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BENGAL,

NATIVE STATES AND FRENCH POSSESSIONS.

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Cooch Behār State (*Kuch Bihār*).—Feudatory State in North Bengal in political relations with the British Government. It lies between 25° 58′ and 26° 32′ N., and 88° 45′ and 89° 52′ E., with an area of 1,307 square miles. It is bounded on the north by the District of Jalpaigurī; on the east by Goālpāra; on the south by Rangpur; and on the west by Rangpur and Jalpaigurī. Boundaries, configuration, and river system.

The State is a low-lying plain, the whole of which has at one time or another been subject to fluvial action. It is intersected by several large rivers, but they are of no use for drainage purposes, except in the cold weather, when they are at their lowest, and even then the fall is so small that they are not very effective. Moreover, any attempt to cut drainage channels to them would lead in the rains to an inundation rather than to the drainage of the area they might be constructed to serve. The State generally is, in fact, hopelessly water-logged, and in the rains it is not uncommon to see the wells overflowing. The general direction of the rivers is from the north-west to the south-east; they rise in the Himālayas and fall into the main stream of the Brahmaputra. The most important are the TISTA on the west and the Sankos on the east, while between these two are situated the Dharlā, the TORSA, the Kāljāni, the Raidāk and other minor streams. The Tīsta enters the State within a few miles of its western boundary and flows in a south-easterly direction for about 15 miles, when it passes into Rangpur. The Jaldhākā, which is called in Bhutān the Di-chu, enters the State at the north-west corner and flows more or less parallel to the Tīsta. It receives as tributaries the Gilāndi, the Duduyā, the Mujnai, and, later during its course when it is called the Mansai, the Satangā, the Dolang and the Dharlā: after its junction with the river last named it assumes the name of Singīmāri. It is finally joined by the old channel of the Torsā, locally called the Dharlā, under which name the united stream leaves the State, after a course of about 60 miles within it with an average breadth of 400 to 500 yards throughout. It is shallow in the dry season, but is liable to heavy floods during the rains. The Torsā bifurcates in its course, one branch flowing south under the name of Dharlā and falling into the Singīmāri (Jaldhākā), while the other turns eastward and falls into the Kāljāni. The Kāljāni in its turn meets the Raidāk, which subsequently joins the Gadādhar, and the united river falls into the Brahmaputra by two mouths, the southern one being known as the Dudhkumār and the northern as the Sankos.

The soil is everywhere alluvial. Where the ground is not occupied by the usual crops of North Bengal, it is covered by Geology and botany.

an abundant natural vegetation. Old river beds, ponds and marshes, and streams with a sluggish current have a copious vegetation of *Vallisneria* and other plants. Land subject to inundation has usually a covering of *Tamarix* and reedy grasses, and in some parts, where the ground is more or less marshy, *Rosa involucrata* is plentiful. Few trees occur on these inundated lands; the most plentiful and largest is *Barringtonia acutangula*. On the higher ground also the trees are few and usually rather stunted, and the greater portion of the surface is covered with grasses, the commonest of these being *Imperata arundinacea* and *Andropogon aciculatus*. Among the trees the most conspicuous is the red cotton tree (*Bombax malabaricum*); the *sissū* (*Dalbergia sissoo*) and the mango occur as planted or sometimes self-sown species, bamboos grow in profusion, and palms, especially the *areca*, are common. Near villages there are usually thickets or shrubberies and more or less useful trees of a rapid growth and woody character. A few tracts are maintained as shooting reserves, but these consist mainly of grass jungle, and there is no real forest.

Fauna. The big game with which the State formerly abounded has receded northwards before the advance of cultivation, and within its limits the only wild animals now found are leopards, bears, deer and hog; of small game, florican and francolin are plentiful in some of the grassy plains.

Climate and temperature. The temperature is rarely excessive, the thermometer never rising above 93° in the shade and seldom so high, but the abnormal humidity makes the climate very trying and unpleasant. The lowest recorded temperature is 49° and the mean about 78°. The average annual rainfall is 123 inches, of which 5·1 are received in April, 14 in May, 29·4 in June, 24 in July, 22·4 in August, 19·4 in September and 5·5 in October.

Natural calamities. In 1887 a severe cyclonic storm caused great havoc over a tract, 25 miles in length and 8 in breadth, including Cooch Behār town. The earthquake of 1897 caused enormous damage to property. The bridges along the railway were broken and the permanent way was much cut up by fissures; roads with their bridges suffered similarly, and the total damage done to property, communications, wells and tanks was approximately 20 lakhs. Tremors and shocks were frequent for a year after the main upheaval, during which jets of hot water and sand issued from the fissures. Prior to 1897 the severest and most frequent shocks of recent years were felt in 1885. Dr. Buchanan Hamilton makes mention of the frequency of earthquakes in this part of Bengal in 1808. The State has occasionally suffered severely from floods, the most memorable being those of 1787, 1822, 1842 and 1878.

History. This tract once formed part of the ancient and famous kingdom of Kāmarūpa. In the 15th century it was ruled by a

dynasty of Khen kings, the last of whom, Nīlāmbar, was overthrown by the Afghāns under Alā-ud-dīn Husain, king of Gaur, in 1498. Local traditions of this dynasty are still current, and more than one of its capitals are pointed out at the present day. Alā-ud-dīn appointed his son governor over Nīlāmbar's territories with the object of pushing his conquest further east, but the latter was eventually defeated and his troops driven out of the country. A period of anarchy ensued, during which a number of petty principalities was formed by independent local rulers called Bhuiyās, and a fresh kingdom was then established by the Koches. A divine parentage is ascribed to the Koch kings; the tradition is that the god Siva fell in love with Hirā, the wife of a Koch chief named Hājo, and the result of their intimacy was a boy named Bisu or Biswa Singh. The account current in the State, however, is that the kingdom was founded in 1510 by a chief named Chandan, and that he was succeeded by his cousin, Biswa Singh. The latter soon proved himself to be a mighty chief and brought under his rule the whole tract from the Karatoyā on the west to the Barnadi on the east. He was succeeded about 1540 by his son Nar Nārāyan, the greatest of the Koch kings, who with the aid of his brother Silarai, conquered the rulers of all the neighbouring countries to the east and south, and even ventured to wage war with the Muhammadans. After Silarai's death, his son Raghu rebelled (in 1581), whereupon Nar Nārāyan divided his kingdom into two parts and gave up to Raghu the portion east of the Sankos river. This event soon led to the downfall of the Koch kings. Nar Nārāyan died in 1584, and his son, Lakshmī Nārāyan, who succeeded him, having quarrelled with Raghu's son, Parikshit, invoked the aid of the Mughals and declared himself a vassal of the emperor of Delhi. The history of the Koch kings now loses all general interest. The eastern kingdom was gradually absorbed by the Ahoms, while the western was shorn of its outlying possessions by the Mughals on the south and west and by the Bhotiās on the north, until at last only the modern State of Cooch Behār remained in the precarious possession of Biswa Singh's descendants. Internal affairs also fell into deplorable confusion. In accordance with the curse of the Hindu political system, three families, all scions of the royal stock, the Nāzir Deo, the Dīwān Deo and the Raikat of Baikuntpur, each claimed a hereditary position which was inconsistent with unity of administration, and did not hesitate to call in the foreign foe to support their pretensions.

It was under these circumstances that the attention of the East India Company was first attracted to Cooch Behār and its affairs. In 1772 the Nāzir Deo having been driven out of the country by his rivals, who were aided by the Bhotiās,

and the Rājā having fled to Pāngā, the former applied for assistance to Warren Hastings, the Governor-General of Bengal. A detachment of sepoys was accordingly marched into Cooch Behār, and the Bhotiās were expelled after a short resistance and forced to sue for peace through the intervention of the Lāma of Tibet. The treaty between the East India Company and the Rājā of Cooch Behār made on this occasion bears date April 5, 1773. By the third clause the Rājā acknowledged subjection to the East India Company and consented to his country being annexed to the Province of Bengal. This right of annexation was, however, eventually waived by Government. In subsequent clauses the Rājā promised to make over to the Company one-half of his annual revenues, according to an assessment to be made by the Company. This moiety was permanently fixed by the Collector of Rangpur in 1780 at Rs. 67,700. Fresh domestic dissensions soon reduced the administration to a deplorable condition, and in 1788 a Commission of two Civil Servants was nominated to enquire into the state of the country. The Commissioners concluded their report by recommending the appointment of a Resident or Commissioner at the town of Cooch Behār. This office subsequently became merged in that of Governor-General's Agent for the North-East Frontier. The present Mahārājā, His Highness Colonel Sir Nripendra Nārāyan Bhūp Bahādur, G.C.I.E., C.B., was placed on the *gaddi* on the 6th August 1863, when he was only 10 months old. In January 1864 the succession was sanctioned by Government, but a British Commissioner was appointed to undertake the direct management of affairs of the State during the minority of the young ruler. Several salutary reforms were thus introduced: a complete survey and settlement was made, and the various departments of the State were put upon the firm and substantial basis which underlies the present system of administration. The Mahārājā received a wholly European training and education, and has at various times visited England. In 1878 he married the eldest daughter of the great religious reformer the late Keshab Chandra Sen, and in 1883 he assumed charge of the State. He took part in the Tīrāh campaign in 1897 and is an aide-de-camp to the King-Emperor. The Mahārājā is entitled to a salute of 13 guns.

Archæology. Ruins of an old city founded by Rājā Nīladhwaj exist at KAMATAPUR.

The people. The population increased from 532,565 in 1872 to 602,624 in 1881, a gain of 13·1 per cent., but most of this was apparently due to improved methods of enumeration. Ten years later it fell to 578,868, owing mainly to the unhealthiness of the climate and, to a smaller extent, to emigration. In 1901 a further decline of 2·05 per cent. took place, the population decreasing to 566,974. The only thāna in which an increase occurred was Haldībāri, the

principal centre of the jute trade. This is on the Eastern Bengal State Railway and enjoys with Cooch Behār the reputation of being the healthiest portion of the State. The falling off was greatest in the head-quarters thāna, where it was due not only to unhealthiness, but also to migration to Fulbāri. The State is liable to very severe epidemics of cholera. Insanity is more common than elsewhere in Bengal, and deaf-mutism and leprosy are also prevalent. The population is contained in 1,192 villages and 4 towns, COOCH BEHAR, the head-quarters, MATABHANGA, HALDIBARI and DINHATA. The villages are not compact as in most parts of Bengal, but each farmer ordinarily lives apart in a separate homestead on his own land surrounded by his farm servants and adherents. The average number of persons per square mile in 1901 was 434, the density being greatest in the south. There is some immigration from Sāran and other Bihār districts and the United Provinces. The vernacular of the State is the Rangpuri or Rājbansi dialect of Bengali. Hindus number 397,946 persons, or over 70 per cent. of the population, and Musalmāns 168,236, or most of the remainder.

Their castes and occupations.

The Rājbansis or Koches with 338,000 are the distinctive caste of the State numbering 60 per cent. of the total population, while most of the Nasyas (43,000) and Shaikhs (124,000) represent descendants of converts from this caste to Muhammadanism. Though the Koches freely call themselves Rājbansis, it is believed (see Bengal Census Report, 1901, Part 1, pp. 382-383) that the two communities originally sprang from entirely different sources, the Koches being of Mongoloid origin, while the Rājbansis are a Dravidian tribe who probably owned the name long before the Koch kings rose to power. In Cooch Behār the persons now known as Rājbansis are either pure Koches, who though dark have a distinctly Mongoloid physiognomy, or else a mixed breed in which the Koch element usually predominates. The population is almost entirely agricultural, 86·5 per cent. being dependent on agriculture for their livelihood, 4·9 per cent. on industries and 1·4 per cent. on the professions.

Christian Missions.

Christians number 143, of whom 24 are natives. A Swedish mission called the Scandinavian Alliance Mission works in Cooch Behār, but has made no local converts.

General agricultural conditions.

The soil is of alluvial formation with a large admixture of sand and a substantial deposit of light loam to a depth of about 2 feet. Towards the west the soil is stiffer and contains a larger proportion of clay than sand. High-lying lands are used mainly for homesteads or for tobacco cultivation and, to a certain extent, where they contain a good admixture of sand, for the cultivation of the *bāri* or spring rice crop. On low-lying lands, possessing a smaller proportion of sand, *haimantik* or autumn rice is usually grown.

Agricultural statistics and principal crops.

In 1903-04 the net area cropped was 638 square miles, 159 square miles were current fallow, 295 were culturable waste other than fallow, and 199 were not available for cultivation, while 15 square miles were under forest. Of the net cropped area 26 square miles were estimated to be twice cropped. By far the most important staple is rice, of which there are two crops; the *bitari* or early crop is sown broadcast, while the *haimantik* or late one is transplanted. Other food crops are *china*, *kaon*, maize and pulses, including *mūng*, *masūr*, *khesāri*, *thākari*, *kurthi* and *rahar*. Oilseeds, principally mustard, are extensively cultivated. The local tobacco, which is grown on 55 square miles, is a very important crop and has a great reputation. Burma cheroots are usually manufactured from tobacco grown in Cooch Behār and the adjoining British Districts. Jute is grown on 34 square miles; and that grown in Haldībāri and Chaurāhāt is of exceptionally good quality and commands a high price in the Calcutta market.

Improvements in agricultural practice.

The cultivation of sugarcane has been only recently introduced, but is increasing. Cultivation generally is extending, but cultivators are averse to the adoption of new methods; the only manure used is cow-dung for the tobacco crop.

Cattle.

There is no dearth of pasturage, but the local cattle are of a very small and inferior breed. The State keeps some bulls for breeding puspose, but the crossing of heavy imported bulls with the light local cattle has not proved a success. Large numbers of cattle yearly die from rinderpest, and a veterinary officer has recently been appointed to perform inoculations in the localities chiefly affected. Bullocks for draft purposes are imported in numbers from Sonpur and elsewhere, and sold at fairs at Haldībāri and Chaurāhāt.

Irrigation.

The State contains innumerable tanks besides 40 masonry wells, 85 Rānīganj pipe-wells and 30 tube-wells, but for irrigation it depends entirely on its heavy rainfall. Famine is unknown.

Arts and manufactures.

A rough cloth is prepared from the silk of the *endi* worm, which is fed on the castor-oil plant. Coarse cotton fabrics are woven for local use, and the Gāro and Mech women make cloths of variegated colours for their own wear. A considerable amount of excellent gunny cloth is made, especially in Mekhliganj; this locality was once noted for the manufacture of coloured carpets and curtains woven from pure jute and known as *mekhli*, but the industry is dying out. *Ghi* and mustard oil are made locally in large quantities and molasses to a limited extent in the west and south.

Commerce.

The chief exports are tobacco, jute, paddy, mustard seed and mustard oil, and the principal imports cotton piece-goods, kerosene oil, sugar, molasses, salt, and brass, copper, and earthenware utensils. Jute and paddy are exported from all parts of the State, the baled jute going mainly to Calcutta and

the unbaled to Sirājganj. The tobacco trade is chiefly in the hands of Magh merchants, who pay yearly visits to Mekhligunj and Lāl Bazar and purchase almost the entire crop for export to Burma. Several European jute firms are established at Haldībāri and Chaurāhāt, but otherwise most of the trade is in the hands of Mārwāri merchants. Some tobacco, mustard seed and mustard oil are sent down by water to Dacca. Paddy and rice are largely exported to the tea gardens in the Duārs and sometimes by boat to Sirājganj. The railway extension in the State has recently given considerable impetus to both the jute and tobacco trade, though the Mārwāri and other native traders still prefer the river routes to the railway.

Railways and roads.

The Cooch Behār State Railway (2′ 6″ gauge) runs from Gitaldāha junction, where it connects with the Eastern Bengal State Railway system, to Jaintia at the foot of the Bhutān hills; its total length is 53½ miles, of which 33½ lie within the State. The new extension of the Eastern Bengal State Railway from Mughal Hāt to Dhubri runs through the south-east of the State for a distance of 12 miles, and on the west the northern section of the line does so for a distance of 5½ miles. A short section (2½ miles) of the Bengal-Duārs Railway from Barnes Ghāt to Lālmanir Hāt also lies within the State. These three lines are all on the metre gauge. The State contains 382 miles of road, of which 5½ miles in Cooch Behār town are metalled; there are also 187 miles of village paths. The most important roads are the emigration road which runs eastward through the State to Dhubri, passing through Haldībāri, Mekhligunj, Pātgrām, Mātābhānga and Cooch Behār, and the Buxa and Rangpur roads.

Water communications

The Tīsta is navigable for boats of 3 or 4 tons burthen throughout the year. The Jaldhākā is navigable by boats of 7 tons burden up to the junction of the Mujnāi, whilst boats of smaller tonnage can go as far as Fālākāta in Jalpaigurī District. The Kāljāni is a deep stream and carries a considerable river traffic; boats of 7 to 11 tons come up all the year round, and timber from the Western Duārs is floated in considerable quantities down the river to the Brahmaputra from Alīpur. The most important ferry is that over the Tīsta river.

Administration.

For administrative purposes the State is divided into 5 sub-divisions, Cooch Behār, Dīnhāta, Mātābhānga, Mekhligunj and Tufānganj. At the head of the administration is the State Council, which consists of His Highness the Mahārājā Bhūp Bahādur as President, the Superintendent of the State as Vice-President, the Dīwān as revenue member, and the Civil and Sessions Judge as judicial member. In judicial matters the powers of the High Court have been delegated to it, while in revenue matters it sits as a Board of Revenue; it exercises also legislative and executive powers.

The Superintendent of the State, who is an officer lent by the British Government, is the executive head of criminal justice, the police, jail, education, public works and other minor departments. The Dīwān is in charge of the revenue department, being responsible for the collection of all kinds of revenue and the supervision of all proceedings in connection with it; he exercises the powers of a Collector in a British District, and in some cases those of a Commissioner. The sub-divisions are in charge of *naib ahlkārs*; the head-quarters *naib ahlkār* is the general assistant of the Dīwān in executive matters and also holds charge of the Cooch Behār treasury. Below the *naib ahlkārs* is a grade of sub-*naib ahlkārs* whose powers are similar to those of sub-deputy magistrate-collectors in Bengal. The *naib ahlkārs* and sub-*naib ahlkārs* are assisted by divisional *kānungos*, who are employed on survey and enquiry work.

Civil and criminal justice.

The principal courts are the State Council, which is the highest appellate court in all branches of judicial administration, the courts of the Civil and Sessions Judge, the *Faujdāri Ahlkār*, and the Assistant Sessions Judge. On the criminal side the Civil and Sessions Judge exercises all the powers vested in a Sessions Judge according to the provisions of the Criminal Procedure Code, except that under the rules of the State capital punishment is never resorted to. In his civil capacity he discharges the functions of a District Judge, as defined by the Civil Procedure Code. An appeal lies to him from the decisions of the Assistant Civil Judges, *naib* and sub-*naib ahlkārs*. He is also *ex-officio* registrar of deeds. The *Faujdāri Ahlkār* exercises the powers of a District Magistrate, as defined in the Criminal Procedure Code; he is also in charge of the jail. The powers of the Assistant Civil Judges extend in the Cooch Behār subdivision to title suits, suits ordinarily dealt with by a small cause court and rent suits of which the value does not exceed Rs. 1,000, and in the other sub-divisions to title suits of which the value exceeds Rs. 500 but is not above Rs. 1,000. The *naib* and the sub-*naib ahlkārs* have both civil and criminal jurisdiction; the former exercise the powers of sub-divisional officers as defined in the Criminal Procedure Code, and the latter are second or third class magistrates, as the case may be. The *naib ahlkārs* are also sub-registrars and exercise powers extending to all title suits up to the value of Rs. 500 and to all rent suits and suits of a small cause court nature up to the value of Rs. 1,000. The sub-*naib ahlkārs* exercise jurisdiction in title suits up to the value of Rs. 50 and in rent suit and suits of a small cause court nature up to the value of Rs. 100, each in his respective sub-division. In criminal matters they are subordinate to the *Faujdāri Ahlkār* and on the civil side to the Civil Judge.

The revenue receipts under the main heads in 1903-04 amounted to 23·29 lakhs, of which 13·66 lakhs was derived from land revenue, 1·52 lakhs from stamps, 1·11 lakhs from excise and opium, 1·39 lakhs from the Cooch Behar State Railway, 4·91 lakhs from the Mahārājā's estates outside Cooch Behar, and Rs. 69,000 from other sources. The revenue receipts under the same heads in 1880-81, 1890-91 and 1900-01 were 12·95, 18·00 and 22·55 lakhs respectively. The Cooch Behar State Railway had not been constructed in the two first years. Revenue.

There is very little information as to the land revenue arrangements before the State came into contact with the British in 1773. At that time revenue was collected by the State officers, direct from the *jotdārs* or persons holding revenue-paying estates under the State, but in 1790 the collection of the revenue was entrusted to *ijāradārs* or farmers. The system was unsatisfactory and resulted in a great deal of oppression, and during the minority of the present Mahārājā the State was completely surveyed and settlement was made direct with the *jotdārs*; the operations were concluded in 1877, and the demand was then fixed at 9·39 lakhs. A subsequent resettlement of the State concluded in 1897 raised the demand to 12·41 lakhs, the increase being distributed over 5 years; the term of this settlement will expire in 1917-18. In addition, a few permanently settled estates pay an annual revenue of Rs. 7,000. A comparatively small quantity of land is held revenue-free or on service tenures. The *jotdārs* pay the State a revenue assessed according to the rates fixed for lands which have been measured and classified; their holdings are heritable and transferable, and are liable to be sold summarily for arrears of revenue. They can also be resumed by the State on the violation of the terms of the lease or for a public purpose, compensation being paid in the case of temporarily settled estates for standing crops and homesteads, while a fair and equitable price is paid or an exchange of land is made in the case of permanently settled estates. Below the *jotdārs* are several grades of under-tenures known successively as *chukānis*, *dar-chukānis*, *daradar-chukānis*, *tasya-chukānis*, *tali-chukānis* and *tasya-tali-chukānis*. At the time of the settlement it was found that the average area of a *jot* was 37 acres, of a *chukāni* holding 7 acres, of a *dar-chukāni* 5 acres, and of a *daradar-chukāni* 3⅔ acres, while the lower grade holdings averaged between 2½ of and 2⅔ acres. The quantity of land held on an average by the *jotdār* and not sublet to under-tenants is 10 acres. The rates per acre for cultivated land payable by the *jotdārs* vary from R. 1-14 to Rs. 3 for low lands, and from 15 annas to R. 1-11 for high lands other than garden and homestead lands and lands on which the valuable betel-nut and tobacco crops are grown, for which special rates are fixed. The *chukāni* rates are 35 per cent. in excess of the *jot* Land revenue.

rates, and where there are other holders below the *chukānidār*, the cultivating ryot pays a rate 60 per cent. in excess of the *jot* rate, the profit of 25 per cent. being divided between the *chukānidār* and any other intermediate middlemen.

