Church Missionary Society, while the Church of England Zanāna Society, which started work at Amritsar in 1884, maintains St. Catherine's Hospital in the city. The District contained 1,492 native Christians in 1901.

Amritsar is for the most part secure against any serious General failure of either summer or winter rains, and the certainty of agricultural each harvest is further secured by ample irrigation from both conditions. canals and wells. The prevalent soil is a light reddish-yellow loam, with patches of clay where the surface drainage collects, and occasionally expanses of sandy soil.

The land is held almost entirely by small peasant proprietors, Chief large estates covering only about 15,000 acres. The area for agricultural stawhich details are available from the revenue records of 1903-4 tistics and is 1,559 square miles, as shown below:—

principal crops.

| Tahsīl. | | | | Total. | Cultivated | Irrigated. | Cultivable waste. |
|------------|-------|-----|---|--------|------------|------------|-------------------|
| Amritsar | | 11. | | 545 | 453 | 261 | 33 |
| Tarn Taran | | | • | 597 | 516 | 298 | 22 |
| Ajnāla | • | | | 417 | 265 | 174 | 80 |
| | Total | | | 1,559 | 1,234 | 733 | 135 |

Wheat is the chief crop of the spring harvest, covering 542 square miles in 1903-4; gram occupied 267 square miles, and barley only 25. In the autumn harvest maize covered 98 square miles, rice 54, cotton 43, pulses 25, and sugar-cane 28.

The cultivated area increased by a little more than 2 per Improvecent. during the ten years ending 1901-2, and there is small ments in agriculroom for further increase. Loans for the improvement of tural land are but rarely taken, less than Rs. 10,000 having been practice. advanced during the five years ending 1903-4.

Few cattle are bred locally, as the area for grazing is Cattle, extremely limited. Cattle are largely bought at the Diwāli and ponies, Baisākhi fairs held at Amritsar. Buffaloes are kept in large numbers, being used as much as bullocks for working the wells. An important horse fair is held at Amritsar in connexion with each of the cattle fairs, and the number of ponies is large, but there is nothing remarkable about the breed. Mules and donkeys are largely used as pack animals. Seven horse and thirteen donkey stallions are kept by the Army Remount department, and four pony stallions by the District board. Sheep and goats are kept in considerable numbers, but few camels.

Of the total area cultivated in 1903-4, 733 square miles, Irrigation.

or 60 per cent., were classed as irrigated. Of this area, 386 square miles, or 53 per cent., were irrigated from wells: 344, or 47 per cent., from canals; and 1,750 acres from streams and tanks. The District is traversed by the Lahore Main, Kasūr, and Sobraon branches of the BARI DOAB CANAL, from which 486 square miles can be irrigated annually. In 1903-4 the District contained 12,159 masonry wells worked with Persian wheels by cattle, besides 349 unbricked wells, waterlifts, and lever wells. The inundated lands are chiefly on the Rāvi, but some lie on the Beās.

Forests.

There are four 'reserved' forests, with a total area of 2,886 acres, under the Forest department, and 119 acres of unclassed forest under the Deputy-Commissioner. Waste land is scarce, and trees are few. The revenue from forests in 1903-4 was Rs. 3,200.

Minerals.

The only mineral product of value is kankar, which is much used for road-metal and for making lime.

Arts and manufactures.

The manufactures are practically confined to Amritsar City. which formerly had a considerable trade in weaving shawls from pashm, the fine wool of the Tibetan goat, but this industry rapidly declined after the Franco-German War. Its place has been largely taken by the manufacture of carpets, which are turned out in great quantities and find a ready sale all over the The work is done entirely on hand-looms, and the prices range from Rs. 10 to Rs. 50 per yard, or even higher. Silk piece-goods are also extensively made. Of the minor artistic industries, wood-carving, ivory-carving, and the manufacture of brass and copper ware may be mentioned. Amritsar city contains a number of steam factories, the most important of which are the Amritsar cotton-spinning mills, with 312 employés; five combined cotton-ginning factories and flour and rice-mills, with 377 employés; the Canal department workshops, with 250; the Government forage press, with 69; and the municipal workshops, with 37. The total number of hands employed in 1904 in the thirteen registered factories in Amritsar city was 1,129. A small manufacture of acids and chemicals is carried on, and soap is largely made.

