to the great demand for labour in Arakan, the rates of wages are very high, and even a common cooly can earn 6 annas a day. His daily wage in 1850 was only  $1\frac{1}{2}$  annas, so that the ordinary labourer's earnings have increased fourfold in the last half century. There is the same upward tendency in the case of skilled labour; masons and carpenters, who used to receive only 2 annas 1 pie per diem, now getting from 6 to 8 annas according to their skill. Field labourers are very well paid. They are hired for the cultivating season of four months and the two months of the harvesting season. At this time every labourer gets as much as he can eat, and is also paid in cash according to his strength and ability, his wages in cash varying in amount from Rs. 12 to Rs. 24 for the four months of the cultivating season, and from Rs. 6 to Rs. 12 for the two months of the harvesting season. Except for those who are diseased, infirm, aged, or

without relatives, it is rare to find labourers who, with their families, do not habitually have two hot meals a day and one cold meal in the early morning. A statement of the wages paid for certain selected classes of labour will be found in the Statistical Appendix.

While wages have increased, the rise in the price of food-Prices. grains has been equally great. In 1843 the price of rice was 50 seers to the rupee, or nearly annas 12-9 per maund. Fifty years later the average price was 14 seers 7 chittacks to the rupee, or in other words the price of rice had risen by 247 per cent. The enormous rise in prices is, however, even more clearly illustrated by the tradition of the dire distress which prevailed during the great famine of 1770, when rice sold at 9 seers per rupee, and comparing that with the price which at times now rules in the district. This progressive rise has benefited the agriculturist. but has had the opposite effect on the classes above him, who are not directly concerned with the produce of the soil. As in other parts, the bhadra lok (non-agricultural) sections are steadily deteriorating in material prosperity; but on the other hand. landless labourers thrive, as abundant work is available. The annual migration to Arakan gives large wages to all that want them, and in the villages labourers are still largely paid in kind and are therefore unaffected by the rise in market prices.

The majority of the population live by agriculture, and, as MATERIAL a rule, the people are better clad and more prosperous than in condition other parts of Lower Bengal. The rice crop which forms the PROPLE. staple food of the district rarely, if ever, fails from drought. a bumper year rice is available for export, while if there is a partial failure, large imports take place from Burma and Noākhāli: but on the whole there is a close balance between consumption and production. Migration is unusually active. large number of petty cultivators and field labourers go yearly to Arakan to assist in harvesting operations, to work as coolies in the Burma ports, or to help in carrying on the coasting trade. From the north-west of the district large numbers go to Calcutta every cold season, and help to work the boat traffic of that port. This annual exodus is an important factor in the economic system of the district, for the labourers usually return about April, bringing their savings with them. The yearly influx of money thus brought about, which amounts to many lakhs of rupees, enables the cultivators to pay their rents and to husband their paddy for home consumption to a very large extent.

The result is that the ordinary cultivator generally has in stock a supply of paddy sufficient to last him and his family

for 10 or 12 months. "A considerable proportion of these earnings," remarks the Settlement Officer, "is remitted through the post office. Thus in 1897-98, 121,323 money-orders were raid in Chittagong to the value of Rs. 25,90,108. This sum represents an average of Rs. 2-0-1 per head of the population, and this figure is largely in excess of the average in the remaining districts of the Eastern Bengal Circle, which is only 12 annas 2 pies per head. The bulk of this sum probably represents remittances by Chittagong emigrants. It is noticeable that the gross rental of the district is about 22½ lakhs of rupees, or less than the sum remitted into the district by money-orders." Since that date the amount paid in this way through the post office has increased still further, and in 1905-06 aggregated Rs. 37,60,760.

The rivers, tanks and ditches swarm with fish, and the great and inexhaustible sea fisheries are free to everybody. The proximity of almost every village to the hills secures an ample supply of firewood and materials for building and agricultural imple-Thatching grass is abundant, and grazing ments at a low cost. for cattle is found readily. Bamboos, timber for posts, and fuel are cheap, and an annual pass, costing only 12 annas, enables a villager to cut a load of firewood every day of the year. Many householders living along the rivers get their fuel and timber. free even of the cost of carriage, by salving drift wood when the rivers are in flood. A market is held every 3 or 4 miles along nearly every road, and all are attended by busy dealers. Feasts and meetings, drumming and other musical exercises. wrestling matches, fire-works, both by day and night, are common signs of the general prosperity and of the prevailing idea of enjoyment.

Wealth is evenly distributed and education fairly diffused. These are circumstances which help to account for the insistence of the people on receiving written rent-receipts, their eagerness to obtain perpetual leases, the extent to which they use the facilities afforded by Government for registration, their preference for settling disputes by law rather than by violence, and the degree of comfort to which they have attained. Their litigiousness is extraordinary, and though it has been instrumental in maintaining and protecting the rights of all classes, it may reasonably be contended that the benefits thus gained are outweighed by the enormous sums of money spent by the people in the indulgence of this craze, a large proportion of which must go out of the district or serve only to swell the profits of a professional class engaged on unproductive labour.

This sketch of the material condition of the people may be concluded by quoting the following remarks of the Settlement Officer:—

"The condition of the people of Chittagong is, on the whole, comfortable without being eminently prosperous. There being few large landlords, the rights of property in land are evenly distributed among the mass of the population. Landlords and tenants are thus pitted against each other on fair terms, and there is little oppression of tenants by landlords. Moreover, the rights of all classes are protected by written and registered leases and by rent-receipts. The popularity of registration has been indicated. and it is probable that the diffusion of elementary education among the masses explains the large number of written leases. Further protection of landed interests results from the litigious habits of the people, as every point of doubt is referred to the Courts, and the decrees of the Courts and the recorded admissions and statements of interested parties are carefully preserved from generation to generation. The free distribution of copies of the survey papers of the 1837-48 settlement has also done much to stereotype rights in land. One result is that, whenever any question arises regarding landed interests, as, for instance, during the preparation of a record-of-rights, each party arrives armed with a large bundle of papers comprising registered leases, rentreceipts, certified copies of decrees of the Courts and of the chithas or field-books of the 1837-48 settlement, which are of much assistance in the deciding of any dispute. So that it happens that the litigious spirit which has so often been cast in the teeth of the people of Chittagong has its use in assisting to maintain and protect the rights of all classes in the land. And another advantage of the free recourse of the people to the Courts is that agrarian crime can scarcely be said to exist. Litigation thus acts as a safety-valve to passions which elsewhere burst out in murderous riots.

"The even balance between the produce and consumption of rice inculcates habits of prudence and thrift. The greatest misfortune a Chittagong man has to dread is to fall short of rice when the market is high. He is very seldom, therefore, led into the mistake of selling his rice unless his granary contains a year's supply. When he has stored up a sufficient provision for his requirements until the next harvest, he gradually barters any surplus in small quantities for various luxuries; but, unless he owns a large estate, he rarely sells his rice in sufficient quantities for export. The density of the population and the high price of rice caused by the deficiency of the local production have forced large

numbers of the population to emigrate, and the earnings of the emigrants have inflated the currency of the district, and this has resulted in abnormally high money-rents; while the wages of labour and prices generally are also above those ruling in other neighbouring districts. The earnings of the emigrants no doubt enable the district to provide the large amount of cash required to adjust the balance of trade, as well as to pay the Government revenue, and these earnings are eked out by the money spent locally in wages in the port, on the railway, and at the teagardens. While, therefore, the people of Chittagong have reaped none of the large profits which the cultivation of jute enables the more northern districts to earn, they share in the general affluence of Eastern Bengal, while the even distribution of wealth among the population leaves no class exposed to the pinch of poverty. The neediest class are those whose gentility forbids manual labour, and who live on their rents. These are naturally the first to suffer in any partial failure of crops. Such failure, however, very rarely occurs, both because the rainfall is regular and copious, and because the facility of irrigation from hill-streams and the regular fall of pre-monsoon showers in April and May enable a succession of crops to be reaped from the land."

Dwellings.

The style of houses occupied by both shop-keepers and cultivators is the same. Earth for a ground-floor is raised, according to the locality, from two to three feet above the surrounding level. Wooden posts, or straight poles of rough wood, are erected at the four corners, with others under a ridge-pole along the centre line, to support the roof. The outer walls and inner partitions are formed of bamboo mats, and the roof is thatched with long jungle grass placed over bamboo mats. The rafters are rough sticks or bamboos, each fastened in its proper place with split cane used as rope. The roof either slopes from the four sides of the house to a common vertex, or from two sides only which meet at a long ridge-pole. A large house of this description generally consists of an enclosed verandah (lakta) a centre dining-room behind the verandah (hātinā), and a large back room for sleeping (barāghar). Sometimes there is behind these three rooms a fourth, called pichkuli, used for keeping stores and utensils. The cook-room (aulâ) is usually a separate small hut. but sometimes it is attached to the house. A shop has generally only two rooms,—a large one in front and a smaller one at the back, with a small shed to serve as a cook-room. Of late years the building of mud-walled houses has come into fashion, and corrugated-iron roofs are beginning to be seen in all parts of the district.

In the Magh villages there are always one or more rest-houses. These buildings, when used solely as rest-houses, are all of one pattern, and are raised above the ground on piles. They are not only used by travellers, but serve as a place of meeting for the villagers, who, when they have nothing else to do, sit there and talk and smoke. Near each rest-house there is usually a small stand roofed in and containing two vessels of water and a drinking cup. It is the duty of the women to keep the vessels continually supplied with fresh water. The Buddhist houses of religion, called kyaungs, are also built on piles; when there is no building set apart exclusively as a rest-house or place of meeting, the kyaung is used for this purpose, besides being a house of religion and a school for the education of children.

The furniture in the house of an ordinary cultivator consists of Furniture. brass plates  $(th\bar{a}l\bar{a})$ , brass cups  $(b\bar{a}ti)$ , brass pots  $(lot\bar{a})$ , some coarse quilts for night-covering, a mat to lie on, and a few earthen cooking vessels. A shop-keeper's furniture consists of the same articles, but in larger number and of better workmanship, with the addition sometimes of some low wooden stools. To this list of furniture may be added kerosene-oil tins, which are put to a variety of uses and are especially employed for carrying water; sometimes also they are kept on the roof full of water in case of fire. The wooden boxes in which the tins are imported are also greatly used; and here and there a school may be seen with nothing but these boxes for the stools and desks of scholars and teachers alike.

The food of the people generally consists of rice, fish, pulses, Food. chillies and salt. During the cold season, fresh fish is rare in the interior, as most of the fishermen go out to sea, and the people then use dried fish. Oil is seldom used by the poorer classes, but all classes grow vegetables for food, such as yams, beans, pumpkins and radishes. Pan (betel-leaf) is extensively chewed by both men and women, but some of the Muhammadans abstain from it altogether. With it are used lime, coriander-seed, cinnamon, cardamoms, and sometimes rose-water, enclosed in betel-leaves, which are wrapped round them so as to form a cone in shape. Opium and its compounds (chandu, etc.), as well as ganja, are used for smoking, but chiefly by the Maghs.

The cultivators and small shop-keepers in Chittagong dress Dress. in the same way; but the clothing of the cultivator is of a coarser description. The Hindus wear a dhoti or waist-cloth, and also a chādar or shawl thrown over the body; the Muhammadans, as a rule, do not use the chādar, and their waist-cloth is of smaller size. Both Hindu and Muhammadan women wear large cloths wound

round the waist and body, coloured cloths being used by those who can afford them. In Chittagong town shoes are worn by the well-to-do, and many of them are made after the English pattern; a similar innovation is the European umbrella, the use of which is becoming universal among the townsfolk. A large variety of ornaments are worn by women, including bracelets, armlets, rings for the fingers, toes and nose, necklaces, waist-bands and anklets. During the rainy season nearly every cultivator and herd-boy carries a jhumrā or weather-shield, consisting of a boat-shaped hood worn on the head and covering the back; at this period it is a familiar sight to see long lines of labourers hidden under these shields and looking like great beetles as they stoop over their work in the rice-fields.

# CHAPTER IX.

## OCCUPATIONS. MANUFACTURES AND TRADE.

According to the census of 1901, only 60 per cent. of the Occurapopulation are dependent on agriculture, and this is by far the TIONS. lowest proportion in Eastern Bengal, where the average is 76 per cent. Industries support 14 per cent., commerce 1 per cent., while 4 per cent. follow one or other of the professions and 12 per cent. are general labourers, the remainder being otherwise employed. The proportion of the population engaged in industrial pursuits is unusually high, while, owing to the large number of priests (10,000), the professional element exceeds that in any other district in Eastern Bengal. Only a quarter of the agricultural population are actual workers; and the number of rent-receivers (18,000), which is exceptionally large, indicates the wide prevalence of sub-infeudation. There are only 12,000 field labourers, and 3,000 coolies are employed in the tea gardens. Among the industrial population, cotton weavers and spinners (22,000), fishermen and fish dealers (17,000) are most numerous, and next come rice pounders (12,000), barbers and potters. larger number of women than elsewhere are employed industrially. especially in rice husking (12,000), cotton spinning (11,000), cotton weaving (6,000) and mat making. Boatmen are exceptionally numerous, while the well-known lascars of Chittagong, with engineers and firemen, number 1,500 and have nearly 12,000 dependents; the former number shews only the men on leave at the time of the census. Both the law and medicine are strongly represented. The number of labourers is much greater than in any other East Bengal district. The Sītākund shrines are responsible for the large number of priests and mendicants. the latter numbering 19,000, of whom 13,000 are women.

A noticeable feature in the occupations of the people is the large extent to which the women help the men, especially those belonging to the Kalāl or Kumhār, Jugi, Phulmāli or Mālākar, Dhobā, Bhuinmāli and Jaliyā castes; while in agriculture they assist in planting out, weeding and gathering the cold weather crops, and also when the rice is being threshed. In Kumhār or potter families the women prepare the clay and make it fit for use on the potter's wheel. Phulmāli women prepare articles out

of sola pith, and the Dhobā women help their husbands in washing clothes. The women of the Bhuinmāli caste, whose chief work is to cleanse latrines and sweep out the homesteads of well-to-do people, similarly assist their husbands; and among the Jaliyas the man catches fish and carries them home, while the woman takes them to market and sells them.

MANUFAC-

With the exception of the tea industry, the manufactures of Chittagong are of little commercial importance. Various handicrafts are carried on, but, as a rule, the articles manufactured only suffice to meet the local demand.

The tea industry.

The introduction of tea in Chittagong dates from the year 1840. In that year Mr. Sconce, the Collector, received some tea-seed from Assam and some China plants from the Botanical Gardens. Calcutta, which he put down in the "Pioneer" Garden in Chittagong; Mr. Hogue planted an acre or two at Kodālā as a private enterprise; and in 1843 tea was first manufactured. In 1862 Dr. J. B. Barry visited Chittagong, and caused 20,000 acres of land to be taken up on his account. After this, the mania for tea-planting speculation in the years 1862 to 1865 gave a great impetus to the buying of waste land, with the intention of forming tea gardens. The aggregate area of waste lands, for which applications were made, was an enormous proportion of the total area of waste lands within easy reach of a river, a road, or a village path. In one valley, between two ranges of hills, all the waste lands on both sides of the borders of cultivation, extending from the 9th to the 40th mile-post of the road passing through the valley, were applied for. One hundred and one applications were received by the Collector of Chittagong for 215,730 acres of land, and a number of gardens were soon opened out.

This wild spirit of speculation ended, however, in great disaster, due to extravagant expenditure, incapable supervision and the unsuitability of many of the sites, and also because of the constant disputes with the peasant proprietors. An applicant would put in a petition for any tract he might have prospected and taken a fancy to, just as if it were Australian bush; the lot he asked for was put to auction and sold; and after the planter had built a bungalow and planted tea, he learnt for the first time that neighbouring villagers and their mātabars, rightly or wrongly, looked on him as an intruder. Although the waste lands were Government property, the private estates had no boundaries, and their proprietors had been busy in creating documentary claims over much larger areas than their settlements covered. In some cases, again, either through the negligence or ignorance of the

rightful holders, the areas sold included a considerable area of settled land, and of land held under various rights and titles, which thus passed into the hands of the purchasers. Tālukdārs also sometimes found their lands taken into the lots, and no compensation paid in consequence; while the villagers were aggrieved by the fact that some managers either refused to allow grass, bamboos, and jungle to be cut at all, or only on payment, and disputes also arose regarding the right to graze cattle on waste land. Litigation ensued, and in many cases the villagers had recourse to violence; but the planters found they could not get a conviction. If their servants gave evidence against them, the villagers burnt down their houses, and before long the quarrels terminated in the destruction of the tea-plants, and in a few cases in the firing of tea-houses and nurseries, and even of the bungalows in which the planters lived.

In order to allay the bad feeling aroused, it was decided that the waste lots that had not been professionally surveyed should be surveyed and demarcated, and either the settled lands restored or ompensation paid for them. These measures were successful. the antagonism to the planters gradually subsided, and the industry began to develop. In 1872 there were 13 plantations with an area of 24,890 acres, of which 1,200 acres were under tea, and the outturn of manufactured tea was 205,000 lbs In 1880-81, the export of tea had risen to 737,000 lbs. with an estimated value of Rs. 5,71,000; in 1890-91 altogether 1,181,000 lbs, were manufactured; and in 1900-01 there were 21 gardens with 4,340 acres under tea, and the total outturn was 1,187,000 lbs., the outturn per acre being 308 lbs. According to the returns for 1905-06, there are 24 gardens with a total area of 27,973 acres, of which 4,280 acres are under tea, and the outturn in that year was 1,480,984 lbs.

A list of the tea gardens is given in the margin. The gardens The tea

Agania.
Amochia.
Bāramāsiā.
Belgāon.
Chāndpnr (2).
Dāntmārā.
Dorothea.
Fenoā.
Jaitapurā.
Kālāpāniā.

Khandakıā.

Kodālā.
Kutubcharī.
Neptune.
Patiyā.
Patiyā.
Rioneer.
Rāngonīā.
Ruplī.
Shujānagar.
Teixera.
Udāliā.
Zurzuria.

opened out in the Haldā valley gardens. have so far given the best results, the soil being the most suitable for tea in the district. Less rain falls in the early months of the year than in Assam and Cāchār, but taken altogether the climate is favourable for tea. The class of plant grown is chiefly hybrid, but there are some Assam and Manipurī indigenous plants, while in

puri indigenous plants, while in the gardens first opened there is a large proportion of the China

variety. High class hybrid is preferred by most planters and seems to thrive best. Machinery has been freely introduced, the cost of manufacture being considerably reduced; and the tea boxes, which used to be brought from Burma, are now to some extent made on the gardens. The quantity of tea exported is steadily rising, although inconsiderable compared with the outturn of the large tea districts. Only black tea is made, classed as Broken Pekoe, Pekoe, Souchong, Fannings and Dust. The bulk of it is shipped to Calcutta for sale there, but the facilities for direct shipment now offered are beginning to attract a fair portion to the London market.

Local labour is preferred by most planters, the coolies being found to be both docile and intelligent; but it is impossible in some localities to obtain a sufficient supply during the seasons of rice transplanting and harvesting, while the high rates offered in Arakan attract a large number of labourers from this district during the other months of the year. Imported coolies have consequently been introduced to supplement the local supply of labour; these seldom return to their homes, preferring to settle down on the gardens, and nearly all the plantations are in this way fully supplied with labour. Their wages in general are the same as those earned by local labourers, viz., Rs. 6 a month for tea-rollers and factory hands, Rs. 5 for ordinary hands, and Rs. 3 to Rs. 5 for women and children, with a bonus if they work during the entire year; during the plucking season, however, the women and children can earn more by bringing in a greater quantity of leaf. The family wage compares favourably with the town rates, while land is freely given to the coolies to cultivate on their own account at nominal rates of rent.

The health of both Europeans and natives on the tea gardens has improved materially of late years, which is attributable to the extensive clearance of jungle, to better cultivation and drainage, and to the attention given to the water-supply.

Tea cultivation. The tea plant, if allowed to grow naturally, attains a considerable height. The China variety grows to a height of about 15 feet with branches shooting out close to the ground; while the Assam variety, which is more like a tree in form with a clean straight stem, grows to a height of 20 feet. On several gardens some of the Assam and Manipuri varieties are allowed free growth for the sake of seed, which is used for local requirements. For the purpose of the planter, the plant must be kept in the form of a low bush not higher than 3 feet, and has to be trained so as to have a good spread of plucking surface. A bushy growth from the roots upwards is desirable, and the plant is

therefore pruned periodically, all moribund wood being cut off and unnecessary twigs removed.

After the spring has set in, the bushes are allowed to develop on each shoot a growth of five leaves, besides the terminal bud. The pluckers then come along, and with forefinger and thumb nip off a piece from the top of each shoot, consisting of the bud and two leaves, leaving three leaves on the bush. These are left. because the bush requires new leaves by which to breathe and maintain its health. Only young tender leaves are fit for making into good tea, and the old matured and coarse leaves are useless for the purpose. The bud makes what is called "Orange Pekoe" and "Broken Orange Pekoe"; the young leaf next it is "Pekoe"; the coarser leaf is "Pekoe Souchong."

After the first plucking, new buds start away from the nodes or eyes at the base of the remaining leaves. As these develop to a growth of three leaves, the new bud and two leaves are again plucked, leaving only one leaf; and so on throughout the season. A growth of shoots is termed a "flush." The shoots are plucked only as they become ready, and the whole estate is gone over once a week; the interval becoming longer as the season advances, till it is once a fortnight at its close. begins at the end of March, and closes about the end of November. The average crop is about 300 lbs. of tea per acre, there being several small native gardens which give poor results. The larger estates yield from 400 to 600 lbs. per acre.

The leaf, having been plucked, is taken to the factory, where Tea it is weighed, and the process of manufacture then begins. The manufacfirst process is withering, which means that the leaf is spread out upon trays or frames or lofts, and becomes soft and flaccid, losing about one-third of its weight by the evaporation of moisture; while the enzyme within the sap of the leaf becomes considerably developed and increased. The leaf is next rolled by machinery, the object of this process being to bruise the leaves, so that the cells become ruptured, and the sap is brought to the surface. The leaves are thus converted into a wet mass, and incidentally The tea is then taken out of the become curled and twisted. roller, again spread out on cement or glass slabs covered with thin cloth, and allowed to stand until fermentation sets in. This is due to the sap, which becomes liberated during rolling, being brought into contact with the atmosphere, the prime agent being an enzyme within the sap itself, which then becomes active. During this process the leaf assumes a bright coppery colour.