Miscellaneous revenue.

The administration of excise is conducted on the same principles as those adopted in British territory. The State has its own excise department, each sub-division is an excise circle, and the outstill system has been introduced. The greater portion of the excise revenue is derived from the duty and license fees on *gānja* and hemp drugs; next in importance come the receipts from the sale of country spirit; and a considerable amount is also realized from the duty and license fees on opium. Poppy was formerly grown and opium manufactured in the State; but in 1867 the cultivation of poppy was prohibited on the British Government agreeing to supply opium at cost price. The cultivation of *gānja* has also been stopped, and the drug is obtained from the British District of Rājshāhi. The stamp revenue is collected under special Acts passed by the State Council. It is mainly derived from judicial documentary and court-fee stamps; copying-fee stamp and receipt stamps form a minor source of income. The stamps last mentioned have only been in use since 1903. No customs or transit dues are levied, and there is no tax on salt.

Local self-government.

At Cooch Behār town and the sub-divisional head-quarters, Dīnhāta, Mātābhānga and Haldībāri in the Mekhligānj sub-division, there are town committees appointed by the State, consisting of official and non-official members in the proportion of 2 to 1; subject to the general control of the Council, the management of all matters ordinarily entrusted to municipalities rests in the hands of these bodies. The funds administered by the town committees are derived mainly from *chaukidāri* and latrine taxes supplemented by State grants.

Public works.

The maintenance of the Mahārājā's palace and of all public buildings and communications is in the hands of a Public Works department. The average annual outlay of the department is about 1¾ lakhs, of which about Rs. 50,000 is devoted to the maintenance of communications.

Army.

The State employs 156 sepoys and *sowārs* of all ranks for guard, orderly and escort duties; these are subordinate to the Superintendent of the State.

Police and jails.

The State contains 7 police stations, and the strength of the force subordinate to the Superintendent of Police consists of 2 inspectors, 11 sub-inspectors, 24 head-constables and 262 constables, in addition to a rural and municipal police numbering respectively 1,571 and 43. The average annual cost of the maintenance of the force is Rs. 53,000, and the proportion of police to population is 1 to 4,079. The jail at Cooch Behār has

accommodation for 189 prisoners, in addition to which there are lock-ups at the other sub-divisional head-quarters.

Education has made considerable progress in recent years and the number of persons able to read and write was more than doubled between 1881 and 1901; in the latter year 5·9 per cent. of the population (10·7 males and 0·4 females) were returned as literate. The number of pupils under instruction increased from 10,194 in 1892-93 to 12,670 in 1901-02, in which year 26·2 per cent. of the boys and 0·36 per cent. of the girls of school-going age were at school. In 1903-04 there were altogether 12,639 pupils under instruction, and the number of educational institutions was 333, including one Arts college, 43 secondary schools, 37 night schools and 9 girls' schools. The expenditure on education was Rs. 79,000, of which Rs. 44,000 was contributed by the State, the remainder being derived from fees and subscriptions. The principal institutions are the Victoria college and the State high school in Cooch Behār town and 3 high schools at Mātābhānga, Mekhligānj and Dinhāta. The control of educational matters rests with the Superintendent who is assisted by an inspector and deputy inspector of schools and circle pandits. Education.

The medical charge of the State is in the hands of a European Civil Surgeon, who has under him an assistant surgeon and a large staff of native doctors and compounders. The State contains (1903-04) 9 dispensaries, of which 8 have accommodation for in-patients, the most important being the hospital at Cooch Behār town with 36 beds. At all these institutions the cases of 25,000 out-patients and 1,000 in-patients were treated during the year, and 907 operations were performed. The cost of their maintenance was Rs. 34,000, all of which, except a small sum derived from the sale of medicines, was borne by the State. Medical.

The annual number of vaccinations has been slowly increasing, and 24,044 operations were performed in 1903-04; under recent legislation vaccination may be made compulsory within affected areas by notification in the State Gazette. Vaccination.

[Sir W. W. Hunter, *Statistical Account of Bengal*, vol. x, 1876; Harendra Nārāyan Chaudhri, *Cooch Behār State*, Cooch Behār, 1903.]

Cooch Behār Town.—Capital of Cooch Behār State, Bengal, and the principal residence of the Mahārājā, situated in 26° 20′ N. and 89° 27′ E. on the Torsā river. Population (1901) 10,458. The town is connected by the Cooch Behār State Railway with the Eastern Bengal State Railway system. It is well laid out, and local affairs are managed by a town committee appointed by the State. The principal buildings are the Mahārājā's palace, the courts, a hospital with 36 beds and the jail with accommodation for 189 prisoners. The Victoria college was established in 1887

and is affiliated to the Calcutta University. A State high school is also situated here.

Dinhāta.—Head-quarters of a sub-division of Cooch Behār State, Bengal, situated in 26° 8′ N. and 89° 28′ E. on the Rangpur road. Population (1901) 1,207. It contains a high school.

Haldibāri.—Town in the Cooch Behār State, Bengal, situated in 26° 21′ N. and 88° 49′ E. on the Eastern Bengal State Railway, 292 miles from Calcutta. Population (1901) 1,112. Haldibāri is an important centre of the jute trade, and several European firms have branches established here.

Kamātāpur.—Ruined city in Cooch Behār State, Bengal, situated in 26° 23′ N. and 89° 21′ E. The city is reputed to have been founded by Rājā Nīladhwaj, the first of the Khen kings. Its ruins indicate that it must have been a very extensive place. Dr. Buchanan Hamilton in 1809 found that it occupied an area 19 miles in circumference, 5 of which were defended by the Dharlā, and the rest by a rampart and ditch. The city consisted of several enclosures, one within the other, the centre one being occupied by the king's palace. Kamātāpur was abandoned and fell into decay after the overthrow of Rājā Nīlāmbar by Alā-ud-dīn Husain, king of Bengal, towards the close of the 15th century. Kamātāpur figures conspicuously as Comotay in some of the earlier maps of India. [Sir W. W. Hunter, *Statistical Account of Bengal*, 1876, vol. x, pp. 362—370.]

Mātābhānga.—Head-quarters of a sub-division of Cooch Behār State, Bengal, situated in 26° 23′ N. and 89° 50′ E. on the emigration road. Population (1901) 1,283. It contains a high school.

Boundaries, configuration, and hill and river system.

Orissa Tributary States (also known as the Orissa Tributary Mahāls or as the Garjāts).—A group of 17* dependent territories situated between the Mahānadī delta and the Central Provinces and forming the mountainous background of the Orissa Division of Bengal. They lie between 19° 53′ and 22° 34′ N., and 83° 35′ and 87° 10′ E., and have a population of 1,947,802 and an area of 14,387 square miles. They are bounded on the north by the Districts of Singhbhūm and Midnapore; on the east by Orissa; on the south by Ganjām District in the Madras Presidency; and on the west by the Tributary States of Patnā, Sonpur, Rairākhol, Bāmra and Bonai. The names of the individual States are ATHGARH, TALCHER, MAYURBHANJ, NILGIRI, KEONJHAR, PAL LAHARA, DHENKANAL,

* In 1905 five States (BAMRA, RAIRAKHOL, SONPUR, PATNA and KALAHANDI) were added from the Central Provinces, and two (GANGPUR and BONAI) from the Chotā Nāgpur States. These had in 1901 an area of 13,659 square miles and a population of 1,225,693.

ATHMALLIK, HINDOL, NARSINGHPUR, BARAMBA, TIGIRIA, KHANDPARA, NAYAGARH, RANPUR, DASPALLA and BAUD; a separate article on each will be found under its own name.

The States occupy a succession of ranges rolling back towards the centre of the peninsula. They form three watersheds with fine valleys between, down which pour the three great rivers of the inner tableland. The southernmost is the valley of the Mahānadī, at some places closely hemmed in by peaks on either side and forming picturesque passes, at others spreading out into fertile plains, green with rice, and watered by a thousand mountain streams. At the Barmūl pass the river winds round magnificently wooded hills, from 1,500 to 2,500 feet high. Crags and peaks of a wild beauty overhang its channel, which at one part is so narrow that the water rises 70 feet in time of flood. From the north bank of the Mahānadī the ranges tower into a fine watershed, from 2,000 to 2,500 feet high, running north-west and south-east and forming the boundary of the States of Narsinghpur and Barāmbā. On the other side they slope down upon the States of Hindol and Dhenkānāl, supplying countless little feeders to the Brāhmanī, which occupies the second of the three valleys. From the north bank of this river the hills again roll back into magnificent ranges, running in the same general direction as before, but more confused and wilder, till they rise into the Keonjhar watershed with peaks from 2,500 to 3,500 feet high, culminating in Malayagiri, 3,895 feet above the sea, in the State of Pāl Laharā. This watershed, in turn, slopes down into the third valley, that of the Baitaranī, from whose eastern or left bank rise the mountains of Mayūrbhanj, heaped upon each other in noble masses of rock from 3,000 to nearly 4,000 feet high, sending countless tributaries to the Baitaranī on the south, and pouring down the Burhābalang and the feeders of the Subarnarekhā on the north. The hill ranges are densely wooded to the summit, and, except at the regular passes, are inaccessible to beasts of burden. The intermediate valleys yield rich crops in return for negligent cultivation, and a vast quantity of land might be reclaimed on their outskirts and lower slopes. Cultivation is, however, rapidly extending in all the States, owing to improved means of communication and to the pressure of population in the adjoining British Districts.

Besides Malayagiri, the principal peaks are Meghāsanī (3,824 feet) in Mayūrbhanj, Gandhamādan (3,479 feet), Thākurānī, (3,003 feet) and Tomāk (2,577 feet) in Keonjhar, Pānchdhar (2,948 feet) in Athmallik, Goāldes (2,506 feet) in Daspallā, Suliyā (2,239 feet) in Nayāgarh and Kopilās (2,098 feet) in Dhenkānāl.

The principal rivers are the MAHANADI, the BRAHMANI, the BAITARANI and the Burhābalang. The Mahānadī enters the

Tributary States in Baud, forming the boundary between that State on the south and Athmallik and Angul on the north for 49 miles. It then divides Daspallā, Khandparā and Cuttack District on the south from Narsinghpur, Barāmbā, Tigiriā and Athgarh on the north. In the last State it debouches through a narrow gorge upon the Cuttack delta. It is navigable throughout the Tributary States by flat bottomed boats of about 25 tons burden, and carries a considerable trade, though it has decreased since the opening of the Bengal-Nāgpur Railway; it would afford even more valuable facilities for navigation but for the numerous rocks and sand banks in its channel. Its chief feeders in the Tributary States are on its north or left bank, the Sāpua in Athgarh, and the Dandātapā and Māno in Athmallik; on its south or right bank, the Kusumī and Kamai in Khandparā, with the Jorāmu, Hināmandā, Gānduni, Bolat, Sālkibāgh, Mārini and Tel. This last stream divides the Orissa Tributary States from those of the Central Provinces and forms the boundary between the States of Baud and Sonpur. The Brāhmanī is formed by the junction of the South Koel and Sankh rivers in the Gāngpur State, enters Tālcher from Bonai State and passes through Tālcher and Dhenkānāl into Cuttack District. It is navigable for a few months of the year as far as 4 miles below Tālcher, where there are some dangerous rocks. The Baitaranī rises among the hills in the south-west of Keonjhar State; its chief affluent is the Sālandī which rises in Mayūrbhanj. In the dry season the Baitaranī is navigable by small boats, but with difficulty, as far as Anandpur, a large trading village in Keonjhar on its north bank. The Burhābalang rises in Mayūrbhanj and, after receiving two tributaries, the Gangāhar and the Sunai, passes into Balasore.

Geology. So far as is known at present, gneissic rocks cover these States except Tālcher and parts of Angul and Athgarh, where sandstones, conglomerate and shales belonging to the Gondwāna system are developed.*

Botany. The narrower valleys are often terraced for rice cultivation, and these rice-fields and their margins abound in marsh and water-plants. The surface of the plateau land between the valleys, where level, is often bare and rocky, but where undulating, is usually clothed with a dense scrub jungle in which *Dendrocalamus strictus* is often prominent. The steep slopes of the hills are covered with a dense forest mixed with many climbers. *Sāl* (*Shorea robusta*) is often gregarious; and among the other noteworthy trees are species of *Buchanania*, *Semecarpus*, *Terminalia*, *Cedrela*, *Cassia*, *Butea*, *Bauhinia*, *Acacia*, *Adina*, which are found

* Memoirs, Geological Survey of India, vol. i., Geological Structure of Bānkurā, Midnapore and Orissa.

also on the lower Himālayan slopes. Mixed with these, however, are a number of trees and shrubs, characteristic of Central India, such as *Cochlospermum*, *Soymida*, *Boswellia*, *Hardwickia* and *Bassia*, which do not cross the Gangetic plain.

Fauna.

Wild elephants infest the jungles of Athmallik, Barāmbā, Dhenkānāl, Hindol, Mayūrbhanj, Nilgiri and Narsinghpur, and the chiefs of some of these States carry on *khedda* operations in the beginning of the cold season. Game, big and small, is plentiful in most of the States, including tiger, panther, leopard, hyæna, bear, deer of several kinds, antelope, wild hog, bison, hares, wild fowl, peacock, partridges, etc. Tigers carry off considerable numbers of men and cattle every year. Crocodiles swarm in the large rivers. Among snakes, pythons and the *ahirāj* or hamadryad (*Ophiophagus elaps*) are met with in the jungles, while cobras and *karaits* are responsible for hundreds of deaths by snake-bite.

Climate and temperature.

No record has been kept of the temperature, but the climate is said to be similar to that of the rest of Orissa, except that it is hotter in summer and colder in winter. During a period of 5 years the average annual rainfall has been 55 inches, of which 5·6 inches fell from January to May, 48·6 inches from June to October and 1 inch in November and December. Failure of the autumn rains is not frequent, but it involves, when it occurs, a more or less serious failure of the rice crop. The low-lying lands, on the banks of the Mahānadī and Brāhmanī, are subject to devastating floods and to deterioration by the deposit of sand; the floods of 1866, 1872, 1894 and 1900 were specially destructive.

History.

The Tributary States have no connected or authentic history. Comprising, as they do, the western and hilly portion of the province of Orissa, they were never brought under the central government, but from the earliest times consisted of numerous petty principalities which were more or less independent of one another. They were first inhabited by aboriginal races, chiefly Bhuiyās, Savars, Gonds and Khonds, who were divided into innumerable communal or tribal groups each under its own chief or headman. They carried on incessant warfare with their neighbours on the one hand and the denizens of the forests on the other. In course of time their hill retreats were penetrated by Aryan adventurers, who, by reason of their superior prowess and intelligence, gradually overthrew the tribal chiefs and established themselves in their place. Tradition relates how these daring interlopers, most of whom were Rājputs from the north, came to Purī on a pilgrimage and remained behind to found kingdoms and dynasties. It was thus that Jai Singh became ruler of Mayūrbhanj over 1,300 years ago, and was succeeded by his eldest son, while his second son seized Keonjhar. The chiefs of Baud and Daspallā are said to be

descended from the same stock, and a Rājput origin is also claimed by the Rājās of Athmallik, Narsinghpur, Pāl Laharā, Tālcher and Tigiriā. Nayāgarh, it is alleged, was founded by a Rājput from Rewah, and a scion of the same family was the ancestor of the present house of Khandparā. On the other hand, the chiefs of a few States, such as Athgarh, Barāmbā and Dhenkānāl, owe their origin to favourites or distinguished servants of the ruling sovereigns of Orissa. The State of Ranpur is believed to be the most ancient, the list of its chiefs covering a period of over 3,600 years. It is noteworthy that this family is admittedly of Khond origin and furnishes the only known instance in which, amidst many vicissitudes, the supremacy of the original settlers has remained intact. The States acknowledged the suzerainty of the paramount power and were under an implied obligation to render assistance in resisting invaders, but in other respects neither the ancient kings of Orissa nor their successors, the Mughals and Marāthās, ever interfered with their internal administration. All the States have annals of the dynasties that have ruled over them, but they are made up in most part of legend and fiction and long genealogical tables of doubtful accuracy, and contain very few features of general interest.

The British conquest of Orissa from the Marāthās took place in 1803, and was immediately followed by the submission of 10 of the Tributary States, the chiefs of which were the first to enter into treaty engagements. Meanwhile, Major Forbes penetrated through the hilly and jungly country on the west and reached the famous Barmūl pass in Daspallā, the key to Berār and the Central Provinces. Here the Marāthās made a last stand, but on the 2nd November the pass was forced and the enemy fled in confusion. The Rājā of Baud and others hastened to tender their submission. Including Khurdā, the Tributary States were then 20 in number. In the following year the chief of Khurdā rebelled, was vanquished and forfeited his State, which is now a Government estate and is administered as a sub-division of the Purī District. The Rājā of Bānki was deposed in 1840 for murder, and his State, which escheated to Government, has since been added to the District of Cuttack. In 1847 Angul was annexed on account of the misconduct of its chief, and with the Khondmāls (originally a portion of the Baud State) was in 1891 formed into a British District. Athmallik was a tributary of Baud and Pāl Laharā of Keonjhar, and they find no mention in the earlier treaty engagements. They were both recognised as separate States in the *sanads* of 1874, which at the same time conferred the hereditary title of Rājā on their chiefs. Pāl Laharā however still pays to Keonjhar a quit-rent, which is remitted through the Superintendent of the Tributary Mahāls. It has been held that these States do not form part of British India, and the

status, position and power of the chiefs are defined in the *sanads* granted to them in 1894.

Archæology.

Some interesting archæological remains are found at KHICHING in the Mayūrbhanj State, including statues, pillars, mounds and the ruins of several temples. The village of BAUD contains a number of small but exquisitely finished temples.

The people.

The population of the States increased from 1,103,699 in 1872 to 1,410,183 in 1881, to 1,696,710 in 1891 and to 1,947,802 in 1901. The earlier enumerations were very defective, and the large increase brought out by each successive census is due in a great measure to improvements in the arrangements for counting the people. At the same time, there is no doubt that the population is growing rapidly under the *ægis* of British rule; the inhabitants are hardy and prolific, and there is ample room for expansion. Owing to the presence of low hills and forests, the climate of the greater part of the States is somewhat unhealthy, especially during the rainy season and the beginning of the cold weather, when malarial affections prevail to a greater or less extent.

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

NAME OF STATE.	Area in square miles.	NUMBER OF		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Athgarh	163	...	192	43,784	269	+10·6	2,100
Talcher	399	...	293	60,433	151	+14·7	1,275
Mayūrbhanj	4,243	1	3,693	610,583	144	+14·7	13,115
Nilgiri	278	...	466	66,160	239	+18·3	3,660
Keonjhar	3,096	1	1,037	285,758	92	+15·2	7,349
Pāl Lahara	452	...	203	22,951	49	+13·5	518
Dhenkānāl	1,463	2	968	278,662	187	+14·8	9,392
Athmallik	730	...	460	40,753	56	+29·9	553
Hindol	512	...	234	47,180	151	+21·2	1,668
Narsinghpur	199	...	108	39,613	199	+17·0	3,309
Baramba	134	...	181	34,260	243	+17·6	1,675
Tigiria	46	...	102	22,625	493	+10·1	1,105
Khandpara	244	...	325	69,130	284	+ 0·7	1,391
Nayāgarh	588	...	775	140,779	239	+19·4	12,013
Ranpur	203	...	261	46,075	227	+14·9	3,101
Daspalla	168	...	485	51,057	93	+14·0	676
Baud	1,264	...	1,070	88,230	70	— 1·4	1,471
TOTAL ...	*14,387*	*4*	*11,805*	*1,947,802*	*135*	*+14·8*	*64,578*

The only towns are DHENKANAL and BHUBAN in Dhenkānāl BARIPADA in Mayūrbhanj and KEONJHAR in Keonjhar. The population is very sparse, but becomes greater on the lower levels as the plains of Orissa are approached. The greatest increase in the decade ending in 1901 took place in the sparsely inhabited State of Athmallik, which gained by immigration from Baud and the Central Provinces, and in Hindol, which also received an

accession of new settlers. The comparatively slow rate of increase in Tigiriā and Khandparā is explained by the fact that the population of these States is already much more dense than it is elsewhere. The only State which suffered a loss of population was Baud, which suffered much from epidemic disease and general unhealthiness, and from which many of the restless Khond inhabitants emigrated during the scarcity of 1900. As a general rule, the growth of the population has been greatest along the borders of the British Districts of Orissa, where the level is comparatively low and the proportion of arable land relatively high. The construction of the railway through Orissa and of feeder roads in connection with it has greatly improved the communications and raised the prices of produce in this tract. The volume of immigration is very considerable, and the census of 1901 showed a net gain of 61,000 persons from contiguous territory in Bengal and 7,000 from the Central Provinces. Oriyā is the vernacular of 76·6 per cent. of the population; Mundāri dialects are spoken by 18·4 per cent., including Santāli (nearly 10 per cent.), Ho (5 per cent.), Bhumij and Juāng, while Bengali is the language of only 3·4 per cent. Hindus number 1,778,921 persons or 91 per cent. of the whole population, and Animists 159,321 or 8 per cent.

Their castes and occupations.

The most numerous castes are Chāsas (220,000), Santāls (194,000), Pāns (177,000), Gaurs (150,000), Hos (99,000), Khandaits (86,000), Brāhmans (76,000), Khonds (71,000), Bhumijes (67,000), Bhuiyās (55,000), Kurmis (54,000), Telis (51,000), Bāthudis (44,000) and Sahars (41,000). The so-called Hindus include a large number of aboriginal and semi-aboriginal tribes. These are most numerous in the mountainous jungle tracts of Mayūrbhanj, Keonjhar and Baud. The majority, including the Santāls (*see* SANTAL PARGANAS), Pāns, Hos, Khonds (*see* KHONDMALS), BHUMIJES, Savars and BHUIYAS, are of Dravidian stock. The Bāthudis and Sahars are of uncertain origin. The primitive leaf-wearing Juāngs, a small tribe found chiefly in Keonjhar and Dhenkānāl, also deserve mention. The Chāsas, Gaurs, Khandaits and Kurmis are apparently derived from various elements and seem to be mainly non-Aryan. Agriculture supports 70·6 per cent. of the population, industries 11·7 per cent., commerce 0·2 per cent. and the profession 1·2 per cent. Small Christian missions are at work in Athgarh, Mayūrbhanj and Nīlgiri, the total number of Christians in 1901 being 950, of whom 917 were natives.

