3,408 in 1881 to 2,080 in 1901. It is still, however, a place of pilgrimage; and close to it are the temples of Pirthūdakeshwar or Pirthūveshwar, built by the Marāthās during their supremacy in honour of the goddess Saraswatī (Sarsūti), and of Swāmi Kārtik. The latter is said to have been founded before the war of the Mahābhārata in honour of the war-god Kartaya. The town has a dispensary.

Pündri.—Town in the Kaithal *taksil* of Karnāl District, Punjab, situated in 29° 46' N. and 76° 34' E., on the bank of a great tank called the Pundrak tank. Population (1901), 5,834. It was formerly one of the strongholds of the Pündirs, a Rājput tribe who held Thānesar and the Nardak. It has a vernacular middle school.

Shāhābād.—Town in the Thānesar tahsil of Karnāl District, Punjab, situated in 30° 10' N. and 76° 52' E., on the Delhi-Umballa-Kālka Railway, 16 miles south of Ambāla. Population (1901), 11,009. The town was founded by one of the followers of Muhammad of Ghor at the end of the twelfth century. It is of no commercial importance. The municipality was created in 1867–8. The income during the ten years ending 1902–3 averaged Rs. 10,900, and the expenditure Rs. 10,200. The income in 1903–4 was Rs. 12,300, chiefly derived from octroi; and the expenditure was Rs. 11,200. The town has a vernacular middle school and a dispensary.

Tirāwari (or Azamābād-i-Talāwari, the Tarain of the earlier Muhammadan historians) .--- Village in the District and taksil of Karnal, Punjab, situated in 29° 48' N. and 76° 59' E., 14 miles south of Thanesar and 84 north of Delhi, on the Delhi-Umballa-Kälka Railway. Tirāwari is identified as he scene of Muhammad of Ghor's defeat by Prithwi Raj (Rai Pithora), the Chauhān king of Ajmer, in 1191, and of the former's victory over that king in 1192. In 1216 Tāj-ud-dīn Yalduz, who had made himself master of the Punjab, advanced against Shams-ud-din Altamsh, but was defeated by the latter near Tarain. It derives its modern name of Azamābād from Azam Shāh, son of Aurangzeb, who was born in the town. In 1739 Nādir Shāh occupied the place, then a fortified town, after battering its walls, and marched to encounter Muhammad A great rabāt or fortified sarai still exists at Tirāwari, Shāh. and the walls round the village are in excellent preservation.

Thānesar Town (*Thānesavar*).—Head-quarters of the *tahsīl* of the same name in Karnāl District, Punjab, situated in 29° 59' N. and 76° 50' E., on the banks of the Saraswatī, and

on the Delhi-Umballa-Kālka Railway. Population (1901), 5,066. It is famous as the most sacred place in the holy land of KURUKSHETRA, its name meaning 'the place of the god' (sthāneshwara). In the time of Hiuen Tsiang, Thānesar was the capital of a Vaisya (Bais) dynasty, which ruled parts of the Southern Punjab, Hindustan, and Eastern Rājputāna. In A.D. 648 a Chinese ambassador was sent to Harshavardhana of Thanesar, but found that the Senapati Arjuna had usurped his kingdom, and the dynasty then became extinct. Thanesar, however, continued to be a place of great sanctity; but in 1014 it was sacked by Mahmud of Ghazni, and although recovered by the Hindu Rājā of Delhi in 1043, it remained desolate for centuries. By the time of Sikandar Lodi it had, however, been in some measure restored, for that emperor proposed to make a raid on it to massacre the pilgrims. In 1567 Akbar witnessed its great fair; but Aurangzeb desecrated the shrine and built a castle in its sacred lake, whence his soldiers could fire on pilgrims who attempted to bathe. At the annexation of the. cis-Sutlej territory, the town and neighbourhood were in the possession of a Sikh family, but they lapsed to the British Government in 1850. Thanesar was the head-quarters of a British District till 1862, but has since steadily declined in importance. The municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 7,900, and the expenditure Rs. 7,300. The income in 1903-4 was Rs. 8,900, chiefly derived from octroi; and the expenditure was Rs. 8,200. The town has a vernacular middle school and a dispensary. The bathing-fairs held here on the occasion of solar eclipses are sometimes attended by half a million pilgrims.

Ambāla District.-Northernmost of the plains Districts Bounof the Delhi Division, Punjab, lying between 30° 2' and daries, con-figuration, 30° 13' N. and 76° 19' and 77° 36' E., with an area of and hill 1,851 square miles. It extends from the Sutlej, which sepa- and river systems. rates it from the District of Hoshiārpur on the north, to the Jumna, which divides it from the District of Sahāranpur in the United Provinces on the south-east. On the north-east it is bounded by the States of Nālāgarh, Patiāla, Sirmūr, and Kalsia; on the south by the District of Karnal; and on the west by Patiāla and the District of Ludhiana. The District is very irregular in shape, and consists of two almost separate portions. The main portion lies between the Ghaggar and the Jumna, comprising the three tahsils of Ambala, Naraingarh, and Jagādhri. It is formed of the plain which descends from

the Siwālik Hills towards the south-west. This plain is fertile, generally speaking a good alluvial loam, but intersected by torrents, which pour down from the hills at intervals of a few miles; and it is interspersed with blocks of stiff clay soil, which in years of scanty rainfall are unproductive, so that the tract, especially the Naraingarh tahstl, is liable to famine. In this part of the District lies the Morni ilaka, a hilly tract of about 93 square miles, chiefly made up of two main ridges, and culminating in the Karoh peak (4,919 feet) on the Sirmur border. It is inhabited by tribes of Hindu Kanets. The second portion of the District is the Rupar subdivision, which comprises the taksils of Rupar and Kharar, a submontane plain lying to the north between the Ghaggar and the Sutlej. This plain is of great fertility, highly cultivated, and well wooded, with numerous mango groves; but its south-eastern extremity, which is heavily irrigated from the Ghaggar, is waterlogged, and though of boundless fertility is so unhealthy as to be almost uninhabitable. The District also includes the detached tracts containing the town of Kalka and the hill cantonment of Kasauli.