Commerce

Amritsar city is the most flourishing trade centre in the and trade. Punjab, and the value of the yearly imports and exports is estimated at 3 crores and 2.2 crores respectively. The principal articles of import are grain, pulses, sugar, oil, salt, tobacco, raw cotton, English piece-goods, thread, shawls, wool, silk (raw and manufactured), broadcloth, blankets, metals and hardware, glass, and dye-stuffs. Many of these are re-exported; and the

District also exports wheat, shawls, carpets, cotton goods, brass vessels, jewellery, and many other articles. The city has a branch of the National Bank of India and a sub-agency of the Commercial Bank of India. The District contains no other town of any importance as a trade centre.

The main line of the North-Western Railway runs through Means of the District, with branches from Amritsar to Pathankot and communito Pattī in Lahore District via Tarn Tāran. The grand trunk road runs by the side of the railway, and metalled roads connect Amritsar city with Ajnāla and Tarn Tāran. total length of metalled roads is 78 miles and of unmetalled roads 350 miles. Of these, 45 miles of metalled and 17 of unmetalled roads are under the Public Works department, and the rest are maintained by the District board. The Ravi is crossed by twelve ferries and the Beas by ten; these rivers are navigable in the rains, but are little used. The canals are not navigable.

Before the construction of the Bari Doab Canal, Amritsar, Famine. like the rest of the Punjab, was periodically visited by famine. The District suffered from scarcity in 1869; but since then there has been no distress deserving mention, and, owing to the large proportion of the cultivation irrigated by either wells or canals, it is now practically secure from famine. The crops matured in the famine year 1899-1900 amounted to 76 per cent. of the normal.

The District is in charge of a Deputy-Commissioner, aided District by six Assistant or Extra Assistant Commissioners, of whom subdivisions and one is in charge of the District treasury. It is divided into the staff. three tahsīls of Amritsar, Ajnāla, and Tarn Tāran, each under a tahsīldār and naib-tahsīldār. Amritsar is the head-quarters of a Superintending Engineer and three Executive Engineers of the Canal department.

sible for criminal justice, while civil judicial work is under criminal a District Judge. Both are supervised by the Divisional and Sessions Judge of the Amritsar Civil Division. In addition to a judge of the Small Cause Court, there are six Munsifs, three at head-quarters and one at each outlying tahsīl, while one is registrar to the Small Cause Court. There are twenty honorary magistrates, of whom five exercise also civil powers. The Sikhs of the Mānjha are as a class given to the commission of dacoity, and illicit distillation is prevalent. Civil litigation

The Deputy-Commissioner as District Magistrate is respon-Civil and

presents no unusual features, except that Amritsar city provides

a large number of commercial cases.

Land revenue.

On annexation, a summary settlement was made in 1849-50. The value of the Sikh collections was appraised, and the cash demand thus arrived at was proportionately reduced. demand, though high in the Amritsar tahsīl, and extremely so in Ajnāla, was paid for three or four years. In 1852 the first regular settlement was made. One-fourth of the gross produce was taken as the basis of the Government demand, and an assessment of $9\frac{1}{2}$ lakks was announced. The incidence in Ajnāla was Rs. 2-3-5 per cultivated acre; but as this was found to be excessive, a reduction of 15 per cent. was made. In 1862 the settlement was revised, resulting in an initial demand of 9 lakhs and an ultimate demand of $9\frac{1}{2}$ lakhs. The rates varied from 10 annas to Rs. 1-12 per acre (unirrigated), with a water-rate of R. 1 per acre (plus an extra 8 annas if the same land was cropped twice in the year). Wells were charged lump sums, averaging about Rs. 12 each in addition to the 'dry' rate. This settlement, sanctioned for twenty years from 1865, was allowed to run on till 1891. In 1888 the reassessment was commenced. The water rate was given up by order of Government in 1891, and a system adopted by which land liable to canal irrigation was separately classed and a small separate rate fixed for it, the figures obtained by its application to the irrigated area being added to the village assessment. Irrigation from the canal had more than trebled, while the number of wells in use had fallen off. The result of the assessment was an initial demand of 121 lakhs, an increase of $2\frac{1}{4}$ lakes on the last annual payment under the expiring settle-The average assessment on 'dry' land is Rs. 1-2 (maximum, Rs. 1-8; minimum, 12 annas), and on 'wet' land Rs. 1-15 (maximum, Rs. 2-14; minimum, R. 1). The total demand, including cesses, for 1903-4 was 14.5 lakhs.

