what was once a fairly level plain, sloping down from 2,000 feet at the foot of the hills to 1,400 feet in the neighbourhood of the Sohān; but the surface is now much cut up by ravines and is very difficult to travel over.

Pind Dādan Khān Tahsīl.—Southern tahsīl and subdivision of Ihelum District, Punjab, lying between 32° 27' and 32° 50' N. and 72° 32' and 73° 29' E., with an area of 875 square miles. It is bounded on the south-east by the Thelum river, and is traversed in its northern portion by the Salt Range. The hills consist of two roughly parallel ranges about 6 miles apart, with a strip of richly cultivated and fairly level uplands between. The southern slopes of the hills are steep and barren. The rest of the tahsil consists of a belt of alluvial plain, a portion of which is much affected by saline deposits. The population in 1901 was 170,130, compared with 173,071 in 1891. It contains the town of PIND DADAN KHAN (population, 13,770), the headquarters; and 207 villages. The land revenue and cesses amounted in 1903-4 to 2.8 lakhs. KATAS and MALOT are places of considerable archaeological interest, the village of JALALPUR possesses historical importance, and the Mayo MINE at Khewra is one of the chief sources of the supply of salt in India.

Bhaun.—Town in the Chakwāl tahsīl of Jhelum District, Punjab, situated in 32° 52′ N. and 72° 40′ E., on the southern extremity of the Dhanni plain. Population (1901), 5,340. The town possesses a vernacular middle school, maintained by the District board.

Chakwāl Town.—Head-quarters of the tahsīl of the same name in Jhelum District, Punjab, situated in 32° 56' N. and 72° 52' E., in the Lundi Patti plain, 55 miles due west of Jhelum town. Population (1901), 6,520. A light railway from Mandra to Chakwāl has been suggested, but has not yet been surveyed. Shoes and parti-coloured cotton cloth are made. The town is administered as a 'notified area,' and contains an Anglo-vernacular middle school, maintained by the District board, and a Government dispensary.

Jalālpur Village.—Ancient site in the Pind Dādan Khān tahsīl of Jhelum District, Punjab, situated in 32° 39′ N. and 73° 28′ E., on the right bank of the Jhelum river. Population (1901), 3,161. The village was identified by Sir Alexander Cunningham with the site of the ancient Bucephala, built by Alexander the Great in memory of his famous charger, which was killed in the battle with Porus at the crossing of

the Jhelum; but doubts have been cast on the identification. Remains of ancient walls still crown the summit of the hills, which rise to a height of 1,000 feet above the village. Coins found among the ruins date back to the period of the Graeco-Bactrian kings. Even in the time of Akbar, the town covered a site four times as large as that which it now occupies; but since the foundation of Pind Dādan Khān, and the shifting of the river channel 2 miles eastward, it has undergone a constant decay. Jalālpur is now nothing more than a small agricultural village, of no importance apart from the interest attaching to its antiquarian remains.

Jhelum Town (Jehlam).—Head-quarters of the District and tahsīl of Jhelum, Punjab, situated in 32° 56' N. and 73° 47' E., on the right bank of the Jhelum river and on the North-Western Railway; distant by rail 1,367 miles from Calcutta, 1,403 from Bombay, and 849 from Population (1901), 14,951. The present town Karāchi. is of modern origin, the old town, which may have been the Bucephala of Alexander, having been on the left or opposite bank of the river. Under Sikh rule the place was quite unimportant, being mainly occupied by a settlement of boatmen, and at the time of annexation contained about 500 houses. It was then chosen as the site of a cantonment, and as the head-quarters of the civil administration. some years it was the seat of the Commissioner of the Division, but in 1859 his head-quarters were transferred to Rāwalpindi. Under British rule Jhelum has steadily advanced in prosperity, and is the entrepôt for most of the trade of the District, though, since the completion of the Sind-Sagar branch of the North-Western Railway, the salt trade no longer passes through it. It is an important timber dépôt, the timber from the Kashmir forests which is floated down the river being collected here. A good deal of boat-building is carried on. The cantonment, which is 3 miles from the civil station, contains the church and post office. The normal strength of the garrison is one native cavalry and four native infantry regiments. The municipality was founded in 1867. During the ten years ending 1902-3 the receipts averaged Rs. 32,100, and the expenditure Rs. 31,900. Receipts and expenditure from cantonment funds in the same period averaged Rs. 5,900 and Rs. 6,100, respectively. The income of the municipality in 1903-4 was Rs. 34,200, chiefly from octroi; and the expenditure was Rs. 41,000. The town possesses two Anglovernacular schools, a municipal high school, and a middle