Besides the great boundary streams of the Sutlej and Jumna, each of whose beds passes through the various stages of boulders, shingle, and sand, the District is traversed in every part by innumerable minor channels. The Ghaggar rises in Sirmūr State, passes through the Morni tract, crosses the District at its narrowest point, and almost immediately enters Patiāla; but near the town of Ambāla it again touches British territory, and skirts the border for a short distance. It is largely used for irrigation, the water being drawn off by means of artificial cuts. Among other streams may be mentioned the Chautang, Tangri, Baliāli, Sirvan, Boli, Budki, and Sombh. The Western Jumna Canal has its head-works at Tajewāla in this District, and the Sirhind Canal takes off from the Sutlej at Rūpar.

Geology.

Botany.

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With the exception of the narrow submontane strip running along its north-eastern border, the whole District lies on the Indo-Gangetic alluvium. The submontane tract consists of sandstones and conglomerates, belonging to the Upper Tertiary (Siwālik) series of the Himālayas.

The District includes three very different botanical tracts: the southern part, which belongs to the Upper Gangetic plain; the Siwāliks in the north-east; and the Kasauli tract, which rises to over 6,000 feet, and is Outer Himālayan, with a flora much the same as that of Simla below 5,000 feet above sealevel. The Kalesar forest and the Morni hills generally, which fall in the second tract, have a fairly rich Siwālik flora, with which a few Himālayan types, such as *chīr* or *chīl* (*Pinus longifolia*), intermingle.

Tigers are occasionally shot in the Kalesar forest and the Fauna. Morni hills; there are a few bears about Morni, and leopards, hyenas, and wolves are not uncommon, while wild hog abound. Of deer six kinds are found: *sāmbar*, *chātal*, and *kākar* in the hill tracts; and 'ravine deer' (Indian gazelle), antelope, and hog deer in the plains.

The climate of the plains is fairly good, though, owing to the Climate nearness of the hills, subject to severe changes of temperature. The average mean temperature of January is 39.45° and of June 77.55°. The hill station of Kasauli, owing to its moderate height and nearness to the dust of the plains, is the least esteemed for climate of the Punjab hill stations. The chief cause of mortality is fever. Swamping, caused by percolation from the Western Jumna Canal, used to affect the health of the people injuriously; but the careful realignment of the canal which has been carried out of recent years has, it is hoped, completely remedied the evil.

The rainfall varies widely in the hill, submontane, and plain Rainfall. tracts, and the average fall ranges from 28 inches at Rūpar to 61 at Kasauli. The District on the whole is well off in the matter of rainfall, and there are comparatively few years in which the rains fail altogether; the variations from year to year are, however, considerable. The heaviest rainfall recorded during the twenty years ending 1900-1 was 87 inches at Jagādhri in 1884-5, and the lightest was 0.33 inches at Dādūpur in 1889-90.

The earliest authentic information with reference to this History District is derived from the itinerary of Hiuen Tsiang, the and Chinese Buddhist pilgrim of the seventh century. He found logy. it the seat of a flourishing and civilized kingdom, having its capital at Srughna, a town identified by General Cunningham with the modern village of SUGH, near Jagādhri. The country around Ambāla from its position felt the full force of every important campaign in Northern India, but receives little mention except as an appurtenance of Sirhind. Such references as occur in the Muhammadan historians are given in the articles on AmbāLa CITY and RŪPAR TOWN.

The practical interest of the local annals begins with the rise of the Sikh principalities south of the Sutlej during the latter half of the eighteenth century. As the central

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power of the Mughal empire relaxed under the blows of the Marāthās on the one side and the Afghāns on the other, numerous Sikh marauders from the Punjab proper began to extend their encroachments beyond the Sutlej, and ere long acquired for themselves the heart of the country between that river and the Jumna. When the Marāthā power fell before the British in 1803, the whole tract was parcelled out among chiefs of various grades, from the powerful Rājās of Patiāla, Jind, and Nabha down to the petty sardar who had succeeded in securing by violence or fraud the possession of a few villages; but after Ranjīt Singh began to consolidate the Sikh territories within the Punjab, he crossed the Sutlej in 1808, and demanded tribute from the Cis-Sutlej chieftains. Thus pressed, and fearing for themselves the fate which had overtaken their brethren, the Sikh chieftains combined to apply for aid to the British Government. The responsibility of protecting the minor States from their powerful neighbour was accepted, and the treaty of 1809, between the British Government and Ranjit Singh, secured them in future from encroachment on the north. Internal wars were strictly prohibited by a proclamation issued in 1811; but with this exception the powers and privileges of the chiefs remained untouched. Each native ruler, great or small, including even the descendants of private troopers of the original invading forces, had civil, criminal, and fiscal jurisdiction within his own territory, subject only to the controlling authority of the Governor-General's Agent at Ambāla. No tribute was taken, nor was any special contingent demanded, although the chieftains were bound in case of war to give active aid to the Government. The right to escheats was the sole return which was asked. The first Sikh War and the Sutlej campaign of 1845 gave Government an opportunity of testing the gratitude of the chieftains. Few of them, however, displayed their loyalty more conspicuously than by abstaining from open rebellion. Their previous conduct had not been such as to encourage Government in its policy towards them; and a sweeping measure of reform was accordingly introduced, for the reduction of their privileges. The Political Agency of Ambāla was transformed into a Commissionership, and police jurisdiction was handed over to European officers. In June, 1849, after the second Sikh War had brought the Punjab under British rule, the chiefs were finally deprived of all sovereign powers. The revenues were still theirs, but the assessments were to be made by British officials and under British regulation. Even

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previous to this arrangement portions of the modern District had lapsed to Government by death or forfeiture; and the reforms of 1849 brought Ambäla nearly to its present proportions.