General agricultural conditions.

The Tributary States, consisting of a succession of hills and valleys, present every variety of soil and conformation of surface. The mountain sides exhibit bare rocks or are covered only by a thin layer of earth, and extensive ridges of laterite or other hard soil support nothing but scrub growths. The intervening valleys

hold rich deposits of clay, loam and alluvium, varying in thickness from a few inches to several feet over a foundation of solid metamorphic rocks; the soil is enriched by mineral substances washed down from the disintegrated hills by the annual rains. The rainfall is adequate and well distributed, but the sloping nature of the country enables the numerous hill streams to drain off the rain-water quickly into the main rivers. The forests, where they exist, help to retain a certain amount of moisture, and perennial springs are also met with, though not to any great extent. Cultivation is confined to the valleys and to clearances on the hill slopes. The latter, or *jhūm*, method of cultivation, locally called *dahi*, has been pursued from time immemorial by the aboriginal tribes in the uplands of Mayūrbhanj, Pāl Laharā and Keonjhar, and has practically denuded the valuable forests of these parts of all good timber. When preparing a *jhūm* the large trees are ringed, and the smaller ones are cleared by the hatchet and fire. The soil is then scratched with primitive hand-ploughs, bullocks being seldom used, and a fairly good miscellaneous crop, consisting of early rice, maize, millets, oilseeds, turmeric, etc., is raised for two or three seasons: the site is abandoned for a fresh one and is allowed to rest until again covered with jungle when the same process is repeated. The sloping nature of the country affords ample opportunity for cultivation in terraces, which can easily be irrigated from a tank or reservoir.

Principal crops.

The staple crop is rice, of which three varieties are grown, *biāli* or early, *sārad* or winter and *dālua* or spring. Advantage is taken of the early spring showers to prepare the land for the first two varieties, the former of which is grown on comparatively high land and the latter in hollows and on the lower levels. *Dālua* is cultivated to a limited extent along the edges of basins which remain wet throughout the year. The modes of cultivation are the same as in Orissa proper. As a food crop, rice is supplemented by millets, such as *chīna*, *mandiā* or *maruā*, etc., and maize and pulses, which form a large part of the dietary of the people, including *bīrhi*, *mūng*, *kurthī*, *rahar* and gram. Cereals and oilseeds are grown on the high lands and slopes, the chief oilseeds being mustard, sesamum and castor-oil; castor-oil is sometimes used by the poorer classes for cooking. Sugarcane is extensively cultivated, and the coarse sugar which is made from it is not only consumed locally, but is exported to Cuttack and elsewhere. Cotton is largely grown, chiefly for export. Tobacco is raised on the rich silt deposits of rivers and near homesteads, where cattle manure is plentiful. Turmeric is extensively grown for export, and all the ordinary vegetables are cultivated, the commonest being the brinjāl or egg-plant and pumpkin. The hills produce various tubers and edible roots, upon which the aborigines largely subsist. As a result of the growth of population within the States,

of immigration from outside and of improved communications, cultivation is steadily on the increase; extensive clearances are being made on all sides, and the problem in every State is how to devise measures for the proper conservation of the forests without unduly restricting the reclamation of waste lands. Each chief maintains a number of State granaries, which are replenished by rent-payments and repayments of advances in kind and also from the produce of his private lands.

Cattle. Pasture lands are generally plentiful, and no difficulty is experienced in feeding cattle; during the dry season large numbers are brought up from the plains for grazing purposes. The local breeds of cattle are poor and of small stature, and no attempt is ever made to improve them.

Irrigation. There are no canals, but the cultivators often irrigate their fields from tanks and wells. It is a common practice to construct reservoirs for the storage of water by damming up streams, but this method of irrigation might be utilized much more widely than it is at present. Tanks and wells number about 12,000 each, and the area irrigated from them is roughly estimated at 512 square miles. For irrigating sugarcane, vegetables, tobacco, etc., in the dry season, the people sink temporary wells in the sandy beds of streams, and lift the water by means of simple levers worked by one or two men.

Forests. The character of the forests is the same throughout the Tributary Mahāls. The hills in most of the States extend over a large area and are covered with vegetation, but the most valuable timber is found in the intervening narrow valleys. These forests were at one time among the best timber-producing tracts in India, but the chiefs have taken little care of them, and reckless exploitation and clearances for *jhūms* have caused nearly all their valuable timber to disappear. Till lately forest conservancy was practically unknown, but the example of Mayūrbhanj and the British District of Angul, where the forests have been surveyed, reserved and brought under regular control, has induced the other States to follow suit, though in a crude and unmethodical way. There is very little good timber left in the vicinity of the Mahānadī and the Brāhmanī rivers, but elsewhere and further inland the absence of good roads and the difficulty of transport have saved them from wholesale destruction. The principal timber trees are *sāl* (*Shorea robusta*), *piāsāl* (*Pterocarpus marsupium*), *sissū* (*Dalbergia sissoo*), *karam* (*Adina cordifolia*), *bandhan* (*Ougeinia dalbergioides*), *gamhār* (*Gmelina arborea*), *tendu* or ebony (*Diospyros melanoxylon*), *mahuā* (*Bassia latifolia*) and *āsan* (*Terminalia tomentosa*). Among other common trees are the mango (*Mangifera indica*), tamarind (*Tamarindus indica*), *jām* (*Eugenia jambolana*), jack (*Artocarpus integrifolia*), *amrā* or hog-plum (*Spondias mangifera*), *piār* (*Buchanania latifolia*), *harītaki* (*Terminalia chebula*), *kuchila*

(*Strychnos nux-vomica*), *khair* (*Acacia catechu*), *gundi* (*Mallotus philippinensis*), *bahera* (*Terminalia belerica*), *semul* or cotton tree (*Bombax malabaricum*), *karanj* (*Galedupa indica*), *kusum* (*Schleichera trijuga*), banyan (*Ficus indica*) and *pipal* (*Ficus religiosa*). The minor forest products are honey, bees-wax, *tasar*, lac, a dye called *gundi* and various medicinal drugs. *Sabai* grass (*Ischæmum angustifolium*) grows largely in Dhenkānāl, Keonjhar, Mayūrbhanj, Nīlgiri, Pāl Laharā, Tālcher and other States, and is used locally for the manufacture of ropes. Paper can also be made from it, and small quantities are already exported for use in the Bengal paper mills. The area of forests in the Tributary States has not been ascertained, but the revenue from them in 17 of the States in 1903-04 is reported to have amounted to 2·5 lakhs.

Minerals.

The TALCHER coal-field was last explored in 1875, when a thorough examination was made by an officer of the Geological Survey but with no very favourable result. The bed extends to Angul, Athmallik and Dhenkānāl, having a total area of about 700 square miles, but the coal is of inferior quality. Lime-stone and sand-stone suitable for building purposes are procurable in almost all the States. Iron has been found and worked from the earliest times; and a recent geological survey shows that the iron ores of Mayūrbhanj are of excellent quality. A scheme is now being developed for a line to carry the latter to Sini in the Saraikelā State, where large iron and steel works will be constructed. Gold dust is washed to a small extent in Keonjhar, Dhenkānāl and Pāl Laharā. A kind of magnesian rock, intermediate in composition between potstone and serpentine, locally called *mugni*, is extensively quarried in Nīlgiri for the manufacture of dishes, plates and bowls, which have a large sale. Dhenkānāl and a few other States produce talc. Red and yellow ochre is found in Athmallik, Mayūrbhanj and Nayāgarh.

Arts and manufactures.

In Barāmbā and Tigiriā *tasar* and cotton cloths of very fine texture and superior quality are made; they find a ready sale in the local markets and are also exported. In Khandparā and Narsinghpur, brass and bell-metal utensils are manufactured on a large scale, but, since the opening of the railway in Orissa, the industry has suffered from outside competition. In Baud, Dhenkānāl, Daspallā, Khandparā, Mayūrbhanj and Tālcher blacksmiths make, for local use, iron implements, such as axes, bill-hooks, crow-bars, shovels, spades, sickles and knives, some of which are very well turned out. At one time the Garjāts, like the rest of Orissa, possessed excellent workers in stone and wood, but very few are now met with. In Dhenkānāl and Nayāgarh ivory work of good quality is still made by one or two families.

Commerce.

Trade is carried on principally by itinerant dealers from the British Districts and by the ubiquitous Mārwāri and Kābuli. They take away rice, pulses, oilseeds, *tasar* cocoons, etc., and timber

and other forest produce in return for salt, dried fish, European cotton piece-goods, cotton twist and kerosene oil. A considerable business in hides and horns is carried on by Muhammadans. Most of the trade is with Cuttack, but some also with Balasore and Puri. There are no markets of much importance; KANTILO in Khandparā, ANANDPUR in Keonjhar and BHUBAN and DHENKANAL in Dhenkānāl are the principal local centres. The larger rivers are open to country boats for about 8 months in the year, during which they are largely used for floating down rafts of timber and bamboos. But the bulk of the trade is carried on during the dry season when the rivers are low; country carts are used where there are fair-weather roads, but elsewhere pack-bullocks still form the chief means of transport. Carts with small solid wheels are used for bringing down timber and stone from the forests and for carrying other goods in places where only rough tracks exist.

Communications. The Bengal-Nāgpur Railway passes in proximity to Ranpur, Nilgiri and Mayūrbhanj; and Baripādā, the capital of the last State, has recently been connected with it by a branch line on the narrow gauge, 32 miles long. The most important roads are those from Cuttack to Sambalpur and to Sonpur, which are maintained by Government as fair-weather roads; the former skirts the south, and the latter the north, bank of the Mahānadī. A new diversion of the second road, the greater portion of which is metalled, passes through Dhenkānāl and Angul. Branch roads lead from these main lines of communication to all the States situated in the Mahānadī and Brāhmanī valleys. Mayūrbhanj is traversed by several excellent roads, some of which are metalled and bridged, and in Keonjhar two important roads have recently been made, one to the Balasore and the other to the Singhbhūm boundary. The Mahānadī and Brāhmanī form broad waterways during half the year, but there is no steamer or regular boat service on either of them. All the States except Tigiriā and upper Keonjhar have subsidized Imperial post offices, and the telegraph line to Angul passes through Dhenkānāl; there are also branch telegraph lines to Nilgiri and Baripādā, the capital of Mayūrbhanj.

Famine. The great Orissa famine of 1866 did not extend its ravages to the Tributary States, which have long been free from famine, though some of them have suffered from partial scarcity in recent years, *e.g.*, in 1897 and 1900. The reason of this comparative immunity is to be found in the conformation of the country, which is less subject to devastating floods and which, owing to the presence of wooded hills, is better able to retain moisture than the plains. The natural facilities for irrigation are also better. The people do not depend entirely on the single crop of rice, but grow also other food grains and a variety of other

crops. The fruit of the mango and jack and the flower of the *mahuā* tree, with which the forests and village sites abound, afford substantial relief in time of scarcity, and the jungles contain many edible roots and tubers.

Administration.

The Garjāts have formed the subject of frequent legislation of a special character. They were taken over from the Marāthās in 1805 with the rest of Orissa, but, as they had always been Tributary States rather than regular districts of the native governments, they were exempted from the operation of the general regulation system, by sections 36, 13 and 11 of Regulations XII, XIII and XIV of 1805. The exemption was allowed on the ground of expediency only; and it was held that there was nothing in the nature of British relations with the proprietors that would preclude their being brought under the ordinary jurisdiction of the British courts, if it should ever be thought advisable. The office of Superintendent of the Tributary States was established in 1814, and he was directed to endeavour to establish such control over the conduct of the zamindārs as might prevent the commission of crimes and outrages. The only law, however, under which he appears to have been formally invested with any judicial authority was Regulation XI of 1816, by which he was empowered to dispose of claims to inheritance and succession among the Rājās. In 1821, the Government ruled that his interference should be chiefly confined to matters of a political nature; to the suppression of feuds and animosities prevailing between the Rājās of adjoining mahāls, or between the members of their families, or with their subordinate feudatories; to the correction of systematic oppression and cruelty on the part of the Rājās or their officers; to the cognizance of any apparent gross violation by them of their duties of allegiance and subordination; and generally to important points, which might lead, if not attended to, to violent and general outrage and confusion or to contempt of the paramount authority of the British Government. Several local Acts were passed, such as Act XX of 1850, for settling boundary disputes. But the whole system was changed in consequence of a ruling of the Calcutta High Court in 1882, which held that Tributary States did not form part of British India. After prolonged correspondence the decision was accepted as final by the Secretary of State, and a special Act, called the Tributary Mahāls of Orissa Act, XI of 1893, was passed to indemnify certain persons and to validate acts done by them in the Mahāls, and to admit of certain sentences passed there being carried into effect in British India. The relations between the British Government and the Tributary States are governed mainly by the *sanads* granted in similar terms to all the chiefs in 1894. They contain 10 clauses reciting the rights, privileges, duties and obligations of the chiefs, providing for the settlement of boundary disputes, and indicating the nature and extent of the

control of the Superintendent, who is also the Commissioner of the Orissa Division.

Except in Mayūrbhanj, which, under its present enlightened ruler, is governed on British lines, the States are administered by the chiefs in a more or less primitive fashion, generally with the help of a *diwān*, who in many cases exercises full authority.

During the minority of a chief or in the rare case of his gross incapacity, the management of the State is undertaken by Government under the supervision of the Superintendent. Five States are thus now under Government management, viz., Narsinghpur, Dhenkānāl, Pāl Laharā, Nayāgarh and Barāmbā.

Civil and criminal justice.

The chief of each State has his own court with civil and criminal powers, which he exercises himself or delegates to his *diwān* or manager. Under the terms of the *sanad* of 1894, he tries all criminal cases occurring in his territory, except those in which Europeans are concerned and heinous offences, such as murder, homicide, dacoity, robbery and torture, which he must commit to the Superintendent of the Tributary Mahāls, or to such of his assistants as the latter may direct. Sentences passed by the chiefs in criminal cases are regulated by the instructions issued from time to time by the Bengal Government, and unless specially extended, may not exceed in the case of imprisonment a term of 2 years, in the case of fines a sum of Rs. 1,000, and in the case of whipping 30 stripes. In his criminal jurisdiction the Superintendent exercises the powers of a High Court in the Tributary States. In civil matters the chief has full authority subject to the general control of the Superintendent. The 3 largest States have out-lying sub-divisions, viz., Mayūrbhanj 2, Keonjhar 2, and Dhenkānāl 1. The sub-divisional officers are vested with limited revenue, criminal and civil powers.

Owing to the general absence of subinfeudation and of large estates, land disputes are simple and few in number, and civil litigation is practically confined to petty suits regarding bonds and small trade transactions. Various kinds of oaths are in vogue for eliciting the truth. Criminal cases consist mainly of burglaries and thefts; dacoities take place occasionally, and murders are by no means uncommon, but riots seldom occur. The people are on the whole truthful, peaceable and law-abiding, the only exception being the Pāns, who being landless and indolent, live from hand to mouth and furnish the greater part of the jail population. Some of the aboriginal tribes are impulsive and excitable, and there have been several instances of risings, the most notable of which are the Bhuiyā rebellions of 1862 and 1891 in Keonjhar, and the Khond rebellion of 1894 in Nayāgarh.

Revenue.

No reliable statistics of the income and expenditure of these States are available, except for Mayūrbhanj and the 5 State under Government management. Such figures as have been

obtained will be noticed in the separate account of each State. The principal source of income is the land revenue, which is supplemented by excise, stamps, judicial fines and license fees from various minor monopolies. In some of the States the forests yield a handsome profit. The excise revenue consists of the license fees from the outstills, and for *gānja* and opium shops; these are settled yearly on the basis of auction sales, but there is a general want of supervision and very little is done to force up prices. Exciseable articles are thus very cheap, and they are often smuggled into the adjoining British Districts. The chiefs formerly derived no revenue from *gānja*, which was allowed to grow wild, but in 1896 they were induced to put a stop to its cultivation and to introduce the Rājshāhi drug, under an arrangement which has proved lucrative to themselves, while it has effectually suppressed *gānja* smuggling. Some of the States have introduced the stamp and court fee rules. Stamps are supplied to them at cost price. The fees charged are below the rates prevailing in British territory. The miscellaneous revenue of the States is derived from several minor sources, such as fines and fees, *salāmis* or *nazarānas* and license fees for the sale of various forest products. According to a time-honored custom, large sums are levied as *māgan*, or voluntary contributions, on the occasion of the marriage, birth or death of a chief or of some near member of his family.

Land revenue.

The land settlement is extremely simple and approximates closely to the system which existed in the Districts of Orissa proper under the Hindu dynasties. The abstract ownership vests in the Rājā or hereditary chief, but the right of occupancy remains with the actual cultivator. So long as he pays his rent, his possession is undisturbed, but alienation by sale, gift or mortgage is subject to the permission of the chief. No intermediate rights in the soil exist except in the case of service tenures and other beneficiary grants. The revenue assessed on the holding of each ryot is based on measurement by a standard pole and a rough classification of the soil, or on an approximate estimate of the produce of the land; the assessment is generally revised every 10 or 15 years. Land revenue is collected through *sarbarāhkārs*, of whom there is one or more for each village. They are paid by commission ranging from 5 to 15 per cent., and in some cases have *jāgīr* lands besides. In some of the States the aboriginal races pay no revenue, but are assessed at a certain rate per house or per plough, which is subject to revision every 3 or 5 years. The revenue is supposed to bear some relation to outturn, but the mode of calculation is often very crude. Formerly the whole or a part of the rent used to be realised in kind, but this led to much oppression and discontent, and cash payments have, under pressure from Government, now become the rule. On an average the rate per acre of rice lands varies from

R. 1-2 to Rs. 2, and for miscellaneous crops from 2 annas to R. 1. A ryot's holding does not ordinarily exceed 5 acres.

Police. The police of the Tributary States consisted in 1903-04 of 173 officers and 871 men. In Keonjhar and Mayūrbhanj European officers are in charge of the police force. The rural police is divided into two classes, viz., *paiks* and *chaukīdārs*, both remunerated by small *jāgīr* grants. The former are employed on guard and escort duties, and form an ornamental appendage to a chief's following. They are sometimes a source of danger by reason of their number and influence, which the chiefs are now trying to reduce. The *chaukīdārs* are the rural police proper, and look after crime in the villages.

Jails. The States have their own jails in Barāmbā, Narsinghpur, Dhenkānāl, Daspallā, Mayūrbhanj, Tālcher, Keonjhar, Athmallik and Athgarh; they are of masonry, but elsewhere they are merely mud huts within mud enclosures. They generally have sufficient accommodation, but are without proper sanitary arrangements. The prisoners are employed on extra-mural labour; discipline is badly enforced, and there is seldom any provision for exacting penal labour. Escapes are not uncommon. Long-term prisoners are sometimes sent to British jails, where the chiefs pay for their maintenance.

Education. Education is very backward, but in late years there has been steady progress, especially in primary education. Only 3·3 per cent. (6·4 males and 0·2 females) could read and write in 1901. The States of Dhenkānāl and Mayūrbhanj, which are the most advanced, maintain a large number of schools including a high school. The number of pupils in all the States increased from 14,505 in 1883 to 17,176 in 1900-01, while 22,108 boys and 1,188 girls were at school in 1903-04, being respectively 15·1 and 0·8 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 1,356, of which 20 were secondary, 1,130 primary and 206 special schools. The total expenditure was Rs. 1,20,000, of which Rs. 20,000 was paid by Government, Rs. 54,000 by the several States and Rs. 43,000 was met from fees. No special institutions exist for the aboriginal races, but primary schools have been opened in a few of their central villages, where in 1904, 2,705 boys were under instruction.

Medical. All the States except Tigiriā maintain dispensaries in charge of civil hospital assistants or, in two cases, of assistant surgeons. In Dhenkānāl a female hospital, under a qualified Lady Doctor, was opened in 1900-01. In all the States combined, 23 dispensaries gave medical aid in 1904 to 684 in-door and 103,177 out-door patients at an expenditure of Rs. 29,000, including the cost of establishment and medicines. The dispensaries are fairly well equipped, but they suffer from want of professional supervision.

The people have not yet learnt to appreciate the European system of medical treatment, but in surgical cases they readily resort to the hospitals.

Inoculation has been stopped in the Garjāts, but vaccination has not yet been made compulsory, and it is making slow progress. Here, as in British Orissa, the people have strong prejudices against it, and so also have the chiefs, with the exception of the enlightened rulers of Mayūrbhanj, Nīlgiri, Hindol and Athgarh, who have not hesitated to introduce vaccination in their own families. In 1903-04, in all the States excluding Khandparā 45,000 persons or 23 per thousand of the population were vaccinated. The work is generally carried on by paid or licensed operators under the supervision of the medical officer in charge of the State dispensary, and in some States sub-inspectors of vaccination have been appointed. A class has been opened in the Cuttack medical school where each State sends one or more men annually to receive practical training in vaccination. The course lasts for six weeks, and the successful students are employed as vaccinators in their own States. Vaccination.

[Sir W. W. Hunter, *Statistical Account of Bengal*, vol. xix, pp. 195—314, 1877.]

Athgarh.—One of the Tributary States of Orissa, Bengal, lying between 20° 26′ and 20° 41′ N., and 84° 32′ and 85° 52′ E., with an area of 168 square miles. It is bounded on the north by Dhenkānāl State; on the east and south by Cuttack District; and on the west by the States of Tigiriā and Dhenkānāl. The country is level, low-lying and very subject to inundation. The soil is fertile, and the cultivation consists chiefly of rice, with an occasional crop of sugarcane, pulses and millets.

The founder of the State was Srī Karan Nīladri Bawārta Patnaik, who belonged to the Karan caste. It is said that he was the Bawārta or minister of the Purī Rājā, who conferred on him the title of Rājā and gave him Athgarh as a reward for his services, or, according to another account, as a dowry on his marrying the Rājā's sister. The present chief, Srī Karan Biswanāth Bawārta Patnaik, is the 13th in descent. The State has an estimated revenue of Rs. 50,000 and pays an annual tribute of Rs. 2,800 to the British Government. The population increased from 36,603 in 1891 to 43,784 in 1901; of the latter number all but 2,643 are Hindus. The most numerous castes are the Chāsas (10,000), Sahars (6,000) and Khandaits and Pāns (5,000 each). The average density of the population is 260 per square mile. It is distributed among 192 villages, of which the principal is Athgarh, the residence of the Rājā. A small Christian colony is settled in 3 hamlets near Chagān village. The State is traversed by the old high road from Cuttack to Sambalpur and the newly opened Cuttack-Angul-Sambalpur road. The Mahānadī river,

which runs along the southern boundary, is navigable by boats. There is some trade in grain, and fuel and charcoal are largely exported to Cuttack. The State maintains a charitable dispensary, a middle English, an upper primary and 75 lower primary schools and one Sanskrit *tol*.