After this it is necessary to dry or fire the tea. leaf is placed in machines called driers, by means of which it is

passed through a chamber filled with air heated to a high temperature, and slowly turned over until it is nearly black. This operation requires great care, as all the moisture must be eliminated, and yet the tea must have no trace of scorching, which destroys its delicate flavour and essential oil. After firing, the tea is sifted by machinery into the various grades already enumerated, according to the size of the leaves, and the manufacture is complete. It only remains to pack the tea in the well-known chests of commerce, and this is done on most large estates by means of machinery. The tea is invariably packed in close-fitting chests, lined with lead, which has to be carefully soldered up, as tea is very susceptible to moisture, and must be hermetically sealed in order to retain its flavour and aroma.\*

By.products. Experimental crops have been tried on the tea estates during recent years, but the only crop which can be said to have come to stay is sisal fibre, which grows freely and of which there are now about 200 acres planted, with a sufficiency of seedlings in nurseries to more than double the area in 1908. Rhea fibre also grows freely, but, till there is more certainty about its market value, it is not considered desirable to extend the cultivation. Jute, mustard, sugar and cotton have been grown successfully, but do not give such good results as tea. The climate is scarcely suitable for rubber. Coffee grows well. The periodical cyclones, however, play havoe with the bushes, and there is now practically no coffee cultivation in the district.

Fisheries.

The fisheries of Chittagong furnish a means of livelihood to a large section of the population, and constitute one of its most valuable industries. The rivers by which it is intersected abound in fish, and there are large inland fisheries in the Karnaphuli, Haldā, Sangu, Chāndkhāli, Harbhang and Mātāmuhari rivers. Fish is sold daily in every market, and the devices for catching everything down to the minutest fry are many and ingenious. Extensive sea fisheries exist in the estuary of the Fenny river and along the banks of the Sandwīp channel, but practically all the coast-line is exploited. Some of the largest fisheries are near Sonādiā and at Kālī Dahar, Sonādiā being a small sandy island off the southern point of Maiskhāl, while Kālī Dahar is a portion of the Bay, dahar meaning a place where boats congregate.

The fishing is conducted by fleets of boats which go out under a fleet admiral called a bahaddār, and at various places along the coast there are stations, where the fishermen camp for the hot weather and dry and salt the fish, after which process it

<sup>•</sup> I am obliged to Mr. A. F. Dowling, Managing Director of the Kodālā Tea Estate, for kindly scrutinizing the above account of the tea industry.

is known as *sukti*. The Maghs of Harbhang and Teknāf make a special preparation of dried fish and prawns, known as *ngapāi*, and also a condiment called *bālichaung*, which looks and smells like bloater paste; both are greatly relished by the Maghs of Cox's Bazar and Arakan. Large quantities of *hilsā*, after being salted and dried, are preserved by being stored in pits dug in the ground. The methods of fishing and preserving are the same as have been followed from time immemorial.

The chief season for sea fishing is from November to March and for river fishing from April to October; but no close season is observed for either, though during the monsoon the fish are somewhat protected by the weather, which interferes with deepsea fishing. Besides the professional fishermen, practically all the poorer classes in rural tracts eatch fish for food, both breeding and young fish being recklessly destroyed with large sized and mature fish. Nearly every man is a fisherman during his leisure moments, and there are few families without a tank, or at least a share in one, which is stocked as a stew pond. There is also a considerable fish-rearing business on the Halda river. The eggs laid in April and May are caught in cloths and hatched in shallow pits dug in the bank of the river; the small fry are then placed in small ponds, and when large enough, are sold to stock the numerous tanks.

There are no statistics showing the value of the fisheries or the quantity of fish caught, but it is known that many tons of fish are dried and salted annually. They are almost entirely used for local consumption, and with the exception of sharks' fins, which are sent to Rangoon, there is little exportation.

There are two small pearl fisheries which have been taken Pearl possession of by Government. One, with an area of 1,175 acres, fisheries. is situated off the island of Sonādiā near Maiskhāl. It was discovered by accident in 1894, and some Arakanese pearl traders confirming the discovery, a few oysters were sent to the Superintendent of the Indian Museum for examination. reported that the pearls found were of trifling value, and that the oysters were not the true pearl-bearing ones, but belonged to the species Placuna placenta. The other pearl fishery, which is situated on a char at the mouth of the Gumakhāli creek on the east side of the Maiskhal channel, has an area of 325 acres. It having been ascertained that these pearl fisheries are the property of Government, orders were issued in 1896 for leasing them out by auction to the highest bidder; they are now held by a Bombay They have not been worked for pearls since the cyclone of 1897, and only isinglass and mother-of-pearl are now obtained.

Boatbuilding. Chittagong had once an important industry in boat-building. In the 16th and 17th centuries galleys for the Sultān of Turkey were built here or in the neighbouring islands; and as late as the beginning of the 19th century vessels of 800 and even 1,000 tons were launched from the yards: a list of shipping belonging to the port of Calcutta in 1824 shows 11 English vessels and 8 brigs as having been built at Chittagong. The building of sea-going sloops and brigs has now died out; only 3 vessels were built in 1901-02, and none have been constructed since that year. Country-boats however are made in large quantities, the chief boat-building places being on the banks of the Haldā and a dried up bend of the Sangu river. They are also built and refitted by the boatmen themselves on practically all the creeks, and the local dug-outs and canoes are in considerable demand in the Tippera and Noākhāli districts.

Weaving.

Weaving is carried on by the Hindu caste of Jugis and by Muhammadan Jolāhās. The former are usually landless labourers and are in poor circumstances, but the latter are better off, as they generally have land, with the produce of which they supplement their earnings. The cotton-weaving industry is, however, unimportant, as the use of European piece-goods is almost universal. Even for the local looms imported machinemade varn and twist are generally used; but the cotton grown in the Hill Tracts and sold at the riverside hats is still used to a certain extent for coarse cloth, and a large quantity is carded at Katakhāli near the mouth of the Halda. Improved looms have not as yet found any favour, and the type in use is a simple contrivance of bamboo, in which the spindle is thrown by hand. The most important centre of the cotton-weaving industry is at Pahārtali. A small quantity of tusser silk is made into fishing lines at Sātkaniā, and the Magh women of Cox's Bazar make silk and cotton lungis or kilts for sale in the Burmese market.

Sugar pressing. Among the minor industries sugar pressing claims a place. The mill used is a wooden mill of an old-fashioned type, consisting of three upright rollers set in a trough, the middle roller being turned by two long bars like a capstan; half a dozen men or a pair of bullocks, walking round and round, turn the mill, while two or three men push the caues in between the rollers. The juice runs from the trough plate, which forms the lower part of the mill, into a pot set in a hole in the ground; and it is boiled in a row of saucer-shaped copper pans (deg), which are placed over a long narrow furnace or trench made in the ground. The fire is fed to a great extent with the refuse cane

after it has been squeezed dry. Several families combine to set up and work a sugar mill, and when once the cane is cut, the sugar pressing goes on day and night till it all is worked off, the men working by shifts. The whole district resounds at this season with the lamentable creaking of the sugar mills. The juice is transferred from pan to pan, until the final boiling converts it into a dark stiff fluid (gur), which is run into long-necked jars, in which it sets hard. All the molasses thus made are consumed in the district, and there is no refining, the only refined sugar used by the people being imported. Attempts have been made to introduce the Bihia mills, which are now beginning to acquire some popularity.

Soft iron bars are imported and made into das for the hill-Other men, and, as in other districts, all the agricultural implements are industries. made locally. Little brazier's work, however, is done, brass and bell-metal goods being largely imported from Calcutta. Besides the ordinary bamboo mats and baskets, fine mats are woven of a reed known as sītalpāti (Phrynium dichotomum) and are exported to a small extent. A few villages, such as Mirzāpur and Nātmura on the Sangu river, have a local reputation for pottery. but this is of the usual indigenous kind, made in red and black clay; at Natmura fragments of red pottery with a green glaze are occasionally dug up, and the ground is full of brick and earthenware. There are skilled carpenters at Chittagong who have a brisk trade, some of their products, such as chests and palanquins, being exported to the neighbouring districts; and sawyers, called kapitans, do a good business in sawing logs into planks for export. Wheelwrights also are fairly numerous owing to the increase in the number of carts used. In the north of the district carpenters make wooden mills for husking paddy after the pattern of the Arakan mills made in Cox's Bazar. It is usual for the small merchants who collect rice in the interior to set up a wooden handmill on the banks of the streams in which their boats are moored, and husk paddy in small quantities.

Coconuts are imported from the Maldives, and the shells are made into hukkas, the husks beaten into coir, and the kernels cut out and used for making oil. A small amount of mustard or rape-seed oil is also made in the usual wooden mill, with a pestle working in a socket made out of a tree stem and worked by men and cattle pushing a horizontal lever, as they walk round the stem. There is some cordwainer's work done, cordage and cables being made for shipping. Fishing traps and nets are made on a large scale, but this is practically a domestic industry.

English yarn is much used now in place of the local shan hemp for nets and lines, as it is strong and cheap. Many of the Magh appliances are particularly elaborate and ingenious, and attracted considerable attention when exhibited at the London Fisheries Exhibition. The manufacture of umbrellas from palm fronds has declined owing to the importation of cotton umbrellas, but large numbers of jhumrās or weather shields are still made of this material.

Factories.

At Chittagong there is a large rice mill owned by a European firm, at which 226,000 maunds of rice, valued at Rs. 7,13,000, were milled in 1904; in 1906 and 1907 it was idle, as there was no surplus paddy for export. A factory has been started for the ginning of cotton, and the town also contains several aerated-water manufactories.

TRADE.

The district contains 3 ports, Chittagong, Cox's Bazar and Nhilā, but no statistics are available for the two last mentioned, which are not customs ports. Cox's Bazar is only a port for carrying on coasting trade with customs ports and for no other purpose, while Nhila is merely a port for the shipment of rice, on account of which duty is paid at Chittagong. For practical purposes, therefore, the sea-borne trade of the district is confined to Chittagong. In 1905-06, 23 vessels, with a tonnage of 45,000 tons, engaged in the foreign trade, entered this port, but of these only six, with a tonnage of 13,000 tons, entered with cargoes; on the other hand, 29 vessels, with a tonnage of 72,000 tons, cleared with cargoes. Altogether, 292 coasting vessels, with a tonnage of 245,000 tons entered with cargo, and 271 with a tonnage of 248,000 tons cleared with cargo. During the 5 years ending in 1905-06 the total trade of this port was more than doubled, and in that year was valued at 463.41 lakhs.

Sea-borne trade.

The sea-borne trade consists of that which is termed foreign, i.e., with non-Indian ports, and of the coasting trade with Indian (including Burma) ports. During the year 1905-06 the value of the foreign trade of Chittagong amounted to 317.76 lakhs, and that of the coasting trade to 145.64 lakhs, so that roughly 69 per cent. of the value of the trade is with foreign ports and 31 per cent. with Indian ports. The foreign trade is now more than four times what it was before 1901-02. The coasting trade has hitherto returned a gradual decrease since the opening

This account of the trade of Chittagong Port has been compiled from the Annual Customs Administration Report for 1905-06 by Mr. H. Luson, I.C.S., Commissioner of the Chittagong Division. The figures of the last two years have not been given, as they were abnormal on account of the very large rice imports from Burma.

of the Assam-Bengal Railway, but recently it has shown signs of reviving.

Of the total sum of 317.76 lakhs, which represented the value Foreign of the foreign trade in 1905-06, no less than 287.68 lakhs or trade. 90.5 per cent. were exports, and 30.09 lakhs or 9.5 per cent. were The latter included 9.73 lakhs' worth of railway imports. materials, but even excluding the value of these, the imports from foreign ports had a value of 20.36 lakhs, as compared with 2.80 lakhs in 1901-02; and the value of the imports thus increased sevenfold during the quinquennium. Besides the Clan line of steamers, which in the season maintained a regular service to the United Kingdom every 10 days, four outside steamers left with tea and jute for the United Kingdom; three steamers of the Bucknall line left with jute direct for New York; one steamer left with general cargo for Penang and Australasia; one steamer left with rice for Reunion; and five sailing vessels left for San Fernando, Trinidad, and the Maldives with rice. Shipments were also booked to the following foreign places: - Ghent, Marseilles, Odessa, Mauritius, Boston, Philadelphia, Ludlow, Melbourne. Geelong, Victoria and New Zealand. Vessels with imports do not come here regularly from the United Kingdom, though in the season they leave regularly for that destination. Imports were brought in ships from foreign ports from the following places:-United Kingdom, Aden, Antwerp, Hamburg, Sydney, Fremantle, Bremen, Yokohama, Hongkong, Amoy, Mauritius, Melbourne, Cape Town, Bordeaux, Trieste, Paris and Rotterdam.

The chief article in the trade with foreign ports is tea, which Exports. is exported to the United Kingdom. The value of this in 1905-06 was 155.79 lakhs, or 49 per cent. of the whole trade with foreign ports, both exports and imports. The second article of importance in the foreign trade is jute, exported to Europe and America, the value of which was 125.18 lakhs, or nearly 40 per cent. of the whole trade with foreign ports. The tea and jute exports constitute together 89 per cent. of the whole foreign trade, or 97.6 per cent. of the foreign exports. There has been a remarkable increase in the quantity of tea and jute exported since 1901-02, when the value of the former was 55.59 lakhs and of the latter 87.51 lakhs. The total quantity of tea exported in 1905-06 was 41,535,870 lbs. of which 16,824 lbs. were produced in Chittagong and 41,519,046 lbs. were received from Assam. The exports of Assam tea direct from Chittagong have grown rapidly of late years, and will no doubt continue to increase, as this is the nearest and most convenient port for Assam. The increase in the exports of jute has been decided, but not so

consistent, owing partially to the variations in the outturn of the crop; with the provision, however, of better facilities for communication from the Dacca and Mymensingh districts to Chittagong, the trade in jute through this port must develop greatly.

The next item of importance in the foreign trade is the export of rice and paddy to Ceylon, the Mauritius, and Reunion. Owing to the very short crop in Eastern Bengal, the value of this trade fell from 22 lakhs in 1904-05 to 5.89 lakhs in 1905-06, a decrease of 16.11 lakhs, or 73.2 per cent., but this decline is quite fortuitous. Other articles of export to foreign ports are of little importance; a cargo of raw hemp was for the first time shipped to the United Kingdom from Chittagong during 1905-06.

Imports.

The chief item among foreign imports is metals, mainly corrugated iron, imported from Liverpool, the value of which in 1905-06 was 8.09 lakhs; and next in importance is salt from the United Kingdom, Germany and Aden, which had a value of 3.32 lakhs. Cotton piece-goods to the value of 3.21 lakhs were imported from ports outside India, a considerable proportion being prints and chintzes shipped from Antwerp; the amount would be greater than it is, were it not that most of the piece-goods are at present brought from Calcutta by coasting steamers, and not direct from foreign ports.

Coasting trade.

The coasting trade of Chittagong consists of trade with Indian ports outside Bengal and trade with ports within Bengal, viz. Calcutta, Nārāyangani and Nhilā. The trade between Chittagong and Indian ports outside Bengal fluctuates, but its value in 1905-06 was 69.58 lakhs. The most important item of this trade is kerosene oil, imported from Burma; and exports of rice and paddy to Cochin and other ports of Southern India also bulk Among other exports may be mentioned provisions, consisting mainly of eggs, which are shipped in large quantities to Rangoon, metals, salt, and spices, such as betel-nuts and chillies, which are sent to the same destination; and among imports, wood from Rangoon and rice from Burma. The boatmen of Chittagong have the eastern littoral trade in their hands and do not, as a rule, ply inland above Goalundo or Calcutta. They work their way. however, across the Bay of Bengal into Burma, from which Province there is an influx of coasting boats into Chittagong.

The coasting trade with other ports in Bengal, after falling off continuously since the opening of the Assam-Bengal Railway from some 120 lakhs a year, increased to 76.06 lakhs in 1905-06. This trade is chiefly with Calcutta, the total value of that with Nārāyanganj being only 6.01 lakhs in 1905-06, and that with Nhilā being negligible. Alarge proportion of this trade is due

to the export of jute viâ the Assam-Bengal Railway by coasting steamers to Calcutta, the value of the jute thus exported being 25.44 lakhs in 1905-06. Raw cotton to the value of 10.05 lakhs and hides to the value of 5.54 lakhs were exported by coasting steamers to Calcutta in the same year. The value of the imports from Calcutta was 16.72 lakhs, the most valuable of the imports being piece-goods (5.51 lakhs).

During recent years there has been a great increase in the trade Developof the port, and with improved railway and navigational facilities, ment of the port. the prospect of its further development in the near future seems very hopeful. Chittagong, rather than Calcutta or Rangoon, is naturally the distributing port to Akyab and Northern Burma of imports brought from Europe, and the larger portion of the piece-goods consumed in Eastern Bengal should also come direct from Europe to this port. The exports of jute have risen by 50 per cent. and those of tea by 300 per cent. during the 5 years ending in 1905-06. When Chittagong is connected by rail with the Mymensingh and Dacca districts, the export of jute through this port will very largely increase. And it is expected that the cost of carriage ria Chittagong to the Hooghly mills will soon demonstrate the advantage of having mills on the Karnaphuli river, and so saving the freight across the Bay of Bengal and the charges at the two ports; excellent sites are already being made available for jute mills on that river just below the jetties. present, too, the selling and buying of hides for exportation are confined to Calcutta, but as Eastern Bengal and Assam furnish large quantities of these articles, it may be expected that direct shipments will eventually be made from Chittagong. For the full development of the port, a considerable increase of the jetty accommodation will have to be made, as well as railway connection across the Meghnā river.

The preceding account will show that the trade of Chittagong Internal is mainly a transhipment business. The jute is not grown in trade. the district, but brought down by railway; the greater part of the tea is grown in Assam; and the cotton is imported from the Hill Tracts in the raw state. Some of the rice exported is grown in the south of the district, but the greater part is grown in Tippera and Noākhāli, and is brought into the port by country boats. The local crops are hardly sufficient to meet the local demand, and the imports exceed the exports; the rice being re-exported by sea to foreign countries, after the deficiency of Chittagong has been met. Even the ducks' eggs, which are sent in such large quantities to Rangoon, come for the most part from the same two districts. The trade is mainly carried by sea, and the

railway is therefore a feeder to the port, the merchandise transported by it being that already mentioned in the account of the foreign and coasting trade. The remainder of the trade is of minor importance, with the exception of that in hides, which is very brisk at the time of the *Bakrīd*, the great Muhammadan festival, when a very large number of cattle are slaughtered.

The district adjoins the Noakhali district for a few miles at its north-western extremity, and at this point it receives trade by boats from the country along the Meghnā. Mahājan's Hāt is the chief mart at this end of the district, to which salt and piecegoods are brought from Calcutta, and tobacco, areca-nut, brassware, dried fish and country produce from the neighbouring districts. Droves of cattle are also brought in from the north, the greater part of them apparently crossing the hills to Hāthazāri, another large market 12 miles north of Chittagong; there is also a considerable trade in cattle towards the south of the district. From the island of Sandwip a small amount of trade comes in by boat to Kumira, coconuts, fish, etc., being brought by the islanders, who take away thatching-grass, bamboos and other jungle products, timber being scarce on the island. with the Hill Tracts is in the hands of small traders, called jum beparis, who go up the streams into the interior with salt. saltpetre, sulphur, lead, daos, iron-ware and a variety of other articles sought after by the hillmen. Their practice is to make advances to the hillmen and barter for cotton, rubber, skins, horns, and other local products, but cotton is the principal article of commerce. This trade is concentrated at several markets, such as Nārāyan's Hāt, Bībi's Hāt and Rāojān in the Haldā valley, Raojā's Hat in the North Rangonia valley, and other places on the banks of the Karnaphuli river, at which cotton and other produce are collected for export to Chittagong merchants, and from which salt, piece-goods, cotton yarns, areca-nut, kerosene oil, dried fish, brass-ware and other imported goods are distributed.

A large trade is also carried on in timber and wooden canoes (saranga), rattans of all sorts, and the palm fronds called kuruj patta, which come down the streams from the jungle. From the south come boat-loads of gātia wood (commonly called mangrove), which is used for house-building, fencing and fire-wood, while its bark is utilized for tanning nets. On the Sangu and Mātāmuhari rivers and on the Bāghkhāli the traffic is of the same character as on the Karnaphuli and its tributaries. Cotton and other hill produce come down-stream, and salt, iron daos, and manufactured goods go up in exchange. There are large markets at several places on the rivers and canals in Patiyā and Sātkaniā

thanas, and less important ones in the more backward subdivision of Cox's Bazar. The hills shut off the subdivision from Sātkaniā, and another block of hills along the south bank of the Bāghkhāli cuts off the Teknāf thana from Cox's Bazar. From the Bāghkhāli southwards the traffic is almost solely with Burma, and is almost entirely sea-borne, there being no easy land route and no water communication except by the open sea.

The country within tidal limits is a network of waterways: consequently boat traffic is the most usual means of transport throughout the district, eart traffic being almost restricted to the country north of the Karnaphuli river. Even there, however, it pays to take dried fish by boat from Chittagong 30 miles up the Halda, and thence to carry it 10 miles on men's shoulders through the hills to places along the Trunk Road, rather than to take it by cart half the distance. The earthenware used in every household is distributed almost from door to door by means of boats, and it is a common sight to see a boat-load of earthen pots drawn up at the very end of a small tidal creek, and an impromptu bazar established for a week or two; the boatmen stock their earthenware on the bank, make a small fenced enclosure and a hut of mats to camp in, and barter pots for grain until they have a cargo to take away. Most of the distribution of piece-goods, cotton varn and other imported goods is done by itinerant retail merchants called paikars, but there are also a few up-countrymen and Kābulis carrying on an independent trade. The shopkeepers advance piece-goods, machine-made yarns and twist to the paikars on credit, making up accounts periodically, once a week or once a month or at longer intervals according to the paikār's credit.

Two, and those perhaps the two chief branches of traffic, have not been referred to above. One is the carrying to market of agricultural produce, which is mostly done by coolies or by the cultivators themselves bringing their produce to the nearest market, from which it gradually finds its way to the chief mart centres of commerce. The other is the coasting trade by large bālām and gadu boats, which bring in rice, dried fish, areca-nuts, etc., from the Meghnā river, and wood, fish, etc., from the south.