During the Mutiny of 1857, although incendiary fires and other disturbances gave much ground for alarm, especially at the first beginning of disaffection, no actual outbreak occurred, and the District was held throughout with little difficulty. In 1862 the dismemberment of Thänesar District brought three new *parganas* to Ambāla; since that date there have been several alterations of boundary, the most important of which were the transfer of the Thānesar *tahsil* to Karnāl in 1897 and the accession of Kasauli and Kālka from Simla in 1899.

Information as to the principal remains of archaeological interest will be found in the articles on SUGH and SADHAURA.

The District contains 7 towns and 1,718 villages. Its popu-The people. lation at the last three enumerations was: (1881) 864,748, (1891) 863,641, and (1901) 815,880. During the last decade the rural population decreased by 6.6 per cent. The decrease was apparent in every taksil, being greatest in Naraingarh and least in Jagādhri; but the towns, with the exception of Ambāla, Būriya, and Sādhaura, showed an increase. This general decline is attributable to the mortality caused by cholera, fever, and small-pox, and also to scarcity and emigration in the famine years. The District is divided into five taksils--AMBĀLA, KHARAR, JAGĀDHRI, NARAINGARH, and RŪPAR---the head-quarters of each being at the place from which it is named. The chief towns are the municipalities of AMBĀLA, the head-quarters of the District, JAGĀDHRI, RŪPAR, SĀDHAURA, and BŪRIYA.

	24	Number of		ę	ie.	5	deto
Taksil.	Area in squa miles.	Towns.	Villages.	Population	Population per square mile.	Percentar variation population tween 1	Number persons at read at write.
Ambāla . Rūpar Kharar Naraingarh .	355 290 370 436	I I 2 I	295 358 369 317	218,006 139,327 166,267 131,042	614-1 480-4 449-4 300-5	5•4 5•1 5•7 7-3	13,701 5,472 7,122 4,022
Jagādhri . District total	406	2 7	379 1,718	161,238 815,880	397·1 440-7	44	5,148 35,465

The following table shows the chief statistics of population in 1991:---

Norm .- The figures for the areas of taksils are taken from revenue returns. The total District area is that given in the Census Report.

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About 62 per cent. of the people are Hindus, 30 per cent. Muhammadans, and 7 per cent. Sikhs. In the Rūpar and Kharar *taksīls* the language is Punjābi, a Hindī *patois* being spoken in the rest of the District.

Castes and occupations,

Jāts or Jats (125,000) are the chief landowning tribe. They are divided into two widely different classes, those of the northern taksils being the fine sturdy type found in the Punjab proper, while to the east and south they are inferior in physique and energy. Of the Rajputs (67,000), more than two-thirds are Muhammadans. The Malis (24,000) and Sainis (26,000) are market-gardening tribes scattered throughout the District, generally as occupancy tenants, though the Sainis hold many villages in Rupar. The Malis are nearly all Hindus, the Sainis chiefly Hindus with some Sikhs. The Arains (29,000) are almost all Muhammadans, the Kambohs (9,000) chiefly Hindus or Sikhs. The Gujars (46,000) are divided almost equally between Hindus and Muhammadans; they chiefly inhabit the Jumna valley and the wild broken tract lying under the hills, and own large herds of goats. In this District the Gūjars have an undeserved reputation as cattle-thieves. In the Morni hills, Kanets (2,500), Koris (4,000), and Brahmans (44,000) are the chief cultivators. The Kanets claim a Rājput descent, the Koris are of menial status. The whole Morni population are a simple, orderly folk, mixing as little as possible with the people of the plains. The Banias (29,000) are the most important commercial tribe, but there are also 7,000 Khattris. Of the menial tribes may be mentioned the Chamārs (leather-workers, 113,000), Chührās (scavengers, 32,000), Jhinwars (water-carriers, 31,000), Julāhās (weavers, 20,000), Kumhārs (potters, 9,000), Nais (barbers, 11,000), Tarkhans (carpenters, 19,000), and Telis (oilmen, 12,000). There are 20,000 Shaikhs, 6,000 Saiyids, 16,000 Fakirs, and 8,000 Jogis and Rāwals. Of the total population, 51 per cent. are supported by agriculture, 19 per cent. are industrial, 4 per cent. commercial, and 3 per cent. professional.

Christian missions. The Ludhiāna American Presbyterian Mission has stations at Ambāla city and cantonment, both occupied in 1849, with out-stations at Jagādhri, Mubārakpur, Naraingarh, Raipur, and Mulāna. With a staff of eight missionaries, it supports a high school, a middle school, a school for Muhammadan girls, two for Hindu girls, and a hospital for women. The District contained 959 native Christians in 1901.

General agriculEvery taksil except Rupar contains a large tract of hard clay land, which is fit for cultivation only when the rains are abundant. Hence the autumn harvest, which is sown by aid tural conof the monsoon rains, is more important than the spring ditions. harvest. The insecure parts are those in which this heavy clay soil predominates, chiefly in the Ambāla *tahstl* and in the southern quarter of Kharar. The rest of the four *tahsils* which abut on the Himālayas contain, with a certain proportion of hilly country, large tracts of good alluvial loam; the Rūpar *tahstl* is practically secure; and such insecurity as there is in Naraingarh and Jagādhri is due rather to the character of the Rājput inhabitants than to defects of soil or climate. The District is intersected by numerous watercourses which, though to all appearance dry except after heavy rain, constitute a large reserve of moisture, and even in times of drought enable fairly good crops to be cultivated along them.

The District is held almost entirely on the *patfidāri* and Chief agribhaiyāchārā tenures; but *samīndāri* lands cover about 70 cultural square miles, a larger proportion than in most Districts.