Tālcher.—One of the Tributary States of Orissa, Bengal, lying between 20° 52′ and 21° 18′ N., and 84° 54′ and 85° 16′ E., with an area of 399 square miles. It is bounded on the north by the Bāmra and Pāl Laharā States; on the east by Dhenkānāl; and on the south and west by Angul District. The Brāhmanī river traverses the State, and Tālcher village, which contains the Rājā's residence, is picturesquely situated on a bend on its right bank. The State contains a coal field of which a thorough examination was made in 1875. It was then reported that there is no seam of workable thickness and fairly good quality; that a final and thorough exploration could only be effected at a considerable expense; that the local consumption would never suffice to support a proper mining establishment, and that with the long and costly land carriage, no class of coal equal to Rānīganj coal could compete successfully at the Orissa ports with coal sent from Calcutta by sea. The project for utilizing the Tālcher coal-beds has, therefore, been abandoned for the present. Iron and lime are also found near the banks of the Brāhmanī river, which separates Tālcher on the east from Pāl Laharā and Dhenkānāl. Small quantities of gold are found by washing the sand of the river, but little profit accrues to the workers.

The Rājā claims a Rājput origin and descent from the Jaipur ruling family. The State has an estimated revenue of Rs. 65,000, and pays an annual tribute of Rs. 1,040 to the British Government. The population increased from 52,674 in 1891 to 60,432 in 1901; it is contained in 293 villages, and the density is 151 persons to the square mile. All but 179 of the inhabitants are Hindus. The most numerous castes are Chāsas (17,000) and Pāns (10,000). Tālcher village is connected by fair-weather roads with Pāl Laharā and Angul, and is an important mart. The State maintains a middle vernacular school, 2 upper primary and 61 lower primary schools and a charitable dispensary.

Mayūrbhanj.—The most northerly of the Tributary States of Orissa, Bengal, lying between 21° 17′ and 22° 34′ N., and 85° 40′ and 87° 10′ E.; it is by far the largest of the Orissa States, and has an area of 4,243 square miles. It is bounded on the north by the Districts of Singhbhūm and Midnapore; on the east by Midnapore and Balasore; on the south by Balasore and the Nilgiri State; and on the west by Keonjhar.

Mayūrbhanj presents every variety of soil and scenery. A block of hills occupies an area of about 1,000 square miles in the centre of the State, and abounds in rich valleys and dense

timber forests. This region is almost unexplored at present, but efforts are being made to open it out by roads. In the south the Meghāsanī hill attains a height of 3,824 feet above the sea. Large herds of elephants roam through the mountains and forests, and successful *khedda* operations are carried on from time to time.

It is related in native chronicles that the principality of Mayūrbhanj was founded about 1,300 years ago by a relative of the Rājā of Jaipur in Rājputāna. The family title is Bhanja (*breaker*), which, it is said, was assumed after the overthrow of a chieftain named Mayūradhwaj, an event which is also believed to account for the present name of the State. The chief's emblem is a pea-fowl (*mayūr*), and there is another tradition which alleges that his family originally sprang from a pea-fowl's eyes; the killing of this heraldic bird is strictly prohibited throughout the State. The remains of ruined temples, tanks, etc., at KHICHING, near Udaipur, indicate a state of considerable prosperity in the past. The State came under British control with the conquest of Orissa in 1803, prior to which it had been feudatory to the Marāthās; and in 1829 a treaty engagement was entered into between the British and the Rājā.

The enumerated population rose from 258,680 in 1872 to 385,737 in 1881, to 532,238 in 1891 and to 610,383 in 1901. A great deal of this phenomenal increase must be ascribed to the defective character of the earlier enumerations. In the last decade the growth amounted to 14·7 per cent., and in 1901 the density was 144 persons to the square mile. The climate is on the whole fairly healthy, except in the hills and jungle tracts, which are very malarious. The inhabitants are contained in one town, Baripādā (population 5,613), and 3,593 villages, of which the most important are Bahalda and Karanjiā, the head-quarters of the Bāmanghāti and Pāuchpīr sub-divisions. Hindus number 507,738, Animists 98,485 and Muhammadans 3,785. The bulk of the population is of Dravidian origin and the most numerous castes are Santāls (185,000), Hos (68,000), Bhumijes (56,000), Kurmīs (36,000), Bhuiyās (32,000), Gaurs and Bāthudis (30,000 each), Pāns (25,000) and Khandaits (15,000). A Baptist mission is at work at Baripādā and a Roman Catholic mission at Nāngalkāta, 8 miles from Baripādā on the Balasore road.

The population is almost entirely agricultural and leads an uneventful and contented life, so long as the harvests are good. About one-third of the State is under cultivation, and the remainder is either forest or waste. There is ample room for the extension of cultivation, and large tracts are reclaimed each year under leases granted by the State. Paddy is the staple crop; *rabi* crops and peas and pulses are cultivated along the river banks, and sugarcane and tobacco are also grown. Experiments are being

made in the growth of long-stapled cotton. Forest conservancy now forms an important branch of the administration, but the forests are suffering severely from the ruthless destruction of former times.

A geological survey of the State was recently undertaken, and it is reported that its iron ores are possibly the richest and most extensive in India. They occur in all parts of the State but especially in Bāmanghāti, where there are a considerable number of smelters working with crude apparatus. It is now proposed to construct a branch to carry the ore to Sini on the Bengal-Nāgpur Railway, where large iron and steel works are to be built. Limestone in the shape of tufa or travertine is found in several localities; red and yellow ochres are met in places; and the clays underlying the laterite near Baripādā constitute an excellent material for pottery. Gold is washed for in the Subarnarekhā river on the northern confines of Mayūrbhanj proper and in the Kadkai and Bonai rivers in the Bāmanghāti sub-division; at the head-waters of the latter river, there is a tract of about 2 square miles where almost the entire alluvium is auriferous, and, separated from it by a low range of hills, is another area of placer deposit of similar extent. In these two places about 70 families obtain a livelihood by gold washing, but they only scrape the surface soil: nuggets weighing as much as 2 or 3 *tolās* are said to be found occasionally. Mica occurs extensively in both the Mayūrbhanj and Bāmanghāti sub-divisions, but the plates obtained are small; and agate, flint and jasper are found in some profusion in the latter sub-division

The rearing of *tasar* cocoons and the cultivation of lac are extensively carried on, especially in Bāmanghāti. There is a considerable trade in forest produce, such as timber, lac, myrabolams, nux-vomica, honey, resin and fuel. Horns and hides, rice, oilseeds and cereals are also exported.

A narrow gauge branch line connecting Baripādā town with Rupsā junction on the Bengal-Nāgpur Railway, a distance of 32 miles, was opened in 1904. The town is also connected by metalled roads with Bahalda and Karanjiā, the head-quarters of the out-lying sub-divisions, and with the towns of Balasore and Midnapore; while several fair-weather roads lead from it to other parts of the State.

The head-quarters are at BARIPADA town, which contains the residence of the chief and the seat of the administration. There are two out-lying sub-divisions, Bāmanghāti and Pānchpīr, with head-quarters at BAHALDA and KARANJIA respectively.

The administration of the State is conducted on British lines under the personal supervision of the chief, who has been vested with higher criminal powers than any of the other tributary chiefs, being empowered to pass sentences of imprisonment for

five years. He is assisted by a Dīwān and three Assistant Dīwāns, and the judicial officers include a State Judge, a Subordinate Judge and two Munsifs; of the latter the Subordinate Judge and one Munsif have the powers of a Magistrate of the first class, while the other Munsif has second class powers. The sub-divisional officers are vested with limited revenue, criminal and civil powers. The Education department is controlled by a Superintendent, the Public Works department by a State Engineer, and the police and jails by a Superintendent; the reserved forests are under the management of a forest officer, while the protected forests are under the revenue authorities. The State has a revenue of 9½ lakhs, the current land revenue demand being 7 lakhs, and the tribute payable to the British Government is Rs. 1,068 per annum.

The police force consists of 33 officers and 201 men in charge of a European officer. A masonry jail has accommodation for 89 prisoners. Education has made rapid progress in the last 20 years, and in addition to a high school at Baripādā 284 schools of all kinds are scattered over the State. The State contains 6 dispensaries; the people are beginning to appreciate them, and the number of patients is gradually rising.

Bahalda.—Village in Mayūrbhanj, one of the Orissa Tributary States in Bengal, situated in 22° 23′ N. and 86° 5′ E. Population (1901) 1,724. Bahalda is the head-quarters of the Bāmanghāti sub-division of the State and is connected with Baripādā, the capital, by a metalled road.

Bāmanghāti.—The northern sub-division of Mayūrbhanj, one of the Orissa Tributary States in Bengal, with head-quarters at Bahalda. It was at one time under British management supervised by the Deputy Commissioner of Singhbhūm, but was restored to the direct control of the chief of Mayūrbhanj in 1878.

Baripādā.—Head-quarters of Mayūrbhanj, one of the Orissa Tributary States, Bengal, situated in 21° 56 N. and 86° 44′ E. on the Burhābalang river. Population (1901) 5,613. Baripādā is connected by a light railway (2′ 6″ gauge) with Rupsā junction a station on the Bengal-Nāgpur Railway, and by metalled roads with Bahalda and Karanjiā, the head-quarters of the Bāmanghāti and Pānchpīr sub-divisions, and with the towns of Balasore and Midnapore; several fair-weather roads run from it to other parts of the State. It is the seat of the administration and contains the residence of the chief, a good dispensary and a high school, besides criminal and civil courts and a jail.

Karanjiā.—Village in Mayūrbhanj, one of the Orissa Tributary States, Bengal, situated in 21° 44′ N. and 86° 6′ E. Population (1901) 732. Karanjiā is the head-quarters of the Pānchpīr sub-division of the State and is connected with Baripādā, the capital, by a metaleld road.

Khiching.—Village in Mayūrbhanj, one of the Orissa Tributary States, Bengal, situated in 21° 55′ N. and 85° 50′ E. Population (1901) 269. It contains various archæological remains such as statues, pillars, mounds and the ruins of several brick and stone temples. A group of temples adjoining the village is of the greatest interest. One of the temples (to Siva) seems to have been repaired in the time of Mān Singh, to whom another (unfinished) temple should probably be ascribed. [*Archæological Survey Reports*, vol. xiii, pp. 74-76.]

Meghāsanī.—One of the chief mountain peaks in Mayūrbhanj, one of the Orissa Tributary States, Bengal, situated in 21° 38′ N. and 86° 21′ E. Its height is 3,824 feet; there is a plateau on the top of the hill.

Nīlgiri State.—One of the Tributary States of Orissa, Bengal, lying between 21° 17′ and 21° 37′ N., and 86° 25′ and 86° 50′ E., with an area of 278 square miles. It is bounded on the north and west by the State of Mayūrbhanj, and on the east and south by Balasore District. One-third of the area is taken up by hills, some of which contain valuable timber. There is much land awaiting reclamation. Valuable quarries of black stone are worked, from which cups, bowls, platters, etc., are manufactured for export. Negotiations are now (1905) in progress with a European firm for working the granite quarries in the State, and for connecting them by a light railway with the Bengal-Nāgpur Railway at Balasore. The origin of the State is obscure. According to tradition it was founded by an adventurer from Chotā Nāgpur. It came into prominence during the Mughal period, and one of the chiefs was handsomely rewarded for the assistance he rendered to Akbar's general, Mān Singh, in subduing the refractory Pathāns. The State has an estimated revenue of Rs. 1,37,000 and pays an annual tribute of Rs. 3,900 to the British Government. The population increased from 56,198 in 1891 to 66,460 in 1901; it is contained in 466 villages, and the density is 239 persons to the square mile. The most important village is Nīlgiri, containing the residence of the Rājā; this is picturesquely situated at the foot of a hill, 5 miles from the Trunk Road from Calcutta to Madras, with which it is connected by a good metalled road. Hindus number 58,896, Muhammadans 101 and Animists 7,302. The most numerous castes are Khandaits (15,000), Bhumijes (6,000), Brāhmans (5,000) and Gaurs and Hos (4,000 each). A small Christian community belonging to the American Free Baptist Mission is established at Mitrapur, 11 miles west of Balasore town. The State maintains one middle English school, 9 upper primary and 75 lower primary schools, and a dispensary.

Keonjhar State.—One of the Tributary States of Orissa, Bengal, lying between 21° 1′ and 22° 10′ N., and 85° 11′ and

86° 22′ E.; it is the second largest of the Orissa States, having an area of 3,096 square miles. It is bounded on the north by Singhbhūm District; on the east by Mayūrbhanj State and Balasore District; on the south by Cuttack District and Dhenkānāl State; and on the west by Pāl Laharā and Bonai States. Keonjhar is divided into two widely dissimilar tracts, lower Keonjhar being a region of valleys and lowlands, while upper Keonjhar includes the mountainous highlands. The latter consists of great clusters of rugged crags, which in troublous times afforded a safe retreat to its inhabitants. The mountain summits appear from the lowlands to be sharply ridged or peaked, but in reality they have extensive tablelands on their summits, fit both for pasture and for tillage. The Baitaranī river takes its rise in the hilly north-western division. The principal peaks are Gandhamādan (3,474 feet), Thākurāni (3,003 feet), Tomāk (2,577 feet) and Bolat (1,818 feet).

Keonjhar originally formed part of Mayūrbhanj, but about 200 years ago the local tribes threw off their allegiance to that State and chose a brother of the Rājā as their king. Since that time 36 chiefs have ruled. The late chief rendered good service during the Mutiny of 1857, in recognition of which his tribute was reduced and he was made a Mahārājā. He died in 1861 without legitimate issue, and on Government nominating his natural son, the present chief, to the *gaddi*, a dispute arose as to the succession, culminating in an insurrection of the Bhuiyā and Juāng tribes, which was only suppressed with the aid of British troops. The hill tribes again rebelled in 1891 as a protest against the oppressions of the minister, and the aid of British troops had again to be invoked before the rising could be suppressed. The State has an estimated revenue of 3 lakhs and pays an annual tribute of Rs. 1,710 to the British Government. The population increased from 248,101 in 1801 to 285,758 in 1901, but is still very sparse, the density in the latter year being only 92 to the square mile. The inhabitants are contained in one town, KEONJHAR (4,532), and 1,937 villages, of which the most important is ANANDPUR situated on the Baitaranī river. Of the total population 246,585 are Hindus and 38,567 Animists, the most numerous castes being Pāns (31,000), Khandaits (29,000), Gaurs (28,000), Hos (24,000), Bhuiyās (20,000), Kurmīs (17,000), Gonds (16,000), Bāthudis (13,000) and Khonds (12,000). The old Midnapore-Sambalpur road runs through Keonjhar town, and a few metalled roads have been made in the neighbourhood of the head-quarters. A new and important fair-weather road has lately been completed, connecting Keonjhar town with Bhadrakh station in Balasore on the Bengal-Nāgpur Railway (84 miles) on the one side, and on the other with Jaintgarh on the borders of the Singhbhūm District

(36 miles). For administrative purposes, the State is divided into 3 sub-divisions, viz., the head-quarters, Anandpur or lower Keonjhar and Champeswar or Nuāgarh. The State maintains 3 charitable dispensaries, 2 middle English, 7 upper primary and 84 lower primary, schools.

Anandpur.—Village in Keonjhar, one of the Tributary States, Bengal, situated in 21° 13′ N. and 86° 7′ E. on the left bank of the Baitaranī river. Population (1901) 2,945. Anandpur is connected by a fair-weather road with Keonjhar town and also with Bhadrakh station on the Bengal-Nāgpur Railway. A considerable trade is carried on, the rural and forest produce brought by land from the south-west being bartered for salt carried by boats from the coast.

Keonjhar (Nijgarh) Town.—Head-quarters of the Orissa Tributary State of the same name, Bengal, situated in 21° 38′ N. and 85° 36′ E. on the Midnapore-Sambalpur road. Population (1901) 4,532.

Pāl Laharā.—One of the Tributary States of Orissa, Bengal, lying between 21° 9′ and 21° 41′ N., and 85° 0′ and 85° 24′ E., with an area of 452 square miles. It is bounded on the north by Bonai State; on the east by Keonjhar; on the south by Tālcher; and on the west by Bāmra. The east and north of the State are occupied by hills. A magnificent mountain, Malayagiri (3,895 feet), the loftiest peak in the Orissa Garjāts, towers above the lesser ranges. The agricultural products of the State consist of the usual coarse grains and oilseeds, but it has nothing worthy of the name of trade. There is some excellent *sāl* (*Shorea robusta*) in the northern hills, but there are no means of carrying it to a market.

Pāl Laharā was formerly feudatory to Keonjhar, and its chief still pays an annual tribute or quit-rent into the office of the Superintendent of the Tributary Mahāls, where it is placed to the credit of Keonjhar. The State has an annual revenue of Rs. 29,000, and its tribute payable to Government is Rs. 267. The population increased from 19,700 in 1891 to 22,351 in 1901; it is distributed among 265 villages. The density is 49 persons to the square mile, or less than in any other of the Orissa States. Hindus number 20,770, Animists 1,540 and Muhammadans 41, the most numerous castes being Chāsas (5,000) and Pāns (4,000). The leaf-wearing Juāngs are still met with in the outskirts of the Malayagiri range. The old Midnapore-Sambalpur road passes through the north of the State. The Rājā's residence is connected with Tālcher and Angul by a fair-weather road of recent construction. The State maintains an upper primary and 7 lower primary schools, and a dispensary.

Malayagiri.—The highest peak in Orissa, Bengal, situated in the Pāl Laharā Tributary State in 21° 22′ N. and 85° 16′ E.

The hill, which is 3,895 feet in height, is isolated and commands a magnificent view of the surrounding country. Water is obtainable near the summit, on which there is space for building sites.

Dhenkānāl State.—One of the Tributary States of Orissa, Bengal, lying between 20° 31′ and 21° 11′ N., and 85° 10′ and 86° 2′ E., with an area of 1,463 square miles. It is bounded on the north by the Pāl Laharā and Keonjhar States; on the east by Cuttack District and Athgarh State; on the south by the Athgarh, Tigiriā and Hindol; and on the west by the Angul District and the Tālcher and Pāl Laharā States. The Brāhmanī, after forming the boundary between Tālcher and Dhenkānāl for a considerable distance, runs from west to east through the State along a richly cultivated valley and affords a waterway for trade. The State is said to derive its name from an aborigine named Dhenkā, who was in possession of a small strip of land, the site of the present palace; according to the story, he was killed in a *nullah* or hill stream by a scion of the Khurdā family, who founded the Dhenkānāl Rāj in the middle of the 17th century. The State was soon extended by conquests from the neighbouring chiefs, the largest acquisitions being made during the time of Trilochan Mahendra Bahādur (1756-98). The present chief's grandfather, Bhagīrath Mahendra Bahādur, was an enlightened ruler and was made a Mahārājā in 1869. Dhenkānāl is now third in importance among the Tributary States of Orissa. It is divided for administrative purposes into the head-quarters and the Baisingha sub-divisions, the Brāhmanī river forming the dividing line. It yields an annual revenue of 2·19 lakhs and pays an annual tribute of Rs. 5,099 to the British Government. The population increased from 238,285 in 1891 to 273,662 in 1901; of these, 265,750 were Hindus and 7,132 Animists. The most numerous castes are Chāsas (51,000), Pāns (46,000), Sahars (21,000), Gaurs (18,000) and Khandaits (16,000). The population is contained in 2 towns, DHENKANAL, the head-quarters (population 5,609), and BHUBAN (6,788), and 968 villages, and the density is 187 persons to the square mile. Iron is plentiful, but is worked only on a small scale. Trade in timber, rice, oilseeds and cereals is carried on by boats, pack-bullocks and bullock carts. Weekly markets are held in several places. Dhenkānāl is well provided with roads, one of them being the Cuttack-Angul-Sambalpur road, which is metalled and bridged for a considerable distance. The State maintains a well organized charitable dispensary, in charge of an assistant surgeon, and a Lady Dufferin hospital at the capital, besides a dispensary in the Baisingha sub-division. It also keeps up a high school in addition to 13 upper primary and 218 lower primary schools.

Bhuban.—Town in Dhenkānāl, one of the Orissa Tributary States, Bengal, situated in 20° 53′ N. and 85° 50′ E. on the

north bank of the Brāhmanī river, about 14 miles from Jenāpur station on the Bengal-Nāgpur Railway. Population (1901) 6,788. Bhuban has a local reputation for its manufacture of bell-metal ware.

Dhenkānāl (Nijgarh) Town.—Capital of the Orissa Tributary State of the same name, Bengal, situated in 20° 40′ N. and 85° 36′ E. Population (1901) 5,609. The town contains the residence of the Rājā and other public buildings.

Athmallik.— One of the Tributary States of Orissa, Bengal, lying between 20° 37′ and 21° 5′ N. and 84° 16′ and 84° 48′ E. with an area of 730 square miles. It is bounded on the north by the State of Rairākhol; on the east by Angul District; on the south by the Mahānadī river, which separates it from Baud; and on the west by Sonpur and Rairākhol. The country is for the most part covered with dense jungle, and a long range of hills clothed with forest runs along its southern side parallel with the course of the Mahānadī. The origin of the State is obscure. According to tradition, the founder of the family, Pratāp Deo, came to Purī and quarrelled with the Rājā, who put to death two of his 7 brothers. The survivors fled to Bonai, and established themselves there. Pratāp Deo next proceeded to Baud and thence to Athmallik, of which he took possession after killing the Dom chief. Official records, however, show that till lately the State had no separate existence, and in the treaty engagement of 1804 it is mentioned as a tributary of Baud. It was treated as a separate State in the *sanad* granted to the chief in 1894, the terms of which were identical with those contained in the *sanads* of the other Orissa chiefs. The State yields an estimated revenue of Rs. 71,000 and pays an annual tribute of Rs. 480 to the British Government. The population increased from 31,605 in 1891 to 40,753 in 1901, part of the gain being due to immigration from Baud and the Central Provinces. A great extension of cultivation has taken place in recent years, and the population is now nearly double what it was in 1881, but Athmallik is still, with the exception of Pāl Laharā, the most sparsely populated of all the Orissa States, the density being only 56 to the square mile. Of the total population all but a hundred are Hindus. The most numerous castes are Chāsas (8,000), Gaurs (6,000), and Gonds, Pāns and Sudhās (4,000 each). There are 460 villages, the principal being KAINTIRA, the residence of the chief. The trade in timber, rice and oilseeds is carried on pack-bullocks and by boats. The forests contain good timber, but they have not been systematically worked. The State maintains a charitable dispensary, one middle English, one upper and 32 lower primary schools.