In the interior, trade is carried on at a large number of hāts Markets or markets, which usually consist of several permanent shops and and fairs. a central square occupied on market days by temporary booths. They are found every 5 or 6 miles throughout the district, and are so conveniently situated that no village is far from one of them; as a rule they belong to private zamīndārs, who levy a small fee from the vendors. The principal trade done at these markets

consists of the sale and purchase of country produce, mats, earthen pots, fish, imported piece-goods and salt. At the sea-board markets, fish form an important article of trade, while bamboos and thatching-grass are brought in large quantities to those situated near the streams issuing from the hills. The most important are Mahājan's Hāt near the Fenny; Raojā's Hāt near the Karnaphuli in the Rangoniā valley; Nāzir's Hāt on the Haldā; the town markets on the Chaktai creek; Poāng's Hāt on the Sangu; Sātkaniā on the Dolu; Cox's Bazar, Teknāf, Idgāon and Rāmu in the south; and Rumkha (Rungya) Hāt on the Rezu.

There are no fairs held solely for commercial purposes, but there are two large religious fairs, the Sivarātri melā held at Sītā-kund in February, and the Mahāmuni melā held annually in April at Pahārtali near the northern bank of the Karnaphuli in the hills east of the Haldā valley, which is attended by hillmen and local Buddhists.

### CHAPTER X.

# MEANS OF COMMUNICATION.

A CENTURY ago the lines of communication were almost exclu-ROADS. sively along the tidal rivers and streams by which the district is intersected; and there was only one road worthy of the name in the district, viz., the Trunk Road running from Chittagong northwards along the coast, which branched off at Zorāwarganj in the direction of Lakshmipur in the district of Noakhali and then led to Comilla and Dacca. This road, however, was a mere causeway raised above the level of the surrounding country; it was not bridged and was impassable in the rainy season. It was used for the passage of troops, the halting places being at Burburia on the Fenny river, Nursarai, Sītākund and Kadam Rasul, a mile north of Chittagong. To the south there was a postal runner's track to Rāmu, which led from that place through Dariādīghi to the Rezu river, and thence along the seashore to Teknaf, with a branch line running from the Rezu to Ukhiā Ghāt in the Naf estuary. There were also portions of roads from Chittagong to Dohazari on the Sangu river, with a continuation to Adunagar on the Dolo, and a few bridges constructed by the Muhammadan troops, which used to be posted along this line. About 1824 Captain White cut a trace through the jungle from Rāmu into Arakan for the purpose of aligning a military road, but this road was not completed, though it was used for the transport of baggage and cattle. After the second Burmese war, however, when the whole of Arakan had been annexed, it was determined to establish a line of road in continuation of that connecting Dacca and Chittagong, to run straight into Akyab. Accordingly, in 1854-56 the Dacca Trunk Road was remodelled as part of the line from Calcutta to Burma vià Dacca and Chittagong, and the construction of the present Arakan road was taken up, the road leaving the old Rāmu post line at Dulahazāri and then striking eastward through Garjania and Twautang into This work was interrupted by the Mutiny, and the road was not completed till many years afterwards.

There are now 541 miles of road maintained by the District Board, in addition to village tracks with a length of 362 miles. With the exception of 5 miles, however, all the roads are unmetalled, and most are imperfectly bridged. Ferry arrangements are not all that can be desired, and owing to the heavy rainfall many of the roads are almost impassable during the monsoon, for a few days' downpour of rain will cut the sandy roads half through in many places. Very great progress, however, has been made during the last 25 years in improving and extending the roads. Many old cross-roads called jangal or embankments, which are perhaps relics of the Muhammadan and Arakanese rule, have been brought into connection with the district lines; a great number of light iron bridges, called jowarianala, have been introduced, though more are still wanted over the numerous streams and creeks; and much has been done to connect the villages in the interior with the railway by means of feeder roads.

Principal roads.

The principal roads run in a north-easterly or south-easterly direction from Chittagong, at right angles to the watershed, the rivers being generally used for traffic from the east of the district to the coast. There is also very little cart traffic south of the Karnaphuli, and there are practically no roads suitable for it other than those mentioned below. The following is a brief account of the most important roads.

Dacca Trunk Road The Dacca Trunk Road is a Government road maintained by the Public Works Department, running between the Sitākund range of hills and the sea; it crosses the Fenny 45 miles northwest of Chittagong, and then proceeds northwards to Comilla in the Tippera district. It is bridged throughout as far as the Fenny river, which is crossed by a ferry.

Rāmgarh road. The Rāmgarh road runs north-east to the borders of the district, passing east of the Sītākund range of hills and between it and the Haldā river. It passes northwards through Hāthazāri (12 miles), and crosses the Haldā river by a ferry at Nāzir Hāt, 21 miles north of Chittagong. Thence it proceeds north-eastwards, passing the Phatikcharī thāna, and again north to Rāmgarh on the Fenny river, crossing and re-crossing the Haldā river.

Hill Tracts road. The Hill Tracts road branches eastwards from the Rāmgarh road at Hāthazāri, and, crossing the Haldā river at Sartā Ghāt (2½ miles east of Hāthazāri), passes Rāojān (8 miles), and after crossing a loop of the hills of the Chittagong Hill Tracts, traverses the North Rangoniā valley in an easterly direction, and enters the Hill Tracts 23 miles from Hāthazāri. This is the main road leading to Rāngāmāti, the headquarters of the Hill Tracts.

South of the Karnaphuli river, the Arakan road starts from Arakan Boalkhali, 2 miles from Chittagong, on the left bank of the road. Boalkhali Khal, and runs in a south-easterly direction through Patiyā (7½ miles) to Dohazāri (22 miles), where it crosses the Sangu river by a ferry. Thence it proceeds south-westwards to Chunăti (38 miles), where it is joined by the Rampur road. After crossing the Matamuhari river by a ferry at Chakaria (49 miles), the road runs south-eastwards through Garjania. where it leaves the district, to Akyab.

The Rāmu road leaves the Arakan road at the 58th mile, Rāmu and runs in a southerly direction through Rāmu to Ukhiā Ghāt, whence there is a steam ferry, maintained by the Arakan Flotilla Company, to Maungdaw, on the eastern bank of the Naf estuary, in the Akyab district. Two cross-roads connect Cox's Bazar with the Rāmu road, the most important leading eastwards from Cox's Bazar to Rāmu (9 miles), while a fair-weather road runs north-eastwards to Idgaon, 12 miles north of Ramu and 66 miles from Chittagong. The Cox's Bazar-Rāmu road is continued eastwards until it joins the Arakan road at the 74th mile.

The Chandpur road leaves the left bank of the Karnaphuli Chandpur river at Anti-Muhammad's Ghāt, opposite to Chittagong, where road. there is a ferry, and runs south-eastwards, west of the Arakan road and more or less parallel with it, to Chandpur (15 miles) on the Sangu river. Thence the Rampur road passes eastwards between the northern spur of the Banskhali range of hills and the Sangu river, and, skirting the eastern slope of the hills, joins the Arakan road at Chunāti (38 miles).

The Jaldi road proceeds southwards from Chandpur between Jaldi the Banskhāli hills and the sea. This road is unfinished, but road. will eventually join the Arakan road near the 52nd mile-post.

The Assam-Bengal Railway, which was opened in 1895, RAILtraverses the district for nearly 50 miles before it crosses the ways. Fenny and passes into Noākhāli. The terminus is at Chittagong, and the line proceeds thence in a north-westerly direction nearly parallel with the coast between the Sītākund range of hills and the Dacca Trunk Road. Communication with Calcutta has been established by means of a branch line running westward from Laksham in the Tippera district (81 miles from Chittagong), to Chandpur, and thence by the India General Steam Navigation Company steamers as far as Goalundo, from which the Eastern Bengal State Railway runs into Calcutta. The railway stations in the district are Chittagong, Pahārtali, Bhatiyāri, Kumirā, Bārabākund, Sītākund, Baraiyadhala, Kunder Hāt, Mīrsarai. and Hinguli.

WATER COMMUNI-CATIONS

Chittagong is connected with Calcutta and Rangoon by coasting steamers belonging to the British India Steam Navigation Company and the Asiatic Steam Navigation Company. In 1905-06 there were 14 steamers engaged in the native passenger trade between Calcutta and Chittagong, and 4,191 passengers were carried from Calcutta and 3,361 to that port. A third company, the Bengal Steam Navigation Company, formed by native merchants at Rangeon, has also been started recently and has begun to run steamers between Chittagong and the Burmese ports. Hitherto the coasting steamer trade has been the monopoly of the two companies mentioned above, which work in agreement, and the intervention of a new company has resulted in a war of rates. It remains to be seen whether the new company can maintain an independent existence. There are also two steamers plying between Chittagong and Cox's Bazar, and a weekly steamer runs to Rangamati in the Chittagong Hill Tracts. There has also been instituted a regular steamer service between Chittagong and Noakhali and Barisal.

In the interior a great deal of traffic passes by water. passenger traffic on boats travelling with the tide is very great. and any one can secure a seat for a few annas and go 20 or 30 miles in 4 or 5 hours' time. Beside the main rivers, there are numerous streams along the coast, which are navigable by country boats throughout the year, while smaller streams and watercourses intersect the district in every direction. It is, in fact, impossible to give any estimate of the number of streams navigable by small boats during the rains, for except in the hilly tracts there is hardly a village which has not this means of communication with other parts of the district. South of the Karnaphuli, traffic is almost entirely by water. Here the sea channels and the streams of the Chakaria delta afford water communication to all parts, while the main rivers are connected north and south by cross channels. By these waterways inland communication can be had at all seasons from Chittagong southward to Cox's Bazar.

Canals.

The main arteries, in addition to the rivers, are the Boālkhāli, Kumirā and Murari-Sikalbhangā canals. The Boālkhāli canal connects the Boālkhāli river, a tributary of the Karnaphuli, with the Chāndkhāli, which flows into the Sangu river. This canal, therefore, establishes communication between the Karnaphuli and Sangu rivers. Similarly, the Bānskhāli canal, by connecting the Kumirā Chara, a tributary on the left bank of the Sangu river, with the Jaliākhāli and Jalkhadar khāls, which flow into the Kutubdiā channel, forms a water-way between the Sangu river

and the sea. Leaving Chittagong at half-flood, the flood tide takes a boat through the Boalkhali canal, and the ebb tide takes it out through the Chandkhali into the Sangu river, and as far as the mouth of the Kumirā Chara. Thence one-half of the flood tide is sufficient to carry it through the Boalkhali canal, and the ebb tide bears it into the Kutubdia channel. The passage by this line of communication from Chittagong to the sea ordinarily occupies about 21 hours. The Murari canal connects the Sikalbhanga, a small stream which flows into the Boalkhali on its left bank. with the Murari, a tributary of the Chandkhali river. This canal was opened a few years ago, its object being to shorten the journey between Chittagong and the Sangu river, and also to provide water communication to the dense population of Anwāra.

The commonest boat is the saranga, a dug-out sometimes Boats. enlarged by side-planks and roofed with bamboo matting. A small saranga carries up to 8 maunds and can be paddled by one man; a big saranga, which is chiefly used for traffic on the canals and shallow rivers, carries up to 100 maunds and requires a crew of 3 men. The bharutyā is of the same type as a saranga, but somewhat bigger, and has a moveable roof; it carries 100 to 150 maunds and requires 3 men to work it. The ād-bālām is a larger dug-out, with a plank bulwark fastened to the side with cane; it carries from 150 to 200 maunds and requires a crew of 5 men. The bālām has an extra plank along each side, carries 200 to 300 maunds, and requires 7 men. The gadu is larger again, having another plank; it carries from 300 to 600 maunds and requires a crew of 13 men. The jālyanāo is a large gadu with an extra plank, which is used for deep-sea fishing.

Daily postal communication between Calcutta and Chittagong POSTAL was first established in 1794. Letters took 6 days in transit and communithe lowest charge was 6 annas for letters weighing 2½ tolas.\* The district now contains 85 post-offices and 569 miles of postal communication; the number of postal articles delivered in 1905-06 was 25,836,320. Besides the departmental telegraph offices, there are 22 postal telegraph offices situated at Banigram, Chakariā, Chak Bazar, Cox's Bazar, Double Moorings, Fatehābād, Phatikeharī, Hāthazāri, Jafarābād, Jorāwarganj, Katirhāt, Kumirā, Mīrsarai, Maheshkhāli, Paduā, Patiyā, Rāmu, Rāngāmāti, Rāojān, Sadarghāt, Sātkaniā and Sītākund. The number of Savings Bank deposits in 1905-06 was 9,324, and the amount

<sup>.</sup> W. H. Carey, The good old days of Honour able John Company (reprinted), Calcutta, 1906.

deposited was Rs. 2,41,000. The value of the money-orders issued in the same year was Rs. 18,21,000, and of those paid Rs. 37,61,000. These figures are significant of the popularity of this means of transmitting money and also of the large sums received by the resident population from their relations in other parts of India.

#### CHAPTER XI.

## LAND REVENUE ADMINISTRATION.

"CHITTAGONG," Sir Charles Allen observes,\* "is the only one REVENUE of the permanently settled districts of Bengal in which it HISTORY. has been possible to partially redeem the fiscal blunder of the Permanent Settlement, owing to the fact that the decennial settlement was there, and there alone, preceded by a detailed ascertainment and record of the assets on which the settlement was based. Elsewhere the estates, which were permanently settled in 1793, consisted of entire villages or portions of villages, without any specification by ascertained area. This was not the case, however, in Chittagong, where the actual fields comprised in each estate had been ascertained, measured and recorded during the survey and settlement of 1764. It was only to these estates thus precisely defined that the decennial settlement, which was subsequently made permanent, applied, and the remaining area of the district, after deducting the fields comprised in these estates, remained at the absolute disposal of the State. It was not until 1838 that the issue was definitely raised whether this remaining area, known in Chittagong revenue parlance as the noābād lands, should be permanently settled or not, and that issue was then decided in favour of temporary settlements, this decision being explained partly by the amelioration of the political conditions, which, in 1793, had over-ridden fiscal considerations and carried the day for the Permanent Settlement, and partly by the increasing perception of the steady growth of the agricultural resources of the country.

"But while it was still possible in Chittagong to redeem the fiscal blunder of the Permanent Settlement, this result could not be attained without introducing an extraordinary degree of complexity into the revenue accounts of the district. For the two mutually antagonistic systems of permanent and temporary settlements are in force, not in separate parts of the district, but

<sup>\*</sup> Survey and Settlement Report, 1900.

side by side in adjoining fields belonging to what would be one estate, were it not that it has been necessary, for the purpose of maintaining this dual system, to divide the estate into two portions, one of which is a permanently settled estate, and the other a temporarily settled tenure. And this subdivision descends to the most minute areas, so that the majority of the tenures and under-tenures, and even of the ryoti holdings, are split up into two portions, one of which is held under a permanently settled estate, and the other under a temporarily settled tenure. Indeed, it is not uncommon to find fields so subdivided, and the extraordinary spectacle not infrequently occurs of a tank, the bank of which is permanently and the water temporarily settled."

"The fiscal history of a district in which the revenue conditions are so peculiar and complex, demands," he adds, "a minute analysis." This long and complicated history has been fully dealt with in Sir Charles Allen's Settlement Report; and all that can be attempted here is to furnish an outline of the present position and to explain briefly how it arose.

MUHAM-MADAN REVERUE SYSTEM. Origin of taluks.

For practical purposes, the revenue history of Chittagong may be said to begin with the Muhammadan conquest in 1666. Previous to that date the district consisted for the most part of uncleared jungle, but here and there immigrant squatters had made small settlements. The first settlers naturally occupied the most convenient spots in the vicinity of Chittagong, the port of debarkation, each family or group of families making its own clearance. As the family increased in numbers, more jungle would be cleared, but each oasis so reclaimed would remain more or less isolated and surrounded on all sides by impenetrable jungle. There was no organized government, however, with an arm sufficiently long to collect revenue from these settlers, living in a country infested by wild animals and liable to invasion by the Tipperas and the savages of the eastern hills. The Muhammadan conquest of 1666 effected a great change, as the conquering army was able to protect the district from foreign invasion. Forts were established on the Sangu river and elsewhere to repel the incursions of the Arakanese and the raids of the wild hill The army itself was numerous; it was accompanied by a large body of immigrants and a staff of Hindu revenue officials: and the numerous immigrants set to work to clear the jungle and to effect new clearances. Each clearance was known as a tāluk. and this is the unit of every description of landed property in Chittagong.

Origin of tarafs.

The Muhammadans now began to introduce a revenue system, and appointed tārafdārs to collect revenue from the settlers.

The tarafdars were in many cases wardens of the marches, such as the Hazāri family at Dohazāri, whose ancestors were established there to protect the passage of the Sangu river, and received large grants of land for the upkeep of the troops necessary to garrison this post. In other cases, the tarafdar would be one of the Hindu revenue officials about the Nawab's Court, who was given a sanad authorizing him to collect what revenue he could from the settlers in a more or less defined tract of country. Speculators, again, might obtain grants of waste land and induce settlers to reclaim them; or a number of squatter families, banded together under a leader for the purpose of mutual protection, would acquire the right to pay in their revenue through their leader, who would become the tarafdar responsible for the revenue. In these and other ways the taraf originated. The unit of each taraf was the settler's clearance, known as a tāluk, and the tarafdār or zamindar was the middleman, who collected the revenue from the tālukdārs, and paid a portion of it to the Government. The bulk of the district was still covered with dense forest: what cultivation there was lay scattered about in small clearances; and consequently the taraf or estate was itself only an aggregate of many detached clearances in different parts of the district.

In addition to the tarafs, it appears that the Muhammadan Origin of rulers distributed many lands free of revenue, and the lakhiraj rent-free tenures. tenures date from this period. The position of the district on the frontier of the Mughal Empire rendered the retention of a garrison necessary, and this garrison was paid not in eash, but in jagirs or grants of land free of revenue. A considerable area was thus distributed in small allotments to the soldiers, and a great number of these petty grants are still found in the vicinity of Chittagong, where they are often distinguishable by the name of some eponymous sepoy. It is curious to find these petty allotments, now obliterated by time, included in roads, in the compounds of European houses, in the cricket-ground, and in the police paradeground.

But little revenue appears to have been collected by the Muhammadan Government until 1713, when the collections are said to have been Rs. 1,75,458; but they gradually increased until 1760, when they amounted to Rs. 3,37,761.

In 1760 the district was ceded to the East India Company; EARLY and in 1761 the attention of the Council having been drawn by ADMINISthe Raja of Arakan to the large area of land lying waste in the TRATION. south of the district, a notice was issued offering the land free of rent for five years to any one who would cultivate it.

pursuance of this notice, a sanad was granted in 1763 to Jaynarayan Ghosal, a nephew of the Diwan or head revenue official in the service of the Company, for the lands in many different places which had been cleared by him in virtue of earlier grants; and this property was converted into the "zamīndāri of Jaynagar." In the following year, a survey was made of all lands occupied at that time throughout the district, the lands being classified into three classes—tarafs or revenue-paying estates. revenue-free tāluks or tenures, and the Jaynagar estate. This survey was a rough one, and, like all the surveys before that of 1898, was a revenue survey pure and simple, made solely for the purpose of ascertaining the areas of the different estates, so that Government revenue might be assessed upon them. No attempt was made to survey the hills and jungle in the district. because they were deemed incapable of yielding any revenue. The total area measured was 609 square miles, comprised in 28,224 revenue-paying tarafs and revenue-free tenures and in the grant made to Jaynārāyan Ghosāl in 1763.

Settlement of 1764.

There are two important points to be noticed in this settlement. By measuring and recording plot by plot the lands belonging to each estate, it defined precisely for all time what lands appertained to each, and precluded the proprietor from claiming at any subsequent date any parcel of land which was not recorded as included in his estate in the settlement papers of 1764. This fact constitutes the essential difference between Chittagong and the other districts of Bengal, which were permanently settled as a whole. For in those districts the actual lands comprised in each estate had not been ascertained by survey, and consequently the effect of the Permanent Settlement was to fix in perpetuity the assessment of the villages or portions of villages comprised in each estate as a whole, and of waste as well as cultivated land. In Chittagong, on the other hand, the effect of the survey of 1764 has been to confine each estate to the particular parcels of land which were recorded during that survey as appertaining to it. The estates so defined were permanently settled in 1793, and the proprietary interest in them was conferred upon their owners. In the remaining area, or, in local parlance, the noābād land, the proprietary interest has remained vested in Government.

The second important feature of this settlement was that all the lands held by one proprietor were amalgamated into one estate, called a taraf, irrespective of their geographical position. The result of this amalgamation is that every large taraf in Chittagong consists of taluks scattered about all over the district; and this is one of the peculiar features of the Chittagong revenue system.

In brief, the boundaries of the estates measured in 1764 were fixed for ever, and these estates, as so defined, were, with the exception of the Jaynagar estate, settled in perpetuity in 1793. The remaining area of the district, viz., 1,882 square miles, is Government noābād, a term which literally means land newly cultivated, i.e., since 1764, but is generally used to denote not only cultivated lands, but even hills, rivers, roads, etc., which were not included in one or other of the estates according to the measurement of 1764. The tarafs and the Jaynagar estate comprise to this day approximately the same lands as appertained to them in 1764, and the revenue of the torafs has been permanently settled. assessment of the Jaynagar estate was revised in 1848, additional revenue being imposed on the newly cultivated lands. It was again revised in 1902, and this estate now stands on the revenueroll as a temporarily settled estate, with a revenue of Rs. 13,000.

From the year 1764 onwards the revenue history of the dis- Surveys trict is mainly a record of successive measurements undertaken SETTLE. with the object of assessing to revenue all lands which have been MENTS. cleared and cultivated since that date, and which were therefore not included during that settlement in any estate, but remained unsettled lands at the absolute disposal of Government.

There were partial surveys in 1770, in 1772, in 1782, in 1788-89, in 1800-01 and in 1818-20. In 1836 a general survey of the district was undertaken, with a fourfold object, viz., to mark off and settle with the Ghosals the Jaynagar noabad lands measured in 1764 as their property; to define the limits of the permanently settled estates; to separate and assess the noabad land; and to ascertain and define all rent-free holdings. valid and invalid, in order to resume the latter and settle them with the occupant lakhirājdārs. This survey, which was conducted by Mr. Harvey, was carried out in 1835-37, but the settlement proceedings were not completed until 1848.

Under the system of settlement followed up to that time, the Settlement revenue of each noabad taluk was practically settled in perpetuity, of 1848. subject to a periodical remeasurement and assessment of new cultivation at the rate of Rs. 16 per dron, i.e., about 133 annas per bigha, or Rs. 2-8 per acre, a dron being equivalent to 6.335 acres; but henceforth temporary settlements for a definite term became the invariable rule, and the rate of Rs. 16 per dron of cultivated area was not regarded as being a maximum rate. During this settlement, the noabad land was separated from each taraf taluk, and the lands so separated were formed into noabad taluks.

settlement being offered to the proprietor of each taraf. As each taraf consisted of many tāluks, this action led to the creation of several thousands of noābād tāluks.