The following table shows the main agricultural statistics in pal crops. 1903-4, areas being in square miles :--

Taksīl.		Total.	Cultivated.	Irrigated.	Cultivable waste
Ambāla Rūpar Kharar Naraingarh Jagādhri		355 290 370 436 406	274 193 242 219 267	3 28 21 5 14	38 23 28 27 39
Total	1,857	1,195	71	155	

The chief crops of the spring harvest are wheat and gram, which in 1903-4 occupied 309 and 181 square miles respectively. Barley covered only 13 square miles. Maize, the principal crop in autumn, occupied 151 square miles; then came rice (115), pulses (95), great millet (30), and cotton (43). About 2,000 acres were under poppy. In the Morni hills mandal (Eleusine coracana), kulthi (Dohichos uniflorus), the tuber kachālu (Arum colocaria), and ginger are cultivated.

The area under cultivation increased from 1,171 square Improvemiles in 1890-1 to 1,195 square miles in 1903-4, in which ments in latter year it was 64 per cent. of the total area of the District. tural Experiments were carried out in 1887 with a view to intro- practice. ducing natural khäki-coloured (Nankin) cotton as a staple. The cotton was a fine strong plant with a good fibre, and made up well as coarse cloth ; but Government decided that it could not take the place of dyed cotton for army purposes, and the people preferred the ordinary cottoa; both on account of its colour and because the Nankin cotton took longer to come to maturity and yielded a smaller proportion of fibre to seed. More recent experiments have been made with Nägpur, Egyptian, and American cotton, the latter with good results as regards out-turn. There is a tendency to substitute the cultivation of fine rice for coarse. Loans under the Land Improvement Loans Act are not very popular, the people preferring to borrow money from the village banker. Only Rs. 1,400 was advanced under this Act during the five years ending 1904, all for the construction of masonry wells. Loans for seed and bullocks are readily taken in times of scarcity, when credit with the banker has failed. Rs. 31,000 was thus advanced during the five years ending 1903-4.

Cattle, horses, and sheep.

The breed of cattle is capable of improvement; but in the alluvial lands the weak home-bred stock are quite equal to the work required, and being accustomed to stall-feeding do not, like the stronger cattle imported from the upland tracts, feel the change from grazing in the open. For work in heavy clay soils, or with deep irrigation wells, a finer breed of cattle is imported. Hissār bulls have been introduced. A /good deal of horse-breeding is carried on in the District; the District board maintains seven horse and five donkey stallions. Large quantities of sheep, pigs, and poultry are kept, the high prices obtainable in Simla making poultry especially remunerative.

Irrigation.

Of the total area cultivated in 1903-4, 71 square miles, or 6 per cent., were irrigated. Of this area, 43 square miles were irrigated from wells, 3,396 acres from canals, and 23 square miles from streams and tanks. The head-works of both the WESTERN JUMNA and SIRHIND CANALS lie in the District, but it receives no irrigation from the latter. About 2,500 acres are estimated as irrigable annually from the main line of the Western Jumna Canal. The District has in use 3,207 masonry wells worked by bullocks, almost all on the rope-and-bucket system, even in the riverain tracts; also 2,095 unbricked wells, lever wells, and water-lifts. The hill torrents afford a certain amount of irrigation. Of the crops harvested in 1903-4, only 4 per cent. was grown on irrigated land, sugarcane being the only crop irrigated to any great extent. It is proposed to add to the programme of famine relief works projects for the construction of storage tanks for purposes of rice irrigation in the clay tracts which largely depend on that crop.

The Kalesar 'reserved' forest has an area of about 19 square Forests. miles, lying principally between two low ranges of hills on the right bank of the Jumna. The chief growth is of sāl, but ebony and other trees are also found. This forest contains no bamboo, but a good deal grows south of it. Near Jagādhri is a 'reserved' plantation of shīsham (Dalbergia Sissoo), and at Ambāla a military Reserve of nearly 3 square miles forms the grass farm. The Morni hills are covered with a dense forest growth of scrub mixed with chil (Pinus longifolia) and many other valuable trees, including the harrar (Terminalia Chebula), the fruit of which yields a considerable revenue. In 1903-4 the total forest revenue was Rs. 2,000.

A good deal of limestone is burnt in the Morni hills; but Minerals. since 1887 the industry has been discouraged, as it was found that much harm was being done to the forest growth by reckless cutting for fuel. The District also possesses some block *kankar* quarries, which were largely used when the Sirhind Canal was under construction; and in the Kharar *tahsil* millstones are prepared. Gold is washed in minute quantities in the sand of some of the mountain torrents, especially the Sombh.

Excellent cotton carpets are made at Ambāla; and the town Arts and also possessed four ginning factories with 369 employés in manufac-tures. 1904, three cotton presses with 180 employés, and two factories in which cotton-ginning is combined with flour-milling, and which between them give employment to 63 hands. The cantonment has two flour-mills; one of which was working in 1904 and gave employment to 54 hands, and a factory for cabinet-making and coach-building with 105 hands. At Sādhaura there is a combined cotton-ginning and pressing factory and flour-mill with 55 employés, and at Khanpur a combined cotton-ginning factory and flour-mill with 40, while the Kālka-Simla Railway workshops at Kālka give employment to 200 operatives. A museum of industrial exhibits has recently been started in a building erected in memory of the late Queen-Empress. Rupar is famous for small articles of ironwork, and a potter in the town enjoys some celebrity for his clay modelling. The Rupar canal foundry was closed in 1901. Kharar produces good lacquer-work, and Jagadhri has a welldeserved reputation for its brass-ware. Cotton prints are made in some villages.