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

| | 1880-1. | 1890-1. | 1900-1. | 1903-4. |
|-------------------------------|---------------|---------------|---------|----------------|
| Land revenue Total revenue | 8,89 12,79 | 9,68 15,57 | 10,48 | 10,88 23,76 |

Local and

The District contains four municipalities, Amritsar, Majītha, municipal. JANDIĀLA GURŪ, and TARN TĀRAN, and one 'notified area,' Outside these, local affairs are managed by the District board, whose income in 1903-4 amounted to 1.5 lakhs, derived mainly from a local rate. The expenditure was 1.7 lakhs, public works forming by far the largest item.

The regular police force consists of 875 of all ranks, including Police and 5 cantonment and 499 municipal police, under a Superintendent, jails. who usually has one Assistant, one Deputy-Superintendent, and 6 inspectors under him. The village watchmen number 1,374. There are 12 police stations and 3 outposts. The District jail at head-quarters has accommodation for 234 prisoners.

The District stands eleventh among the twenty-eight Districts Education. of the Province in respect of the literacy of its population. The proportion of literate persons in 1901 was 4.3 per cent. (7.4 males and 0.5 females). The District contained 7,182 pupils under instruction in 1880-1, 16,273 in 1890-1, 16,872 in 1900-1, and 15,190 in 1903-4. In the last year it possessed 2 Arts colleges, 21 secondary, 154 primary, and 2 special (public) schools, and 22 advanced and 120 elementary (private) schools, with 1,951 girls in the public and 535 in the private schools. The two Arts colleges are at Amritsar city, which also contains 3 girls' schools (one high and 2 middle schools). The District has 48 primary schools for girls, and stands first in the Province in the matter of female education. Amritsar municipality also maintains industrial and commercial schools. The total expenditure on education in 1903-4 was 1.9 lakhs, to which Government contributed Rs. 19,000, fees bringing in Rs. 46,000, and subscriptions and endowments Rs. 39,000, while District and municipal funds provided the remaining cost.

Besides the civil dispensary, a female hospital, two city branch Hospitals dispensaries, and a midwifery school at Amritsar, the District has and dispensaries. seven outlying dispensaries. In 1904 a total of 166,364 outpatients and 2,741 in-patients were treated, and 9,265 operations The expenditure was Rs. 36,000, most of were performed. which was contributed by municipal funds. The District also contains seven mission dispensaries, which receive grants from District and municipal funds; and a leper asylum at Tarn Tāran, which was transferred to the Mission to Lepers in India and the East in 1903.

The number of successful vaccinations in 1903-4 was 30,528, Vaccinarepresenting 30 per 1,000 of population. The Vaccination Act tion. is in force in Amritsar city.

[J. A. Grant, District Gazetteer (1892-3); Settlement Report (1893); and Abstract of the Code of Customary Law for the Amritsar District (1893).

Amritsar Tahsil.— Tahsil of Amritsar District, Punjab, lying between 31° 29' and 31° 51' N. and 74° 42' and 75° 24' E., with an area of 545 square miles. It is bounded on the east by the Beas, which divides it from the State of Kapurthala.

West of the high bank is a fertile belt of loam, irrigated by wells, which is succeeded by a belt of sandy country. Beyond this lies a fertile plain irrigated by the Bāri Doāb Canal. Amritsar city lies in a depression in this tract. The population of the tahsīl in 1901 was 488,383, compared with 462,734 in 1891. The city of Amritsar (population, 162,429) is the head-quarters. It also contains the towns of Majītha (6,403) and Jandiāla Gurū (7,750); and 373 villages. The land revenue and cesses amounted in 1903-4 to Rs. 6,22,000.

Tarn Tāran Tahsīl.— Tahsīl of Amritsar District, Punjab, lying between 31° 10′ and 31° 40′ N. and 74° 33′ and 75° 17′ E., with an area of 597 square miles. It forms a triangle with its base resting on the Beās, which divides it from the State of Kapūrthala. The country west of the high bank of the river is a level plain with a soil of fertile loam, traversed from north to south by two natural drainage channels, and irrigated by the Bāri Doāb Canal. The population in 1901 was 325,576, compared with 305,127 in 1891. The town of TARN TĀRAN (population, 4,428) is the head-quarters. It also contains the town of VAIROWĀL (5,439), and 338 villages. The land revenue and cesses amounted in 1903-4 to Rs. 4,72,000.