Kaintira.— Village in Athmallik, one of the Orissa Tributary States, Bengal, situated in 20° 43′ N. and 84° 32′ E. on the

north bank of the Mahānadī. Population (1901) 1,567. Kaintira is the principal village in the State and contains the residence of the chief.

Hindol.—One of the Tributary States of Orissa, Bengal, lying between 20° 29′ and 20° 49′ N. and 85° 6′ and 85° 30′ E. with an area of 312 square miles. It is bounded on the north and east by Dhenkānāl State; on the south by Barāmbā and Narsinghpur; and on the west by Angul District. Hindol consisted originally of 3 or 4 petty States completely buried in jungle, till two Marāthā brothers, belonging to the family of the Kimedi Rājā in Madras, drove out the old chiefs and formed their territories into one principality. The State has an estimated revenue of Rs. 70,000 and pays an annual tribute of Rs. 551 to the British Government. The population increased from 37,973 in 1891 to 47,180 in 1901, part of the growth being due to an accession of new settlers. It is contained in 234 villages, one of which, Hindol, is the residence of the chief; the density is 151 persons to the square mile. Of the total population less than two hundred are non-Hindus. The most numerous castes are Chāsas (11,000) and Pāns (7,000). The old Cuttack-Sambalpur high road runs through the State in a south-easterly direction, and small quantities of country produce are thus brought to the Mahānadī and there sold to travelling merchants. A branch road, 7½ miles in length, connects the main road with the Rājā's residence. Excellent oranges are grown in the Rājā's gardens, and the soil of the State appears to be well suited for the cultivation of this valuable fruit. The State maintains one middle English school, 3 upper primary and 57 lower primary schools, and a charitable dispensary.

Narsinghpur.—One of the Tributary States of Orissa, Bengal, lying between 20° 23′ and 20 37′ N., and 84° 5′ 8and 85° 17′ E., with an area of 199 square miles. It is bounded on the north by a range of forest-clad mountains, which separate it from Angul District and Hindol State; on the east by Barāmbā; on the south and south-west by the Mahānadī river which divides it from the Khandparā and Daspallā States; and on the west by Daspallā and Angul District. The State is reputed to have been founded some 600 years ago by a Rājput, named Dharma Singh, who conquered two Khond chiefs named Narsingh and Poro. It has an annual revenue of Rs. 66,000 and pays an annual tribute of Rs. 1,450 to the British Government. The population increased from 33,849 in 1891 to 39,613 in 1901, the density being 199 persons to the square mile. It contains 198 villages, the most important of which is KANPUR. Of the total population all but 150 are Hindus. The most numerous castes are Chāsas (6,000) and Pāns (4,000). Narsinghpur is connected with Barāmbā by a road which is a continuation of that from Sankarpur in the

Dhenkānāl State. A road leads to Angul, and another to Hindol is under construction. The State maintains a middle vernacular, an upper primary and 36 lower primary schools, and a charitable dispensary.

Kānpur.—Principal village in Narsinghpur, one of the Orissa Tributary States, Bengal, situated in 20° 24′ N. and 85° 11′ E. on the Mahānadī. Population (1901) 1,727. Kānpur has a bi-weekly market, and a trade in grain, cotton, oilseeds and sugarcane.

Barāmbā.—One of the Tributary States of Orissa, Bengal, lying between 20° 21′ and 20° 31′ N., and 85° 12′ and 85° 31′ E., with an area of 134 square miles. It is bounded on the north by Hindol; on the east by Tigiriā; on the south by Cuttack District and Khandparā (the boundary line being formed by the Mahānadī river); and on the west by Narsinghpur. Kanakā Peak (2,038 feet), the highest point of a hill range of the same name, is situated on the northern border of the State. A legend attributes the foundation of the State to a celebrated wrestler, to whom the Orissa monarch presented two villages which were owned and inhabited by Khonds; the wrestler speedily drove out the aborigines and then extended his territory, which received further accessions in the time of his successors. The State yields an annual revenue of Rs. 43,000, and pays Rs. 1,398 as tribute to the British Government. The population increased from 32,526 in 1891 to 38,260 in 1901, of whom 37,441 were Hindus. A few Buddhists are still found in one or two villages. The most numerous castes are Chāsas (11,000) and Pāns (4,000). The population is contained in 181 villages, and there are 285 persons to the square mile. The Mahānadī affords excellent water carriage, and logs of timber and bamboos are floated down the river to Cuttack and Purī Districts. A good fair-weather road connects Barāmbā with Narsinghpur on one side and Tigiriā on the other, and joins the old Cuttack-Sambalpur road above Sankarpur in the Dhenkānāl State. Excellent cotton and silk cloth is manufactured at the village of Māniābundha. The State maintains a charitable dispensary, a middle vernacular, 2 upper primary, and 44 lower primary schools.

Tigiriā.—One of the Tributary States of Orissa, Bengal, lying between 20° 24′ and 20° 32′ N., and 85° 26′ and 85° 35′ E. It is the smallest of the Orissa States, having an area of only 46 square miles. It is bounded on the north by Dhenkānāl State; on the east by Athgarh; on the south by the Mahānadī river; and on the west by the Barāmbā State. The State is alleged to have been founded about 400 years ago by one Nityānanda Tunga, who is said to have come from the west on a pilgrimage to Purī and to have been directed to the spot by a dream. The name Tigiriā is apparently a corruption of *Trigiri* or "three hills." The State

has an estimated revenue of Rs. 10,000 and pays a tribute of Rs. 882 to the British Government. The population increased from 20,546 in 1891 to 22,625 in 1901; it is contained in 102 villages. Tigiriā, though the smallest, is the most densely peopled of the Orissa States, supporting a population of 492 to the square mile. Hindus number 22,184. The most numerous caste is the Chāsa (7,000). The State is well cultivated, except among the hills and jungles at its northern end. It produces coarse rice, and other food-grains, oilseeds, sugarcane, tobacco, cotton, etc., for the transport of which the Mahānadī affords ample facilities. Bi-weekly markets are held at two villages. Cotton cloth of superior quality is made in the State and largely exported. The road to Barāmbā and Narsinghpur passes within half a mile of the Rājā's residence. The State maintains an upper primary and 27 lower primary schools.

Khandparā.—One of the Tributary States of Orissa, Bengal, lying between 20° 11′ and 20° 25′ N., and 85° 0′ and 85° 22′ E., with an area of 244 square miles. It is bounded on the north by the Mahānadī river, which separates it from Narsinghpur and Barāmbā States; on the east by the Cuttack and Purī Districts; on the south by Purī and Nayāgarh State; and on the west by Daspallā State. The State originally formed part of Nayāgarh, and was separated from it about 200 years ago by a brother of the Nayāgarh Rājā, who established his independence. The State has an estimated revenue of Rs. 30,000 and pays an annual tribute of Rs. 4,212 to the British Government. The land is very valuable, and the State is one of the best cultivated in Orissa. Fine *sāl* (*Shorea robusta*) timber abounds in the hilly tracts, and magnificent banyan and mango trees stud the plain. It is intersected by the Kuariā and Dauka rivers, small tributaries of the Mahānadī. The population increased from 63,287 in 1891 to 69,450 in 1901. It is contained in 325 villages, of which the most important is Kantilo, a large mart on the Mahānadī. The density is 284 persons to the square mile. The State maintains a charitable dispensary, a middle vernacular and 30 lower primary schools.

Kantilo.—Village in Khandparā, one of the Orissa Tributary States, Bengal, situated in 20° 22′ N. and 85° 12′ E. on the right bank of the Mahānadī. Population (1901) 4,719. It is situated on the Cuttack-Sonpur road and is 7 miles from the Rājā's residence. It is a considerable seat of trade, but has somewhat declined in importance since the opening of the Bengal-Nāgpur Railway. The manufacture of brass-ware is largely carried on.

Nayāgarh State.—One of the Tributary States of Orissa, Bengal, lying between 19° 53′ and 20° 20′ N., and 84° 48′ and 85° 15′ E., with an area of 588 square miles. It is bounded

on the north by Khandparā State and Purī District; on the east by Ranpur State; on the south by Purī District; and on the west by Daspallā State and the Madras District of Ganjām. The State is a fine property and capable of great development. It abounds in noble scenery, and a splendid range of hills, varying from 2,000 to 3,000 feet in height, runs through its centre. It exports rice, cotton, sugarcane and several kinds of oilseeds and cereals to the neighbouring Districts of Cuttack, Purī and Ganjām. Towards the south and south-east the country is exceedingly wild and hilly, and is inhabited by turbulent Khonds, who are sometimes a source of terror to their more peaceful neighbours. In 1894 they revolted against the chief, and committed many murders and other outrages, but were put down with the aid of the Government military police. The State is alleged to have been founded about 500 years ago by a scion of the ruling family of Rewah in Central India. Khandparā, which was originally part of Nayāgarh, became independent about 200 years ago. Nayāgarh has an annual revenue of Rs. 1,20,000 and pays an annual tribute of Rs. 5,525 to the British Government. The population increased from 117,862 in 1891 to 140,779 in 1901, when the density was 239 persons to the square mile. The State contains 775 villages, the principal being NAYAGARH, which contains the residence of the Rājā and is connected by road with Khurdā in the Purī District. Hindus number 133,995, Animists 6,190 and Muhammadans 585. The most numerous castes are Chāsas (41,000), Pāns (13,000), Gaurs (11,000), and Brāhmans and Khonds (10,000 each). The State maintains a middle English, 3 upper primary and 48 lower primary schools, and a dispensary.

Nayāgarh Village.—Head-quarters of the Orissa Tributary State of the same name, Bengal, situated in 20° 8′ N. and 85° 6′ E. Population (1901) 3,340. The village contains the residence of the Rājā and is connected by road with Khurdā in Purī District.

Ranpur.—One of the Tributary States of Orissa, Bengal, lying between 19° 54′ and 20° 12′ N. and 85° 8′ and 85° 28′ E. with an area of 203 square miles. It is bounded on the north, east and south by Purī District, and on the west by Nayāgarh State. The south-west is a region of forest-clad and almost entirely uninhabited hills, which wall in its whole western side, except at a single point, where a pass leads into the adjoining State of Nayāgarh. To the north and east there are extensive fertile and populous valleys. The State claims to be the most ancient of all the Orissa Tributary States, and a long list of chiefs covers a period of over 3,600 years. It is the only State whose ruler refrains from pretensions to an Aryan ancestry, and in 1814, in response to an enquiry addressed to all the chiefs, the Rājā was not ashamed to own his Khond origin.

The State yields an estimated revenue of Rs. 51,000 and pays an annual tribute of Rs. 1,401 to the British Government. The population increased from 40,115 in 1891 to 46,075 in 1901; it is contained in 261 villages, and the density is 227 persons to the square mile. Hindus number 45,762 of the whole population, by far the most numerous caste being the Chāsas (14,000). The head-quarters of the State are 14 miles from the Kalupāra Ghāt station of the East Coast section of the Bengal-Nāgpur Railway and about 10 miles from the Madras Trunk Road, with which it is connected by a feeder road partly bridged and metalled. The State maintains a middle English, 3 upper primary and 38 lower primary schools, and a dispensary.

Daspallā.—One of the Tributary States of Orissa, Bengal, lying between 20° 11′ and 20° 35′ N., and 84° 29′ and 85° 7′ E., with an area of 568 square miles. It is bounded on the north by Angul District and Narsinghpur State, from the latter of which it is separated by the Mahānadi river; on the east by Khandparā and Nayāgarh States, on the south by the Madras District of Ganjām; and on the west by Baud. Daspallā, especially on the west and south, is covered with hills containing much timber. The principal peak is Goālides (2,506 feet). The Mahānadi river flows through the picturesque Barmūl gorge in the north-west corner of the State, and constitutes an excellent waterway. The State is said to have been founded about 500 years ago by a son of the Rājā of Baud, and consisted originally of two small grants made by the Rājās of Nayāgarh and Khandparā; it was subsequently extended by the gradual absorption of neighbouring Khond villages. It is divided into two parts, Daspallā proper, lying south of the Mahānadi, the original principality, and Joremuha, a small tract north of the Mahānadi, which was an acquisition from Angul. The chief is commonly known as the Rājā of Joremuha Daspallā. No tribute is paid for Joremuha by virtue of a concession granted by the Marāthās in consideration of the Rājā supplying, free of all cost, all the timber annually required for the Jagannāth cars at Puri. At the Barmūl gorge the Marāthās made their unsuccessful stand against the British in 1804. The State has an estimated revenue of Rs. 70,000 and pays an annual tribute of Rs. 661 to the British Government. The population increased from 46,597 in 1891 to 51,087 in 1901, of whom 51,003 were Hindus, the most numerous castes being Khonds (12,000), Pāns (8,000), Chāsas (7,000) and Gaurs (5,000). The density is 92 persons to the square mile. The inhabitants are contained in 485 villages, of which the chief is Kunjaban, the head-quarters of the State, situated 14 miles from the Cuttack-Sonpur road. The State maintains a charitable dispensary, a middle English, 2 upper primary, and 30 lower primary schools.

Baud State.—The most westerly of the Tributary States of Orissa, Bengal, lying between 20° 13′ and 20° 53′ N., and 83° 35′ and 84° 48′ E., with an area of 1,264 square miles. It is bounded on the north by the Mahānadī river, separating it from Sonpur and Athmallik; on the east by Daspallā; on the south by the Khondmāls; and on the west by Patnā and Sonpur, from which it is separated by the Tel river.

The State is one of the oldest in the Garjāts and is said to have been originally founded by a Brāhman, but he being childless adopted a nephew of the contemporary Rājā of Keonjhar, who is regarded as the founder of the present family. The list of chiefs contains 45 names, who are said to have ruled for nearly 1,400 years. The State was formerly of considerable extent, but from time to time portions were wrested from it by more powerful neighbours, and Athmallik, which was for centuries part of Baud and acknowledged its suzerainty, is now quite separate. The large tract known as the KHONDMALS with an area of about 800 square miles, which originally belonged to Baud, was made over to the British Government in 1835 by the chief, who was unable to manage the Khonds or to put a stop to the human sacrifices, and was in 1891 formed into a sub-division of the Angul District. The State as now constituted yields an estimated revenue of Rs. 64,000, and pays to the British Government an annual tribute of Rs. 800. The population decreased from 89,551 in 1891 to 88,250 in 1901. The falling off is due, as in the case of the Khondmāls, partly to the prevalence of epidemic disease and the general unhealthiness of the climate, and partly to the emigration of many migratory Khonds during the scarcity which occurred in 1900. The inhabitants are distributed among 1,070 villages and the density is 70 persons to the square mile. Of the total population 87,988 claim to be Hindus, but many of them are really Hinduized aborigines. The most numerous castes are the Gaurs (23,000), Khonds (15,000), Pāns (9,000), Sudhās (7,000) and Chāsas (4,000). The Khonds (*see* KHONDMALS) are giving up their primitive customs and beliefs and endeavouring to amalgamate with their Hindu neighbours. The land is fertile and is well provided with wells, reservoirs and other sources of irrigation. The Mahānadī, which forms the northern boundary of the State, and the Tel, which borders it on its west, afford excellent facilities for water carriage, and rice, oilseeds and such cereals as are produced in the State are exported in large quantities by boats down the Mahānadī. The State maintains a charitable dispensary, a middle English, 4 upper primary, and 16 lower primary schools.

Baud Village.—Head-quarters of the Orissa Tributary State of the same name, Bengal, situated in 20° 50′ N. and 84° 23′ E. on the right bank of the Mahānadī. Population (1901) 3,292. The village contains several ancient temples. The most important

are the Nabagraha temple, built of red sandstone, very profusely carved, and probably dating from the ninth century, and 3 temples of Siva with beautifully and elaborately carved interiors. [*Archæological Survey Reports*, vol. xiii, pp. 118-119.]

Gāngpur.—A Tributary State, Bengal, lying between 21° 47′ and 22° 32′ N., and 83° 33′ and 85° 11′ E., with an area of 2,492* square miles. It is bounded on the north by Jashpur State and Rānchī District; on the east by Singhbhūm; on the south by Bonai, Sambalpur and Bāmra States; and on the west by Raigarh State in the Central Provinces. Gāngpur consists of a long undulating table-land about 700 feet above the sea, dotted here and there with hill ranges and isolated peaks which rise to a height of 2,240 feet. In the north the descent from the higher plateau of Chotā Nāgpur is gradual, but on the south the Mahāvīra range springs abruptly from the plain in an irregular wall of tilted and disrupted rock with two flanking peaks, forming the boundary between Gāngpur and the State of Bāmra. The principal rivers are the Ib, which enters the State from Jashpur and passes through it from north to south to join the Mahānadī in Sambalpur, the Sankh from Rānchī, and the South Koel from Singhbhūm. The two latter meet in the east of Gāngpur, and the united stream, under the name of the Brāhmanī, flows south into the plains of Orissa. The confluence of the Koel and Sankh is one of the prettiest spots in Gāngpur, and it is said by local tradition to be the scene of the amour of the sage Parāsara with the fisherman's daughter Matsya Gandhā, the offspring of which was Vyāsa, the reputed compiler of the Vedas and the Mahābhārata. These rivers are practically dry from the end of the cold weather till the rains, and there is no systematic navigation on them. Tigers, leopards, wolves, hyænas, bison and many kinds of deer abound, and peafowl are numerous.

The State was once under the suzerainty of Sambalpur, which formed part of the dominions of the Marāthā Rājās of Nāgpur. It was ceded in 1803 to the British Government by the treaty of Deogaon, but was restored to the Marāthā Rājā in 1806. It reverted under the provisional engagement with Mādhuji Bhonsla in 1818 and was finally ceded in 1826. In 1821 the feudal supremacy of Sambalpur over Gāngpur was cancelled by the British Government and a fresh *sanad* granted to the chief. In 1827 after the permanent cession, another *sanad* was granted for a period of 5 years, but this was allowed to run till 1875 before it was renewed. The last *sanad* was granted to the chief in 1899. The State was transferred from Chotā Nāgpur to Orissa in 1905.

* This figure, which differs from the area shown in the census report of 1901, was supplied by the Surveyor-General.

The total annual revenue is Rs. 2,40,000, and the annual tribute payable to the British Government is Rs. 1,250. The relations of the chief with the British Government are regulated by the *sanad* granted in 1899, which was reissued in 1905 with a few verbal changes due to the transfer of the State to Orissa. Under this *sanad* the chief was formally recognized and permitted to administer his territory subject to prescribed conditions, and the tribute was fixed for a further period of 20 years, at the end of which it is liable to revision. The chief is under the general control of the Commissioner of Orissa, who is Superintendent of the Tributary Mahals, as regards all important matters of administration, including the settlement and collection of land revenue, the imposition of taxes the administration of justice, arrangements connected with excise, salt and opium, and disputes in which other States are concerned; and he cannot levy import and export duties or transit dues, unless they are especially authorized by the Lieutenant-Governor. He is permitted to levy rents and certain other customary dues from his subjects, and is empowered to pass sentences of imprisonment up to 5 years and of fine to the extent of Rs. 200, but sentences of imprisonment for more than 2 years and of fine exceeding Rs 50 require the confirmation of the Commissioner.

The recorded population increased from 191,440 in 1891 to 238,896 in 1901, the development being due partly to a more accurate enumeration and partly to the State having been opened out by the Bengal-Nāgpur Railway, which runs through the south-east corner for about 70 miles. The inhabitants are contained in 806 villages, one of which, SUADI, is the residence of the Rājā; the density is 96 persons to the square mile. Hindus number 146,549, Animists 88,949, Muhammadans 1,640 and Christians 1,758. The most numerous tribes are the Oraons (47,000), Gonds (37,000), Khariās (26,000), Bhuiyās (24,000) and Mundās (19,000). The Agariās (7,000), a cultivating caste, claim to be descendants of Kshattriya immigrants from Agra. A branch of the German Evangelical Mission, with its head-quarters at Kumārkelā, has been at work since 1899 and has made several converts. The Roman Catholic Jesuit Mission established in the Biru *pargana* of Rānchī claims many converts in the State, chiefly among the Oraons.

The soil of the Ib valley towards the south is extremely productive, and here the skilful and industrious Agariās make the most of their land; in the north the soil is less fertile and the cultivators are more ignorant and lazy. The principal crops are rice, sugar-cane and oilseeds. Irrigation of the fields from rivers and streams is extensively resorted to, but large works are not numerous. The estates of Hingīr and Nāgra and certain portions of the *khālsa*, or chief's own domain, contain stretches of *sāl*

(*Shorea robusta*) which have been worked since the opening of the Bengal-Nāgpur line through the State. The chief jungle products are lac, resin, and catechu. The forests also contain a large number of edible roots and indigenous drugs. *Sabai* grass (*Ischæmum angustifolium*) grows plentifully throughout the State and is exported in large quantities. Diamonds have occasionally been found in the sands of the Ib river, and gold washing is carried on in most of the rivers and streams by Jhorā Gonds, who thus gain a precarious livelihood. An extensive coal-field is situated in the Hingīr estate, and negotiations for its working are now in progress. Limestone and iron occur throughout the State in great abundance, especially in the north-east, where a concession of 100 square miles has been made to a European prospector: the industry is developing rapidly and promises to be important. Work has also been commenced in the dolomite deposit in the same concession, where the stone procurable is said to be extremely rich and extensive. Villages in Gāngpur are held either on feudal tenures or on farming leases. The feudal tenures date back to the early times when the vassals of the chief received grants of land in consideration of rendering military service and making certain payments in kind. These payments and the service conditions also have been gradually commuted to a quit-rent in money. The other villages are leased out to small farmers, called *gaontiās* or *ganjhus*, who pay a fixed annual rent and are remunerated by lands, called *bogrā*, which are held rent-free. Rents are paid only for rice lands, but the cultivators are bound to work gratuitously for the chief in return for the up-lands which they hold rent-free. The police force was reorganised in 1900, and is now managed by the chief's eldest son as District Superintendent on the lines followed in British Districts. The State contains altogether 13 police stations and outposts, and the force consists of 24 officers and 134 constables, maintained at a cost of Rs 20,000; there is in addition a *chaukīdār* in each village, who is remunerated by a grant of land. The State jail at Suādi has accommodation for 50 prisoners, and there is a dispensary at the same place at which in-door and out-door patients are treated. The State also maintains a middle English school, and 7 upper primary and 8 lower primary schools.