Ambāla city is a considerable grain mart, receiving grain Commerce and cotton from the Phūlkiān States and Ludhiāna, and and trade. exporting them up and down country. It imports English

cloth and iron from the south, and salt, wood, and woollen and silk manufactures from elsewhere ; and exports cotton goods, especially carpets. It has a considerable trade in hill products, such as ginger, turmeric, potatoes, opium, and charas; and Simla and Kasauli are largely supplied from it with various necessaries. Rupar is also an important mart for commerce between the hills and the plains, and has a considerable traffic in grain, sugar, and indigo; salt is imported and sent to the hills in exchange for iron, ginger, turmeric, and potatoes, and country cloth is manufactured in the town and exported to the hills. Jagādhri carries on a considerable trade in metals, importing copper and iron and exporting the manufactured products. It is also a centre of the borax trade. During the American Civil War, a cotton mart was established at Kurāli, where 5 lakhs' worth is still reported to change hands yearly.

Railways and roads.

The North-Western Railway from Saharanpur to Lahore and the Delhi-Umballa-Kālka line cross each other at Ambāla city, the latter being continued by the narrow-gauge Kalka-Simla line. The grand trunk road passes through Ambala, where the Kälka road for Simla leaves it. The only other important metalled roads are from Abdullahpur (via Jagādhri) to Chhachhrauli, the capital of the State of Kalsia, and from Büriya to Jagadhri. The total length of metalled roads is 103 miles, and of unmetalled roads 404 miles. Of these, 87 miles of metalled and 32 miles of unmetalled roads are under the Public Works department, and the rest are maintained by the District board. Both the Sirhind and Western Jumna Canals are navigable, taking to a large extent the place of the rivers which they drain almost dry except in the summer months. The Jumna is crossed by a ferry, which is replaced in the cold season by a bridge of boats, and the Sutlej by three ferries.

Famine.

Ambāla District has only once suffered from serious famine since its formation in 1847. This was in 1860-1, when wheat rose to 8 seers a rupee. Regarding the distress in 1868-9 very little is recorded. The total number of persons employed on relief works was 46,000, and 57,000 received gratuitous relief. Only about Rs. 2,500 was spent from subscriptions, to which Government added as much again. The crops failed in 1884-5 and 1890. The famine of 1896-7 was due, not so much to any actual failure of the crops in the District (though the spring harvest of 1897 was the third poor harvest in succession), as to the state of the grain market all over India. For months together the prices of all food-grains stood at about 10 seers per rupee in rural tracts; and in the towns, when prices were highest, wheat rose to 7 seers, maize (the staple food of the people) and gram to 8 seers; and the District only escaped worse calamities than it actually suffered owing in no small degree to the resources of the small capitalists. The greatest daily average number relieved was 5,279. Rs. 36,600 was spent from District funds on gratuitous and all other forms of relief, and Rs. 15,000 was received from the Indian Charitable Famine Relief Fund. In the famine of 1899-1900, though prices did not rise so high, the crop failure was more complete: there were heavier losses of cattle, and credit was harder to obtain. The greatest daily number relieved did not, however. exceed 816; the expenditure from District funds was Rs. 4,176, and from the Charitable Relief Fund Rs. 4,925.

The District is divided for administrative purposes into District 5 tahsils: AMBÄLA, JAGADHRI, NARAINGARH, RUPAR, and subdivi-KHARAR, the two last forming the Rupar subdivision. Each staff. tahsil has a tahsildar and a naib-tahsildar. The District is in charge of a Deputy-Commissioner, aided by six Assistant or Extra Assistant Commissioners, of whom one is subdivisional officer in charge of Rupar, and another is in charge of the District treasury. Ambāla is the head-quarters of the Deputy-Inspector-General of Police, Eastern Range, and of an Executive division of the Public Works department.

The Deputy-Commissioner as District Magistrate is respon- Civil sible for the criminal justice of the District. The civil judicial justice and work is under a District Judge, and both officers are supervised by the Divisional Judge of the Ambala Civil Division. There are three Munsifs-at head-quarters, Jagādhri, and Rūpar. There are also Cantonment Magistrates at Ambāla and Kasauli, with an assistant cantonment magistrate at the former place, and seven honorary magistrates. The predominant forms of crime are burglary and cattle-theft.

In the revenue history two periods of chaos have to be Land distinguished; the first between 1763 and 1809, when the revenue Sikhs having crossed the Sutlej proceeded to divide the country tration. among themselves and rule it with degrees of extortion which varied with the position, necessities, and temperament of individual chieftains; the second between 1809 and 1847, the period of British protection, when confiscation followed escheat, and so-called settlement followed either, under conditions so diverse as to baffle any uniformity of treatment. fiscal or historical. The summary settlements were invariably pitched too high, the demand being fixed by simply commuting at cash rates the grain collections made by the Sikhs. The only

data were the accounts of the former payments, and the estimates made by leading men-not unbiased financiers, as their revenue assignments rose and fell with the Government demand. A regular settlement for the whole cis-Sutlej tract was carried out between 1847 and 1855, and remained practically unaltered until the revision commenced in 1882. The assessment, though not unduly light, was fair and, helped by the rise of prices that began in 1860, worked without any difficulty. The Jagadhri tahsil was resettled in 1882-9, and the rest of the District between 1883 and 1889. The average assessment on 'dry' land is Rs. 1-3-6 (maximum, Rs. 2-2; minimum, 5 annas), and on 'wet' land Rs. 3-10 (maximum, Rs. 5; minimum, Rs. 2-4). The result of these revisions was an increase of one lakh in the assessment of the whole District. The demand, including cesses, for 1903-4 was 13.8 lakhs. The average size of a proprietary holding is 2.7 acres.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees :----

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		1880-1.	1890-1.	1900-1.	1903-4.
Land revenue	• •	7,87	9,50	6,61	7,45
Total revenue		11,11	13,87	12,26	14,54

Local and

The District contains five municipalities-AMBALA, RUPAR, municipal. JAGADHRI, SADHAURA, and BURIYA-and two 'notified areas' or embryo municipalities, Kharar and KALKA. Outside these, local affairs are managed by a District board, whose income amounted in 1903-4 to 1.2 lakhs, while its expenditure was 1.1 lakhs, education accounting for one-fifth of the total.