Ajnāla.— Tahsīl of Amritsar District, Punjab, lying between 31° 37′ and 32° 3′ N. and 74° 30′ and 74° 95′ E., with an area of 417 square miles. It is bounded on the north-west by the Rāvi, separating it from Siālkot District. The Sakki, a sluggish perennial stream, which falls into the Rāvi near the southern boundary, separates the alluvial lowlands from the upland plateau which occupies two-thirds of the area. The southern portion of the plateau is irrigated by the Bāri Doāb Canal, and the northern by wells. Cultivation is less extensive than in the other tahsīls, owing to the inferiority of the soil. The population in 1901 was 209,869, compared with 224,836 in 1891. It contains 331 villages, of which Ajnāla is the head-quarters. The land revenue and cesses amounted in 1903-4 to Rs. 3,61,000.

Amritsar City.—Head-quarters of Amritsar District, Punjab, and holy city of the Sikhs, situated in 31° 38′ N. and 74° 53′ E., on the North-Western Railway and the grand trunk road, 33 miles east of Lahore; distant by rail from Calcutta 1,232 miles, from Bombay 1,260, and from Karāchi 816. In population Amritsar comes next in the Province after Delhi and Lahore, and in point of commercial importance vies with Delhi. The population was 151,896 in 1881, 136,766 in 1891, and 162,429 in 1901, including 1,390 in the cantonment. It

includes 77,795 Muhammadans, 65,117 Hindus, 17,860 Sikhs, 1,104 Christians, 532 Jains, and 19 Pārsīs.

The city lies in a depression in the middle of the Bari Doab. The canal flows within a mile of it, and irrigation channels intersect the fields on every side. In the rainy season the subsoil water rises everywhere close to the surface, and in some places lies above it. Thus the city is completely water-logged, and is perhaps the most unhealthy site in the Province. The Sikh religion centres round the Golden Temple of Amritsar and its tank. Gurū Rām Dās first settled near the tank about 1574, and obtained a grant of the site with 500 bighas of land from Akbar in 1577. The tank was called Amritsar, 'the tank of nectar or immortality,' though others derive the name from Amar Dās, the predecessor of Rām Dās. Arjun, the next Gurū, built the temple, and the foundation grew in religious and political importance until, on the retirement of Ahmad Shāh from India, in 1762, the temple rose from the ashes in which he had left it, and Amritsar became the acknowledged capital of an independent community. It was for a time in the hands of the Bhangī confederacy, but Ranjīt Singh seized the city in 1802. As a devout Sikh, he spent large sums of money on the decoration of the temple and roofed it with sheets of copper gilt. the same time he put an end to the independent supremacy of the Bhangī misl, and incorporated Amritsar in his own dominions.

From that time circumstances combined to make the city the greatest commercial centre in the Sikh kingdom. fame of the temple brought visitors from far and near. to Lahore, the sacred city was yet far enough off to be free from the distracting influence of political intrigue. Two large fairs were instituted, one at the Baisākhi festival in April, the other at the Dīwālī in November. Religious as they were originally, it was inevitable that these gatherings should acquire a commercial importance. The shawl industry appears to have spread pari passu with the dominion of Ranjīt Singh, and received a great impetus about 1833, when a number of Kashmīrī weavers left their famine-stricken country and settled in Amrit-The supply created a large demand in Hyderābād, Lucknow, Delhi, and the States of Rajputana. trade began immediately after annexation, and 4,000 looms are said to have been at work simultaneously in Amritsar. This great demand did not last. Europeans ceased to wear Kashmīr shawls, and the number of looms dwindled to about 1,000. The shawl industry, however, had done its work for Amritsar, and established it as a centre not only of particular industries but of trade in general. Merchants from a distance found that customers were plentiful at Amritsar, and caravans from Bokhāra, Kābul, and Kashmīr began to be seen at the great fairs. Trade in European goods, which these travelling merchants wanted in exchange for their local wares, sprang up automatically, while the Amritsar shawl-weavers, casting about for employment, found in the carpets of Afghanistan and the silkwork of Bokhāra occupation for their imitative talent and their idle looms. The carpet industry has taken root. States and Central Asia are ransacked for choice patterns, a number of wealthy firms are pushing the trade with great enterprise and vigour, and the output has been increasing largely every year. The silk industry has had a strange history The supply of raw silk from Bokhāra was small, in Amritsar. and China was soon indented on. The trade has grown, and now Amritsar exports to Peshāwar and beyond the frontier the silk goods which the caravans from Kābul showed her artisans Sulphate of copper, soap, carved wood, ivory how to make. and brass-work are the minor products of Amritsar. The city has a branch of the National Bank of India and a sub-agency of the Commercial Bank of India.