Gunjais

In the surveys of 1764 and 1837 each field was described both by its boundaries and by its dimensions. As the dimensions were persistently understated, the true area of a field. measured according to its boundaries, exceeded the nominal area according to those dimensions, and this excess area is called the quajais of that field. Mr. Harvey's procedure in dealing with the quijais was to call upon the proprietors and their tenants to point out the lands of the permanently settled estates, and, after giving an allowance of one-eighth, to record all surplus land as noābād, and assess it accordingly. Thus, by Mr. Harvey's survey of 1837, not only was a very large number of small taluks created out of the noabad land cleared by the tainkdars since 1764, but innumerable petty strips and patches of land were, by being treated as gunjais, separated from the tāluks and assessed as separate noābād tāluks. The result is that strips and patches of noābād land are found intermingled in all directions with the plots of permanently settled estates. Subsequently, Sir Henry Ricketts, the Commissioner, revised Mr. Harvey's proceedings by making allowances (called taufir) varying from one-eighth to one-fourth of the area of each taraf or permanently settled estate from which excess land had been separated and recorded as noābād by Mr. Harvey; but the area eventually relinquished as taufir to the tarafdars was small.

During this settlement, no record of the rights of tenants subordinate to the noābād tālukdārs was made. Tāluks containing large areas of culturable waste were settled, to the number of 1,280, for 25 years only, and were known as "short-term tāluks," while ordinary tāluks, numbering 30,978, were settled for 50 years, and were known as "long-term tāluks."

Settlement of 1882.

On the expiry of the term of their settlement, the 1,280 short-term  $t\bar{a}luks$  were resettled by Mr. Fasson during 1875-82 for a period extending up to 1898, the year in which the term of settlement of the long-term  $t\bar{a}luks$  was also thought to expire. The system of measurement with a bamboo pole, which had hitherto been followed, now gave way to a scientific system of survey; and noābād uncultivated land was assessed for the first time. The rent to be paid by the  $t\bar{a}lukd\bar{a}r$  was reckoned at 80 per cent. of the gross rental paid to him by his ryots; and if any  $t\bar{a}lukd\bar{a}r$  refused settlement, his  $t\bar{a}luk$  was converted into an ijārā or farm, and settled with whomever the Settlement Officer thought fit; but an ijārādār was given no claim to resettlement

at the expiry of the term of his settlement. The unassessed noābād lands of the settlement of 1848, as well as all estates which had been bought in by Government for arrears of revenue from time to time, were also measured and settled with the actual ryots in occupation. These jots were assessed in precisely the same manner as the ryoti holdings under the short-term tālukdārs, the only difference being that the former were permitted to pay rent direct to the local khās tahsīl office. In this settlement the tāluks were assessed for the first time on the basis of a rentroll, and the practice of protecting the occupancy ryots' rents during the currency of the settlement was introduced.

In 1882 the present khās tahsīl system was instituted. Under Khās it all the noābād lands are distributed into Government estates, tahsīl in each of which a khās tahsīldār resides, who collects the revenue, maintains a register of all the noābād tāluks, ijārās and jots within his circle and records mutations.

In 1877 a proposal had been made for a general cadastral survey Settleof the district, to enable the position of each plot of the 1848 MENT OF survey to be identified with accuracy, and to assess excess areas encroached upon by holders of permanently settled estates and of the unexpired long-term tāluks. In 1878-79 an experimental survey of thana Chakaria was made as a preliminary to the general survey; but it was ultimately decided that the proposal to survey the district should stand over until 1890. The leases of the long-term noābād tāluks began to expire in 1892, and all were to become liable to resettlement by 1898, which was also the date of expiry of all the settlements and resettlements effected by Mr. Fasson in 1875-82. In the meantime, the leases in the Rāmu thana of the Cox's Bazar subdivision having expired in 1886, operations were started in that than in November 1888; and in 1890 it was decided to undertake a cadastral survey and recordof-rights of the entire district, the main object of the measure being the general settlement of existing disputes, the removal of causes for future disputes, and the diminution of litigation.

The cadastral survey was commenced in 1889-90 and completed in 1893, with the exception of 489 square miles, which had been exempted from detailed survey, viz., the waste land free-hold lots under tea cultivation, the permanently settled portion of the Maiskhāl island, certain hills covered with jungle, including the Rāmgarh-Sītākund reserved forest, and extensive jungles in the Cox's Bazar subdivision. The area surveyed cadastrally amounts to 2,002.88 square miles. Settlement work was begun in 1890 and was completed in 1898, the cost incurred being Rs. 16,16,204 or Re. 1-3-1 per acre of the area dealt with. The

work was one of great difficulty and intricacy, involving as it did an area of 1,209 square miles containing no fewer than 2,410,000 plots, 442,000 separate holdings and 152,000 units of proprietary interest, nearly 140,000 of which are separate estates, from which revenue has to be collected or which are revenue-free properties. The credit of this settlement is due to Mr. F. A. Slacke, who initiated the operations and worked out the whole system of writing the record, and to Sir Charles Allen, who for 7 years was in charge of the proceedings and brought to a successful conclusion what was at one time believed to be an almost impossible task.

Minute size of plots.

The special difficulties which had to be met were the minute size of the plots, the enormous number of estates and tenures, the extraordinary intermixture of the lands of different estates. and the ignorance of the people themselves as to what fields constituted each estate. The minute size and excessive number of plots are due to the operation of a number of causes. almost universally grown is rice, and the winter crop is always transplanted. Consequently, the cultivator requires fields of at least two different levels-one on comparatively high land for seedlings, and the other at a lower level for the transplanted crop—and, where the level varies as it does in Chittagong, the embanked areas are necessarily small, because the surface of each must be sufficiently level to admit of the water covering the roots of the growing crop. The variety of levels, again, is accompanied by a great difference in fertility between neighbouring lands, with the result that each agriculturist endeavours to hold plots of land situated at different levels, so that whatever the rainfall may be in any particular season, it will be suitable to some at least of his fields. Other causes of the minute size of the plots are the great density of population, and the frequent division of holdings resulting from the Muhammadan law of inheritance, in consequence of which each heir takes as his share a portion of each of the fields belonging to the holding.

Number of estates,

But perhaps nothing has tended so much to reduce the size of the plots as the enormous number of estates, and the intricacy with which the plots of each estate are intermingled. Thus, a field held by one tenant under one landlord will be found to belong to two or more different estates, and must therefore be subdivided into two or more plots, each of which has to be assigned to the estate to which it belongs. The number of estates which the Settlement Officer had to identify was 139,165; but this huge number does not take into account the Government

nnassessed lands which had to be identified in each of the 1.036 villages, nor the large number of separate portions of permanently settled revenue-paying estates situated in different villages; the number of the portions of these estates and of the neābād taraf Jaynārāyan Ghosāl which had to be separately identified was 12.170. An average village with an area of one square mile was found to contain no less than 1,984 plots distributed among 77 estates.

The total number of plots in the plains portion (1,2063 square Intermixmiles) of the district was 2,413,688, which gives an average ture of number of 15 plots to each estate or tenure and of 3.1 plots to the acre. But even these few plots in each estate are rarely compactly situated. On the contrary, the plots of a portion of a permanently settled revenue-paying estate are scattered about all over the village, intermingled with plots of other similar estates, of confirmed revenue-free estates, of resumed revenuefree estates, and of noābād farms, tāluks, jots, and unsettled lands, so that the survey map of a village resembles a piece of mosaic work. The result is that, in almost every village, the small proprietary units are mixed up in the most confused manner, and the multiplication of estates has been so great that it has become almost unintelligible to the people themselves, who receive and pay rent for their lands with little comprehension of the complicated system by which they have been parcelled out into tarafs, tāluks and jots. They even pay in their revenue to Government without making much effort to understand which of their lands belong to each of the revenue units which form the basis of the calculation of the amount they have to pay. Such a system is happily unique in Bengal, and perhaps without a parallel in India.

The following is a brief summary of the main features of SUMMARY. the revenue administration since 1764. The district as a whole has never been permanently settled. The British occupation was almost immediately followed by the rough survey of 1764, the only one of its kind made at that time in Bengal, and this embraced all the land then occupied. The total area measured was 609 square miles, of which 575 square miles were included in various estates, and 34 square miles belonged to the Jaynagar grant. When the decennial settlement was made in 1790, the measurement papers of 1764 were used as the basis of the assessment, and consequently no land was permanently settled except the area of 575 square miles referred to above. According to the survey of 1898, these permanently settled estates comprise an area of 713 square miles, or two-sevenths of the district, the difference of 138 square miles being due mainly to

under-measurement in 1764. The remaining five-sevenths are known locally as noābād or newly reclaimed land.

Of the permanently settled area of 575 square miles measured in 1764, about 417 square miles were included in revenue-paying estates, being assessed at 4.95 lakhs, and 158 square miles in revenue-free estates. Many of the latter were resumed and assessed to revenue in 1848; and the revenue-free area is now only 89 square miles, while the permanently settled revenue-paying estates measure 624 square miles and pay a revenue of 5.30 lakhs. The Jaynagar grant was conferred in 1763 subject to periodical remeasurement and reassessment; it escheated in 1796, because the proprietor set up an unfounded claim under a forged grant. In 1815 the Sadar Diwani Adalat held that the escheat was illegal, and ordered restitution, which was eventually made in 1848. The term of lease expired in 1902, and the revenue was then raised from Rs. 9,000 to Rs. 13,000 for an area of 38 square miles. The proprietors refused to accept the settlement. and the estate was taken under Government management; it was subsequently restored to them at the increased revenue. pending the decision of their claim that it is a permanently settled estate.

An area of 751 square miles has now been accounted for: an additional area of 447 square miles was given out in 1848 under temporary leases. Part of this had been usurped by the proprietor of the Jaynagar grant under his forged grant prior to 1796; this was settled in 1848 direct with the persons in possession, who were styled tālukdārs. In the same year other State lands, which had been encroached upon by the proprietors of permanently settled estates and their tenants, were separated from the estates claiming them, and settled with the occupants for terms of either 25 or 50 years; and lands which had been reclaimed by squatters were similarly dealt with. The aggregate assessment on these two classes of estates was 2 lakhs. When the shorter leases fell in, the taluks concerned were resettled at enhanced rentals up to 1898, by which date the longer terms had also expired, and a general resettlement was effected on the basis of a regular survey and scientific assessment. At the same time, all new reclamations were settled with the occupants.

Excluding Jaynagar, the total area thus brought under settlement in 1898 was 515 square miles, which was assessed until 1925 at 6 lakhs. About 65 square miles have been sold under the Waste Lands rules for tea cultivation, and 2 square miles have been acquired by the Assam-Bengal Railway; the area not included in any of these categories is still at the disposal of the State.

It must not be supposed from this brief summary that each of the classes of estates is homogeneous or is clearly defined from the others. On the contrary the fields of permanently settled estates and of tāluks held under temporary leases are interlaced on the ground like squares on a chess-board, and the correct classification of each field according to the particular estate to which it belongs is a task of enormous difficulty. The permanently settled estates number 28.634, while the temporarily settled estates number no less than 80,000. Of the latter 34,500 are tāluks, and the occupants have a right to resettlement in 1925 at such rents as Government may then fix: 500 are ijārās or farms, which carry no such right; and 45,000 are ryoti holdings pure and simple. All these temporary holdings are grouped with reference to locality into five Government estates, each of which is managed by an officer styled a khās tahsīldār. The headquarters of these officers are at Chittagong, Cox's Bazar, Sātkaniā, Patiyā and Raojan, and their principal duty is the collection of the rents.

Landed property in Chittagong comprises the following classes Estates:
of estates:—(1) tarafs, or permanently settled revenue-paying estates; (2) revenue-free estates; (3) resumed revenue-free tāluks, all of which are permanently settled; (4) the temporarily settled noābād taraf Jaynārāyan Ghosāl; (5) the Government estates, which comprise ijārās, noābād tāluks, jots and unsettled Government land; and (6) the waste lots granted freehold to tea planters.

A distinction may be drawn between the proprietary and tenant classes of estates. Thus, the owners of tarafs, of revenuefree estates, and of the Jaynagar estate all belong to the proprietary class. The resumed lakhirāj tāluks are technically estates, but many of them are held by persons of the tālukdār or tenureholder class, because the revenue-free estates resumed in 1848 were, on resumption, broken up into their constituent tāluks or tenures, each of which was settled with the occupant tālukdār. The ijārādārs and tālukdārs of the Government estates are not possessed of a proprietary title, the proprietorship of these estates being vested in the Government; but most of the ijārādārs, many of the tālukdārs, and a few of the jotdārs also belong to the proprietary as distinguished from the tenant class of landholders: as regards the noabad taluks, this is especially the case with the great taluks in the south and in the north-east of the district. Moreover, many petty tāluks, created during the settlement of 1848 from excess lands separated from permanently settled estates, were settled with the proprietors of those estates, so that these tālukdārs also belong to the proprietary class. The great mass of the noābād fālukdārs, however, belong to the tenant class.

TEMURES.

All the land in the district which was occupied at the time was, as we have already seen, measured in 1764 and subsequently received a permanent settlement, all the occupants being known as tarafdārs. Under these tarafdārs are the tālukdārs, whose tenures are permanent and transferable; and under the tālukdārs, again, are the itmāmdārs and dar-itmāmdārs, who enjoy similar privileges. Lands outside the areas held by the tarafdārs are held by noābād tālukdārs, whose tāluks are held from generation to generation subject to a readjustment of the revenue at each resettlement. Besides these, there are a large number of ijārās or farms and jots or ryoti holdings.

Tarafs.

At the settlement of 1898 it was found that there were 4,071 tarafs or revenue-paying estates with an area of 435 square The majority of the turafs are petty estates, and there are only eight with an area of 3,000 acres or more, of which three only remain in the hands of the descendants of the original grantees. viz., Taraf Baidya Nāth Kānungo (3,435 acres), Taraf Nur Champa (7,473 acres), and Taraf Prabhabati (11,170 acres). Two have been purchased by Chittagong merchants, viz., Taraf Zabardast Khān (3,194 acres) and Taraf Aura de Barros (4,693 acres) named after a Portuguese lady, who was one of the farmers in the settlement of 1764. One, Taraf Sambhu Ram Kanungo (3,950 acres), has been split up and divided among a large number of petty co-sharers; and two have passed into the hands of Calcutta capitalists, viz., Taraf Tej Singh (4,928 acres) and Taraf Jaynārāvan Ghosāl (23,609 acres). The taraf last named is the largest in the district; it pays a revenue of Rs. 48,793, and the bulk of the lands comprised in it lie in 38 villages in the Mīrsarai thāna, but 4,000 acres are scattered about in 56 villages in six other thanas.

Taluks.

The tālukdārs were originally squatters on jungle lands, who reclaimed them by clearing the jungle. Each tāluk was, therefore, the tract which one family could clear, and many of the tālukdārs are descendants of the original reclaimers of the land. In the Sundarban tracts the tāluks are larger than elsewhere, for, in order to embank land economically, it is necessary to carry one ring of embankments round a large area; but in such tracts they are usually subdivided into itmāms or under-tenures, the itmāmdār acquiring much of the status of a tālukdār, and relieving the tālukdār of the risks of cultivation. In permanently settled estates the tāluks are held at fixed rates of rent in perpetuity, and are heritable, transferable and saleable,

The tālukdār's title was based generally on reclamation of waste and clearance of jungle, and was not the creation of contract, but originated in prescription. He occupied his tāluk first, and obtained formal settlement of it later, so that his title arose from occupancy, and was only ratified by the lease subsequently obtained from the tarafdar. In his relations with the ryots under him, the tālukdār is not a mere middleman. something very much more than this, for it is the tālukdār who originally brought the ryots upon the land, who was the capitalist, and who was responsible for the success or failure of the enterprise of reclamation. There are many also who have purchased the title from other talukdars, and who have no actual interest in the land beyond the right to collect rent from the ryots holding the land at fixed rates in perpetuity. There are many again who have sublet to middlemen and are in similar case. But the above description applies to the tālukdārs as a class.

The designation noābād means newly cultivated lands, and Noābād a strict use of the term would confine it to all lands cultivated taluke. since 1764; but it has long been loosely employed to denote all lands in which the proprietary interest vests in the State, including not only cultivated lands, but even hills, rivers, roads, etc., which are not susceptible of cultivation. The term noābād. in fact, denotes all land which was not included in one or other of the estates measured in 1764, and is also applied to the Jaynagar Mahāl, which is described as the Mahāl noābād taraf Jaynārāyan

Ghosál.

The noābād tāluks comprise a number of tenures of widely varying character. Thus, in the remoter parts of the district, especially in the Cox's Bazar subdivision, large taluks are found, sometimes comprising a whole village, or the greater part of one, with a revenue of some thousands of rupees. These tāluks are situated in villages which had not been reached by cultivation in 1764, and in which therefore no lands were then settled as tarafs. There are again many thousand tāluks of moderate size in all parts of the district, which were originally squatters' clearances of land occupied at some date subsequent to 1764. Some of these taluks paid rent to the proprietors of the Jaynagar estate until that estate was attached in 1800, and in the measurement made in that year were recorded as noābād tāluks, paying revenue direct to the State. These tāluks were again surveyed in subsequent surveys as noābad, and were settled as such in 1848. But almost all the petty tāluks were not entire clearances, but were formed of scraps of land which, previous to the survey of 1837, had been held as part and parcel of tāluks under tarafdārs

or under revenue-free proprietors; these are found in the greatest number in the central thanas, especially in Patiya.

The noābād tālukdār is thus sometimes a grantee of a large tract of land, in which case he belongs to the proprietary class of the population, although he is de jure a tenure-holder subordinate to the Government in its capacity as proprietor of all the noābād lands. Again, many of the noābād tāluks were created during the settlement of 1848 from excess lands separated from permanently settled estates, and these tāluks were settled with the proprietors of the parent permanently settled estates, who thus also became noābād tālukdārs. In such cases the original tālukdārs, who held these lands as appertaining to their tāluks under the permanently settled estates, became dar-tālukdārs or itmāmdārs (under-tenure-holders) in name, but for all practical purposes retained their status as tālukdārs.

The noābād tālukdārs are the most important class of tenants found upon the Government estates. They hold directly under the Government as landlord for a term of years; and at the expiry of that term are entitled to resettlement of such portion of the tāluk as is cultivated, the uncultivated portion being at the absolute disposal of Government. The tālukdār cannot grant any leases binding on Government after the expiry of the term of settlement, and should he refuse resettlement at the rent offered, the whole tāluk is at the disposal of Government. The total number of tāluks settled during the recent operations was 36,666, of which 32,601 had been settled in or about 1848 for terms of 50 years, 1,873 had been settled at the same time for shorter terms and resettled in 1882, while 192 were new tāluks created during the settlement.

Ijarās.

The ijārās or farms were created during Mr. Fasson's settlement (1875-82) in two ways. If a tālukdār, whose tāluk was under resettlement, refused to accept settlement at the terms offered, the Settlement Officer settled the tāluk with an outsider; and the new settlement was called an ijārā. Another class of ijārās consisted of groups of jots or ryots' holdings of Government land, which were farmed out to some substantial villager. The only difference between the title of an ijārādār and a tālukdār was that the former was given no claim to resettlement at the expiry of the term of his settlement, and that ijārās are not saleable for arrears of rent. The terms of settlement of these ijārās expired in 1898, and they were then settled precisely as if they had been tāluks.

Jots. The jots are ryoti holdings of Government land which were for the most part settled by Mr. Fasson in the years 1875-82.

The recent survey shows that they have an area of 112 square miles, and their number exceeds 39,000; the bulk of those in the central thanas are exceedingly small plots consisting of patches of worthless land, and the average area is only 14 acres. Besides these, there are 6.345 new jots consisting partly of recently occupied lands, which were settled for the first time during the recent settlement, and partly of lands which had formerly been held as appertaining to permanently settled estates, but which were identified as noābād lands, the property of Government, and settled with the occupants. The average area of these iots is nearly 4 acres, and many of them comprise waste lands. especially in the Chakaria thana.

The next class of tenancies deserving notice consists of under- Undertenures, known in the greater part of the district as dar-tāluks. tenures. itmams (properly ihtimam, meaning "entrusted to"), and daritmāms, but as tappās and dar-tappās and musakāsi tenures in the Mīrsarai and Sītākund thānas, where the revenue nomenclature. having been introduced by immigrants from the Noakhali district, differs from that in the remainder of the district. whatever name it is known, the under-tenure carries with it the same rights as the tāluk, being transferable, heritable, and held at fixed rates of rent in perpetuity. Under-tenures in Chittagong are indeed very similar to tāluks not only in their incidents. but also in their history. Many itmams existed before the creation of the tāluks to which they are now subordinate, while in Rāmu itmāms are to be found which are not subordinate to any tāluk. but are independent tenures, paying rent direct to Government as the proprietor. So far as under-tenures were created by grants from tālukdārs, they probably owed their existence originally to the incapacity of the latter to bring the whole of their tāluks under cultivation. Generally speaking, the tālukdār under whom there are itmandars occupies the position of a mere rent-receiver with respect to the land included in the itmām.

Dar-itmams and other under-tenures of the second degree bear precisely the same relation to the itmandars that the latter does to the tālukdār. The itmāmdār who sublets to a daritmāmdār becomes himself a mere rent-receiver, and the daritmāmdār is the person with the real interest in the land. Where lower grades of sub-infeudation exist, the same remarks apply. Thus a jamāi ryot, or ryot holding at a fixed jamā or rent, enjoys the same privileges as to fixity of rent and heritability as a tenure-holder, and at the same time incurs the sole responsibility and risk of cultivation. The same is the case with the ordinary kāimi or permanent ryot, who holds on similar terms.

The ordinary rule, therefore, is that the tenant with rights of fixed rate of rent and heritability, who occupies the lowest position in the chain of sub-infeudation, is the only person with a real and abiding interest in the land, as he is responsible for the expenditure of such capital as may be necessary, and also for the risks of cultivation. This rule, however, prevails in a somewhat modified form in the sea-board tracts, where large embankments are required, which are beyond the means of small Such large embankments are usually maintained by the proprietor or tālukdār, the smaller tenant maintaining the smaller embankments only. This system of sub-infeudation finds an economical justification in the necessity of employing capital upon the land; and it principally prevails in the southwest of the district, where the taluks are large, owing to the necessity of surrounding large areas with a ring of embankments to exclude salt tidal water, and the expenditure of capital is consequently heavy. The tāluk lār here divests himself of a portion of his responsibility, and at the same time procures the co-operation of his tenants, and induces them to expend capital, by granting them permanent leases at fixed rates of rent.