Police and jails.

The regular police force consists of 803 of all ranks, including 148 cantonment and 86 municipal police, under a Superintendent, who usually has one Assistant and one Deputy-Superintendent and five inspectors under him. The village watchmen number 1,782, including 31 daffadars. The District has 17 police stations, 2 outposts, and 6 road-posts. The District jail at head-quarters has accommodation for 856 prisoners.

Education.

The District stands ninth among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 4.3 per cent. (7.5 males and 0.4 females). The number of pupils under instruction was 5,262 in 1880-1, 9,359 in 1900-1, and 8,906 in 1903-4. In the last year the District possessed one

secondary and 99 primary (public) schools, and 3 advanced and 69 elementary (private) schools, with 421 girls in the public and 393 in the private schools. The Mission school in Ambāla city was the only high school of the District until Government opened one at Jagādhri. The District possesses six girls' schools. The total expenditure on education in 1903-4 was 2.4 lakhs, of which the greater part was provided by Imperial and Provincial funds and endowments.

The District contains a hospital at Ambāla city, and seven Hospitals outlying dispensaries. In 1904 a total of 98,679 out-patients and dispensaries. and 1,982 in-patients were treated at these institutions, and 8,697 operations performed. The aggregate expenditure was Rs. 21,000, which was met in nearly equal shares by District and municipal funds, assisted by a grant from Government of Rs. 2,000. A description of the Pasteur Institute and Research Laboratory will be found under KASAULI. There is a leper asylum at Ambāla under the American Presbyterian Mission. The -Philadelphia Hospital for women at Ambāla is also under American management.

The number of successful vaccinations in 1903-4 was 15,708, Vaccinarepresenting 20 per 1,000 of the population. Vaccination is ^{tion}. compulsory in Ambāla city and Rūpar town.

[A. Kensington, Customary Law of Ambāla District (1893), District Gazetteer (1892-3), and Settlement Report (1893); J. M. Douie, Settlement Report of Karnāl-Ambāla (1891).]

Ambāla Tahsīl.—South-western tahsīl of Ambāla District, Punjab, lying between 30° 7' and 30° 27' N. and 76° 33' and 77° 12' E., with an area of 355 square miles. The population in 1901 was 218,006, compared with 230,567 in 1891. The head-quarters are at the city of AMBāLA (population, 78,638). It also contains 295 villages. The land revenue and cesses amounted in 1903-4 to 2.8 lakhs. 'The *tahsīl* lies in the open plain, and the hard clay subsoil is almost everywhere covered with alluvial loam.

Rūpar Subdivision.—Subdivision of Ambāla District, Punjab, comprising the *tahsīls* of Rūpar and Kharar. Kharar contains the cantonment and sanitarium of KASAULI and the 'notified area' of Kālka.

Rūpar Tahsīl.—Northern *tahsīl* of Ambāla District, Punjab, lying at the foot of the Himālayas, between $30^{\circ} 45'$ and $31^{\circ} 13'$ N. and $76^{\circ} 19'$ and $76^{\circ} 44'$ E., with an area of 290 square miles. It is bounded on the north by the Sutlej river, and forms part of the Rūpar subdivision. On the northeast the *tahsīl* runs up into the Lower Siwāliks, and along the

Sutlej is a narrow strip of low-lying country. The rest consists of a loam plateau rich in wells, and intersected by mountain torrent-beds. The head-works of the SIRHIND CANAL are at Rūpar. The population in 1901 was 139,327, compared with 146,816 in 1891. The head-quarters are at the town of R**Ū**PAR (population, 8,888). It also contains 358 villages. The land revenue and cesses amounted in 1903-4 to 2.8 lakhs.

Kharar.—*Taksil* of Ambāla District, Punjab, lying at the foot of the Himālayas, between 30° 34' and 30° 56' N. and 76° 22' and 76° 55' E., with an area of 370 square miles, and forming part of the Rūpar subdivision. The population in 1901 was 166,267, compared with 176,298 in 1891. It contains 369 villages, of which Kharar is the head-quarters. The land revenue and cesses amounted in 1903-4 to 3·1 lakhs. For administrative purposes the hill station of KASAULI (population, 2,192) and the town of KĀLKA (7,045) are included in this *tahsil*. The northern part lies in the Siwāliks. Between the hills and the Ghaggar, in the east, is an unhealthy tract of jungle and rice-fields. The soil in the centre and west is a fertile loam, which in the south stiffens into clay. Communications are everywhere rendered difficult by the torrentbeds which intersect the country.

Naraingarh.— Tahsil of Ambäla District, Punjab, lying at the foot of the Himālayas, between 30° 19' and 30° 45' N. and 76° 52' and 77° 19' E., with an area of 436 square miles. The population in 1901 was 131,042, compared with 141,326 in 1891. It contains the town of Sādhaura (population, 9,812) and 317 villages, of which Naraingarh is the headquarters. The land revenue and cesses amounted in 1903-4 to 2.3 lakhs. The tahsil includes a tract of hilly country on the north, culminating in the Karoh peak, 4,919 feet above the sea. The lower hills are devoid of vegetation; and below them comes a tract of rough stony country much cut up by ravines, the continuous advance of which is a most serious difficulty for the farmer. The southern half is fairly level.

Jagādhri Tahsīl.—Eastern tahsīl of Ambāla District, Punjab, lying at the foot of the Himālayas, between $30^{\circ} 2'$ and $30^{\circ} 28'$ N. and $77^{\circ} 4'$ and $77^{\circ} 36'$ E., with an area of 406 square miles. It is bounded on the south-east by the Jumna, which separates it from the United Provinces. The population in 1901 was 161,238, compared with 168,634 in 1891. It contains the towns of JAGĀDHRI (population, 13,462), the head-quarters, and BŪRIYA (5,865); and 379 villages. The land revenue and cesses amounted in 1903-4 to 2.9 lakhs. The *tahsil* includes a small tract of hilly country in the Siwāliks. On the east lie the Jumna lowlands. The rest is generally level or gently undulating, and is intersected by torrent-beds.