The Darbar Sahib, as the Golden Temple is called by the Sikhs, is a square building with a dome-shaped roof, plated with copper gilt. The walls throughout are of marble, the spoils of Tahāngīr's tomb and other Muhammadan monuments, and are adorned with inlaid devices of figures and flowers. Under the dome, shaded by a gorgeous silk canopy, lies the Granth Sāhib, the sacred book of the Sikhs, from which the attendant priests read passages morning and evening. The tank surrounds the temple on all sides, and a broad causeway leads across from the temple itself to the buildings which cluster round the tank. The most conspicuous of these are the Akal Bungah, which contains the temple treasures; the seven-storeyed tower known as Bāba Atl, erected rather more than a century ago in memory of a son of Gurū Har Gobind; and the Bungah Rāmgarhiān, of the same period, with its two lofty minarets. The other buildings include a large number of Bungahs or hospices built by Sikh chiefs and Sardars, for their own accommodation and that of their friends when they come to worship at the temple. The fort of Govindgarh to the north-west of the city and close to its walls was built by Ranjīt Singh in 1805-9. The Rām Bāgh on the north-east of the city was also laid out by his orders, and like the Golden Temple it owes some of its architectural ornament to the Muhammadan remains at Lahore.

Amritsar is garrisoned by a detachment of native infantry from Jullundur or Siālkot, a detachment of garrison artillery from Ferozepore, and a detachment of sappers and miners. The municipality was created in 1867. The income during the ten years ending 1902-3 averaged 5 lakhs, and the expenditure 4.9 lakhs. The income and expenditure in 1903-4 was 11.9 and 11.4 lakhs respectively. The chief source of income is octroi (Rs. 3,94,000); and the principal items of expenditure were conservancy (Rs. 75,000), education (Rs. 68,000), hospitals and dispensaries (Rs. 1,31,000), and administration (Rs. 99,000). The income and expenditure of cantonment funds during the ten years ending 1902-3 averaged Rs. 5,000.

The chief educational institutions are the Khālsa College and Mission College, both Arts colleges of the Punjab University. The city also contains 5 high schools and 2 middle schools for boys, and 3 schools for girls. The industrial school and the clerical and commercial schools, maintained by the municipality, are important institutions. Details of the industries of the city are given in the article on Amritsar District.

Bundāla.—Village in the District and tahsīl of Amritsar, Punjab, situated in 31° 32′ N. and 74° 59′ E., 11 miles southeast of Amritsar city. Population (1901), 4,500. The place is of little commercial importance, and is chiefly noticeable for its famous monastery of Jogīs.

Jandiāla Gurū.—Town in the District and tahsīl of Amritsar, Punjab, situated in 31° 34′ N. and 75° 2′ E., on the North-Western Railway, and on the grand trunk road, 11 miles east of Amritsar city. Population (1901), 7,750. The proprietary body are Jats, but there is a large mercantile community of Bhābras, who by religion are Jains. There is a considerable manufacture of blankets and brass vessels. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 8,200, and the expenditure Rs. 8,100. The income in 1903–4 was Rs. 8,400, chiefly derived from octroi; and the expenditure was Rs. 9,800. The town possesses an Anglo-vernacular middle school, maintained by the District board, and mission hospitals for men and women.

Majītha.—Town in the District and tahsīl of Amritsar, Punjab, situated in 31° 46′ N. and 74° 58′ E., 12 miles northeast of Amritsar city. The main branch of the Bāri Doāb Canal runs between Majītha and the village of Kathū Nangal, a station on the Amritsar and Pathānkot Railway, 4 miles to the

north. Population (1901), 6,403. The town is said to have been founded by a Gil Jat from the Mālwā, named Madū, who called the town Madū Jetha after his eldest son (jetha). To the Jat clan of this village belonged the Majītha Sardārs, some of whom, such as Sardārs Desa Singh and Lehna Singh, held high places at the court of Ranjīt Singh. The municipality was created in 1867. The income during the ten years ending 1902-3 averaged Rs. 3,700, and the expenditure Rs. 3,000. The income in 1903-4 was Rs. 4,800, chiefly from octroi; and the expenditure was Rs. 4,700. Some carpets are manufactured, but the town is not of any commercial importance. There is an Anglo-vernacular middle school and a dispensary.