Fictitious undertenures. So far the system has been described in its healthy or normal state, but unfortunately a very different state of things obtains in some parts. In the south of the district instances of fictitious sub-infeudation are not very common, but sometimes a purely fictitious tenure is created, as when a tālukdār gives an itmāmi lease of his tāluk to his wife or son, in order to attempt to raise the rents of the subordinate ryots; or a tarafdār may create a patnī tāluk immediately subordinate to himself and superior to his tālukdārs, with the object of getting his tālukdārs' rents enhanced. Such tenures are purely fictitious and represent no separate interest.

Sub-infeudation. In the north of the district a different system prevails. Here the tāluks are not large, nor is much capital required for cultivation, so that sub-infeudation is not to be justified on economical grounds; it is, in fact, merely a form of land-jobbing. Rack-rents are rising year by year owing to the steady increase in the price of rice, and the profits of the permanent tenant, who sublets to tenants-at-will at rack-rents, are growing steadily larger. Permanent leases are, therefore, in great demand and command a heavy rate of premium. The rate at which this premium is paid is usually calculated at so many years' purchase of the difference between the rate of rent agreed upon in the lease and the rate of rack-rent. The number of years' purchase

depends on the description of estate, 10 years being the common period for noabad lands, and from 20 to 25 years for lands belonging to a permanently settled estate. Thus, a ryot, who takes a permanent lease of an acre of land belonging to a perman. ently settled estate at a rent of Rs. 5, may, if such land pays a rack-rent of Rs. 20, pay as premium from Rs. 300 to Rs. 375.

The only class of tenants who can create permanent leases are tenure-holders and under-tenure-holders, and consequently these interests are valued in proportion to the premium which they command. The tenure-holder or under-tenure-holder himself pays a premium, which is calculated at so many years' purchase of the net profit which he will obtain, i.e., of the difference between the rent he is to receive and the rent he is to pay. Throughout the whole chain of sub-infeudation each new tenure-holder endeavours to realize some additional rent from the man directly under him, and his profits are eked out with what ābwābs or illegal cesses he can manage to collect. result is that in some than as there is a regular traffic in these titles, which are freely bought and sold by speculators.

No single description applies to any class of under-tenures. Varying It is not possible to say that any particular class is composed of character capitalists, or that any other class are mere drones; nor can it be of tenures. said that any one system of sub-infeudation is in force in all parts of the district. In the centre of the district there is a dense population, and a land hunger which enables the landlords to dictate terms to their tenants, and to prevent their acquiring rights and privileges. On the other hand, in the remoter parts of the district, especially towards the south, the difficulty is to get rvots to cultivate the land, and here the ryots have it all their own way.

In the noābād lands the custom of subletting to permanent Undertenure-holders and under-tenure-holders has been radically modi-tenures fied by the modern system of temporary settlements. The noābād in noābād tālukdār himself only holds his tāluk for the term of his temporary settlement, and has no power to grant leases to under-tenants for periods longer than the term for which he himself holds. Consequently, at the time of resettlement, the rents payable to the tālukdārs by their under-tenure-holders undergo revision and enhancement, while the rents paid by the former are based on a proportion of the rents paid by their under-tenants. During the recent settlement itmāmdārs have been recorded, and the status of each, whether as tenure-holder or as ryot, has been determined; but the rent has been revised in each case, being assessed, in cases where the itmamdar is a tenure-holder, upon the basis of the rents paid to him by his ryots.

RYOTS.

Below the several grades of tenure-holder comes the ryot, though the classes are apt to merge into each other. The main practical distinction between under-tenure-holders and ryots appears to be that the former have, and the latter have not, the right of subletting to tenants at fixed rates. Otherwise there is no clear line of distinction between the two classes. Thus the petty tālukdār, or still more the itmāmdār and dar-itmāmdār, who cultivates the land of his tenure, is to all intents and purposes a ryot. On the other hand, ryots of the classes known as jamāi, ābādkar, etc., are frequently reclaimers of considerable areas, or descendants of such, who enjoy some of the status of tenure-holders.

Ryots, according to local custom, are broadly divisible into two classes, kāimi (or fixed) and eksanā (or year-to-year) ryots. The former class have almost invariably registered leases, under which they hold at rates fixed in perpetuity. Tenants who have not obtained written leases conferring this right are few in number, and are usually either poor people, who cannot afford to pay salāmi for a permanent lease, or ryots who have acquired occupancy rights, by statute and not by local custom, in lands which are only temporarily cultivated by them. The leases generally contain a clause that the rent is liable to enhancement if new lands are brought under cultivation, or, as the clause is generally expressed, if the cultivated area is found on remeasurement to have increased. A further clause is frequently inserted to the effect that if the Government revenue paid by the landlord is increased, the rent stipulated for in the lease is also liable to be increased. practice, a kāimi holding is, as a rule, transferable, the landlord usually realizing a fee before he recognizes the transfer. A kāimi ryoti lease is greatly valued, and commands a heavy premium. There are, however, many parts of the district, such as the animalinfested clearances in North Phatikcharī and South Sātkaniā, and the embanked lands of the Banskhali sea-board, where the difficulty is to get ryots to settle on the land, and here no premium is paid.

Eksanā ryots.

The eksanā ryot, who is frequently also called a jotdār, is theoretically a mere tenant-at-will, but even he sometimes tends to settle down year after year in the same lands, and to acquire a prescriptive right to his holding. The status of the eksanā ryot, who is not a ryot at all in local parlance, but a korfā, varies with the locality. He is independent, and can strike a fair bargain with his landlord in bad and unpopular lands, which the landlord is afraid of having left on his hands if he is too grasping. On the other hand, he has to pay very highly for good rice lands, for which

there is great competition, and he generally has to pay a portion at least of his rent in kind. These tenants are frequently nomadic in their habits, sometimes emigrating annually to the extensive but thinly populated villages in the south of the district, where rents are low and the opportunities for selling the surplus crop good. In all parts of the district, and especially where there are Hindu landlords, it is considered to the advantage of a landlord of whatever grade, even if he be himself a ryot, to keep his land nominally in his own possession, so that he may reap the advantage of the high rack-rents which are paid by these eksanā ryots. The result is that the same man is frequently a kāimi ryot of his own holding, and also cultivates a portion of some other tenureholder's or kāimi ryot's holding as an eksanā ryot. No separate statistics of the number of these tenants or of the area held and the rent paid by them are available, as they are included among the several classes of ryots.

In the record of rights recently prepared the status assigned Status to each ryot and under-ryot is that to which he is entitled under of ryots. the Bengal Tenancy Act. The record of rights has, therefore, modified to some extent the position of some of these tenants. especially that of the year-to-year tenants. Many of these ryots cultivate lands in their own villages, either taking up the same lands year after year, or moving from one part of the village to another. Such tenants are settled ryots under the provisions of the Tenancy Act, and have been recorded as such in the record of rights. They have, therefore, a right of occupancy, although, their position in local estimation is that of mere tenants-at-will. The occupancy right, as distinguished from the right to hold at a fixed rate of rent, can, however, scarcely be said to exist according to local custom.

The proprietary class of Chittagong occupies a peculiar posi- Landtion. In a district which has been so recently reclaimed from AND jungle that memories of the arduous labour involved in recla-TENANTS. mation are fresh in men's minds, and find expression in such titles as jangalburi (clearer of jungle), tālukdār, ābādkar (original cultivator) and the like, it is natural that great respect should attach to the title of the original reclaimer and of his successors. process of reclamation included the clearance of virgin jungle, and an immense amount of persistent effort to level and terrace the undulating slopes of which the surface of the valleys originally consisted, as well as the destruction of the wild animals with which the country was infested. The incursions of the Tipperas and Arakanese had to be repelled; a supply of drinking-water had to be obtained by the laborious excavation of tanks; and in order to

raise the homesteads above water-level, high mud plinths were everywhere necessary. All along the sea-board, and along the banks of rivers within tidal influence, it was necessary to construct embankments, and to dam the small creeks to keep out the salt water which spoilt the soil for rice cultivation, and year by year it was, and is, necessary to keep these embankments and dams in repair.

The process of reclamation and habitation of a district like Chittagong consequently involved, and still involves, the expenditure of a vast amount of capital. It was the tālukdār who in most cases supplied the capital and the labour necessary; but this was by no means invariably the case, and the position of the proprietor depends on the share which he and his predecessors have taken in the reclamation of the soil. a proprietor whose predecessors have reclaimed an estate by establishing tenants upon it, or who himself expends capital on embanking, is the only person with any real interest in that estate, and on such an estate the cultivators are merely tenants-at-will. On the other hand, a proprietor, whose estate is composed of a grant of land which had already been reclaimed at the period when the grant was made, has no direct interest in the soil. He is a mere middleman, with the right to collect rent at a fixed rate from the occupant tālukdārs, and responsible for the payment of the Government revenue.

The latter state of things is that which usually prevails in this district, or at least in the central portion of it, where tālukdārs had established themselves and commenced to reclaim the jungle before the estates were created. The creation of these estates was a fiscal measure designed by the Muhammadan rulers with the object of collecting revenue from the occupant tālukdārs, so that in almost all cases occupation by tālukdārs preceded the creation of the estates. If the grantee of the estate settled down on some of the lands of the estate, as he generally did, he would naturally obtain rights in the land within the vicinity of his homestead similar to those enjoyed by the tālukdārs in other parts of his estate. With the exception of these lands, however, the larger proprietors as a class have to this day but little interest in the lands of their estates, with the very situation of which they are frequently unacquainted. The tālukdārs of such lands are the persons with a real interest in the soil. The only interest which the proprietor retains is the right to collect rent and cesses from the tālukdārs, and these he collects at a fixed rate, stipulated for in registered contracts between them. The tālukdārs are, therefore, the class with the closest and most permanent interest in the soil.

Almost all the proprietors of Chittagong are resident within Resident the district. The small size of the estates and the comparatively landlords. high incidence of revenue prevent the large profits being made from landed property which enable the landlords of other districts in Eastern Bengal to reside in Calcutta. Speculators have also been deterred from acquiring land in Chittagong, owing to its long established reputation as a jungly place almost outside the pale of civilization; and apart from this, the estates are so scattered that efficient management from a distance is impossible. The result of these combined influences is that the majority of the proprietors are resident in the district, but the lands comprised within their properties are so scattered that they rarely reside on their estates.

The Hindu landlord is, as a rule, far more careful of his Hinduan. rights and more grasping than the Muhammadan, who likes madan to enjoy an easy life, and does not trouble himself with details, landlords Just as the Mughal government gave away immense areas in jāgīr and revenue-free grants, so the Muhammadan landlord to this day allows his land to be held at low rents, and his ryot to acquire privileges. The Hindu landlord, on the other hand. likes to keep his ryot in the position of a tenant-at-will. Anwara and Patiya the cultivator under a Hindu landlord is frequently a ghulam or serf, who cultivates the land and pays rent for it in the shape of small menial services rendered. The Hindu landlord prefers to hold his land nominally in his own nij-jot, subletting to the year-to-year tenants, locally known as eksanā korfā, who are mere tenants-at-will, and who frequently pay their rents in kind. The result is while sub-infeudation exists in a remarkable degree in some parts of the district, it is noticeably absent in others.

Now that a record-of-rights has been prepared, the landlords, as a rule, recognize the fact that they can no longer increase the rents of their tenants or make illegal exactions. The tenants, moreover, nearly always hold a registered lease, and the landlords get nothing but the stipulated rent. There is, consequently, a tendency to convert occupancy holdings into patni tenures for the sake of facility in realizing rents; and the number of sales of patni tāluks is very large. In the two years following the cyclone of 1897 there were 500 sales in each year; they dropped to an average of 150 in the three years ending in 1904, but the number of applications was very much greater than this. There is also a great demand for the services of the Court of Wards; and the result is that, by the action of the Court of Wards and the Patni Tāluk Regulation, the Collector has to collect the rents for a considerable proportion of the zamindars of the district.

### CHAPTER XII.

### GENERAL ADMINISTRATION.

ADMINISTRATIVE CHARGES AND STAFF.

THE district did not acquire its present dimensions till the vear 1881. It formerly included the island of Sandwip to the north, the tract of hills and forest now known as the Chittagong Hill Tracts on the east, and part of Arakan on the south. where the Myothit or Mrosay river formed the boundary. Sandwip formed part of the district until 1822, when it was transferred to Noakhali on the formation of that district; but it remained within the civil jurisdiction of Chittagong until 1877, when the jurisdiction in civil suits was transferred to the District Judge of Noakhali. In 1860 the hills to the east were constituted a separate non-regulation district under the name of the Chittagong Hill Tracts, but the boundary between it and Chittagong was not finally surveyed and demarcated until 1880. the north the boundary has been changed once or twice, but was finally determined as the Fenny river; and to the south the present boundary was laid down in 1881. The subdivisional system was introduced in 1854, when the southern portion of the district was formed into the Cox's Bazar subdivision.

The district thus consists of the two subdivisions of Chittagong and Cox's Bazar, the former being under the direct supervision of the Collector, while Cox's Bazar is in charge of a Subdivisional Officer, who is generally a Deputy Collector of the Provincial Civil Service. At Chittagong the sanctioned staff consists of six Deputy Collectors, of whom four are Magistrates of the first class, including usually a Joint-Magistrate, and two are vested with the powers of Magistrates of the second or third class; in addition to these officers, there are generally two Sub-Deputy Collectors, and occasionally an Assistant Magistrate, stationed there.

A special staff of officers, called Khās Tahsīldārs, is also entertained for the large Government estates (Khās Mahāls), which extend over 1,667 square miles. For administrative purposes, they are divided into five groups, each of which is under the

management of a Deputy or Sub-Deputy Collector, viz., Sadar (79 square miles), Rāojān (238 square miles), Patiyā (345 square miles), Sātkaniā (128 square miles), and Cox's Bazar (877 square miles). A General Manager is also employed under the Collector for the numerous estates which he administers under the Court of Wards. These estates constitute a heavy charge, and many applications are received every year from zamīndārs praying that the Court will assume control of their properties.

The administration of the Port of Chittagong is vested in a Port Trust created in 1887-88. The Commissioner and District Magistrate are respectively Chairman and Vice-Chairman of the Port Trust Commissioners, and the executive officers are a Port Officer, a Port Engineer and a Health Officer; a Government engineer and shipwright surveyor has also been appointed recently. The administration of the Customs Department is carried on by the Commissioners of the Division, who is Chief Customs Officer for the Ports of Chittagong and Cox's Bazar; he is assisted at Chittagong by an Assistant Collector of Customs, and at Nhilā by a Superintendent of Customs. A Forest Division under a Deputy Conservator of Forests has been constituted for this district and the Hill Tracts. Chittagong is also the headquarters of an Inspector of Schools and of an Executive Engineer in charge of a Public Works Department Division.

The revenue of the district, under the main heads, rose from REVENUE. Rs. 14,71,000 in 1880-81, when the income-tax had not been imposed, to Rs. 17,00,000 in 1890-91 and to Rs. 20,32,000 in 1900-01. In 1905-06 it amounted to Rs. 21,47,000, of which Rs. 11,51,000 were derived from land revenue, Rs. 6,32,000 from stamps, Rs. 1,67,000 from cesses, Rs. 1,47,000 from excise, and Rs. 50,000 from income-tax.

The collections of land revenue increased from Rs. 8,02,000 Land in 1880-81 to Rs. 9,45,000 in 1890-91 and to Rs. 11,12,000 in revenue. 1900-01. In 1905-06 they aggregated Rs. 11,51,000 collected from 28,639 estates, the current land revenue demand being Rs. 11,71,000, of which Rs. 5,30,000 were payable by 28,631 permanently settled estates and Rs. 13,000 by two temporarily settled estates, while the demand from the Government estates was Rs. 6,28,000. The total land revenue demand is equivalent to 35 per cent. of the gross rental of the district; and the incidence per cultivated acre is Re. 1-13-7, as compared with annas 13-2 in Noākhāli and annas 14-9 in Tippera.

The receipts from judicial and non-judicial stamps rank next stamps. in importance as a source of revenue. They increased from

Rs. 4,86,000 in 1895-96 to Rs. 5,52,000 in 1900-01 and rose still further to Rs. 6,32,000 in 1905-06. There has, in fact, been a steady increase every year owing to the growth both of the number and value of suits instituted in the Civil Courts, as well as of sales, mortgages, bonds and other miscellaneous transactions. Nearly four-fifths (Rs. 4,98,000) of the receipts in 1905-06 were due to the sale of judicial stamps, and in particular of court-fee stamps, while Rs. 1,34,000 were obtained from the sale of non-judicial stamps, nearly the whole of this sum being due to the demand for impressed stamps.

Cesses.

Road and public works cesses are, as usual, levied at the maximum rate of one anna in the rupee, and the collections increased from Rs. 1,68,000 in 1895-96 to Rs. 2,03,000 in 1905-06. The current demand in the latter year was Rs. 1,77,000, of which Rs. 1,65,000 were payable by 31,302 revenue-paying estates, and Rs. 12,000 by 11,698 revenue-free estates. The number of estates assessed to cesses is thus 43,000, while the number of tenures is 115,798; there are thus thrice as many tenures liable to pay cesses as estates. The number of recorded shareholders of estates and tenures is 210,617 and 231,596 respectively.

Excise.

The receipts from excise fell from Rs. 2,28,000 in 1895-96 to Rs. 1,73,000 in 1900-01, and further declined in 1905-06 to Rs. 1.47,000. More than half of this sum, or Rs. 81,000, was obtained from the duty and license fees on opium, the consumption of which is exceptionally large. The revenue from this source is greater than in any other district in Eastern Bengal, and amounts to Rs. 595 per 1,000 of the population. The Muhammadans, who form 72 per cent. of the population, are especially addicted to the use of the drug, and it is estimated that one-tenth of them are opium-eaters. The issues of opium to local vendors are, however, restricted according to local requirements, in order to check the smuggling of opium into Akyab, which, with one-third of the population, consumes nearly four times as much opium as Chitagong. This measure, which was reintroduced in 1904-05. has reduced the receipts from opium very greatly, and they are now only two-thirds what they were in 1900-01 and one-half what they were in 1895-96. The restrictive system, while reducing smuggling into Burma has, it is said, imposed considerable hardship on the consumers of Chittagong, a malarious sea-board district, in which opium is looked upon as a necessity of life: at the same time, it has placed a premium upon smuggling into this district, and there is reason to believe that opium is now

smuggled into Chittagong from the United Provinces, Patna and Calcutta.\* Alternative methods for preventing smuggling into Burma are under consideration.

After opium, the most important item in the receipts is gānja, i.e., the dried flowering tops of the cultivated female hemp plant (Cannibis indica) and the resinous exudation on them. consumption of this drug is relatively small for Eastern Bengal. the duty and license fees realizing Rs. 40,000 in 1905-06. The bulk of the population being Muhammadans, the income from the sale of liquor is comparatively insignificant. greater part (Rs. 16,000) is obtained from the sale of country spirit, which is conducted on the outstill system. sum (Rs. 3,000) is obtained from the manufacture and sale of pachwai or rice beer, and the same amount from the duty on fermented and unfermented palm-juice (tāri). The license fees charged for the sale of imported liquor realize Rs. 2,400; such liquor is consumed by the European and Eurasian population in the town of Chittagong, and is also finding favour among natives of the upper and middle classes, who are beginning to prefer cheap German and other spirits to country spirits.

In 1901-02 the income-tax yielded Rs. 56,000 paid by Income-2,293 assesses, of whom 1,210 paying Rs. 13,000 had in-tax. comes of Rs. 500 to Rs. 1,000. At that time the minimum income assessable was Rs. 500, but this was raised in 1903 to Rs. 1,000, thereby giving relief to a large body of petty traders, money-lenders and clerks; and the number of assessees consequently fell in 1903 to 979 and the collections to Rs. 48,000. In 1905-06 the tax yielded Rs. 50,000 paid by 917 assessees.

There are 23 offices for the registration of assurances under Registra-Act III of 1877. At Chittagong the Special Sub-Registrar tion. deals as usual with the documents presented there and also assists the District Magistrate, who is ex-officio District Registrar, in supervising the proceedings of the Sub-Registrars in charge of the other registration offices. The average number of documents registered annually during the quinquennium ending in 1899 was 84,279, but fell in the five years ending in 1904 to 82,514, this decrease being due to the fact that the number of presentations was abnormally high at the close of the previous quinquennium on account of the disastrous effects of the cyclone of 1897.

Report on the Administration of the Excise Department, Bengal, for 1904-05.

The marginal statement shows the number of documents

Office.	Docu- ments regis- tered.	Receipts.	Expenditure.
		Rs.	Rs.
Chittagong	6,373	11,096	6.966
Cox's Bazar	3,943	2,931	2,048
" Joint (Chakaria)		935	1,035
Hathazāri	3,792	2,856	1,881
1st Toint (Kotor	3,086	2,355	1,655
Hat).	,,,,,,	_,000	_,,500
Hāthazāri 2nd Joint (Fatehā.	4,120	3,381	1,846
bād).	2,220	0,001	-,010
Kālīpur (Bānskhāli)	3,610	2,569	1,851
Joint (Anwara)	3,003	2,206	1,655
Mīrsarai	4,842	3,962	2,180
Joint (Zorāwarganj)	4,067	3,056	2,056
Pativā	3.512	2,662	1,885
,, 1st Joint (Boalkhali)	2,994	2,001	2,538
,, 2nd Joint (Gasbaria)	3,890	2,987	1,788
3rd Joint (Kanta	3,012	2,437	1,701
Fakīr's Hāt).		, ,	
Phatikcharī	5.058	3,951	2,270
" 1st Joint (Kālī	3,719	3,072	1,850
Munshi's Hat).	,	'	'
Rāojān	4,817	4,331	2,180
" 1st Joint (Rangonia)	2,613	1,964	1,505
" 2nd Joint (Lumbaur	3,310	2,876	1,746
Hãt).			
Sātkaniā	4,780	3,272	2,097
, 1st Joint (Padua)	3,503	2,538	1,760
" 2nd Joint (Adhuna.	6,073	4,853	1,586
gar).			-
Sitākund	4,840	3,922	2,142
Total	90,411	76,213	48,221

registered and the receipts and expenditure each office in 1905. The numof registrations was far greater than in any other district in the Province. and Chittagong alone accounted one-eighth of the total num-The number. ber of perpetual leases registered was more than double that any other district, and over 46 per cent. of the leases of this regischaracter teredthe in whole Province presented in this district. Another proof of

the extraordinary popularity of registration is that there are more optional registrations relating to immoveable property than in any other district, and that Chittagong accounts for nearly one-fifth of the total number in Eastern Bengal and Assam.