Suādi.—Head-quarters of Gāngpur State, Bengal, situated in 22° 8′ N. and 84° 2′ E. on the Ib river. Population (1901) 2,185. Suādi contains the residence of the chief, a court-house, a jail which has accommodation for 50 prisoners, a school and a dispensary with accommodation for in-door patients.

Bonai.—A Tributary State, Bengal, lying between 21° 39′ and 22° 8′ N., and 84° 30′ and 85° 23′ E., with an area of 1,296*

* This figure, which differs from the area shown in the census report of 1901, was supplied by the Surveyor-General.

square miles. It is bounded on the north by Gāngpur State and Singhbhūm District; on the east by Keonjhar; and on the south and west by Bāmra. Bonai is shut in on all sides by rugged forest-clad hills intersected by a few passes or gorges, which connect it with the surrounding States. The space within is not one extensive valley, but is interspersed here and there with hills. Most of the hills are densely wooded to the summit, and except at the regular passes are inaccessible to beasts of burden. The principal peaks are MANKARNACHA (3,639 feet), BADAMGARH (3,525 feet) and KUMRITAR (3,490 feet). Hog, bear, tiger, leopard, elephant, deer and peafowl are met with in the forests. The Brāhmanī, the only large river, flows from north to south through the centre of the State. It receives the drainage of the surrounding hill-streams and waters a beautiful and spacious valley containing large groves of mango and other fruit trees.

Bonai was ceded to the British Government in 1803 under the treaty of Deogaon by Raghujī Bhonsla, to whom it was restored by a special engagement in 1806. It reverted to the British Government under the provisional agreement concluded with Mādhuji Bhonsla (Appa Sāhib) in 1818, and was finally ceded by the treaty of 1826. The State is ordinarily administered, subject to certain restrictions, by the Rājā, who is required to pay a yearly tribute and to render military service in time of war. Indra Deo, the grand-father of the present chief, received the title of Bahādur for his services in suppressing the Keonjhar rising. During the minority of the present chief the State is under the direct management of Government. The total revenue is Rs. 1,30,000 and the tribute is Rs. 500 per annum. The ruling family claims to have come from Ceylon, but appears to be of aboriginal Bhuiyā origin. In 1905 the State was transferred from Chotā Nāgpur to Orissa. The relations of the chief with the British Government are regulated by a *sanad* granted in 1899 and reissued in 1905 with a few verbal changes due to the transfer of the State to Orissa. Under this *sanad* the chief was formally recognized and permitted to administer his territory subject to prescribed conditions, and the tribute was fixed for a further period of 20 years, at the end of which it is liable to revision. The chief is under the general control of the Commissioner of Orissa, who is Superintendent of the Tributary Mahals, as regards all important matters of administration, including the settlement and collection of land revenue, the imposition of taxes, the administration of justice, arrangements connected with excise, salt and opium, and disputes in which other States are concerned; and he cannot levy import and export duties or transit dues, unless they are specially authorized by the Lieutenant-Governor. He is permitted to levy rents

and certain other customary dues from his subjects, and is empowered to pass sentences of imprisonment up to 5 years and of fine to the extent of Rs. 200, but sentences of imprisonment for more than 2 years and of fine exceeding Rs. 50 require the confirmation of the Commissioner.

The recorded population increased from 32,120 in 1891 to 38,277 in 1901, the growth being due partly to a more accurate enumeration and partly to the country having been rendered more accessible by the Bengal-Nāgpur Railway. The inhabitants are contained in 217 villages, the most populous of which are situated in the central valley along the banks of the Brāhmanī; for the whole State the density is 30 persons to the square mile. Hindus number 26,371 and Animists 11,745. The population consists chiefly of Dravidian aborigines, the most numerous tribes being Bhuiyās, Gonds, Hos, Khariās, Mundās and Pāns. The Bhuiyās and Gonds are the most influential classes; they have always shown a very independent attitude towards the Rājā, and within the last 30 years one rebellion of the Bhuiyās and two of the Gonds have taken place. The headman of the Bhuiyās, who is called *saont*, claims the prerogative of bestowing on the Rājā the *tikā* or sign of investiture, a claim which is, however, not recognized by the chief. The two headmen or leaders of the Gonds are respectively called *mahāpātra* and *dandpāt*. The *saont*, the *mahāpātra* and the *dandpāt* are the only three fief holders or sub-proprietors under the Rājā, each possessing several villages and having to render military service to the Rājā if required, besides paying him a fixed yearly rental. There is some immigration of Kols, Mundās and Oraons from Singhbhūm and of Kaltuyās (Kolthās) and Agariās from Sambalpur. These tribes take leases of jungle-clad tracts and gradually reclaim them, and the area under cultivation is thus being rapidly extended. The Kaltuyā settlers, who are mostly paid labourers under the Bhuiyās, are very industrious and intelligent cultivators; in some places they bank up the hill streams and utilize for irrigation the water thereby stored up. Rice is the staple product; three successive crops are grown in the year, the *gorādhān* or the earliest highland autumn rice, the ordinary autumn crop and the winter rice. Among the minor crops are pulses, maize and oilseeds; castor-oil plants and sugarcane are largely grown on homestead lands; and cotton is also extensively cultivated. Pasturage is plentiful. Bonai possesses large forests, full of valuable trees such as *sāl* (*Shorea robusta*), *āsan* (*Terminalia tomentosa*), *piāsāl* (*Pterocarpus marsupium*), *sissū* (*Dalbergia sissoo*) and *kusum* (*Schleichera trijuga*). Since these have been made accessible by the opening of the Bengal-Nāgpur Railway, they have formed a valuable source of income to the State. Minor forest products of value are lac, *tasar* cocoons and *sabai* grass (*Ischæmum*

angustifolium). Gold is found in small quantities in the bed and banks of the Brāhmanī; the sand is washed by Jhorā Gonds, but their daily earnings range only from 2 to 4 annās. In 1896 the Bengal Gold and Silver Company took a prospecting lease from the Rājā for 3 years, paying a premium of Rs. 25,000, but the enterprise was given up as unprofitable. Iron is found but is extracted only for local use. Brass pots and ornaments, pots of a soft black stone and coarse cotton cloths are manufactured, but in quantities hardly sufficient to meet the local demand. The chief imports are European cotton fabrics, salt, kerosene oil, machine-made thread and tobacco; and the exports oil-seeds, hides, horns, lac, *tasar* cocoons, timber, *ghī*, *sabai* grass and wax. These articles are carried to the railway on pack-bullocks or by coolies; for want of good roads, carts are seldom used. An unmetalled and unbridged road connects Bonaigarh with the Raurkelā station on the Bengal-Nāgpur Railway, a distance of about 45 miles.

The police force consists of 6 officers and 27 men, but besides the salaried members of this force there is a body of village *chaukīdārs* and *goraits*. A dispensary is maintained by the State at Bonaigarh, and at the same place there is a jail with accommodation for 50 prisoners. The State also maintains 11 lower primary schools.

Bādāmgarh.—Peak in Bonai State, Bengal, situated in 21° 49′ N. and 85° 16′ E., and rising to a height of 3,525 feet above sea-level.

Bonaigarh.—Head-quarters of Bonai State, Bengal, situated in 21° 49′ N. and 84° 58′ E. Population (1901) 1,850. Bonaigarh, which contains the residence of the Rājā, a dispensary and a jail, is surrounded on three sides by the Brāhmanī river and is further defended by a high mud wall and moat. It is connected by an unbridged and unmetalled road about 45 miles in length with Raurkelā station on the Bengal-Nāgpur Railway. The site, which is very picturesque, is 505 feet above sea-level.

Kumritār.—Peak in Bonai State, Bengal, situated in 21° 45′ N. and 85° 9′ E., and rising to a height of 3,490 feet above sea-level.

Mānkarnācha.—Highest peak in Bonai State, Bengal, situated in 21° 47′ N. and 85° 14′ E., and rising to a height of 3,639 feet above sea-level.

Bāmra.—(To be reprinted from separate booklet.)

Deogarh Town.—(To be reprinted from separate booklet.)

Rairākhol.—(To be reprinted from separrte booklet.)

Sonpur.—(To be reprinted from separate booklet.)

Patnā.—(To reprinted from separate booklet.)

Kālāhandī.—(To be reprinted from separate booklet.)

Chotā Nāgpur States.—A term formerly applied to 9 Native States in Chotā Nāgpur, Bengal, the 7 Tributary States of JHANG BHAKAR, KOREA, SURGUGA, UDAIPUR, JASHPUR, GANGPUR, and BONAI, and the two Feudatory States of KHARSAWAN and SARAIKELA. The five States first named were transferred in October 1905 to the Central Provinces as part of the territorial redistribution connected with the formation of the new Province of Eastern Bengal and Assam, and the Oriyā-speaking States of Gāngpur and Bonai were at the same time attached to the Orissa Tributary States. The Chotā Nāgpur States therefore now include only the two small States of Kharsāwān and Saraikelā. These States, which are situated between 22° 29′ and 22° 54′ N. and 85° 38′ and 86° 0′ E., have an area of 602 square miles and are practically wedged in between the Districts of Mānbhūm and Singhbhūm. They are bounded on the north by the Districts of Rānchī and Mānbhūm; on the east and west by Singhbhūm; and on the south by the Mayūrbhanj State and Singhbhūm.

Kharsāwān.—Feudatory State of Chota Nāgpur, Bengal, lying between 22° 41′ and 22° 53′ N., and 85° 38′ and 85° 55′ E., with an area of 153* square miles. It is bounded on the north by the Districts of Rānchī and Mānbhūm; on the east by Saraikelā State; and on the south and west by Singhbhūm District. The river Sonai flows through the State from north-west to south-east. The country on the north and the Kolhān *pīr* on the south of this river consists of long ranges of jungle-clad hills, attaining in one place an elevation of 2,529 feet. The depressions between them are terraced for cultivation. The rest of the State is a lowland tract dotted here and there with isolated small hills. In this part, almost the whole of the culturable area has been cleared of forest and turned from waste into rice lands. Iron is found in a nodular form in most of the hilly ranges. Gold is found in very small quantities in the sands of the Sonai river. Copper must once have been extracted on a very large scale in Kharsāwān, and traces of ancient mines can be seen at intervals throughout the whole breadth of the State for a length of 15 miles; the most extensive were in the neighbourhood of Lopso. Recent prospecting operations indicate that the supply of copper is still far from exhausted, and it is probable that in the near future the State may once more become an important mining centre. Nodular limestone, a stalagmitic deposit called *asurhad*, slate and potstone are found in the hilly tracts. About 40 square miles of the State are covered with forest, containing chiefly *sāl* (*Shorea robusta*), *āsan* (*Terminalia tomentosa*), *gamhār* (*Gmelina arborea*), *kusum* (*Schleichera trijuga*), *piāsāl* (*Pterocarpus marsupium*),

* This figure, which differs from the area shown in the census report of 1901, was supplied by the Surveyor-General.

kend (*Diospyros melanoxylon*), *jāmun* (*Eugenia jambolana*) and bamboos. Minor jungle products comprise lac, *tasar* cocoons and myrabolams. Tiger, leopard, bear, several kinds of deer, hares and peacocks abound in the forests. Snakes of several varieties are common all over the State.

The chief of Kharsāwān belongs to a junior branch of the Porāhāt Rājā's family. Some generations before the establishment of British rule, Kunwār Bikram Singh, a younger brother of the Rājā, obtained from him as a maintenance grant the eleven *pīrs* which constitute the present Saraikelā and Kharsāwān States. Bikram Singh by his two wives left five sons. The eldest succeeded to Saraikelā, and the second son, from whom the present chief is directly descended, to Kharsāwān. The State first came under the notice of the British in 1793, when, in consequence of disturbances on the frontier of the old Jungle Mahals, the Thākur of Kharsāwān and the Kunwār of Saraikelā were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present *sanad* was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Commissioner of Chotā Nāgpur and the Deputy Commissioner of Singhbhūm, and is empowered to pass sentences of imprisonment up to 5 years and of fine to the extent of Rs. 200. Sentences of imprisonment for more than 2 years require the confirmation of the Commissioner. Heinous offences calling for heavier punishment are dealt with by the Deputy Commissioner of Singhbhūm. The present chief, Srīrām Chandra Singh Deo, being a minor, the State is, for the time being, under direct British administration.

The population increased from 35,470 in 1891 to 36,540 in 1901, the density in the latter year being 239 persons to the square mile. The inhabitants are contained in 263 villages, the most important of which is Kharsāwān, the head-quarters of the State. Hindus number 19,864 and Animists 16,277, the Hos being the most numerous tribe. About 78 per cent. of the population are supported by agriculture. The principal crops grown in the State in order of importance are rice, maize, pulses, mustard, sugarcane and tobacco.

Coarse cotton cloths and iron cooking utensils are manufactured for local use, and in some villages leaf mats are made. The chief exports are rice, pulses, oilseeds, stick-lac, *tasar* cocoons and iron, and the imports salt, cotton thread, cotton piece-goods, tobacco and brass cooking utensils. Trade has been stimulated by the opening of the Bengal-Nāgpur Railway which runs through 12 miles of the State territory; a station at Amdā is 3 miles from its head-quarters. The State contains 8 miles of metalled and 28 miles of unmetalled roads.

The total revenue is Rs. 42,000, of which Rs. 17,000 is derived from the land. The police force consists of 4 officers and 13 constables, and there is a jail with accommodation for 11 prisoners. The State also maintains a dispensary, a middle English school and 2 lower primary schools.

Saraikelā.—Feudatory State of Chotā Nāgpur, Bengal, lying between 22° 29′ and 22° 54′ N. and 85° 50′ and 86° 11′ E. with an area of 449* square miles. It is bounded on the north by Mānbhūm District; on the east and west by Singhbhūm; and on the south by Mayūrbhanj State. It consists chiefly of an undulating plain dotted with small rocky hills; towards the east it is more hilly, and the higher hills in the extreme north-east still contain valuable timber. The scenery throughout is wild and romantic in places. The forests altogether cover about 50 square miles, the chief tree being the *sāl* (*Shorea robusta*); *sabai* grass (*Ischæmum angustifolium*) grows in the forests. The State is drained by 5 streams, the Kharkai, the Sanjai, the Sonai, the Asuyā, and the Bhangbanga. The largest of these, the Kharkai, rises from a hill in Mayūrbhanj and flows northwards past Saraikelā village, which it skirts on its southern side, eventually falling into the Subarnarekhā.

The first ruler of Saraikelā was Bikram Singh, a younger son of the Porāhāt Rāj family. Obtaining part of what is now the Saraikelā State as a fief, he quickly made himself independent. He and his descendants enlarged their dominions from time to time, and gradually eclipsed the parent family of Porāhāt in power and importance. Saraikelā first came under the notice of the British in 1793, when, in consequence of disturbances on the frontier of the old Jungle Mahāls, its chief was compelled to enter into engagements relating to fugitive rebels. Ten years later, Lord Wellesley, the Governor-General, invited Kunwār Abhirām Singh, an ancestor of the present Rājā, to render assistance in the war against Raghujī Bhonsla. In 1856 the Kunwār of Saraikelā received the personal title of Rājā Bahādur; and his services during the mutiny were rewarded by a *khilat* and a rent-free grant in perpetuity of the sub-estate of Karaikelā, a portion of the escheated territory of the rebel Rājā of Porāhāt. The present chief of Saraikelā, Rājā Udit Nārāyan Singh Deo Bahādur, rendered assistance to the British Government in the Bonai and Keonjhar risings of 1888 and 1891; the title of Rājā Bahādur was conferred on him in 1884 as a personal distinction. Within the Saraikelā State are included the estates of Dugnī, Bānksai and Ichā, which were originally maintenance grants to members of the ruling family. They pay no rent, but are subordinate to the chief. The administration is conducted

* This figure, which differs from the area shown in the census report of 1901, was supplied by the Surveyor-General.

by the chief, who exercises judicial and executive powers subject to the control of the Deputy Commissioner of Singhbhūm and the Commissioner of the Chotā Nāgpur Division. He is empowered to pass sentences of imprisonment up to 5 years and of fine to the extent of Rs. 200, but sentences for more than 2 years imprisonment require the confirmation of the Commissioner. Heinous offences requiring heavier punishment are dealt with by the Deputy Commissioner. The present *sanad* of the chief was granted to him in 1899.

The population increased from 93,839 in 1891 to 104,539 in 1901, the density in the latter year being 233 persons to the square mile. The inhabitants are contained in 816 villages, the most important of which are Saraikelā, the head-quarters (population 3,711), which is administered as a municipality, and Sini, a junction on the Bengal-Nāgpur Railway. Hindus number 63,650 and Animists 39,956, the most numerous castes being the Hos (21,000), Santāls (20,000) and Kurmīs (15,000). Most of the inhabitants are supported by agriculture; rice is the staple food grain, other crops raised being maize, pulses and oilseeds.

Copper and iron are found, and nodular limestone is abundant. Slabs of rock, locally called *makrāsa*, which occur in some parts of the State, serve for building purposes. Copper smelting by native methods was carried on 25 years ago on a comparatively large scale, but has now been abandoned. Soapstone, slate and mica are found in places. Cotton and *tasar* cloths, gold, silver and brass ornaments, copper trumpets, bell-metal cups and bowls, iron plough-shares, axes, vices, spades, shovels, knives and locks are manufactured. The chief imports are cotton cloths, salt, kerosene oil and spices, and the exports rice, ropes, cotton, tamarind, *sabai* grass (*Ischæmum angustifolium*) and timber. The Bengal-Nāgpur Railway line runs from east to west across the north of the State. It is joined by the branch line to Asansol at Sini, where large iron and steel works are projected, to prepare ore from the Mayūrbhanj State. The State is traversed by the roads from Chaibāsa to Midnapore and Purūlia, which are kept up by the Singhbhūm road-cess committee, and a metalled road from Sini to Saraikelā is maintained by the chief.

The total revenue of the State is Rs. 92,000, of which Rs. 72,000 is derived from the land. There is a police force of 11 officers and 25 men, and a jail with accommodation for 32 prisoners. The State also maintains a dispensary, 2 middle English, 3 upper primary, and 8 lower primary schools.

Boundaries, configuration, and hill and river.

Sikkim.—Native State in the eastern Himālayas lying between 27° 5′ and 28° 9′ N., and 87° 59′ and 88° 56′ E., with an area of 2,818 square miles. It is bounded on the north and east by Tibet; on the south-east by Bhutān; on the south by Darjeeling District; and on the west by Nepāl. The Tibetan

name for Sikkim is pronounced Denjong, and more rarely Demojong or Demoshong, and the people are called *Rong-pa* or the "dwellers in the valleys;" the term "*Mōm-pa* or dwellers in the low country" is used occasionally to describe the Lepchā inhabitants.

The main axis of the Himālayas, which runs east and west, forms the boundary between Sikkim and Tibet. The Singālilā and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepāl on the west, and from Tibet and Bhutān on the east. From the eastern flank of the Singālilā range rise the great snow peaks of KINCHINJUNGA (28,146 feet), one of the highest mountains in the world; it throws out a second spur terminating at Tendong. The Chola range, which is much loftier than that of Singālilā, leaves the main chain at the DONGKYA mountain; it is pierced by several passes, the most frequented of which are the Tangkar-la (16,000 feet), Natu-la (14,200 feet) and JELEP-LA (14,390 feet) Over the last named comes practically the whole trade between Bengal and Tibet. From the north-west face of the Dongkya mountain an immense spur takes off and runs first west and then south-west to Kinchinjunga forming the watershed of all the remote sources of the Tīsta; the spur has a mean elevation of from 18,000 to 19,000 feet, but several of its peaks, of which Chomiomo is one, rise much higher. Sikkim may be in fact described as the catchment area of the headwaters of the river Tīsta. The whole of the State is situated at a considerable elevation within the Himālayan mountain zone, the ranges that bound it on three sides forming a kind of horse-shoe, from the sides of which dependent spurs project, serving as lateral barriers to the Rangīt and the Tīsta's greater affluents the Lachung, Lachen, Zemu, Talung, Rongni and Rangpo. These basins have a southward slope, being broad at the top where they leave the watershed, and gradually contracting, like a fan from its rim to its handle, in the Tīsta valley near Pashok. The rivers are very rapid and generally run in deep ravines, the ascent from the bank for the first few hundred feet being almost precipitous.