Manauli.-Estate in the Kharar and Rupar taksils of Ambala District, Punjab, with an area of 11 square miles. Τt was the principal jāgār held till recently by a member of the Faizullahpuria or Singhpuria family, which was one of the twelve great Sikh misls or confederacies. Founded early in the eighteenth century by Kapur Singh, a Jat of Amritsar District, the family played a great part in the Jullundur Doab under his great-nephew, Budh Singh. In 1811, however, the Singhpurias were expelled from their territories north of the Sutlej by Ranjit Singh's generals, and confined to the estates south of that river, which they still hold. From 1809 to 1846 the family ranked as independent protected chiefs, but they lost their status in the latter year. The last owner, Sardār Raghubīr Singh, held 81 villages in jāgīr. These vield a net revenue of Rs. 36,000, and the sardar had also other After his death in 1904, the jägir was divided among estates. a number of his relatives.

Ambāla City.-Head-quarters of the District and tahsil of Ambala, Punjab, situated in 30° 23' N. and 76° 46' E., on the North-Western Railway and the grand trunk road, at the point where they are crossed by the Delhi-Umballa-Kalka Railway : distant by rail from Calcutta 1,077 miles, from Bombay 1,105 miles, and from Karāchi 848 miles. The population (1901) is 78,638: namely, Hindus, 39,601; Sikhs, 2,168; Muhammadans, 32,149; and Christians, 3,610-of whom 50,438 reside in cantonments. Ambāla is chiefly important as being one of the largest cantonments in India. The garrison, which is under the General Officer commanding the Lahore division, consists of one battery of horse artillery, with an ammunition column; one regiment of British and two regiments of native cavalry ; and three regiments of British and one battalion of native infantry. The cantonment also contains a mounted infantry school, companies of the Army Hospital and Bearer corps, and detachments of the Punjab Light Horse and the North-Western and East Indian Railway Volunteers.

The native quarter, which has a separate station on the North-Western Railway, lies four miles north-west of the cantonment. Its name is possibly derived from its mythical founder Amba, but is more probably a corruption of Ambwāla, the 'mango village.' It was of no importance before the lapse of the Ambāla estate in 1823, when it became the residence of the Political Agent for the Cis-Sutlej States. The cantonment was established in 1843, and in 1849 it became the headquarters of a District. The civil lines are situated near the city, and contain, besides the usual offices, a jail and a hospital. The city is well situated as a commercial centre, and is an important cotton and grain market. It also forms a dépôt for the supply of Simla, and carries on a considerable trade in hill products, such as ginger and turmeric. The article on AMBĀLA DISTRICT gives details of the modern industries. A branch of the Alliance Bank of Simla has been established in the cantonment.

The municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 56,200, and the expenditure Rs. 54,300. The income in 1903-4 was Rs. 70,700, the chief source being octroi (Rs. 45,200); and the expenditure was Rs. 71,900, the principal items being drainage and water-supply (Rs. 22,400), medical (Rs. 8,100), conservancy (Rs. 5,800), education (Rs. 6,100), public safety (Rs. 7,500), and general administration (Rs. 9,400). The income and expenditure of the cantonment fund during the ten years ending 1902-3 averaged $1\cdot3$ lakhs. Ambāla has three high schools and two middle schools, besides a civil hospital.

Būriya.-Town in the Jagādhri tahsīl of Ambāla District, Punjab, situated in 30° 10' N. and 77° 22' E., 3 miles north of the North-Western Railway. Population (1901), 5,865. Founded in the time of the emperor Humāyūn, it was captured by the Sikhs in 1760, and became the head-quarters of a considerable principality, which, before the treaty of 1809 between the British Government and Ranjit Singh, had been divided into the two chiefships of Buriya and Dialgarh. Dissensions between the widows of the last male holder of the latter led to its subdivision, a few years after it came under British protection, into the estates of Jagadhri and Dialgarh. Jagādhri lapsed in 1829. The Rānī of Diālgarh was one of the nine chiefs exempted from the reforms of 1846 and 1849; and she retained her position as an independent protected chief until her death in 1852, when Dialgarh also lapsed. Būriya proper was reduced to the status of an ordinary jāgār in 1849. The town is of no commercial importance. The municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 4,300, and the expenditure Rs. 5,100. The income in 1903-4 was Rs. 4,500, chiefly from octroi; and the expenditure was Rs. 4,400. There is a vernacular middle school.

AMBĀLA DISTRICT

Jagādhri Town.-Head-quarters of the tahsil of the same name in Ambāla District, Punjab, situated in 30° 10' N. and 77° 18' E., about 5 miles north of the North-Western Railway, on the metalled road connecting Ambala and Sahāranpur. Population (1901), 13,462. It owes its importance to the Sikh chief Rai Singh of Būriva, who settled a commercial and manufacturing population here. The town had been entirely destroyed by Nādir Shāh, but was rebuilt by Rai Singh in It lapsed to the British Government in 1820. The 1782. name is said to be a corruption of Ganga Dhair, so called from a store of Ganges water enshrined in the foundations. Jagādhri is noted for its manufacture of iron and brass-ware. Borax, imported from the hills, is also refined, and oxide of lead manufactured. The municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 24,700, and the expenditure Rs. 24,300. The income in 1903-4 was Rs. 25,700, chiefly from octroi; and the expenditure was Rs. 25,500. It maintains an Anglo-vernacular high school and a dispensary.