ADMINISTRATION OF JUSTICE. Civil justice.

The staff entertained for the administration of civil justice consists of the District Judge, 2 Sub-Judges and 15 Munsifs, viz., 3 Munsifs of Chittagong, 3 Munsifs of Patiyā, 3 Munsifs of Sāt-kaniā, 2 Munsifs of Hāthazāri and the Munsifs of North Rāojān, South Rāojān, Cox's Bazar and Phatikcharī. The staff is large owing to the litigiousness of the people. Year by year the number of suits under the rent laws increase, and recently there has been a considerable rise in the number of title suits as a result of the survey and settlement operations.

Criminal justice is administered by the District and Sessions Criminal Judge, the District Magistrate, the Joint Magistrate and the justice. Deputy and Sub-Deputy Magistrates stationed at Chittagong and Cox's Bazar. The sanctioned staff at Chittagong consists of the District Magistrate and of four Deputy Magistrates of the first class and two Deputy Magistrates of the second or third class, in addition to the Sub-Deputy Magistrates of the second or third class who are generally stationed there. The Subdivisional Officer at Cox's Bazar is almost invariably a magistrate vested with first class powers. Besides these stipendiary magistrates, there is a bench of Honorary Magistrates at Chittagong, as well as an Honorary Magistrate at Cox's Bazar. A noticeable feature of the administration of criminal justice is the unusual variety of cases dealt with, such as offences under the Salt Law, the Port and Shipping Laws, and the Opium Act.

Heinous crime is comparatively rare, with the exception of Crime. arson, for which Chittagong has long had an unenviable reputation; in the quinquennium ending in 1904 there were altogether 230 cases of arson. The people generally resort to incendiarism as the easiest method of revenge—a method facilitated by the construction of the huts in which they live—and the figures scarcely convey an idea of the extent to which they live in fear of it. The fear of arson is, in fact, the means of livelihood of the local bad characters, who live by terrorism and the blackmail which they levy from their neighbours. It is this fear which permits numerous bad characters to enjoy immunity from prosecution.

Rioting is not common, and is generally of a petty character. Formerly such offences were much more common owing to the absence of any record to define the boundaries of the fields: and the Chittagong peasant might well repeat the words addressed by the Roman to his boundary mark—Omnis erit sine te litigiosus Since the recent survey and settlement these offences are less frequent. Thefts and petty burglaries are numerous, as elsewhere, owing to the flimsy construction of the houses; but dacoities are rare, mainly because the people are far too selfreliant to tolerate organized crime of that character. Unlike other parts of Bengal, Chittagong enjoys comparative immunity from river piracy. The boatmen, who are nearly all Muhammadans, serve for the most part on steamers or sea-going ships; and those engaged in the country boat trade, as a rule, bear good characters. A good deal of opium smuggling is carried on, but there are no other complaints against them.

Perhaps the commonest offences are forgery, perjury and the fabrication of false evidence. The cultivator defends his possession

of a field with a · lāthi or dāo, but he attacks his neighbour with a forged document or a false suit. Every peasant has his roll of documents, copies of survey papers, Munsif's decrees, High Court rulings, etc., and where the documents are weak, forgery is only too often resorted to. Overt acts of violence are comparatively rare, for the Chittagonian prefers to try his strength against an adversary by a lingering struggle in the law · courts. In his estimation, litigation is more exciting than an open breach of law.

POLICE.

For police purposes the district is divided into 13 thanas or police circles, viz., in the headquarters subdivision Chittagong (61 square miles), Mīrsarai (115), Sītākund (188), Hāthazāri (109), Phatikeharī (215), Rāojān (214), Patiyā (262), Sātkaniā (226) and Bānskhāli (206); and in the Cox's Bazar subdivision Cox's Bazar (245 square miles), Maiskhāl (138), Chakariā (213) and Teknāf (300). Besides these, there are 9 outposts, and there are thus 22 centres for the investigation of crime. The regular police force consisted in 1905 of 1 District Superintendent, 1 Assistant Superintendent, 3 Inspectors, 36 Sub-Inspectors, Sergeants, 43 head constables and 426 constables, a total force of 512 men, representing one policeman to every 4.8 square miles and to every 2,643 of the population. The cost of maintaining this force was Rs. 87,000. There is a small force of town police consisting of 3 head-constables and 60 constables at Chittagong, and 1 head-constable and 7 constables at Cox's Bazar. rural force for the watch and ward of villages in the interior is composed of 2,411 chaukidars and 215 dafadars, who are paid at the rate of Rs 5 and Rs. 6 a month respectively.

JAITS.

There is a district jail at Chittagong with accommodation for 189 prisoners, viz., barracks for 126 male convicts, 11 female convicts, 23 under-trial prisoners and 7 civil prisoners, cells for 3 male convicts, and a hospital with 19 beds. The only subsidiary jail is that at Cox's Bazar, which has accommodation for 20 prisoners. Cox's Bazar is 88 miles from Chittagong by sea, and convicts are brought to the district jail by a bi-weekly steamer service, which makes an average run of six hours between Chittagong and Cox's Bazar. Convicts are also sent to the district jail from Rāngāmāti, the headquarters station of the Chittagong Hill Tracts, which does not possess a jail.

### CHAPTER XIII.

# LOCAL SELF-GOVERNMENT.

Outside the municipalities of Chittagong and Cox's Bazar, District the administration of local affairs is controlled by the District Board, no Local Boards or Union Committees having been constituted. The District Board consists of 19 members, of whom 6 are ex-officio members and 13 are nominated. In 1905-06 there were 7 European members—an unusually high proportion in Bengal but only 2 Muhammadans. Considering that Muhammadans form the great majority of the inhabitants, there seems no doubt that they are at present insufficiently represented; but this result is due, in large measure, to the want of education among them and to the fact that they have hitherto not realized the necessity of taking an active part in public life.

The average annual income of the District Board during the Income. 10 years ending in 1901-02 was Rs. 2,07,000, of which Rs. 77,000 were derived from the road cess. During the quinquennium ending in 1904-05 it amounted, on the average, to Rs. 1,86,000, of which Rs. 77,000 were obtained from the road cess, Rs. 16,000 from Government contributions, Rs. 5,000 from pounds, Rs. 20,000 from ferries and Rs. 68,000 from other sources. In 1905-06 the opening balance was Rs. 45,000, and the receipts of the year aggregated Rs. 2,11,000, including Rs. 73,000 realized from the road cess, Rs. 49,000 contributed from Provincial revenues, Rs. 17,000 obtained from tolls on ferries, and Rs. 3,500 from pounds. Here, as elsewhere, the road cess is the principal source of income, but the incidence of taxation is light, being only 10 pies per head of the population. The ferries controlled by the Board number over 60, and are an important asset, but the income from this source has decreased considerably in recent years. There are 120 pounds, which like the ferries are leased out annually, but this again is not an elastic source of income, and tends, if anything, to shrink, owing to the difficulty of breaking up combinations of farmers.

The average annual expenditure during the decade ending in Expendi-1901-02 was Rs. 2,09,000, of which Rs. 1,11,000 were spent on civil ture. works and Rs. 30,000 on education. During the five years ending in 1904-05 it amounted to Rs. 1,82,000, the chief items being Rs. 67,000 spent on communications and Rs. 35,000 on education. In 1905-06 the expenditure was Rs. 1,52,000, of which nearly half (Rs. 68,000) was allocated to civil works, while education accounted for Rs. 37,000.

The heaviest charge on the income of the District Board is the maintenance of communications; it now maintains 5 miles of metalled roads and 536 miles of unmetalled roads, besides a large number of village tracks with a total length of 362 miles; the cost of maintaining these roads in 1905-06 was Rs. 769, Rs. 73 and Rs. 22 per mile respectively. The number of schools maintained or aided by the Board is 986 with an attendance of 37,000 pupils; the great majority of these are Primary schools, viz., 819 Lower Primary and 136 Upper Primary schools, but there are also 18 Middle English and 12 Middle Vernacular schools, besides one High English school. Altogether 7½ per cent. of the ordinary income of the Board is expended on medical relief and sanitation—a lower proportion than in any other district in the Division. One dispensary is entirely maintained by it; 10 dispensaries receive grants-in-aid; and medical relief is given to parts affected by cholera by the appointment of local native physicians and supernumerary doctors. A veterinary dispensary is maintained by the Board at Chittagong, and an itinerant Veterinary Assistant is employed for the inoculation of cattle in the interior against rinderpest.

MUNICI-PALITIES. Chittagong. There are only two municipalities in the district, Chittagong and Cox's Bazar. The Chittagong Municipality was established in 1864, and is administered by a Municipal Board composed of 18 Commissioners, of whom 12 are elected, 5 are nominated, and one is an ex-officio member. The area within municipal limits is  $4\frac{1}{2}$  square miles, and the number of rate-payers is 4,782, representing 21 6 per cent. of the population—the highest proportion in the Division. Its area is about to be extended in the direction of the railway terminal jetties. The average annual income of the municipality in the decade ending in 1901-02 was Rs. 58,000, and the expenditure was Rs. 51,000; and in the quinquennium ending in 1904-05 they were Rs. 64,000 and Rs. 55,000 respectively.

Income.

Since the year last named there has been an increase in the income owing to a revision of the assessment, which took effect from April 1905, and a re-assessment of the Railway Company's holdings; and in 1905-06 the receipts amounted to Rs. 88,000, in addition to an opening balance of Rs. 6,000. Of this sum

Rs. 55,000 were realized from municipal rates and taxes, the most important of which is a tax on houses and lands, assessed at 7½ per cent. on the annual value of holdings, which brought in Rs. 26,000. Next to this, the most important tax is a latrine tax, assessed at 6 per cent. on the annual value of holdings, which realized Rs. 16,500. Other minor taxes are those levied on animals and vehicles, and on professions and trades, but neither of these yield as much as the tolls on roads and ferries (Rs. 6,500); the Anti Muhammad ferry across the Karnaphuli is especially valuable as a source of income. Chittagong is the most heavily taxed municipality in the Division, the total incidence of taxation being Rs. 2-7-10 per head of the population, as compared with the Divisional average of Re. 1-8-2.

The expenditure in 1905-06 was Rs. 61,000, in addition to Expendi-Rs. 10,000 allocated for advances, deposits, and the repayment of loans from Government. Chittagong is the only indebted municipality in the Division, Rs. 57,000 having been obtained as loans from Government; Rs. 5,000 per annum are hypothecated for the payment of interest and principal. Sanitation and conservancy constitute the heaviest charge on its resources, and in 1905-06 Rs. 21,000, representing 34.5 per cent. of its income, were expended in this direction. Altogether 21.5 per cent. was expended on public works, 15.3 per cent. on education (the highest percentage in the Division), and 9.2 per cent. on establishment; the remainder of its income was fairly equally distributed among the other branches of municipal administration, such as medical relief (3.2 per cent.)—the lowest percentage in the Division,—lighting (2.9), drainage (2.4), and water-supply (2.2).

The most pressing needs of the municipality are a plentiful and good supply of water, a properly equipped municipal market, the clearance of the Chaktai creek (khāt), a general improvement of the drainage system, the filling up of the numerous unwholesome tanks scattered through the town, improved lighting. and the extension of the metalled roads. Much has been done to remedy some of these defects during the last 20 years by a succession of energetic European Chairmen, but much still remains to be done. A project for the supply of water by means of artesian borings is under the consideration of the Government of Eastern Bengal and Assam, and it is proposed to remove the deficiencies of lighting by electric power; but the municipality is not in a position to undertake and carry out any comprehensive schemes without substantial assistance. A more detailed account of the present state of the town and of the projected improvements will be found in the article on Chittagong in Chapter XV.

Cox's Bazar.

The Cox's Bazar Municipality was established in 1869 and is administered by a Municipal Board composed of 13 Commis-The elective system has not been introduced, and ten Commissioners are nominated, while three are ex-officio members. of the Board. The area within municipal limits is 11 square miles, and the number of rate-payers is 675, representing 17.6 per cent. of the population. The average annual income of the municipality during the decade ending in 1901-02 was Rs. 4,800, the expenditure being Rs. 4,100; and in the quinquennium ending in 1904-05 they were Rs. 5,700 and Rs. 4,600 respectively. In 1905-06 there was an opening balance of Rs. 800, and the total income of the year, in addition to this, was Rs. 5,000. The greater part of this sum was obtained from tolls on roads and ferries, which brought in Rs. 1,570, and from a tax on persons (or property tax), which realized Rs. 1,400. The latter tax is assessed according to the circumstances and property of the assessees, and there is also a tax on Government buildings assessed at 7½ per cent. of their annual value, which yielded Rs. 500. Three-fifths of the total income is thus obtained from municipal. rates and taxes, and the total incidence of taxation is annas 14-7 per head of the population, which is much below the Divisional average. The expenditure in the same year was Rs. 4,400, of which Rs. 1,200 (28.3 per cent) were spent on public works, while 15.1 per cent. was expended on conservancy, the same proportion on establishment, 11.4 per cent. on education, 7.7 per cent. on drainage, and 6.8 per cent. on the water-supply.

With the small income at its disposal the municipality is endeavouring to improve the condition of the town, but its resources are small, and it is difficult to obtain skilled artisans to carry out necessary works of improvement. At present, its most pressing wants are an improved water-supply, better conservancy arrangements, and a more advanced system of sanitation. These are being met by grants from Government.

## CHAPTER XIV.

#### EDUCATION.

CHITTAGONG has long been a district in which indigenous schools PROGRESS have flourished, such as village pāthshālas in which Hindu and CATION. other children are taught reading, writing and a little arithmetic. maktabs in which Muhammadan children recite the Koran by rote, and Magh kyaungs or monastic schools where a Buddhist rauli or priest is the teacher. The instruction imparted in these schools was, however, of the rudest description, and the efforts of the Education Department during the last 30 years have been directed to substituting a better class of school and higher kind of instruction. An English school was first established in Chittagong by the General Committee of Public Instruction in 1836. and this was the only school maintained or aided by Government for more than 20 years. By 1871 there had been established 38 Government and aided schools attended by 1,473 pupils. During the next decade there was an extraordinary development owing to the introduction of Sir George Campbell's scheme for the diffusion of primary education, which extended grants-in-aid to a large number of hitherto unaided vernacular schools. indigenous institutions were thus brought under the control of the Department; and in 1881 there were 337 schools attended by 12,311 pupils. During the next decade the rate of growth was very rapid, and at its close, i.e., in 1891, the number of public institutions had risen to 1,007 and the number of scholars under instruction to 32,686, besides 9,303 pupils studying in 575 private or indigenous schools. The progress of education was equally marked during the next 10 years, and in 1901 there were altogether 1,108 public institutions with an attendance of 43,182 pupils, besides 745 private institutions with 14,023 pupils.

The number of Government and aided colleges and schools thus advanced within 30 years by 1,070, accompanied by an increase of 41,709 pupils. At the same time, the number of private or indigenous institutions greatly decreased. In 1874 the Commissioner reported that there were no less than 1,480 indigenous and unaided schools of various kinds not under Government

supervision or control; and in these schools no less than 29,953 pupils received instruction, i.e., about three times the number of pupils to be found in the inspected and aided schools of the district. In 1901 the proportion was almost exactly the reverse.

The census statistics confirm the impression of progress which population the above figures convey. In 1881 the proportion of males entered as literate, i.e., as able to read and write, was 8.4 per cent.; in 1891 it was 9.8 per cent.; and in 1901 it had risen to 11.7 per cent.; while the corresponding figures in the case of females were 1, 2 and 5 per 1,000. In the year last named 78,319 persons or 5.8 per cent. of the population (11.7 males and 0.5 females) could read and write; but 38,588 or nearly half of the total number were inhabitants of the Chittagong, Patiya and Rāojān thānas. The circumstances of the Chittagong thāna, where 10.02 per cent. of the population is literate, are exceptional, as it contains a large port and is the headquarters of the district. Of the remaining thanas, Patiya, with 7.4 per cent. of its population literate, and Rāojān, with 7.5 per cent., easily take the first place, and there is very little doubt that their position is due to the large number of Hindus they contain. The Hindus of the district are far more advanced from an educational point of view than the Muhammadans, and besides this, these two thanas are favourite residences of pleaders and clerks in ministerial offices. The same three thanas also contain the largest number of persons able to read and write English, of whom there are 2,451 in Chittagong thana, 1,124 in Patiya and 784 in Raojan. They thus account for 4,359 persons with a knowledge of English or six-sevenths of the total number (5,619) in the district. regards the other thanas, it is an established fact that those portions of the district which lie south of the Karnaphuli have attained a higher average standard of education than those to the north of that river.

General statistics.

In 1905-06 the number of public institutions, besides the Arts college, was 1,118, and the number of pupils under instruction was 45.325, representing 22.3 per cent. of the children of school-going age (41.8 per cent. boys and 4.7 per cent. girls); of these, 53.7 per cent. were Muhammadans, 40.4 per cent. were Hindus, and 5.6 per cent. were Buddhists. There were also 764 private institutions. with an attendance of 16,235 pupils.

The educational staff consists of a Deputy Inspector of Schools subordinate to the Inspector of Schools, Chittagong Division, of 6 Sub-Inspectors of Schools, and of 11 Guru Instructors or Inspecting Pandits, one of whom is employed in the Chittagong municipality. The Deputy Inspector is responsible

for the efficient management of the Middle and Upper Primary schools, the Sub-Inspectors for the proper supervision of primary education, and the Guru Instructors for the injection of Primary and indigenous schools, and also for the instruction of the yurus or teachers in methods of teaching.

The only college in the district is the Chittagong College, College, which is supported by Government. It was originally opened in ATE EDU-1836 by the General Committee of Fublic Instruction as a zilā school, but in 1869 it was raised to the status of a second grade college teaching up to the standard of the F. A. examination; a law department teaching up to the Pleadership examination was subsequently added. The staff consists of a Principal and five Lecturers; and attached to the College are a Hindu hostel and a Buddhist hostel open to students of the College and Collegiate school. It has an endowment scholarship called the Rai Golak Chandra Rai Chaudhri Bahādur's scholarship, tenable for two years, which is awarded annually to the successful candidate at the Entrance examination, who stands next below the Government junior scholars educated in the district. A scheme is before Government for the raising of the status of the College to the first grade and for the provision of advanced science courses.

The secondary schools include both High and Middle English SECOND. The former teach up to the Entrance examination BDUCA. of the Calcutta University, and the latter have a shorter course TION. extending up to the 5th class of High schools; but all have Primary departments attached to them. A High school thus represents all stages of instruction from the Lower Primary to the University Entrance examination standard, and a Middle school all stages from the Lower Primary to the 5th class of High schools. In brief, a High school is a Middle school with four additional higher classes; a Middle school is equivalent to an Upper Primary school with two higher classes attached to it; and an Upper Primary school is equivalent to a Lower Primary school with two additional higher classes.

There are eight High schools for boys with 2,154 pupils on High One of these, the Collegiate school at Chittagong, is schools. maintained by Government; four are aided by Government, viz., the Municipal High School at Chittagong and the High schools at Pativa, Sarotali and Satkania; and three, with 608 boys on the rolls, are unaided, viz., the Chittagong High School, the National High School at the same place, and the Ramgati and Rāmdhan High School at Rāojān. In addition to these, a High school for girls has been established at Chittagong, and has an attendance of 92 girls.

Middle English schools. One Middle English school, the practising school attached to the Chittagong Training School, is maintained by Government, and one at Sītākund by the District Board; nineteen receive grants-in-aid, and five are unaided. There are thus 26 schools of this class, and the number of pupils borne on the rolls is 2,600.

Middle Vernacular schools. The third class of secondary schools consists of the Middle Vernacular schools teaching up to the Middle scholarship course, in which the vernacular is the only recognized medium of instruction. The popularity of these schools is on the wane owing to the preference of parents for an English education—a preference due to the higher market value of the latter. The number of these schools has consequently fallen to 29, and the number of boys attending them to 1,963.

PRIMARY EDUCA-TION. There are altogether 835 Primary schools for boys in the district, and the number of boys in attendance at them is 33,171. Of these 137 are Upper Primary schools, and 698 are Lower Primary schools, with an attendance of 8,169 and 25,002 respectively. Besides these, there are 195 girls' primary schools, at which 3,935 children are taught.

SPECIAL SCHOOLS.

Government maintains three Training schools in the district. viz., the Chittagong Training School, a first grade school for the training of the Head Pandits of Middle schools, and two Gurutraining schools at Kumirā and Rāmu, at which the teachers of Primary schools are trained. Only one industrial school has been started, the Victoria Technical Institute at Chittagong, at which carpentry, weaving, goldsmith's work and tinsmith's work are taught; there are 44 pupils on the rolls. Among special schools are included tols for the study of Sanskrit and madrasas for the study of Arabic and Persian. The most important of these institutions is the Government Madrasa at Chittagong, which is managed by a Committee under the presidency of the Commissioner. This is maintained by the State and comprises two departments—the Arabic department with 302 pupils and the Anglo-Persian department with 152 pupils. Another madrasa of some importance is that at Sītākund, which receives grants from the District Board and the Mohsin Fund. Among the tols the Jagatpur Asrām Tol, which sends up pupils for the Sanskrit Title Examination, is worthy of mention.

Hostels.

Altogether eight hostels have been established for the accommodation of boys studying in the various educational institutions. Of these, one is attached to the Chittagong Madrasa and is maintained by Government; two are unaided, and five are aided institutions, viz., the Victoria Islām hostel, the Hindu and

Buddhist hostels attached to the Chittagong Collegiate School, the hostel connected with the Training school at the same place. and that attached to the Middle English school at Cox's Bazar. The Victoria Islam hostel, which is managed by the Muhammadan Education Society at Chittagong, is of special interest, as it aims at reproducing on a small scale the life of an English residential college, and has resident masters for teaching the boys.

Private institutions, i.e., institutions which do not conform PRIVATE to the standard recognized by the Education Department, INSTITUcomprise independent madrasas, tols, and kyaungs or Buddhist monastic schools. They may be subdivided into four classes, viz., advanced schools teaching Arabic, Persian or Sanskrit, elementary schools in which one of the vernaculars is taught, elementary schools teaching the Kerān only, and other schools. The greater number are Koiān schools, of which there are 679 with 14,312 pupils, including 308 girls studying in 25 girls' Korān schools; advanced schools for the teaching of Arabic and Persian number 38, and the attendance at them is 1,004; kyaungs, to the number of 36, account for 670 pupils; while there are 15 tels with 247 scholars under instruction.