Geology. Sikkim is covered by gneissic rocks except in the central portion where metamorphic rocks belonging to the Dāling series occur.*

Botany. Sir J. D. Hooker divides the country into three zones, calling the lower up to 5,000 feet above the sea, the tropical; thence to 13,000 feet, the upper limit of tree vegetation, the temperate; and

* Journal Asiatic Society, Bengal, vol. xxxi, Journal of a trip undertaken to explore the glaciers of the Kinchinjunga group in the Sikkim Himālaya, by J. L. Sherwill; Records, Geological Survey of India, vol. xxiv, Parts i and iv, Extracts from the journal of a trip to the glaciers of Kābru, Pandim, etc., by P. N. Bose, and Geology and mineral resources of Sikkim, by P. N. Bose.

above to the perpetual snowline at 16,000 feet, the Alpine. South of the Penlong-la, where the Nepalese have been allowed to settle, the more productive sites have been cleared for cultivation up to 6,000 feet, the greatest height at which maize ripens; and trees ordinarily remain only in the rocky ravines and on the steepest slopes where no crops can be grown. The tropical zone is characterised by large figs, *Terminalia*, *Vatica*, *Myrtaceæ*, laurels, *Euphorbiaceæ*, *Meliaceæ*, *Bauhinia*, *Bombax*, *Morus*, *Artocarpus* and other *Urticaceæ*, and many *Leguminosæ*; and the undergrowth consists of *Acanthaceæ*, bamboos, several *Calami*, two dwarf *Arecæ*, *Wallichia*, and *Caryota urens*. Plantains and tree-ferns, as well as *Pandanus*, are common; and, as in all moist tropical countries, ferns, orchids, *Scitaminеæ*, and *Pothos* are extremely abundant. Oaks, of which (including chestnuts) there are upwards of 11 species in Sikkim, become abundant at about 4,000 feet, and at 5,000 feet the temperate zone begins, the vegetation varying with the degree of humidity. On the outermost ranges, and on northern exposures, there is a dense forest of cherry, laurels, oaks and chestnuts, *Magnolia*, *Andromeda*, *Styrax*, *Pyrus*, maple and birch, with an underwood of *Araliaceæ*, *Hollböllia*, *Limonia*, *Daphne*, *Ardisia*, *Myrsineæ*, *Symplocos*, *Rubia*, and a prodigious variety of ferns. *Plectocomia* and *Musa* ascend to 7,000 feet. On drier exposures bamboo and tall grasses form the underwood. Rhododendrons appear below 6,000 feet, becoming abundant at 8,000 feet, while from 10,000 to 14,000 feet they form the mass of the shrubby vegetation. Orchids are plentiful from 6,000 to 8,000 feet and *Vaccinia* between 5,000 to 8,000 feet. The sub-alpine zone begins at about 13,000 feet, at which elevation a dense rhododendron scrub occupies the slopes of the mountains, filling up the valleys so as to render them impenetrable. In this zone the chief forms of the vegetation are *Gentiana*, *Primula*, *Pedicularis*, *Meconopsis* and such like genera, gradually changing to a Siberian flora, which at last entirely supersedes that of the sub-alpine zone and ascends above 18,000 feet.

auns. The tiger is only an occasional visitor, but the leopard (*Felis pardus*) and the clouded leopard (*F. nebulosa*) are fairly common, the latter ascending to about 7,000 feet. The snow leopard (*F. uncia*) inhabits the higher altitudes, while the marbled cat (*F. marmorata*) and the leopard cat (*F. Bengalensis*) are found on the warmer slopes. The large Indian civet cat (*Viverra Tibetha*) is not uncommon up to 5,500 feet, and the spotted tiger-civet (*Prionodon pardicolor*), though rare, occurs between 5,000 and 6,000 feet. A tree cat (*Paradoxurus grayi*) is fairly common in the warmer forest. The cat-bear (*Ailurus fulgens*) occurs from about 7,000 feet upwards. The brown bear (*Ursus arctus*) is found at high altitudes, rarely below 11,000 or 12,000 feet, and the Himálayan

black bear (*U. torquatus*) is common from that point down to about 4,000 feet. Though these are the only two bears recorded, the Lepchās assert the existence of a third species possibly to be identified with the *U. Malayanus*. The *sāmbar* (*Cervus unicolor*) is frequent at all elevations up to 9,000 or 10,000 feet. The commonest of the deer tribe is the barking deer (*Cervulus muntjac*) found from the lowest valleys up to 9,000 feet; the musk deer (*Moschus moschiferus*) remains always at high elevations rarely descending below 8,000 feet even in winter. The *serow* (*Nemorhoedus bubalinus*) frequents the rockiest ravines over 6,000 feet, while the *goral* (*Cemas goral*) affects similar localities, but descends to 3,000 feet and is found up to 8,000. The *bharal* (*Ovis nahura*) is found in considerable flocks at high altitudes. An exceptionally large number of birds and butterflies is found in the State.

Climate and temperature.

The climate varies between the tropical heat of the valleys and the Alpine cold of the snowy ranges. The rainfall is very heavy, averaging 137 inches at Gangtok. From November to February the rainfall is light, and the weather in November and December is clear and fine. In March thunderstorms commence and, growing more and more frequent, usher in the rainy season, which lasts till October.

History.

Sikkim was known to early European travellers, such as Horace della Penna and Samuel Van de Putte, under the name of *Bramashon* (see Markham's Tibet, p. 64); while Bogle called it Demojong. Local traditions assert that the ancestors of the Rājās of Sikkim originally came from the neighbourhood of Lhāsa in Tibet. About the middle of the 17th century, the head of the family was named Pūntso Namgye; and to him repaired three Tibetan monks, professors of the Nyingmapa (or "Red Cap" sect of Buddhism), who were disgusted at the predominance of the *Gelukpa* sect in Tibet. These Lāmas, according to Mr. Edgar's Report, succeeded in converting the Lepchās of Sikkim to their own faith, and in making Pūntso Namgye Rājā of the country. The *avatārs* of two of these Lāmas are now the heads, respectively, of the great monasteries of Pemiongchi and Tassiding. In 1788 the Gurkhas invaded Sikkim in the governorship of the Morang or *tarai* and only retired in 1789, on the Tibetan Government ceding to them a piece of territory at the head of the Koti Pass. But in 1792, on a second invasion of Tibetan territory by the Gurkhas, an immense Chinese army advanced to the support of the Tibetans, defeated the Gurkhas, and dictated terms to them almost at the gates of Kātmāndu.

On the breaking out of the Nepāl war in 1814, Major Latter at the head of a British force occupied the Morang, and formed an alliance with the Rājā of Sikkim, who gladly seized the opportunity of revenging himself on the Gurkhas. At the close of

the war in 1816, the Rājā was rewarded by a considerable accession of territory, which had been ceded to the British by Nepāl. In February 1835 the Rājā ceded the site of Darjeeling to the British, and received a pension of Rs. 3,000 per annum in lieu of it.

There was, however, a standing cause of quarrel between the Rājā and the paramount power, due to the prevalence of slavery in Sikkim: the Rājā's subjects were inveterate kidnappers, and the Rājā himself was most anxious to obtain from the British authorities the restoration of runaway slaves. With some notion of enforcing the latter demand, Dr. Campbell, the Superintendent of Darjeeling, and Dr. Hooker, the famous naturalist, were seized in 1849 whilst travelling in Sikkim, and detained for 6 weeks. As a punishment for this outrage the Rājā's pension was stopped, and a piece of territory, including the lower course of the Tista and the Sikkim *tarai*, was annexed. The practice of kidnapping Bengali subjects of the British Crown was, however, not discontinued; and two specially gross cases in 1860 led to an order that the Sikkim territory, north of the Rammān river and west of the Rangīt, should be occupied until restitution was made. Colonel Gawler, at the head of a British force, with the Hon'ble Ashley Eden as Envoy, advanced into Sikkim and proceeded to Tumlong, when the Rājā was forced to make full restitution, and to sign a treaty (in March 1861) which secured the rights of free trade, of protection for travellers, and of road making. For many years the State was left to manage its own affairs, but for some time prior to 1889 the Tibetans were found to be intriguing with the Mahārājā, who became more and more unfriendly. Affairs reached a climax in 1888, when war broke out with the Tibetans, who took up a position 11 miles within Sikkim territory. British troops were sent against them, and they were driven off with ease. In 1889, a Political Officer subordinate to the Commissioner of the Rājshāhi Division was stationed at Gangtok to advise and assist the Mahārājā and his Council; and this was followed in 1890 by the execution of a convention with the Chinese, by which the British protectorate over Sikkim and its exclusive control over the internal administration and foreign relations of the State were recognized. Since the Tibetan expedition of 1904, the Political Officer has been directly responsible to the Government of India. The Mahārājā receives a salute of 15 guns.

The people.

After the appointment of the Political Officer in 1889 communications were greatly improved by the construction of roads and bridges, and the settlement of Nepalese was permitted in certain parts of the State. These measures were followed by a rapid development of the country. Settlers from Nepāl flocked in, and the population which in 1891 was returned at 30,458 had grown to 59,014 ten years later, an increase of 93·7 per cent. The first census was admittedly incomplete, but a great

deal of the increase is accounted for by the growth of the immigrant population, as of the total inhabitants in 1901 no fewer than 22,720 or 38·5 per cent. were born in Nepāl. In addition to this the climate is good; there have been no serious epidemics; the people have been prosperous and they are very prolific, the crowds of children being a striking feature of every Sikkim hamlet. The State is still very sparsely populated, having a density of only 21 persons to the square mile, but a great quantity of waste land is fit for cultivation, and it is probable that the population will continue to grow at a very rapid rate. As elsewhere, where the Mongoloid element of the population preponderates, there is a great excess of males over females. The principal diseases are fever, diseases of the respiratory system, worms, bowel complaints and skin diseases. Deaf-mutism is far more common than elsewhere in Bengal. The census report of 1901 shows 125 villages; but in reality Sikkim contains few real villages, except in the Lachen and Lachung valleys in the north of the State. Here the houses, somewhat similar in appearance to Swiss chalets, cluster into villages in the valley bottoms. In southern Sikkim the nearest approach to villages is to be found in the groups of houses near the Mahārājā's palaces at Tumlong and Gangtok, round some of the larger monasteries, such as Pemiongchi, Tassiding, and Pensung, and at the copper mines of Pache near Dikyiling and the bazars at Rangpo, Rhenok, Pakhyong, Namchi, Mānjhītār, Tokul and Seriong. Khaskura is the dialect of 27 per cent. of the population, while most of the others speak languages of the Tibeto-Burman family, including Bhotiā, Limbū, Lepchā, Murmī, Mangar, Khambū and Newār. Of the total population 38,306 or 65 per cent. are Hindus and 20,544 or nearly 35 per cent. are Buddhists. Buddhism, which is of the Tibetan or Lāmaist type, is the State religion of Sikkim. The Lāmas entered the country about 2½ centuries ago, and since then they have retained the temporal power more or less directly in their hands; the first of the present series of rulers was nominated by them. Sikkim contains about 36 monasteries.

Most of the Buddhists are members of the two main indigenous castes, Lepchās and Bhotiās (8,000 each). The Lepchās claim to be the autochthones of Sikkim proper. Their physical characteristics stamp them as members of the Mongolian race, and certain peculiarities of language and religion render it probable that the tribe is a very ancient colony from southern Tibet. They are above all things woodmen knowing the ways of birds and beasts and possessing an extensive zoological and botanical nomenclature of their own. The chief Nepalese tribes represented are the Khambū, Limbū, Murmī, Gurung, Khās, Kāmi, Mangar, Newār and Damai. The bulk of the population (92 per cent.) are supported by agriculture. Their castes and occupations.

Christian Missions.

In 1901 Christians numbered 135, of whom 125 were natives. The missions at work in the State are the Church of Scotland Mission and the Scandinavian Alliance Mission.

Agriculture.

By far the most important crop is maize, which occupies a larger area than all the other crops together; it is estimated to cover 94 square miles. After maize, the largest areas are under *marua*, buckwheat, rice, wheat and barley, which are estimated to cover from 4,000 to 12,000 acres each. Cardamom, grown on about 600 acres, is a valuable crop. Cultivation has rapidly extended in recent years, but a large quantity of culturable waste still remains. Plantains, oranges and other fruits are grown in the gardens, and the Government apple orchards started at Lachung and Lachen are proving a success. Cattle, yaks, and sheep of various kinds are bred in the State and are also imported from Tibet.

Forests.

The principal trees have been enumerated in the section on Botany. The forests have suffered much from promiscuous cutting of the trees and from fires caused by villagers when clearing ground for cultivation. An attempt is now being made to introduce a proper system of forest conservancy. Pine, *tun* (*Cedrela toona*), *Cryptomeria*, fir, alder, beech, chestnut and a few other varieties have been raised in nurseries for planting by the road sides, and an avenue of 150 rubber trees planted at Singtam is doing well. The receipts in 1903-04 were Rs. 19,000, derived chiefly from the sale of railway sleepers and tea box planking; the expenditure in the same year was Rs. 12,000.

Minerals.

Copper ores are very widespread in Sikkim. The ore is copper pyrites, often accompanied by mundic, and occurs chiefly in the Dáling beds. It is generally disseminated in slates and schists, and seldom occurs in true lodes. The analysis of a sample taken at random from the deeper part of a copper mine at Pachikhani gave 20·3 per cent. of copper. Some ores have been recently smelted and exported for sale on a small scale under State supervision, but the experiments have not proved remunerative. Iron occurs chiefly as pyrites, being most plentiful at Bhotang, where magnetite is also found, but it has not yet been put to any economic use. Garnet is in places abundant in the gneiss and mica schists, but it is of poor quality.

Manufactures and commerce.

A weaving school at Lachung has done well; tweed suits and blankets are the chief articles made. There are several trade routes through Sikkim from Darjeeling District into Tibet, but owing partly to the natural difficulties of the country and partly to the jealousy of the Tibetan authorities, trade over these roads has never been fully developed. In the convention of 1890 provision was made for the opening of a trade route, but the results were disappointing, and the failure of the Tibetans to fulfil their obligations

sulted in 1904 in the despatch of a Mission to Lhāsa, where now convention has been signed. In 1902-03 the total value f the trans-frontier trade was 19 lakhs, the principal imports being rool, musk and yaks' tails, and the exports cotton piece-goods, woollen cloths, silk, tobacco, copper, iron and other metals, Chinese aps, chinaware, maize and indigo. In 1903-04, when the trade was disorganized, the value fell to 7½ lakhs.

Communications.

Good roads, properly bridged throughout, have been opened since 1889 from Pedong in British territory to the Jelep-la and to Tumlong, and in 1903-04 the State contained 376 miles of road. A cart road has recently been constructed from Rangpo to Gangtok from Imperial funds, and a mule track on a gradient of 1 in 15 has been made from Gangtok to Chumbi *via* the Natula. Iron bridges have been constructed across the Tīsta, the Rangit and other streams.

Administration.

The Political Officer, who is stationed at Gangtok, advises and assists the Mahārājā and his Council, but no rules have yet been laid down for the civil and criminal administration. The landlords referred to in the next paragraph exercise a limited civil and criminal jurisdiction within the lands of which they collect the revenue, but all important cases are referred to the Mahārājā or Political Officer. Those referred to the Mahārājā are decided by him in consultation with his ministers (*lōmpo*), at present (1904) five in number, two of whom are always in attendance on him. Appeals are heard by the Mahārājā sitting with one or more members of his Council, or by a Committee of the Council. Capital sentences passed by other authorities require the confirmation of the Mahārājā. The annual budget estimates of income and expenditure are, in the first instance, approved by the Mahārājā and his Council, and are then submitted for the sanction of the Government of India by the Political Officer.

Revenue.

The total receipts in 1902-03 amounted to 1·58 lakhs, of which Rs. 61,000 was derived from the land, Rs. 37,000 from excise, Rs. 25,000 from forests and Rs. 10,000 under the head of agriculture, of which Rs. 9,000 was derived from cardamom rents. In 1903-04 a great demand for labour was created by the Tibet mission and many villagers left their houses; a marked decrease in the collections of land and excise revenue resulted, and the total revenue receipts dropped to 1·54 lakhs. The excise revenue is mainly derived from the fees charged for licenses to brew *pachwai* for home consumption, and from the fees charged for the manufacture and sale of country spirit; the manufacture of the latter is conducted on the outstill system.

Land revenue.

The collection of the land revenue is in the hands of land-lords variously known as Kāzī landlords numbering 21, Lāma landlords 13 and *Thikadārs* 37. Under these are village

Christian Missions.

Agriculture.

Forests.

Minerals.

Manufactures, commerce.

Police and jails.

headmen (styled *pipön* in Bhotiā, *tassa* in Lepchā and *mandal* in Khaskura), each headman being over those ryots whom he or his predecessors have introduced. The sum payable by each ryot is fixed by an informal committee of headmen and villagers presided over by the landlord and his agent. The rate now allowed to the landlord is 14 annas per *pathi* (about 4 seers) of seed for Nepalese ryots, and 8 annas per *pathi* for Lepchā and Bhotiā ryots. In maize and other dry lands of fair quality about 4 *pathis*, and in terraced rice lands about 6 *pathis*, go to the acre. Terraced rice lands, however, more often pay produce rents on the *kuth* system, one-fourth of the outturn being taken by the landlord. New land pays no rent for 3 years, in consideration of the labour involved in constructing the terraces. The *pathi* and *kuth* systems were introduced from Nepāl and have now been adopted throughout the greater part of Sikkim. The monasteries, however, and some of the Sikkim Kāzīs still maintain the old practice of assessing each household according to its circumstances. Each landlord pays to the State a sum fixed at the commencement of his lease. A man can settle down and cultivate any land he may find unoccupied without any formality whatever; and when once he has occupied the land, no one but the Mahārājā can turn him out. The latter, however, can eject him at any time; and if he ceases to occupy the land, he does not retain any lien upon it, unless he pays rent for it as though he had cultivated it. In the Lachung and Lachen valleys the system is peculiar. Here the assessment on each village is communicated each year to the *pipön*, or village headman, who collects the rents but gets nothing for his trouble except exemption from the obligation of carrying loads and from the labour tax. The *pipön* calls a committee of all the adult males over 15 years of age at the end of the year and, in consultation with them, fixes what each individual should pay, having regard to his general condition, the number of his cows, mules, ponies and yaks, and the quantity of land in his possession. There are no fixed rates, but the assessment on animals appears to work out at about 3 annas for each cow or yak and 4 annas for each mule or pony. In the upper part of Lachung the villagers redistribute the fields among themselves every 3 years by lottery, the richer people throwing for the big plots and the poorer villagers for the small ones. Grazing lands are divided in the same way, but not the house and homestead. The Lāmas are not bound to labour for the Mahārājā, and they pay no dues of any kind, no matter how much land may be cultivated by themselves or their bondsmen.

The State maintains a small force of military police, composed of 1 *havildār*, 3 head-constables and 16 *naiks* and constables. A jail with accommodation for 24 convicts has recently been built at Gangtok.

Of the population 5 per cent. (9·5 males and 0·3 females) could read and write in 1901. A school is maintained at Gangtok; in 1903-04 it had 37 pupils on its rolls, and the expense of maintenance was Rs. 2,000. Education.

A civil hospital building has been constructed at Gangtok and a dispensary at Chidam. During 1903-04 these were attended by 14,000 patients, and 153 operations were performed. In addition to this, 1,500 persons were vaccinated during the year. The medical charges borne by the State during the year were Rs. 4,000. Medical.

[*Aitchison's Treaties* (vol. i, 3rd Edition), 1892; W. T. Blanford, *Journey through Sikkim, Journal, Asiatic Society of Bengal*, vol. xl, Part ii, p. 367, 1871; *Journal of the Royal Asiatic Society*, September 1873; Abbé C. H. Desgodins, *La Mission du Tibet*, Verdun, 1872; Sir J. Ware Edgar, *Report on a Visit to Sikkim and the Tibetan Frontier in 1873*, Calcutta, 1874; Col. J. C. Gawler, *Sikkim*, 1873; Sir J. D. Hooker, *Himalayan Journals*, 1854; Colman Macaulay, *Report of a Mission to Sikkim and the Tibetan Frontier*, Calcutta, 1885; *Gazetteer of Sikkim*, Calcutta, 1894.]

Chola.—Pass in the Chola range of the Himālayas, 14,500 feet above the sea, situated in 27° 25′ N. and 88° 49′ E., leading from Sikkim State, Bengal, to the Chumbi valley in Tibet.

Dongkya.—Mountain on the boundary between Sikkim and Tibet, situated in 27° 59′ N. and 88° 48′ E., 50 miles east of Kinchinjunga, where the Chola range leaves the main chain of the Himālayas. Height 23,190 feet above sea-level. The well known Dongkya pass (elevation 18,400 feet) at the head of the Lachung valley is 4 miles west of Dongkya peak.

Gangtok.—Capital of Sikkim State, Bengal, situated in 27° 20′ N. and 88° 38′ E. Population (1901) 749. Gangtok contains the residence of the Mahārājā and other public buildings. It is connected with the Tīsta valley by a cart road.

Jelep-la.—Pass in the Chola range of the Himālayas, situated in 27° 22′ N. and 88° 53′ E., leading from Sikkim State, Bengal, into the Chumbi valley of Tibet. Height 14,390 feet above sea-level. The Jelep pass forms the principal route by which Tibetan trade enters British India and takes about half of the total registered trade between India and Tibet.

Kinchinjunga.—(*Kanchendzönga*).—[To be reprinted from Nepāl.]

Bhutān.—Independent State in the Eastern Himālayas, lying between 26° 41′ and 28° 7′ N., and 88° 54′ and 91° 54′ E. It is bounded on the north by Tibet; on the east by the Towang country, a narrow out-lying dependency of Tibet that stretches southwards to the confines of Assam; on the south by the Goālpāra, Kāmrūp and Jalpaigurī Districts; and on the west by the Chumbi valley, the Sikkim State and the Darjeeling District. Boundaries, configuration, and hill and river system.

Christian Missions.

Agriculture.

Forests.

Mines

The lofty peaks and ranges of the Himālayas stretch along the whole of the northern boundary of Bhutān, and great spurs stretch southwards from the main chain along its eastern and western boundaries. Within these mighty natural barriers is a succession of hill ranges, the general direction of which in western Bhutān is from north-west to south-east and in eastern Bhutān from north-east to south-west. The ridges are mostly steep and separated from each other by deep valleys running far back into the mountains. The Dongkya range which divides Sikkim from the Chumbi valley bifurcates at Gipmochi (on the western shoulder of which is the trijunction point of the Sikkim-Bhutān-Tibet boundary) into two great spurs, one running to the south-east and the other to the south-west, including between them the valley of the Di-chu* or Jaldhākā river. From CHUMALHARI on the Tibetan boundary at the north-west corner of Bhutān another ridge strikes southwards between the basins of the Torsā (the Chumbi valley) and Raidāk rivers, and terminates in the SINCHULA hills which form the boundary between Jalpaigurī District and Bhutān. Further east very little is known of the main chain, but it has been ascertained that its chief offshoots trend southwards: these include the Black mountain range with ramifications south-west and south-east in the Tongsa division; the Yato-la from peak B (24,737 feet) north of Tongsa; the Rudu-la range; the Donga range from a peak north of Donga-la (20,965 feet); the Kollong range from the Daud peak (20,576 feet); and, in the extreme east, a range springing from the 3 peaks E (21,278 feet), F (23,066 feet) and H (22,422 feet), with ramifications in a south-easterly direction, on one of which Dīwāngiri is situated. The last mentioned range probably forms the true boundary between Bhutān and Towang. This mountainous region sends out numerous rivers in a more or less southerly direction, all of which eventually find their way into the Brahmaputra. Their courses in Bhutān are confined between high rocky mountains, and as the gradients of their beds have a very steep fall, they are furious torrents in the rains, and hardly any of them are fordable at this period of the year. Proceeding from west to east, the chief rivers are the Di-chu, Amo-chu or TORSA, Chin-chu, Ma-chu, Mati-chu and Dangme-chu. The Di-chu, which rises in a lake near Gipmochi, forms the boundary between Bhutān and Darjeeling District during the last 12 miles of its course in the mountains. The Amo-chu rises below the Tang pass, which forms the connecting link across the Tibetan table land of the main range of the Himālayas and forms the watershed between the streams running northwards and southwards; and after flowing through the Chumbi valley for about 10 miles it enters Bhutān. Soon after

* *Di* is the Bodo and *chu* the Tibetan word for water or river.

entering Bhutān, the river runs through a steep and narrow gorge, and below this it flows through a valley which is believed to have an easy gradient, and which has been prospected for a road connecting Tibet with Bengal. The Chin-chu rises in the eastern and southern slopes of the Chumalhari range, and after flowing in a south-easterly direction for about 200 miles through Bhutān, enters the Duārs not far from the eastern border of Jalpaigurī, where it is known as Ninagaon river. The Ma-chu rises in Tibet, and after a course in Bhutān of about 180 miles past Punaka, it debouches on the borders of Jalpaigurī and Goālpāra where it is called the Sankos. The Dangme-chu, which is believed to rise in Tibet, flows in a south-westerly direction through Bhutān, and on emerging into the plains, where it is known as the Manās, forms the boundary between the Kāmrūp and Goālpāra Districts of Assam.