Kālka.—Town attached for administrative purposes to the Kharar *tahsīl* of Ambāla District, Punjab, situated in $30^{\circ} 50'$ N. and $76^{\circ} 57'$ E., at the foot of the outlying range of the Himālayas at an elevation of 2,400 feet, and entirely surrounded by Patiāla territory. It is the junction of the Delhi-Umballa-Kālka and Kālka-Simla Railways. Population (1901), 7,045. Kālka was acquired from Patiāla in 1843 as a dépôt for Simla ; it is also an important market for hill produce, such as ginger and turmeric. There is a considerable manufacture of millstones, and a railway workshop is situated here, which employed 200 hands in 1904. It is administered as a 'notified area.'.

Kasauli.—Hill station and cantonment in the Punjab, situated in $30^{\circ} 53'$ N. and $76^{\circ} 58'$ E., entirely surrounded by Native States, but attached for administrative purposes to the Kharar *tahsil* of Ambāla District. It stands on the summit of the long ridge overlooking Kālka, at an elevation of 6,335 feet above the sea, and nearly 4,000 feet above Kālka, from which it is distant about 9 miles. Population (1901), 2,192. Kasauli was founded in 1842 as a military station, and now serves as a convalescent dépôt. It has during the summer months a considerable civil population, for whose accomodation hotels have been built. Owing, however, to its nearness to the plains, it is the least attractive in climate of the Punjab hill stations. The management of the station is in the hands of a Cantonment Magistrate assisted by a cantonment committee; the Cantonment Magistrate proceeds on tour for ten days in each month of the hot season, and is relieved of the charge of the treasury by the Assistant Commissioner in charge of the Rūpar subdivision. The Deputy-Commissioner of Ambāla also resides at Kasauli during part of the hot season. There is an Anglo-vernacular middle school. The Lawrence Military Asylum at Sanāwar is 3 miles away, in a portion of territory attached to Simla District. The income and expenditure of cantonment funds during the ten years ending 1902-3 averaged Rs. 13,000.

The Pasteur Institute at Kasauli was established in 1901 for the treatment of persons bitten by rabid animals, and now treats patients from all parts of Northern India. In 1906 a central Research Institute was founded, which will provide means for the scientific study of the etiology and nature of disease in India, in addition to the preparation of curative sera for the diseases of man and the training of scientific workers. The institution is in charge of a Director, with a staff of assistants. Kasauli is also the head-quarters of the Punjab Nursing Association, and contains a dispensary. There is a brewery in the neighbourhood.

Rupar Town.---Head-quarters of the subdivision and tahsil of the same name in Ambala District, Punjab, situated in 30° 58' N. and 76° 32' E., at the point where the Sutlej issues from the hills. Population (1901), 8,888. It is a town of considerable antiquity, originally called Rupnagar after its founder Raja Rup Chand. It was occupied about 1763 by Hari Singh, a Sikh chieftain, who seized upon a wide tract south of the Sutlej, stretching along the foot of the Himālayas. In 1792 he divided his estates between his two sons, Charrat Singh and Dewa Singh, the former of whom obtained Rupar. The estates were confiscated in 1846, in consequence of the part taken by the family during the Sikh War of the preceding year. The head-works of the Sirhind Canal are situated here, and the town is an important mart of exchange between the hills and the plains. Salt is imported from the Khewra mines and re-exported to the hills, in return for iron, ginger, potatoes, turmeric, opium, and charas. Cotton twill (sūsī) is largely manufactured, and the smiths of Rupar have a reputation for locks and other small articles of iron. Rupar was the scene of the celebrated meeting between Lord William Bentinck and Ranjit Singh in 1831. There are two important religious fairs, one Hindu, one Muhammadan. The municipality was

created in 1867. The income during the ten years ending 1902-3 averaged Rs. 12,100, and the expenditure Rs. 11,400. The income in 1903-4 was Rs. 14,500, chiefly from octroi; and the expenditure was Rs. 16,900. There are three Anglo-vernacular middle schools and a dispensary.

Sādhaura.-Town in the Naraingarh tahsil of Ambāla District, Punjab, situated in 30° 23' N. and 77° 13' E., at the foot of the outlying range of the Himālayas. Population (1901), 9,812. It dates from the time of Mahmud of Ghazni, and contains a mosque built in the reign of Shāh Jahān. fair held yearly at the shrine of the Muhammadan saint, Shāh Kumais, is attended by 20,000 or 30,000 persons. There is some manufacture of cotton cloth; and the town possesses a steam printing press, and a combined cotton-ginning and pressing factory, which in 1904 employed 55 hands. The municipality was created in 1885. The income during the ten years ending 1902-3 averaged Rs. 6,800, and the expenditure Rs. 6,400. The income in 1903-4 was Rs. 7.300, chiefly from octroi; and the expenditure was Rs. 8,100. There is a vernacular middle school and a dispensary.

Sugh (Srughna).—Village in the Jagādhri tahsīl of Ambāla District, Punjab, situated in 30° 9' N. and 77° 23' E., in a bend of the old bed of the Jumna, now a part of the Western Jumna Canal, close to Jagādhri and Būriya towns. Population (1901), 378. Srughna is mentioned by Hiuen Tsiang, the Chinese pilgrim of the seventh century, as a town $3\frac{1}{2}$ miles in circuit, the capital of a kingdom and seat of considerable learning, both Buddhistic and Brāhmanical. He describes the kingdom of Srughna as extending to the mountains on the north, and to the Ganges on the east, with the Jumna flowing through the midst of it. The capital he represents as having been partly in ruins; but General Cunningham thought that there is evidence in the coins found on the spot to show that it was occupied down to the time of Muhammadan conquest. He thus describes the extent and position of the ruins :—

'The village of Sugh occupies one of the most remarkable positions that I have seen during the whole course of my researches. It is situated on a projecting triangular spur of high land, and is surrounded on three sides by the bed of the old Jumna, which is now the Western Jumna Canal. On the north and west faces it is further protected by two deep ravines, so that the position is a ready-made stronghold, which is covered on all sides, except the west, by natural defences. In shape it is almost triangular, with a large projecting fort or PUR. L. Z