There are altogether 5,072 girls under instruction in the EDUCAdistrict, of whom 1,103 attend boys' schools, while 3,968 are TION OF taught in 196 girls schools. All but sixteen of these schools are aided by Government, the District Board or the Chittagong municipality. Chittagong is unusually advanced in having a High English school for girls. This school, which is known as Dr. Kastagir's High School, is situated in the town of Chittagong, and is attended by 92 girls. It has recently been taken over by Government, and is being considerably enlarged. Of the other schools, 190 are Lower Primary schools with 3,751 pupils on the rolls, and 5 are Upper Primary schools, including two model schools in which the Kindergarten system of teaching has been introduced. Nearly all the girls at school are Hindus or Brāhmos, and at present the Muhammadan girls under instruction are an insignificant minority.

The number of Muhammadans receiving instruction in EDUCAschools of all kinds is 39,725, representing 64.5 per cent. of the Tion or total number of pupils. They account for no less than 94.9 per MUHAMcent. of the number attending private institutions, such as Korān schools, and for 53.8 per cent, of those taught in public institutions. On the whole, they are far more backward than the Hindus, in spite of the efforts which have been and are being made to promote education among them.

EDUCA-TION OF ABOBI-GINAL BACES. There are three schools for the education of Maghs or Arakanese settlers in the Cox's Bazar subdivision. Two are in Cox's Bazar town, one for boys, in which Burmese and Bengali are taught, and one for girls teaching only Burmese. The third is a model boys' school at Rāmu, in which both Burmese and Bengali are taught. It is maintained entirely by the District Board, and education is given free to the Magh children of the neighbourhood.

## CHAPTER XV.

#### GAZETTEER.

Chittagong.—Headquarters town of the Chittagong Division and district, situated in 22° 21′ N. and 91° 50′ E., on the northern bank of the Karnaphuli river, 10½ miles from its mouth. The town is also known as Islāmābād, that being the name given to it by the Mughals after its capture in 1666.

Chittagong is one of the most picturesque towns in the plains scenery. of India, with its varied scenery of river and sea, hills, plains and tropical vegetation. "The town," writes Sir Joseph Hooker, "is large and beautifully situated, interspersed with trees and tanks: the hills resemble those of Silhet, and are covered with a similar vegetation: on these the European houses are built. The views are beautiful, of the blue mountains 40 to 50 miles distant, and the many-armed river, covered with sails, winding amongst groves of cocoa-nuts, areca palm, and yellow rice fields. European houses surmount all the eminences, surrounded by trees of Acacia and Cæsalpinia. In the hollows are native huts amidst vegetation of every hue, glossy green Garciniæ and figs. broad plantains, feathery Cassia and Acacias, dark Mesua, redpurple Terminalia, leafless searlet-flowered Bombax, and grey Seaward the tide leaves immense flats, called churs. Casuarina. which stretch for many miles on either side the offing."

During the half century which has elapsed since this account was written, Chittagong has witnessed great changes, which have been vividly described in an article, "The Chittagong of to-day," published in the *Empress*, No. 1, September 1907. In that article the writer says:—"The Chittagong that I have known and the Chittagong known by others in days gone by are two different and distinct places. Chittagong, as it was known to them, was a sleepy, torpid, old-world town, of interest only to the antiquarian, who might find scattered here and there a few relics of its old-time Portuguese inhabitants, and offering a wide and limitless field to the student of coastal and other fevers. The Chittagong that I am acquainted with is a bustling, thriving, growing centre of commercial and railway activity—an activity which,

<sup>\*</sup> Himalayan Jeurnals, by Sir Joseph Dalton Hooker.

germinating in the Port, spreads and communicates its influence to a fast awakening provincial interior. A Chittagong of jetties and warehouses, godowns and offices, and numerous other buildings springing out of the dark, evil-smelling tropical verdure. and alongside the numerous green scum-covered tanks, which abound everywhere, and are the home and the breeding place of the mosquito, the gadfly and a hundred and one other insect pests. . . . Down at the Port itself there is a new Chittagong that has come to develop and to grow. Up and down the northern bank of the river creeps the long line of jetties being built for the accommodation of ocean-going boats. Long lines of iron godowns, their galvanized sheets simmering in the blazing midday sun, railway lines with innumerable crossings, and endless stacks of rice bags, tea chests, and jute bales, shew that there is here an already thriving business centre of much commercial importance. Higher up the river at Moheshkhāl is the installation of the Burma Oil Company, and, beyond, the mat-walled godowns and stores of many large trading firms, both European and native."

Population. The total population, according to the census of 1901, is 22,140, including 13,513 Muhammadans, 7,209 Hindus, 873 Christians, and 422 Buddhists. The population may be divided roughly into four groups according to locality. The European houses are scattered over a considerable area and have cool and breezy sites, each house being built on a separate hill; these hills, though small, are very steep, and with a few exceptions it is impossible to drive to the top. The natives live in the lower ground which comprises the rest of the town. The bazar population inhabit rows of houses which line the principal roads and have a background of jungle. The agricultural population are settled in low-lying bastis buried in jungle. Lastly, along the banks of the river we find the riparian population, who are engaged chiefly in fishing and the coasting trade.

The town.

The town itself, which extends over an area of  $4\frac{1}{2}$  square miles, is merely a collection of small villages interspersed with paddy-fields and small hills. A great portion of the area thus grouped together for municipal purposes consists of low sandy hillocks overgrown with vegetation and intersected by water-courses, which trend towards a creek called the Chaktai Nullah, an old bed of the river Karnaphuli, on the south-east. The rest consists of low-lying land covered with jungle, among which numerous  $bast\bar{\imath}s$  are hidden, honeycombed with tanks, or under cultivation of either rice or betel-nut palms. The jungle is being cleared, but it is very difficult to deal with the tanks.

The northern portion of the town includes the quarters known as Kāpāshgolā, Shuluk Bazar (including Kātālgani), Sholāshahr, Bibi's Hāt, Murādpur and Bhangigutnā. In the centre of the town are Chauk Bazar, Jaynagar, Chandanpurā. Diwan Bazar, Bagh Maniram, Inayat Bazar, Ghat Farad Beg, Rahmatganj, Jamālkhān, Andarkilā, Bakshi's Hāt, Lamār Bazar. Kurbanigani and Patharghata. In the southern portion of the town are Firinghī Bazar, Sadr Ghāt, Madarbāri, Al Korān, Pathāntali and Dīwān's Hāt. The principal streets are Dīwān Bazar and Chandanpurā Bazar, which form one continuous thoroughfare running through the town from north to south, Sadr Ghāt road, and Bakshi's Hāt with Khatunganj Bazar, the commercial quarter which extends down to the Chaktai Nullah. Bakshi's Hāt and Lamār Bazar, which together form one long street, are busy and populous thoroughfares in which every variety of merchandize is sold. There is a municipal market in Chauk Bazar, and the other markets are Bakshi's Hat, Bibi's Hāt, Firinghī Bazar, Khatunganj and Dīwān's Hāt. In the centre of the town stands the railway station, from which a branch line takes off to the Port one and half miles away.

Beyond the town are the European residences built on the small hills, from 150 to 200 feet high, which give Chittagong its characteristic scenery. Prominent among these hills is one known as Fairy Hill, on which the cutcherry and Government offices have been built. From Fairy Hill a fine view is obtained, which has been described as follows in the article already quoted:-"Below and all round is Chittagong, the Chittagong of vesterday and the Chittagong of to-day, while seemingly at the verv feet of the observer lies the Port, and beyond the ocean, breaking in long-crested rollers upon a shiring white beach. The course of the Karnaphuli, adown which country boats move lazily with the tide and wind, can be descried for miles, winding its wav between waving paddy and maize fields, palm and mangrove plantations, past mud-walled villages ahum with life, and through stretch after stretch of tropical foliage of the brightest green hue. a view worth many miles of travel to obtain, and from which the traveller, remembering the dusty, scorching plains of Northern and Central India and the bare fields of the interior of Eastern Bengal, is loth to tear himself away and descend again to the steaming flats and the nauseous odours of the bazars."

In this portion of the town are the Gardens, containing a bust of Queen Victoria and running down to a large tank, on the bank of which is a pillared building, with steps leading to the water's edge, known as the Pilgrims Ghāt. Close by are the

church and hospital, the latter built on the top of one of th numerous small hills or hillocks. The club is situated on another hill, and not far off are the offices of the Assam-Bengal Railway Company and the bungalows of the railway staff. From the station a road leads up to a deep cutting through the hills, called Tiger pass, a name reminiscent of the fact that formerly it was covered with jungle, in which tigers made their lair. from the civil station is Pahārtali, which contains the workshops of the Assam-Bengal Railway and the quarters of the employes, forming a railway settlement. Within a few miles of Pahārtali the remains of a Portuguese stronghold may still be traced, as well as of a country house built by Sir William Jones. Tradition has it that the Portuguese buccaneers buried their treasure here or in the neighbourhood: there is one hill in the centre of the race course at Pahārtali, upon which two bungalows now stand, which is said to contain a horde of rupees, buried by a Hindu Rājā flying before the victorious Muhammadans.

Buildings,

The history of the town has already been given in Chapter II, and it may be supplemented by the description given by Shihāb-ud-dīn Tālish, a Muhammadan writer of the second half of the 17th century:—" On the bank of the Karnaphuli river are some hills, high and low, situated close to each other. The lower hills have been heaped over with earth and raised to the level of the higher ones; all these hills have been scarped cylindrically. fortified, and named the fort. In strength it rivals the rampart of Alexander, and its towers (burj) are as high as the falak-ul-baruj. Fancy cannot sound the depth of its moat, imagination cannot reach its niched parapet. In the fort has been dug a deep ditch, about eight yards in breadth; on the eastern side. close to the edge of the ditch, flows the river Karnaphuli, which descends from the Tippera hills to the sea. On the north side is a large, wide deep tank close to the ditch. Behind the tank, along the entire north side and a part of the western The hills are so high and the jungle so dense, that side, are hills. it is impossible to traverse them even in imagination. the fort two springs flow, the water of which runs into the Karnaphuli river in the monsoons, when the channel of the springs becomes so broad that a jalba boat can easily pass through it. the people of the fort use all the water in seasons other than the rainy, they dam the springs and block the outlet to the Karnaphuli river. On a height within the fort is a tomb, known as the astana of Pir Badar; the attendants of the shrine perform prayer and fast. The Magh infidels have settled some villages in waqf on this tomb; they make pilgrimage to the holy dead and offer presents. It is said that if one could perform the impossible feat of dragging a large gun to the top of the hill at the western angle of the fort, which adjoins Tippera, its balls would fall within the fort. On the other side of the Karnaphuli there is a lofty and strong fort, opposite the fort of Chātgāon; it is full of defence materials. Every year the Rājā of Arakan sends to Chātgāon a hundred ships full of soldiers and artillery munitions, with a new Karamkari (Commandant, Superintendent) when the former Karamkari, with the ships of last year, returns to Arakan. There is always some trustworthy relative or faithful clansman of the Rājā in charge of the government of Chātgāon. He issues gold coins stamped with his own name at this place and its dependencies." The Portuguese settlement, it may be added, was a village called Firinghī-bandar or Bandar on the south bank of the Karnaphuli close to its mouth.

There are few relics even of this comparatively late period. and the buildings are for the most part modern. The old fort is traceable, however, though only the high earthworks remain; and the names Andarkila (within the fort) and Kilādewāl (fort wall) are still in use to designate portions of the town. One of the most interesting buildings is the Jama Masjid in Andarkila. After the conquest of Chittagong by the Mughals (1666) the Jama Masjid was built on the hill at Andarkila by Umed Khan, the son of Shaista Khan, the Viceroy of Bengal. Subsequently, when Umed Khan left the district, it became dilapidated owing to the indifference of the nails and other officials. The English Government then took possession of it and converted it into a magazine for the storage of arms and ammunition. In the year 1853 the principal residents of Chittagong successfully petitioned Government for the restoration of the building to the Muhammadan community, and since 1855 it has since been used as a mosque. There are three other old mosques in or near the town, viz., Hāmzā Khān's mosque in Bāgh Hāmzā built by a nobleman of that name in 1676, the Kadam Mubārak mosque in Rahmatgani built by Muhammad Yasin Khān in 1719, and Alī Khān's mosque in Chaumohanī.

Four miles north of Chittagong are the dargāh and mosque of Sultān Baijid, which are under the management of the Chittagong Endowment Committee. The tank in front of the mosque contains a number of large turtles, which come to the steps of the ghāt to be fed.

<sup>\*</sup> Jadu Nath Sarkar, The Feringi Pirates of Chatgaon, J. A. S. B., June 1907.

Among other buildings may be mentioned the Roman Catholic Cathedral near Firinghī Bazar. It is a fact of some interest that the original Catholic church at Chittagong was the second built in Bengal, and that Catholic missionary enterprise dates back at least to the beginning of the 17th century, for it is known that a Jesuit priest named Fernandez, who came from Cochin, died here in prison in 1602 after he had been shamefully ill-used and deprived of the sight of one eye by the Arakanese.\*

Chittagong is not only the principal civil station in the district, but is also the administrative headquarters of Civil, Forest, Educational and Public Works Divisions and the terminus of the Assam-Bengal Railway. It therefore contains a large number of offices, viz., those of the Commissioner, Deputy Conservator of Forests, Inspector of Schools, and Executive Engineer, besides the Port and Customs offices and the head offices of the railway company. The town contains numerous other buildings of modern date, of which the chief are the Anglican church (Christ Church) built under the auspices of Bishop Wilson and opened in 1839, and the General Hospital. There is a fine railway station, and extensive railway workshops are situated at Pahārtali. The principal educational institution is the Chittagong College, and there is also an important Madrasa for Muhammadan students.

Institu-

Chittagong is the headquarters of the Assam-Bengal Railway Volunteer Rifles, a corps with a strength of 315 men, and of a detachment of the Eastern Bengal Volunteer · Rifles, which includes a mounted section. Several public institutions have their headquarters here, viz., the Chittagong People's Association, the Islam Association, the Buddhist Association, and the Chittagong Divisional Union started in 1901-02. A public library has also been established recently in a building, known as Buckland Ghāt, erected in memory of the late Mr. C. T. Buckland, who was Commissioner here, as was also Sir Henry Ricketts, to whose memory a ghāt dated 1847 stands close by. Three weekly papers, the Jyoti, Sangshodhini and Panchanjanya, are published by local presses; they have a small circulation, and it is reported that they are not of great importance. The first race meet was held in 1885, and the races are now an annual institution. The club was established in 1878, and the present building was opened in 1901.

The port.

As related in Chapter II, Chittagong was an important centre of trade in the 16th century, when the Portuguese gave it the

<sup>.</sup> H. Beveridge, The District of Bakerjanj, 1876.

name of Porto Grande or the great port. It is still the chief port in Eastern Bengal, and the construction of the Assam-Bengal Railway has made it the natural outlet for the trade of Assam and part of Eastern Bengal. A detailed account of its trade has already been given in Chapter IX, and it will suffice here to sav that its trade has doubled within the five years ending in 1905-06. The chief article of export in the trade with foreign ports is tea. which is exported to the United Kingdom; in that year it represented half of the total trade with foreign ports. After tea the most important export is jute, and the two together constituted over 97 per cent. of the foreign exports or 89 per cent. of the whole foreign trade. In 1906-07, 341 vessels with an aggregate tonnage of 436,477 tons were berthed, and the value of the imports and exports of the foreign and coasting trade amounted to 861 lakhs. At present, however, there are only three jetties available for ocean-going steamers, of which one has been reserved for the Clan Line, and as the Railway Company are unable to guarantee the use of the other for any steamer company, the Clan Line is the only big steamer line which comes regularly to the port. Chittagong has also been handicapped hitherto by the fact that the Karnaphuli river is not sufficiently deep to allow vessels of deep draught to moor in the stream; but a large twinscrew steam dredger, recently built on the Clyde for the Port Trust, is now being used for the improvement of the harbour. A. length of 5,700 feet on the right bank of the river below the railway terminal jetties has been revetted, and the revetments are to be extended to a length of 3\frac{3}{4} miles.

The further development of the port seems only a matter of time. It has been served for some time by the Clan Line, one of whose steamers cleared with the largest cargo of tea yet shipped from India on the 16th October 1905, the day that Chittagong was transferred to the new Province of Eastern Bengal and Assam; the Hansa Line is following suit; and two of the leading exchange banks have already started branches in the town. A telephonic installation is being carried out; a cotton mill has been erected close to the river; and with the natural facilities available it is possible that the Karnaphuli may eventually be lined with mills and factories.

Chittagong was a favourite health resort in the days of Climate. Warren Hastings and Sir William Jones; the latter built a residence there and is said to have introduced the cultivation of coffee. This was not unnatural, for not only the station is always green, but compared with most stations in Bengal, it is cool from February to June. During these months the thermometer rarely

rises above 85°, and the heat is mitigated by sea-breezes and occasional storms. Sir Joseph Hooker, who visited the place in 1851, describes the climate as "very healthy, which is not remarkable, considering how closely it approximates in character to that of Silhet, and other places in Eastern Bengal, but very extraordinary, if it be compared with Arakan, only 200 miles further south, which is extremely unhealthy." It soon lost, however, its character for salubrity and became notorious for In 1874-75 we find the Commissioner stating that "there is no doubt that the town of Chittagong continues to deserve the evil reputation of being one of the most insalubrious spots in Bengal." Since then conditions have improved very greatly owing to the sanitary improvements effected, and this reproach has been removed: in 1905 the death-rate was as low as 15.7 per mille. But the groups of houses included within municipal limits are so scattered, having about an acre of ground on the average to each house, and waste places, rice fields and jungly ill-kept gardens are so numerous, as to render any comprehensive scheme of scientific sanitation very difficult and expensive. Another great difficulty is presented by the enormous number of tanks and stagnant pools which the town contains—over 1,300 have been counted—the cost of filling up which is practically prohibitive.

Drainage.

The natural drainage of Chittagong is good, owing to the numerous hill streams, which generally empty themselves into the Chaktai Nullah and thence into the Karnaphuli; the general slope is from north-west to south-east, and the Karnaphuli is the ultimate outlet for all the surface drainage. The Chaktai Nullah, which enters the river at Lamār Bazar, receives the drainage of a large portion of the town, but at present, owing to alluvion and diluvion, it is silting up, and its clearance is a pressing need. Besides this, many of the nullahs are tortuous, and in places obstructed and overgrown with rank vegetation; but of late years systematic arrangements have been made for the clearance of jungle.

Watersupply, The water-supply of the town is derived chiefly from wells and springs, and is also conveyed through pipes from a reserved tank to Bakshi's Hat. The railway quarter and the Port have an hydraulic installation and are supplied with water from the Badar tank near the railway station. There is an excellent supply from pure springs, but it is inadequate for the bulk of the native population, who in many cases get their water from foul tanks. A scheme for sinking artesian wells has now been formulated, and boring has been begun.

At present, the roads are badly lighted, the lamps being Lighting. few and far between; but a scheme for supplying the town with electric light has been mooted, the preposal being to use the Barkal falls for a power supply station. These falls or rapids, as they should properly be called, are situated on the Karnaphuli, 43 miles from Chittagong. They extend over 13 miles, with a fall of some 40 feet, and throughout the year a large volume of water passes over them. It is estimated that they could not only supply sufficient power for the station, but also provide electrical energy for the jetties.

Chittagong Subdivision.—Headquarters subdivision of the district, situated between 21° 51' and 22° 59' N., and between 91° 30′ and 92° 13′ E., with an area of 1,596 square miles. The subdivision, which comprises the northern portion of the district, consists of a long strip of land bounded by the Fenny river on the north and by the Harbhang hills on the south, and bisected lengthwise by a line of hills running almost parallel to the Bay of Bengal on the west and the Chittagong Hill Tracts on the east. The whole area is drained by a number of hill streams and rivers pursuing winding courses from east to west, the most important of which are the Sangu and the Karnaphuli. For administrative purposes, the subdivision is divided into nine police circles, viz., Chittagong, Mīrsarai, Sītākund, Hāthazāri, Phatikcharī, Rāojān, Patiyā, Sātkaniā and Bānskhāli. It contains 1,217 villages and one town, Chittagong, the headquarters of the district and the principal port in Eastern Bengal. The population, according to the census of 1901, is 1,153,081, as compared with 1,102,161 in 1891; and the density is 722 persons per square mile, as compared with 223 persons to the square mile in the Cox's Bazar subdivision.

Cox's Bazar.—Headquarters town of the subdivision of the same name, situated in 21° 27′ N. and 91° 59′ E., on the banks of the Bāghkhāli, or as it was formerly known, the Khurusiā river. The town is named after Lieutenant Cox, who died here in 1798 after he had established a colony of Maghs, who sought shelter in British territory after the conquest of Arakan by the Burmese; two-thirds of the population of the town are descendants of these refugees. The population of the town, according to the census of 1901, is 3,845, as compared with 4,347 in 1891 and 4,363 in 1881, and it therefore shows signs of decadence. The Magh section of the community, it is said, are generally becoming poor, and their lungī (silk kilts) weaving industry is languishing, for they are lazy and have failed to advance with the times.

Cox's Bazar is charmingly situated on a low range of sand hills between the Bāghkhāli and the Bay of Bengal with a long open beach towards the sea. The beach is sandy with a gentle slope, and as the rise and fall of the tide are not great, good seabathing can be obtained. It presents a picturesque view during the rains, when the south-west monsoon blows strongly and the sea, after breaking over the outlying shoals, sweeps up in great rollers over the shelving shore. In the hot weather also there is a steady breeze from the sea, which ensures an equable temperature. Tennis-courts and golf-links have been laid out; and a large variety of fish, including excellent pomfret, soles and oysters, are obtainable. The town promises to become a popular health resort. being connected with Chittagong by a steamer service twice a week, maintained by the Retriever Flotilla Company. It is only 88 miles distant from Chittagong by sea, and the journey occupies an average of six hours. In order to remove a possible source of danger, the adjoining fishing village of Bāharcharā, the insanitary conditions of which appeared likely to injure its prospects, has recently been included in municipal limits.