Geology.

As far as is known, the lower mountain ranges are composed chiefly of a coarse and decomposing granite sandstone. Gneiss, hornblendic slate, micaceous slate and brown and ochre-coloured sandstones form the boulders in the beds of the streams in the ascent from the plains. The rocks at the highest elevation consist of gneiss rising through upheaved strata of mica and talcose slate. At an elevation of 8,000 or 9,000 feet a talcose slate has been observed, thickly disseminated with garnets and in some cases threaded with large grains of titaniferous iron ore. Limestone formations on a large scale extend from Chingi to Santso, and another limestone formation from Pomekpu to Tassisūdra and thence to the plains at Buxa.

Botany.

Above 5,000 feet the mountain slopes are generally covered with forest abounding in many varieties of stately trees, including the beech, ash, birch, maple, cypress and yew. At an elevation of 8,000 or 9,000 feet, is a zone of vegetation consisting principally of oaks and rhododendrons, and above this again is a profusion of firs and pines.

Fauna.

The lower ranges of the hills teem with animal life. Tigers are not common, except near the river Tista, but elephants are so numerous as to be dangerous to travellers. Leopards abound in the valleys and deer everywhere, some of them of a very large species. The musk deer (*Moschus moschiferus*) is found in the snows, and the barking deer (*Cervulus muntjac*) on every hill-side. Wild hogs are met with even at great elevations. Bears and rhinoceros are also found. Large squirrels are common, and pheasants, partridges, jungle fowl, pigeons, and other small game abound.

Climate and temperature.

The climate of Bhutān varies with the elevation, and the cold of Siberia, the heat of Africa, and the pleasant warmth of Italy, may all be experienced in the course of a single day's journey. At the time when the inhabitants of Punaka are afraid of exposing

themselves to the blazing sun, those of Ghāsa experience all the rigour of winter and are chilled by perpetual snows. Yet these places are within sight of each other. The rains descend in floods upon the heights, but in the vicinity of Trashi-chöd-zong and Punaka they are moderate; there are frequent showers, but nothing that can be compared to the tropical rains of Bengal. Owing to the great elevation and steepness of the mountains, terrible storms arise among the hollows, which are often attended with fatal results.

Christian Missions.

Agriculture.

History.

Bhutān has not long been in the possession of its present rulers. It formerly belonged to a tribe called by the Bhotiās Tephū, who are believed to have been of the same race as the Kachāris and Koches of the adjoining plains, and who were subjugated about two centuries ago by a band of Tibetan soldiers. The latter settled down in the country and intermarried with the aborigines, and from them have sprung the people now called Bhotiās. There are still various servile tribes in the country regarding whom very little is yet known, but we may surmise that they are descended from more or less pure remnants of the earlier inhabitants. The relations of the British with Bhutān commenced in 1772, when the Bhotiās invaded the principality of Cooch Behār. The ruler of that State invoked British aid, and a force was despatched to his assistance under Captain James, who expelled the invaders and pursued them into their own territory. Peace was concluded in 1774 through the mediation of the Tashi Lāma, then regent of Tibet. In 1783 Captain Turner was deputed to Bhutān, with a view to promoting commercial intercourse, but his mission proved unsuccessful. From this period few dealings took place with Bhutān until the occupation of Assam by the British in 1826. It was then discovered that the Bhotiās had usurped the strip of lowland lying along the foot of the mountains, called the Duārs or passes, and for these they agreed to pay a small tribute. They failed to do so, however, and availed themselves of the command of the passes to commit depredations in British territory. Captain Pemberton was deputed to Bhutān to adjust the points of difference, but his negotiations yielded no definite result; and every other means of obtaining redress and security proving unsuccessful, the Assam Duārs were taken from the Bhotiās, and, in lieu of them, an annual payment of Rs. 10,000 was promised to the hillmen so long as they behaved themselves. They continued, however, to commit acts of outrage and aggression, and in spite of repeated remonstrances and threats, scarcely a year passed without the occurrence of several raids, often headed by Bhotiā officials, in which they plundered the inhabitants, massacred them, or carried them away as slaves.

Forests.

Mine.

In 1863 the Hon. Ashley Eden was sent as an envoy to Bhutān to demand reparation for these outrages. He was

there subjected to the grossest insults, and under compulsion signed a treaty surrendering the Duārs to Bhutān and making many other concessions. On his return the Viceroy at once disavowed the treaty, stopped the allowance previously given for the Assam Duārs, and demanded the immediate restoration of all British subjects kidnapped during the previous 5 years. As this demand was not complied with, the Governor-General issued a proclamation, dated the 12th November 1864, annexing the Western Duārs. No resistance was at first offered to the annexation; but in January 1865, the Bhotiās made an unexpected attack on Dīwāngiri, and the small British garrison abandoned the post with the loss of two mountain guns. This disaster was soon retrieved by General Tombs, and the Bhutān Government was compelled to sue for peace, which was concluded on the 11th November 1865. In the year following, it formally ceded all the 18 Duārs of Eastern Bengal and Assam, and agreed to liberate all kidnapped British subjects. As the revenues of Bhutān mainly depended on these Duārs, the British Government, in return for these concessions, undertook to pay an allowance beginning at Rs. 25,000 a year and rising in 3 years to a maximum of twice that amount, provided that the Bhotiās abstained from fresh breaches of peace. Since then relations with Bhutān have been almost uninterruptedly friendly.

The people.

Previous to the British annexation of the Duārs, the area of the kingdom was reckoned at about 20,000 square miles. The population in 1864 was estimated to be about 20,000. Later information, however, points to a larger figure, and it is believed that the tract west of the Amo-chu alone contains about 15,000 persons. The chief towns are PUNAKA or Dosen, the winter capital, on the left bank of the Būgni river, 96 miles east-north-east from Darjeeling, TRASHI-CHODZONG, the summer head-quarters, PARO, Wangdü Potrang and Tongsa on the road from Assam to Lhāsa. The other towns are Wandipur, Ghāsa, and Murichom. The population west of the Amo-chu consists almost entirely of Nepalese, who have been driven out of their own country by the pressure of the population on the soil and have flocked to Bhutān, as well as to the Darjeeling District and Sikkim, for many years past. Now that the best lands in the Darjeeling District and much of the good land in Sikkim are filled up, the movement towards Bhutān, where there is still plenty of waste, is stronger than ever. These immigrants are not well treated by the Bhutanese, but their condition is better than it used to be, now that the Bhutanese officials have begun to realize the extent to which they increase the revenue; and for a few years at any rate, until the colonist is settled, and has made money, he is left in comparative peace by his rulers. East of the Amo-chu, the Bhutanese ryots have successfully

objected to their being allowed to take up land, on the ground that once admitted they would swamp the old inhabitants. The objection seems a reasonable one, since the Nepalese, if once admitted, would cultivate many of the Bhutanese grazing grounds that are below 7,000 feet elevation, and would confine the cultivation of the latter within much narrower limits than at present.

The population of Bhutān consists of three classes—the priests, the chiefs or Penlops, including the governing class, and the cultivators. The Bhotiās are most at home among their cattle and mules, and are generally apathetic and backward in cultivation. Physically they are a fine race, hardy and vigorous, with dark skins, ruddy complexions and high cheekbones, but they are dirty in their habits and persons. They are courageous, but truculent and prone to sudden bursts of anger and murder. Robbery and other crimes of violence are common in their country. Their food consists of meat, chiefly pork, mutton and yak's flesh, turnips, rice, barley-meal, and tea made from the brick-tea of China. Their favourite drink is *chang* distilled from rice or barley and millet, and *maruā* beer made from fermented millet; all classes are very much addicted to the use of these liquors. Priests and laymen, men and women all wear close-cropped hair, a feature which distinguishes the Bhotiās of Bhutān from their cousins in Tibet and Sikkim, among whom, except by priests, the pigtail is universally worn. A loose woollen coat reaching to the knees, and bound round the waist by a thick fold of cotton cloth or a leather belt, forms the costume of the men. A legging of broadcloth is attached to a shoe made generally of buffalo hide, and no Bhotiā ever travels during the winter without protecting his legs and feet against the effects of the snow. A cap made of fur or coarse woollen cloth completes the outfit. The women's dress is a long cloak with loose sleeves. The houses in appearance resemble Swiss chalets, and are picturesque and comfortable, but outside towns they are seldom more than two stories high. The Bhutanese are neat joiners, and their doors, windows and panelling are excellent. No iron-work is used; the doors open on ingenious wooden hinges, and all the floors are neatly boarded with deal. On two sides of the house is a verandah, painted and ornamented with carved work. The only defect is the absence of chimneys, which the Bhutanese do not know how to construct.

Language. The Bhutanese spoken language is a dialect of Tibetan, but it is subject to great local variations owing to the mountain barriers which impede free communication between different parts. In the west the dialect is closely akin to that of Sikkim and Kālimpong, but the pronunciation is sharper and more abrupt. The Tibetans and Sikkimese say that the Bhutanese speech

resembles that of a man talking in anger, and there is no doubt that the temper of the people is reflected in their mode of talk. The written language of books is the same as that of Tibet, and by means of it the native of Bhutān can communicate with the Kam-pa Tibetan living on the confines of China and with the Ladākhi on the borders of Kashmīr.

Religion. The people profess to be Buddhists, but their religion, as is the case in Tibet also, partakes largely of the old Bŏm-po or the religion which preceded Buddhism; this consists chiefly of devil-worship and of propitiatory sacrifices, in which animal life is freely taken, a proceeding abhorrent to the true followers of Buddha. The sacred books of the Buddhist, or rather of the Lāmaist religion, are brought from Tibet; they are frequently recited but seldom understood. The local priests excel in the painting of religious pictures, and many of the best pictures in the Sikkim monasteries are the work of Lāmas from Bhutān.

Agriculture. From the configuration of the country, regular husbandry is limited to a comparatively few spots. The chief crop is maize which grows up to 7,000 feet; wheat, *maruā*, buck wheat and mustard are also grown. Cultivation is in a backward state, even in those places where it has existed longest. The most paying crops in this kind of country are cardamoms and terraced rice, but these both require irrigable land and so involve a large outlay on the part of the cultivator. Large areas of suitable land are to be found in which the means of irrigation are abundant, but property is very insecure and the cultivator hesitates to incur the necessary expenditure.

Cattle and ponies. The forests have a certain value as grazing grounds, and many of the graziers who supply Darjeeling town with milk send their cattle when off milk to the forests at the head of the Di-chu. A species of pony, called *tangan* from Tangasthān, the general appellation of that assemblage of mountains which constitutes the territory of Bhutān, is found in this tract, the same name being applied to similar ponies in parts of Nepāl. The *tangan* pony usually stands about 13 hands high, and is short-bodied, clean limbed, deep in the chest, and extremely active.

Material condition. Bhutān is a fairly good country for an ordinary cultivator, so long as he does not grow rich. There is, however, no security of property, and if cultivators amass wealth, they are afraid to show any signs of it, for fear that they may be mulcted on trivial pretexts, such as the wearing of clothes beyond their station, or the possession of ponies which they have not sent to carry the Kāzī's loads. Amongst the reasons which induce the Nepalese to migrate into western Bhutān in the face of these disadvantages, may be mentioned the plentiful supply of land, and the absence of all restrictions on taking it up and clearing it;

on burning down or cutting trees, and on brewing and selling all kinds of liquor. The promiscuous burning of jungle and felling of timber will, however, before long leave them much worse off than if they had been subjected to the restrictions which the British administration imposes in these respects.

Arts and manufactures.

In so rude a country, the manufactures of the people are very primitive, and the few articles produced are all destined for home consumption. Coarse blankets and cotton cloth are made by the villagers inhabiting the southern tract. Leather, from the hide of a buffalo, imperfectly tanned, furnishes the soles of snow boots. Bowls are neatly turned from various woods. A small quantity of paper is made from a plant described as the *Daphne papyrifera*. Swords and daggers, and sheaths made of copper, brass or silver, iron spears, arrow-heads, charm boxes and *pān* boxes, caldrons and agricultural implements complete the list of manufactures.

Commerce.

In 1775 Mr. Bogle obtained the consent of the Deb Rājā to free trade between Bhutān and the territories of the East India Company; and by Article IX of the Sinchulā treaty of 1865 it was agreed that there should be free trade and commerce between the two Governments. Except, however, for a few years during the administration of Warren Hastings, Bhutān has practically remained closed to British traders. The Bhutanese, on the other hand, have been permitted to come freely in British territory, and fairs to promote trade have been established and subsidized at KALIMPONG in Darjeeling, and FALAKATA and ALIPUR in Eastern Bengal, and at Dīwāngiri and Udalguri in Assam. In 1902-03 the value of the exports from Bhutān into Bengal was 4·17 lakhs, and of the imports 1·16 lakhs. The chief exports are timber and oranges, and the imports European piece-goods, manufactured silk, betel-nuts and tobacco. Other exports are ponies and mules, cattle, sheep, musk, *ghi*, silk, tea, wax, manufactured piece-goods, yak's tails, madder, hides, ivory, lac and rubber.

Communications.

Practically the only means of communication are a few rough tracks on which ponies can be ridden. Under a recent arrangement with the Bhutān Government, the country between the valleys of the Amo-chu (Torsā) and the Di-chu (Jaldhākā) has been prospected for a road or mule track, the construction of which is now under consideration. A survey has been completed from Nāgrākāta on the Bengal-Duārs Railway to Chumbi; and the road, if sanctioned, will connect Tibet with the plains of Bengal, leaving Chumbi above the gorge in Bhutān through which the Amo-chu flows, crossing the intervening range at an elevation of under 10,000 feet and reaching the plains at the point where the Di-chu enters the Jalpaigurī District.

Administration.

At the head of the Bhutān Government there are nominally two supreme authorities, the Dharma Rājā, known as *Shaptrung Rinpoche*, the spiritual head, and the Deb or Depa Rājā, the temporal ruler. The Dharma Rājā is regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in Tibet, of which there are several hundreds. On the death of a Dharma Rājā a year or two is allowed to elapse, and his reincarnation then takes place, always in the Chöje, or royal family of Bhutān. It is believed that on the day of his rebirth a slight shower of rain falls from a clear sky, and a rainbow appears above the house in which he is born. The parents report his birth to the local chief. When he is about three years old and able to speak a little, he is expected to give particulars as to the property of his monastery, the Talo *göm-pa* near Punaka, and to identify the rosary, books and other articles used by him in religious ceremonies in his former life from among similar articles used by other monks.

The chief council, called the *shung lhengye*, is composed of the Dharma Rājā and the Deb Rājā, the Penlops of Tongsa, Paro and Tagapa and the Jongpens of Timpu and Punaka; it assembles only for questions of national importance, such as the levying of war or other grave matters. A subordinate council for the disposal of less important matters is, when sitting at Punaka, constituted from the Deb's *simpön*, who is a sort of private secretary to the Deb Rājā, the *shung dronyer*, and either the Punaka or the Timpu Jongpen; in the case of meetings held at Trashichödzong, the summer capital, an official known as the *kalapa* takes the place of the Punaka Jongpen.

The Deb Rājā is in theory elected by the council, but in practice he is merely the nominee of whichever of the two governors of east or west Bhutān (the Penlops of Paro and Tongsa) happens for the time to be the more powerful. At present the Tongsa Penlop controls all public affairs in the name of the Deb Rājā. The chief officials at Tongsa subordinate to him are the *dronyer*, who remains in charge of the *jong* in his absence, his *simpön* or private secretary, and the *Depön* or *Dapön*, who commands the soldiers and police (*simkap*). The subordinate officers in western Bhutān consist, in addition to a number of officials at Paro, of Kāzīs who are Bhutanese and of *thikadārs* who are Nepalese; these live in the interior and are responsible for the collection of revenue. The Kāzīs have power to dispose of cases and to impose fines, and only serious cases are sent to Paro for trial. Though there is thus an outward show of government, the local officials are but imperfectly controlled by the central power, and murder, robbery and other crimes of violence are common. The State is directly under the control of the Government of India, which is exercised through the Political Officer in Sikkim.

Revenue. The Bhutanese in western Bhutān pay a cultivation tax in grain and also a tax in butter on their cattle farms. The Nepalese and Lepchā ryots pay a poll-tax of Rs. 6-8 per annum for each house, in addition to a labour-tax of Rs. 3 per annum for each house, if loads are not carried free of charge according to the Kāzī's requisitions, and a grazing charge of about R. 1 per annum for each 15 to 20 head of cattle grazed in the forests near the villages. This last tax is paid by the Nepalese headmen to the Bhutanese inhabitants as a fee for grazing in the jungles originally occupied by the latter alone. In addition, there are various irregular charges, chiefly fines levied by the officials on the most trivial pretexts, which often swell the expenses, especially of rich ryots, to a very high figure.

Army. Local levies under the control of the different chiefs can nominally be called out by the Deb Rājā, but it is estimated that the total number of fighting men does not exceed 9,500, and that the number that can be concentrated at one place does not exceed 4,000 or 5,000 men. As a militia these levies are of a worthless description; they are seldom mustered for drill and are lacking in discipline, while the officers have no knowledge of strategy or tactics. Their arms consist of matchlocks, bows and arrows, slings and *daos*, with a few breech-loading rifles.

Education. The population is generally illiterate. Facilities have been given by the Government of Bengal for a few young Lāmas to attend the Bhotiā boarding school at Darjeeling, but no advantage has been taken of these by Bhotiās from Bhutān.

[S. Turner, *Account of an Embassy to the court of the Tashi Lāma in Tibet*, 1800; R. B. Pemberton, *Report on Bhutān*, Calcutta, 1839; Ashley Eden, *Report on the State of Bhutān*, Calcutta, 1864, and *Political Missions to Bhutān*, Calcutta, 1865; C. R. Markham, *Mission of Bogle to Tibet and Journey of Manning to Lhāsa*, 1879.]

Chumalhari.—Snow peak on the boundary between Tibet and the north-western corner of Bhutān State, situated in 27° 50′ N. and 89° 16′ E., at a height of 23,933 feet above sea-level. Chumalhari is known as one of the most sacred mountains in Tibet.

Chumurchi.—Village in the south-west of Bhutān State, situated in 26° 55′ N. and 89° 7′ E.

Paro.—Town in Bhutān State, situated in 27° 23′ N. and 89° 27′ E. Paro is the head-quarters of the Paro Penlop, the governor of western Bhutān.

Pempa-la.—Pass in Bhutān State, situated in 27° 39′ N. and 89° 15′ E.

Punaka.—Winter capital of Bhutān State, situated on the left bank of the Būgni river in 27° 35′ N. and 89° 51′ E., 96 miles east-north-east from Darjeeling. Punaka is a place of great natural strength.

Tongsa.—Village in the Bhutān State, situated in 27° 30′ N. and 90° 28′ E. Tongsa is the head-quarters of the Tongsa Penlop, the governor of eastern Bhutān.

Trashi-chöd-zong.—Summer capital of Bhutān State, situated in 27° 20′ N. and 91° 34′ E. It lies in the valley of the Chin-chu or Raidāk river and is entirely surrounded by lofty mountains.

Tule-la.—Pass in Bhutān State, situated in 27° 7′ N. and 89° 0′ E., 10,000 feet above the sea. By it the road from Sipchu to Paro crosses the range dividing the Di-chu and Amo-chu valleys.

Chandernagore (*Chandannagar*).—Town situated on the bank of the Hooghly a short distance below Chinsura, in 22° 52′ N. and 88° 22′ E. Population (1901) about 25,000. The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676. It did not, however, rise to any importance till the time of Dupleix, during whose administration more than two thousand brick houses were erected in the town, and a considerable maritime trade was carried on. In 1757 the town was bombarded by the English fleet under Admiral Watson and captured, the fortifications and houses being afterwards demolished. It was restored to the French in 1763, but was retaken when hostilities were renewed in 1794. It was again restored by the Peace of Amiens in 1802, but was retaken in the same year and was held by the English till 1816, when it was finally restored to the French, in whose possession it has ever since remained. The former grandeur of Chandernagore has disappeared, and at present it is little more than a quiet suburban town with little external trades. The railway station on the East Indian Railway is just outside French territory, 22 miles from Calcutta (Howrah). The chief administrative officer is the Administrator, who is subordinate to the Governor of the French Possessions. On the assumption of the opium monopoly by the British, the French Government of Chandernagore obtained by the convention of 1815 the right to purchase 300 chests of opium annually at the auction sales held in Calcutta, at the average price obtained at the monthly sales. This right has, however, been commuted for the payment of an annual subsidy of Rs. 3,000 to the French Government; and a further subsidy of Rs. 2,000 a year is also paid to that Government in consideration of their undertaking to suppress the smuggling of opium from their territory into British India, or the traffic by export or import of any opium other than that purchased at the Hooghly treasury. Its peculiar situation affords unusual facilities for the escape of thieves and for the operations of smugglers in opium and other excisable articles. The chief public institution is the College Dupleix, formerly called St. Mary's Institution, founded in 1882 and under the direct control of the French Administrator.

Cross-references (for Imperial Gazetteer only).

Boad.—Native State and village in Orissa, Bengal. *See* BAUD.

Bod.—Native State and village in Orissa, Bengal. *See* BAUD.

Chandarnagar.—French settlement. *See* CHANDERNAGORE.

Chhotā Nāgpur.—Division and group of Native States in Bengal. *See* CHOTA NAGPUR.

Chutiā Nāgpur.—Division and group of Native States in Bengal. *See* CHOTA NAGPUR.

Gantak.—Capital of Sikkim State, Bengal. *See* GANGTOK.

Guntok.—Capital of Sikkim State, Bengal. *See* GANGTOK.

Jeylap.—Pass in the Himālayas. *See* JELEP-LA.

Kānchenjanga.—Mountain in Sikkim State, Bengal. *See* KINCHINJUNGA.

Karond.—Native State in Bengal. *See* KALAHANDI.

Keunjhar.—Native State and town in Orissa, Bengal. *See* KEONJHAR.

Koch.—Tribe in Cooch Behar State, Bengal *See* COOCH BEHAR.

Kuch Bihār.—Native State in Bengal. *See* COOCH BEHAR.

Māthābhānga.—River in Bengal and town in Cooch Behār State, Bengal. *See* MATABHANGA.

Moharbhanj.—Native State in Orissa, Bengal. *See* MAYURBHANJ.