Tarn Taran Town.—Head-quarters of the tahsil of the same name in Amritsar District, Punjab, situated in 31° 27' N. and 74° 56' E., on the Amritsar-Patti branch of the North-Western Railway. Population (1901), 4,428. A metalled road connects the town with Amritsar, which is 14 miles to the Tarn Taran is the chief town in the Amritsar Maniha. or upland tract; but its importance is entirely religious, and centres round the sacred tank, said to have been dug by Arjun, the fifth Gurū of the Sikhs, which is 300 yards square, with a paved walk running round it. Ranjīt Singh greatly revered the temple at Tarn Taran, which was originally built in 1768, and overlaid it with plates of copper gilt, besides richly ornamenting it. On the north side of the tank stands a lofty column, erected by prince Nao Nihāl Singh. The water of the tank is supposed to cure leprosy, and lepers come to it even from places beyond the Punjab. The leper asylum outside and the large leper quarter within the city testify more to the fame of the tank than to its healing qualities. The asylum was handed over to the care of the Mission to Lepers in India and the East in 1903. The Sobraon branch of the Bari Doab Canal flows within a short distance of the town, and from this the great tank is supplied with water through a channel constructed at the expense of the Rājā of Jīnd. A fair is celebrated monthly, especially in the Hindu months Chait and Bhadon, when large crowds assemble. The municipality was created in 1875. The income during the ten years ending 1902-3 averaged Rs. 7,700, and the expenditure Rs. 7,400. income in 1903-4 was Rs. 10,300, chiefly from octroi; and the expenditure was Rs. 9,300. The chief industries are the manufacture of iron vessels and wooden cotton-presses. trade of the town is not important. It has three middle schools, a Government dispensary, and a female mission hospital.

Vairowāl.—Town in the Tarn Tāran tahsīl of Amritsar District, Punjab, situated in 31° 25' N. and 75° 10' E., on the right bank of the Beas. Population (1901), 5,439. The place is of no commercial or historical importance. It contains a vernacular middle school.

Gurdaspur District.-District in the Lahore Division Bounof the Punjab, lying between 31° 35' and 32° 30' N. and daries, configuration, 74° 52' and 75° 56' E., with an area of 1,889 square miles. It is and hill bounded on the north by the Jammu province of Kashmir; on and river the west by Sialkot District; on the south-west by Amritsar; on the south-east and east by the Beas, which separates it from the Kapurthala State and Hoshiarpur District, and also by Kāngra District; and on the north-east by the Chamba State.

The District occupies the submontane portion of the Bari Doab, together with a triangular wedge of territory west of the Rāvi. It includes the hill stations of Dalhousie and Bakloh, two isolated pieces of hill territory acquired from the Chamba State, together with a strip of territory on which the cart-road runs connecting these outlying stations with the main body of the District. Dalhousie crowns the westernmost shoulder of a magnificent snowy range, the Dhaola Dhar, between which and the plains two minor ranges intervene. The PATHANKOT tahsīl comprises 130 miles of hilly country between the Rāvi and the Chakki torrent, which divides it from Kangra District. The central watershed of the Doab consists of an elevated plain, contracted to an apex just below the hills, but rapidly spreading out like an open fan until it fills the whole space between the two river-beds. Well-defined banks terminate the plateau on either side, the country falling abruptly away to the present level of the rivers. The bank towards the Beas valley attains a considerable height, and is covered by a ridge of drifted sand; that towards the Ravi is less marked. The plain, though apparently a dead level, has a sufficient westward slope to cause a rapid flow of water in definite drainage lines after heavy rain. Immediately below the hills the country is well wooded, undulating, and picturesque; and, being constantly kept cool and moist by the drainage of the hills, it wears an aspect of freshness very different from the arid monotony of the plains. West of the Ravi is a small tract between that river and the Jammu hills, watered by numerous flowing streams and of great fertility; but the rest of the District west of the Rāvi is, with the exception of the riverain strips, an arid expanse of rolling downs intersected by sandy torrent beds.

The Chakki stream, after forming the eastern border of the

Pathānkot tahsīl, falls into the Beas, which touches the boundary of the District at Mirthal, and thence, running south, divides it from Hoshiārpur District on the east. On the west, the Rāvi forms the border between Gurdaspur and the Jammu State for about 25 miles, after which it enters the District and meanders in a south-westerly course till it leaves Gurdaspur and forms the boundary between Sialkot and Amritsar Districts. Its chief tributary is the Ujh, which enters the Shakargarh tahsīl from Jammu. Several minor torrents traverse the District, and the drainage from the hills has formed large jhils or swamps, of which the Kāhnūwān is the largest. Their area has, however, been much diminished by drainage during recent years. The Bāri Doāb Canal, which takes off from the Rāvi at Mādhopur, just south of the hills, runs for some miles through a deep cutting, but emerges on the level a little east of Gurdaspur town, and divides into four main branches.