The town contains the subdivisional offices, civil and criminal courts, a registration office and a Tahsil office for the administration of the Government estates. In appearance it differs altogether from a Bengal town. The places of worship, and the rest-houses of the Maghs, are well and solidly built, and some of the houses of the well-to-do residents are not only substantial, but very picturesque and neatly ornamented. houses are built entirely of timber, raised on piles, after the Burmese fashion; with their surrounding verandahs and decorated gable-ends, they present an appearance not unlike that of a Swiss cottage. At short intervals, all through the Magh portion of the town, are small covered stands, each containing vessels of fresh drinking-water and a cup; the vessels are refilled daily by the Magh women, and the regularity with which this duty is attended to, together with the large number of rest-houses, shows the stranger at once that he has arrived in hospitable quarters. The happy, free, and careless air of the people, as they walk through the town smoking, or lounge and gossip in the rest-houses, presents a marked contrast to the dreary appearance of the ordinary Bengali villager; while the picturesque dresses of the women, and their apparent happiness as they carry on their domestic duties, or weave their coloured cloths at the thresholds of their houses, shows that as regards the treatment of their wives and daughters, the Buddhists of Cox's Bazar have remained uninfluenced by their Hindu and

Muhammadan neighbours. The court houses, jail, a good dispensary, a madrasa and several sedis or masonry pagodas are the chief buildings. One of the latter can be seen from a similar pagoda at Rāmu and that again from Garjaniā.

One of the earliest accounts of Cox's Bazar is contained in a letter written to Government in 1817 by Mr. P. W. Pechell, Magistrate of Chittagong, who succeeded in obtaining a promise that the town land should be the freehold of the Maghs in perpetuity. "Cox's Bazar," he writes, "is a large town upwards of a mile in length, situated on a spot of sand about (at the utmost) a quarter of mile broad, between the north end of the hills called the White Cliffs and the river Bagcolly. This town is surrounded by a stockade, and is entirely full of houses, not built in the way villages in this country commonly are, with compound and gardens attached, but closely contiguous to each other. ground it stands on being sand, and within two or three hundred vards of the sea, is unsusceptible of cultivation, and was fixed upon by Mr. Cox in 1798, being waste land the property of Government, as a convenient spot for the houses of the new Mugg colony then to be erected; since which time the inhabitants have enjoyed it rent-free, each person occupying his house as his own property." Mr. Pechell then describes the tricks that bad been resorted to by outsiders in order to acquire proprietary right and oppress the inhabitants, and urged on Government to confirm the grant rent-free. His recommendation was acceded to on the 10th April 1818, and a sanad was then granted and filed in the Collector's office. This sanad was recorded in the English, Persian and Magh languages, and declared, "for the information of all persons concerned, that the Government has been pleased to resolve that the ground on which the town of Cox's Bazar is built being now the property of Government, and bounded on the north by the river Bagcolly, and on the south-east and west sides by a stockade, shall be held exempt from revenue by the actual occupiers of the houses in the said town as their own undivided property, and that no person now has, or hereafter shall have, right or power to demand or exact from any of the said inhabitants of the town any money or other articles on the plea of revenue, all claim to which for the ground on which the town is built is hereby given up on the part of Government."\*

Cox's Bazar Subdivision.—Southern subdivision of the district, lying between 20° 35′ and 21° 56′ N., and between 91° 49′

<sup>•</sup> H. J. S. Cotton, Memorandum on the Revenue History of Chittagong, Calcutta, 1880.

and 92° 23° E, with an area of 896 square miles. The subdivision consists of the islands of Kutubdiā and Maiskhāl and of a long tract of low hills and narrow valleys washed by the Bay of Bengal on the west and having the Chittagong Hill Tracts and the Nāf estuary as its boundary on the east. The greater part of the mainland tract is comprised within Teknāf, a long promontory jutting out in the extreme south. This promontory is formed of a barren range of hills running down the centre and leaving only a narrow strip of cultivation on the sea shore. In the north of the promontory the hills recede and leave a broad plain on their east face, which contains some of the richest land in the district.

The subdivision, which is almost entirely a Government estate, is divided for administrative purposes into four police circles, viz., Cox's Bazar, Maiskhāl, Chakariā and Teknāf. It contains 233 villages and one town, Cox's Bazar, its headquarters. The population, according to the census of 1901, is 200,169, as compared with 188,006 in 1891, and is very sparse, the density being only 223 persons to the square mile, as compared with 543 for the whole district. In Teknāf thāna the density of population falls as low as 140 persons to the square mile; and Cox's Bazar thāna, which supports 310 persons to the square mile, is the most thickly inhabited part of the subdivision. As elsewhere in the district, Muhammadans predominate, with a strength of 161,368; Buddhists number 22,779 and Hindus only 16,014.

Garjaniā.—Village in the Cox's Bazar subdivision, situated 7 miles east of Rāmu on the Arakan road, near the eastern boundary of the district. It is a police outpost and contains a large sedi or masonry pagoda; a large market, called Bohmong's Hat, is held here. The village was the scene of a Burmese raid during the troubled times following the Burmese conquest of Arakan. According to Hamilton's Hindostan (1820), "from this period commenced an incessant migration of Maghs of Arakan in this district, which was also selected as an asylum by all the adjacent insurgent chiefs from the Burman dominions, especially a leader named King-berring, whose adherents were estimated at 3,000 men. In April 1814, a party of 500 Burman troops pursued this chief into Chittagong, and proceeded to Garjania, where, in less than 24 hours, they erected a double stockade, above 120 yards square, filled in the interior with crow's feet and sharpened stakes. Within the second stockade they dug a trench, bordered by a parapet 11 feet thick, and nearly high enough for pretection against musquetry. One additional day's work would have rendered the stockade a most formidable

military position; but on the approach of 125 of the Company's troops under Captain Fogo, they lost heart and retreated."

Hāthazāri.—Village in the headquarters subdivision, situated on the Rāmgarh road, 12 miles north of Chittagong. It is an important market and the headquarters of a police circle comprising 109 square miles; it contains a Munsif's court, sub-registry office, dispensary and inspection bungalow. At a distance of  $1\frac{1}{2}$  miles south of the village there is an old mosque with an interesting and valuable inscription from which we learn that a mosque was built by one Rasti Khān in honour of saint Ola in 1416 A. D. during the reign of Bārbak Shāh, independent king of Bengal. This inscription carries us back to the Afghan occupation 250 years before the Mughal conquest. The name of the village, which means the hāt or market place of a battalion of 1,000 men (hasāri), shows that it was once a post at which Muhammadan troops were stationed.

Jaynagar Estate.—A large temporarily settled estate with an area of 24,303 acres (or 38 square miles) properly known as the Noābād Taraf Jaynārāyan Ghosāl. Its history is an interesting one. In 1761 the attention of the Council at Chittagong was drawn by the Raja of Arakan to the large area of waste land in the south of the district, and a notice was issued offering the land free of rent for five years to any one who would cultivate it. In pursuance of this notice, a sanad was granted to Jaynārāyan Ghosāl, a nephew of the then Dīwān or head revenue official in the service of the Company, for the lands in many different places which had been cleared by him in virtue of earlier grants; and this property was converted into the zamindari of Jaynagar. At the survey of 1764 it was found that it extended over 22.231 acres, of which only 4,394 acres were cultivated; but extensive reclamations were now made by the tālukdārs of the estate. For some years all large tracts newly brought under cultivation were treated as appertaining to the Jaynagar estate. and in 1788-89, when it was measured, its area was found to be no less than 41,717 acres, of which 9,950 acres were cultivated. The proprietors of the estate had for several years put forward a claim to all the waste lands in the district; but when an enquiry was held in 1796, a sanad produced by the proprietor, under which he claimed all the waste lands in the district, was declared by Government to be a forgery. The entire estate was thereupon attached by the Collector in 1800. In order to give effect to this attachment, a measurement of the attached lands was made in 1800-01. which returned the whole area as 67,964 acres, of which 20,815 acres were under cultivation. These lands, which were

described as noābād, were settled direct with the tālukdārs who had previously held under the Ghosāls, the aggregate assessment imposed being Rs. 51,749.

The Ghosals, the proprietors of the Jaynagar estate, now brought a suit against Government to set aside the attachment which had been made by the Collector in 1800; and in 1815 the Sadar Dīwāni Adālat passed a decree removing the attachment and ordering a restitution of such lands as had been recorded in the survey of 1764 as appertaining to the estate. In order, therefore, to give effect to this decree, it was necessary to restore 22,231 acres to the Jaynagar estate, the balance of the area measured in 1800, viz., 45,733 acres, being at the disposal of the Government as noabad lands. The decree was executed, and the Ghosāls placed in possession in 1822. In 1832 the property passed, by the foreclosure of a mortgage, into the hands of the Receiver of the Supreme Court, on behalf of the estate of one Ladli Mohan Tagore. He took no measures to look after the interests of the estate, and it came under the khās management of the Collector. Meantime, there had been, and there continued to be, much discussion about the area and the assessment to revenue of the restored lands until the year 1836, when it was decided that the exact identification of the lands should be effected in the course of a complete revenue survey of the district, which should determine the boundaries and area, not of this mahal only, but of all permanently settled lands in the district. At the close of this survey and settlement in 1848, the Jaynagar estate consisted of 22.231 acres, held in scattered patches in 568 villages. that time it had been impossible to measure off the lands of the estate separately from the noabād lands which had been awarded to Government, and one of the chief objects of the survey was to mark off. separate, assess and settle with the Ghosals the Jaynagar noābād lands measured in 1764 as their property, i.e., to execute the decree of the Court of Sadar Diwani Adalat passed in their favour in 1815.

The estate is subject to periodical measurement and reassessment, and the term of lease having expired in 1902, the revenue was then raised from Rs. 9,000 to Rs. 13,000 for an area of 38 square miles. The proprietors refused to accept the settlement, and the estate was taken under Government management; it was subsequently restored to them at the increased revenue, pending the decision of their claim that it is a permanently settled estate.

This estate must not be confused with the permanently settled estate known as Taraf Jaynārāyan Ghosāl, which is also named after the grantee of the Jaynagar estate. This is the largest taraf

in the district, having an area of 37 square miles (23,609 acres) and paying a revenue of Rs. 48,793. The bulk of the lands lie in 38 villages in Mīrsarai thāna, but 4,000 acres are scattered about in 56 villages in six other thānas. It was sold for arrears of revenue early in the 19th century, but was bought in by Government; and eventually the proprietary right was conferred on one Rāj Krishna Banerji of Howrah, whose heirs are the proprietors.

Kutubdiā.—Island in the Cox Bazar's subdivision, situated off the coast between 21° 43′ and 21° 55′ N., and between 91° 49′ and 91° 54′ E. It has an area of 35 square miles, being about 13 miles long and 2 to 3 miles broad; its population, according to the census of 1901, is 10,693. The island is low-lying, and 30 years ago doubts were expressed that it was sinking into the sea. It is exposed to cyclones and liable to inundation, but is protected by a ring of embankments constructed and maintained by Government. These were breached in the cyclone of 1897, which caused terrible havoc in the island, but they have since been repaired and are now kept up by the Collector. Almost the whole of the island is a Government ryotwāri estate. There is a light-house on the west coast, and a dispensary at the village of Kutubdiā.

Maiskhāl.—Island in the Cox's Bazar subdivision, situated off the coast between 21° 29' and 21° 45' N., and between 91° 50' and 91° 58' E. It has an area of 102 square miles, being 60 to 70 miles long and 7 to 8 miles broad; its population. according to the census of 1901, is 24,228 souls. Through the centre of the island and along the eastern coast line rises a range of low hills 300 feet high; but the coast to the west and north is a low-lying tract, fringed by mangrove jungle, which in its general characteristics resembles the Gangetic Sundarbans. greater part of the island belongs to a permanently settled estate. Maiskhāl village is the headquarters of a police circle extending over 138 square miles; and in the hills on the coast, opposite the Bāghkhāli river, is built the shrine of Adināth, dedicated to This shrine, which attracts pilgrims from all parts of the district, is controlled by the Mahanth of the Sambhunāth shrine at Sitakund. By its side on the same hill is a Buddhist pagoda.

Patiyā.—Village in the headquarters subdivision, situated on the Arakan road  $9\frac{1}{2}$  miles south-east of Chittagong. It is the headquarters of a police circle extending over 262 square miles, and contains two Munsifs' courts, a sub-registry office, a Government estate *Tahsil* office, a dispensary and an inspection bungalow. It is a trade centre of some importance and has a large market.

Phatikchari.—Village in the headquarters subdivision, situated in the north of the district, near the boundary of the Chittagong Hill Tracts, on the Rāmgarh road, 24 miles north of Chittagong. It is the headquarters of a police circle extending over 215 square miles, and contains a Munsif's court, sub-registry office, dispensary and inspection bungalow.

Rāmu.—Village in the Cox's Bazar subdivision, situated 9 miles east of Cox's Bazar on a continuation of the Arakan road. It is a police outpost and an important market serving the south of the district. The name Rāmu is of some antiquity, and as stated in Chapter II, the kingdom of Rame is mentioned by Ralph Fitch as a country of the Mogen (Maghs). Sir Arthur Phayre in his History of Burma says:-"The name Ramu is applied to the country of Chittagaon in a general description of Bengal which is found in Purchas. These instances probably explain the name of Ruhmi, Rahma, or Rahmaa given to a kingdom on the sea coast of the Bay of Bengal by the Arabian voyagers in the ninth and tenth centuries of the Christian era. It has been supposed to refer to Ramri in Arakan, or to Ramanya, the classic name of Pegu. There is now a village called Ramu in the southern part of the Chittagaon district, which is a police station. It probably represents the name by which the territory in question was known to the Arabs, and which we may now conclude extended from the north bank of the river Naf to the confines of Bengal."

When the country was ruled by the Arakanese there was a fort here, which was commanded by a brother of the Rājā of Arakan and was stormed by a Mughal force after the capture of Chittagong in 1666. Subsequently the Rājā of Arakan made an attempt to recover possession of it and sent a detachment overland, but this force was easily routed by the Mughals. The latter did not attempt any further advance southwards. According to the Alamgīrnāma, "as the space between Chātgāon and Rāmbu is very hard to cross, full of hills and jungles, and intersected by one or two streams which cannot be crossed without boats, and as in the rainy season the whole path is flooded, and this year there was only a small store of provisions and the rainy season was near, therefore the sending of the Mughal army into Arakan was put off."

Rāojān.—Village in the headquarters subdivision, situated near the eastern boundary of the district on the Hill Tracts road, 8 miles east of Hāthazāri and 20 miles north-east of Chittagong. It is the headquarters of a police circle extending over 214 square miles, and contains two Munsifs' courts.

Government estate Tahsil office, a sub-registry office, a dispensary and an inspection bungalow. The village is also the site of one of the largest markets in the district.

Sātkaniā.—Village in the south of the headquarters subdivision, situated on the Dalu river. It is the headquarters of a police circle extending over 226 square miles, and contains a Munsif's court, sub-registry office, Government estate Tahsil office and dispensary. A large market is held here, and a second market about  $1\frac{1}{2}$  miles to the west. The adjoining village of Deodighi used to contain a large fortified place.

Shāhpuri (Sāhāpari).—Island in the Nāf estuary in the Cox's Bazar subdivision, situated in 20° 38' N. and 92° 19' E. on the border of Arakan. The island is of some historical interest, as it was the scene of an outbreak which led to the commencement of the first Burmese war in 1824. The island had for many years been in the undisputed occupation of the British, but the Burmese claimed possession of it, and on the night of the 24th September 1823, they proceeded to enforce their claim. A force of 1.000 men landed on the island, overpowered the small British guard stationed there, killed and wounded several, and drove them off the island. As soon as the occurrence was known at Calcutta. a detachment of troops was sent to dislodge the Burmese, who, however, had previously retired. The occupation of Shahpuri by a military force had the effect of arresting for a time the hostile demonstrations of the Burmese on the Chittagong frontier: but not long afterwards the Rājā of Arakan was ordered to expel the English from Shahpuri, and Commissioners from Ava. proceeded to take possession of the island, which had been temporarily abandoned on account of its unhealthiness. This and other acts of hostility rendered war inevitable, and in a proclamation dated the 24th February 1824 war was declared.

Sītākund.—Village in the headquarters subdivision, situated in 22° 38′ N. and 91° 39′ E., 24 miles north of Chittagong. It is the headquarters of a police circle extending over 188 square miles, and contains a dispensary, sub-registry office and inspection bungalow. Its population, according to the census of 1901, is 1,329. Sītākund derives its name from an adjoining range of hills, which runs north from Chittagong and reaches its highest elevation (1,155 feet) at a peak near the village. Sītākund is the holiest place in the district in the estimation of Hindus, for tradition states that Rāma and Sīta, while in exile, roamed about the hills in the vicinity, and that Sīta bathed in the hot spring (kund) which is associated with her name. The spring is no longer in existence, but the site is marked by the temple of

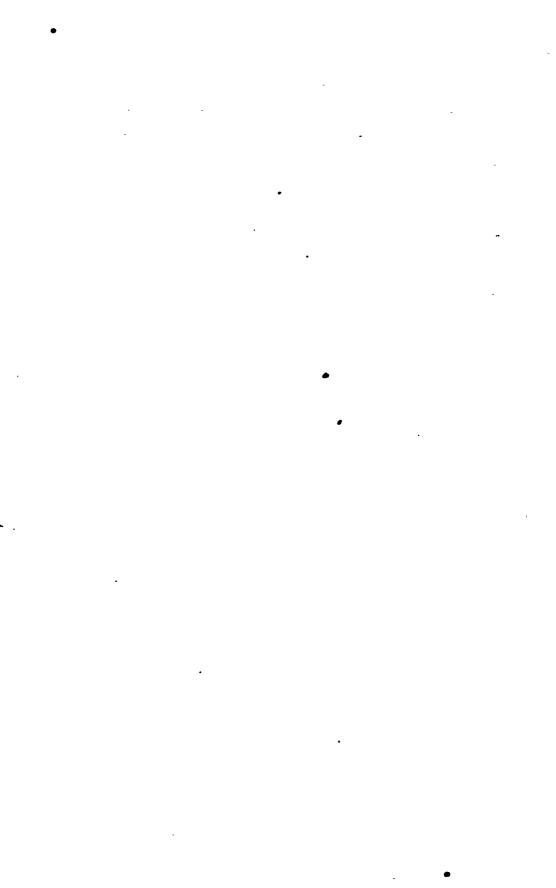
Sambhunāth. The peak of Chandranāth is regarded as a place beloved of Siva, for here, tradition relates, the right arm of Satī fell when severed by the discus of Vishnu. The shrine on the top of the hill contains a lingam or symbolical representation of Siva, and the ascent to it said to redeem the pilgrim from the miseries of future rebirth. Other sacred temples in the neighbourhood are those of Lobanākhya, 3 miles to the north, and Bārabakund, 3 miles to the south, picturesquely situated on hill tops or in romantic glens.

These sacred shrines are visited by pilgrims from all parts of Bengal, the largest gathering taking place at the Siva Chaturdasī festival in February when some 20,000 pilgrims The worship is controlled by Brahmans called assemble. adhikārīs, who send out agents to different parts of Bengal to persuade people to visit their shrines. Lodging houses are maintained for the accommodation of the pilgrims, and the Puri Lodging House Act is in force. Each of the adhikaris is said to realize a large sum at the time of the Siva Chaturdasī festival, for, besides the charge for lodging, they get everything which the pilgrims offer, such as clothes, brass and silver vessels, etc., except the dues paid to the mahanths for the maintenance of the shrines. Recently a number of sheds have been erected by Government for the use of poor pilgrims free of charge. This festival lasts about ten days, and there are minor gatherings during the Doliātrā, Chaitra Sankrānti and Kārtik Purnamāshi festivals, and on the occasion of an eclipse of the sun or moon.

The Chandranāth peak is also regarded as a very sacred site by the local Buddhists, who revere the footprint of Buddha on a stone lying behind the temple, and believe that a Buddhist temple once stood there. They assemble on the hill on the last day of the Bengali year, bringing the bones of their dead relatives and deposit them in a pit which is regarded as sacred to Buddha. A feature of the locality is the inflammable gas which issues from crevices in the rocks. There is a so-called burning spring at Bārabakhund, about 3 miles south of Sītākund, over which a temple has been built; it consists of an ordinary cold water spring, but a jet of marsh gas comes up through the water, which is set on fire and burns and flickers all over the surface. At Lobanākhya, about 3 miles to the north of Sītākund, there is a salt spring, which, like the other kunds or springs, is noticeable merely as a place of pilgrimage.

Sir Joseph Hooker has left the following account of Sītākund in his well-known Himalayan Journals:—" Near Seetakoond (which is on the plain) a hill on the range, bearing the same name.

rises 1.136 feet high. Fields of the poppy and sun (Crotalaria juncea) formed most beautiful crops; the latter grows from 4 to 6 feet high, and bears masses of laburnum-like flowers, while the poppy-fields resembled a carpet of dark-green velvet, sprinkled with white stars, or a green lake studded with water-lilies. The road to the top of Seetakoond leads along a most beautiful valley. and then winds up a cliff that is in many places almost precipitous, the ascent being partly by steps cut in the rock, of which there The mountain is very sacred, and there is a large Brahmin temple on its flank; and near the base a perpetual flame bursts out of the rock. This we were anxious to examine, and were extremely disappointed to find it a small vertical hole in a slaty rock, with a lateral one below for a draught, and that it is daily supplied by pious pilgrims and Brahmins with such enormous quantities of ghee (liquid butter) that it is to all intents and purposes an artificial lamp, no trace of natural phenomena being discoverable."



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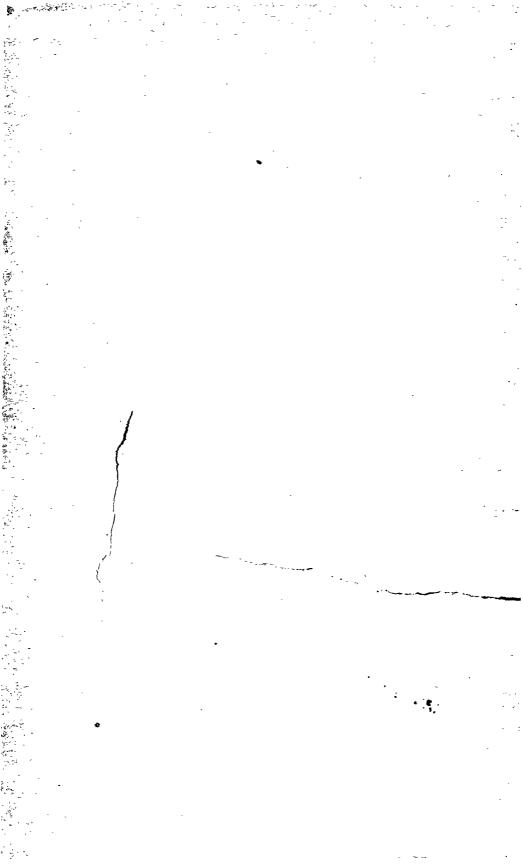
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