Geology.

With the exception of a narrow strip penetrating the hills between the Chakki and Rāvi rivers, the whole of the District lies on the alluvium. The north-east running up to Dalhousie includes representatives of the older rocks of the Central Himālayan zone, consisting of slates overlain by conglomerates and limestones. The slates are usually referred to the infra-Blaini series of Simla, and the conglomerates, with which are associated masses of trap, to the Blaini group, while the limestones are supposed to represent the Krol group. To the south-west of these, the outer hills are composed of sandstones and conglomerates of Upper Tertiary age, belonging to the Siwālik series.

Botany.

The District includes portions of several different botanical areas. Its southern part is entirely in the Central Punjab plain, and the flora resembles that of Jullundur. Owing to dense cultivation, there are few wild plants, except the field weeds that come up with the spring and autumn crops; but on the rivers the tāli (Dalbergia Sissoo) occurs, and blocks of inferior soil are covered with a jungle of reed-grass (Saccharum and Andropogon sp.) and tamarisk (jhao, pilchi). Trees are chiefly planted, but the dhak (Butea frondosa) and kikar (Acacia arabica) grow spontaneously, though the second is a doubtful The ber (Zizyphus Jujuba) is abundant. The submontane tract east of the Ravi is well wooded: the mango, the jāmun (Eugenia Jambolana), and the mulberry, with different shrubs and herbs of the Outer Himālaya, are frequent. West of the Rāvi there is little natural vegetation. The Pathānkot tahsil is mainly Outer Himālayan.

The wild animals include the leopard, wolf, wild cat, hyena, Fauna. hog, and deer, found chiefly in the Pathānkot tahsīl. Nīlgai are also common. Owing to the drying up of the jhīls, the water-fowl for which the District was once famous have largely disappeared.

The climate is on the whole good, and, because of the proximity Climate of the hills, the heat is never excessive. The Pathānkot tahsīl and temperature. is decidedly malarious, owing to its heavy rainfall, and to the large proportion of its soil which is saturated with canal irrigation. Goitre is common here and spleen disease in all parts.

The rainfall is abundant. Excluding Dalhousie, where the Rainfall annual fall averages 80 inches, the average varies from 24 inches at Alīwāl in the Batāla tahsīl, to 51 inches at Mādhopur, where 11 inches fall in the winter and 40 in the summer. The greatest rainfall recorded during the twenty years ending 1901 was 99 inches at Dalhousie in 1882-3, and 80 inches at Mādhopur in 1881-2. Only 9.6 inches fell at Alīwāl in 1899-1900. In 1870 the Rāvi altered its course, and began to threaten the town of Dera Nānak. In spite of strenuous efforts made to divert the channel, the river carried away the Tāli Sāhib temple, and the town itself was only saved by the erection of a strong embankment. There were heavy floods in 1892 and 1894.

The earliest relics of antiquity are the cave-temples of Mukh-History. eshwar, attributed to the Pandavas, on the Ravi. Pathankot was the seat of an ancient Hindu kingdom whose history is related in the article on that town. During the Saiyid dynasty the District was in the heart of the Khokhar country, and KALANAUR was twice attacked by Jasrath Khokhar. Akbar was at Kalānaur when he received the news of Humāyūn's death, and he was here installed by Bairam Khan on February 15, 1556, and seems often subsequently to have held his court here. He had to retake the District from Sikandar Shah, Süri, in the following year. Under Akbar the Afghans who had been settled at Kāhnūwān by Sher Shāh were driven out, and the place became a favourite resort of Jahangir. In the reign of Shāh Jahān the Shāh Nahr or 'royal canal' was begun, in order to conduct water from the Ravi to the gardens at Shalamar, near Lahore; and prince Murād's army assembled at Bahrāmpur, the head-quarters of the chakladar or governor of Jammu and Kāngra, for his campaign against Rājā Jagat Chand. The chief historical importance of the District, however, lies in its connexion with the rise of the Sikhs. Derā Bāba Nānak on the Ravi preserves the name of the founder of Sikhism, who died in 1538 on the opposite bank. Both Guru Amar Dās

and Gurū Har Rai were also connected with the District. In 1710 the Sikh leader Banda plundered Batāla and Kalānaur, and made the District the head-quarters of his raids on the neighbourhood. Driven into the hills by Bahādur Shāh in 1711, he returned and built a fort at Lohgarh, identified with the modern Gurdāspur, and defeated Islām Jang, viceroy of Lahore. In 1713 Abdus Samad Khān drove him back to the hills, and, though he again returned and recaptured Kalānaur, finally took him prisoner at Lohgarh in 1716.

The next period in the history of the District is closely connected with Adīna Beg. At first governor of Bahrāmpur and subsequently of the Jullundur Doāb, he founded Dīnānagar in 1730, which he seems generally to have made his head-quarters. This ruler is chiefly remarkable for the astuteness with which he played off Ahmad Shāh, the Delhi emperors, and the Marāthās, one against the other, until he was installed by the last-named power as governor of Lahore with head-quarters at Batāla. His death in 1758 removed the main obstacle to the spread of the Sikh power, which was only temporarily checked by their defeat at Barnāla in 1762.

The Sikh Rāmgarhia confederacy, under the famous Jassa Singh, then occupied Batāla, Dīnānagar, Kalānaur, Srīgovindpur, and other places, the rest of the Bari Doab south of Dīnānagar falling into the hands of the Kanhayās, while west of the Rāvi the Bhangī confederacy rose to power. The rival confederacies soon fell out, and a struggle for supremacy ensued between the Rāmgarhiās and Kanhayās; the Bhangī, who supported the former, lost their power in these parts in 1774, and Jassa Singh himself was expelled by the Kanhayas. He returned in 1783, but again lost Batāla to the Kanhayās in 1786; and two years after his death, in 1806, all the remaining possessions of the Rāmgarhia confederacy were confiscated by Ranjīt Singh. The Kanhayā estates were confiscated in 1811, and later on Batāla and its dependencies were assigned to Sher Singh, a putative son of Ranjīt Singh by his Kanhayā wife, Mahtāb Kaur. Dīnānagar was a favourite resort of Ranjît Singh, and it was there that in 1838 he received the Macnaghten mission which negotiated the proposed alliance for placing Shāh Shujā on the throne of Kābul.

Pathānkot and a few neighbouring villages in the plains, together with all the hilly portion of the District, formed part of the country ceded by the Sikhs to the British after the first Sikh War in 1846. Under the original distribution of the new territory they were attached to Kāngra; but after the final

annexation in 1849, the upper portion of the Bari Doab became a separate District, with its head-quarters at Batāla. In 1852 the head-quarters were removed to Gurdaspur, and in 1853 the District received an addition by the transfer from Siālkot of the Shakargarh tahsīl. No outbreak took place during the Mutiny, in spite of the large number of Hindustānīs then employed on the head-works of the canal; but the ford of Trimmu was the scene of the battle at which Nicholson, after his famous forced march from Amritsar, intercepted and destroyed the Sialkot mutineers. In 1853 the site for the new sanitarium of Dalhousie, together with the strip of hill road connecting it with the plains, was acquired by the British Government by purchase from the Chamba State. transferred from Kangra in 1860, and in 1862 the further transfer of a strip of hill country between the Ravi and the Chakki brought the District into its present shape.

Recent authorities locate the Sangala of Alexander's his-Archaeotorians, the stronghold of the Kathaei, in Gurdaspur District. logy. but the exact site has not been determined. If this theory be correct, the twelve altars set up by Alexander to mark the extreme limit of his advance were probably erected in the Beas lowlands, somewhere near the meeting-point of the three Districts of Gurdāspur, Hoshiārpur, and Kāngra. The antiquities of PATHANKOT are dealt with in the article on that town. It is impossible to fix the date of the rock-temples at Mukheshwar (Mukesar) on the Rāvi, which legend attributes to the Pandavas. The only inscription is undecipherable, but, judging from the character of the letters that have been made out, it dates approximately from the eleventh century. The soft sandstone of the sculptures has everywhere decayed. Among monuments of later date, the most interesting is the masonry platform at KALANAUR, which marks the scene of Akbar's coronation in 1556. For particulars as to other

Gurdāspur contains 11 towns and 2,244 villages. Its popu- The lation at the last three enumerations was: (1881) 823,695, people. (1891) 943,922, and (1901) 940,334. During the last decade it decreased by 0.4 per cent., the fall being largely accounted for by emigration, about 44,000 settlers having gone from this District to the Chenab Colony. The District is divided into the four tahsils of Gurdaspur, Batala, Shakargarh, and PATHANKOT, the head-quarters of each being at the place from which it is named. The chief towns are the municipalities of GURDASPUR, the administrative head-quarters of the District,

remains of interest, see the article on BATALA TOWN.