school maintained by the American Presbyterian Mission. Besides the civil hospital, the mission also maintains a hospital.

Katās.—Sacred pool in the centre of the Salt Range, in Jhelum District, Punjab, situated in 32° 43' N. and 72° 59' E., 15 miles north of Pind Dādan Khān, at an elevation of over 2,000 feet. The pool lies at the head of the Ganīya nullah, a small ravine between low stony hills, and is fed by springs. From it issues a small stream which flows past Choa Saidān Shāh into the Gandhāla valley. It is visited every year by thousands of pilgrims who come to bathe in its waters. The Brāhmanical story is that Siva being inconsolable at the death of his wife Sati, 'the true one,' tears rained from his eyes and formed the two pools of Katās or Katāksha, 'raining eyes,' and Pushkar near Ajmer. The pool is partly artificial, the rock having been cut away to enlarge the natural basin in the bed of the ravine. Just above it once stretched a strong masonry wall which dammed up the stream, so as to enclose a large lake; but the water now escapes through the broken rocks and ruins of the embankment. About 800 feet below the pool the Ganiya nullah passes between two low flat-topped hills, on which the ancient town is said to have stood. At the foot of Kotera, the west hill, are the remains of twelve temples clustered in a corner of an old fort. These are called the Sat-Ghara, or 'seven temples,' and are popularly attributed to the Pāndavas, who are said to have lived at Katās during a portion of their seven years' wanderings. Their style is that of the Kashmīr architecture which prevailed from the eighth to the thirteenth centuries, and they comprise a group of six small temples placed in pairs at regular distances about one large central temple. Facing this to the east is the basement of a great structure, which was in all probability a Buddhist stūpa.

South-west of the village of Choa Saidān Shāh, which lies 2 miles due east of Katās, extends the Gandhāla valley, itself 2,000 feet above the sea, and separated by lofty cliffs from Katās on the north. On the bank of the Katās stream, which flows through the valley, lies the hill of Murti, rising on a base of solid sandstone to about 100 feet above the stream, its level top being 225 feet long by 190 broad. On this plateau is a small mound, the remains of a stūpa; and close to it once stood a small Jain temple, from the débris of which a considerable quantity of highly ornamented architectural fragments (now in the Lahore Museum) was recovered by Dr. Stein's excavations in 1890. The temple has been identified with a famous Jain shrine where Mahāvīra was supposed to have

obtained his enlightenment. The locality is also identified with Singha-pura, the Sang-ho-pu-lo of the Chinese pilgrim Hiuen Tsiang, and described by him as the capital of a dependency of Kashmir about A.D. 630.

[Archaeological Survey Reports, vol. ii, pp. 88 and 90; Cunningham, Ancient Geography of India, pp. 124-8; Vienna Oriental Journal, vol. iv (1890), pp. 80 and 260.

Malot.—Fort and temple on a precipitous spur projecting from the southern edge of the Salt Range, Jhelum District, Punjab, lying in 32° 42′ N. and 72° 50′ E., about 9 miles west The fort is said to have been built five or six cenof Katās. turies ago by Rājā Mal, a Janjūa chief, whose descendants still hold the village. The temple, with its gateway, stands on the extreme edge of the cliff. They are in the earlier Kashmīr style, built of coarse red sandstone, much injured by the action of the weather. The temple is 18 feet square inside, with remarkable fluted pilasters and capitals, on each of which is a kneeling figure.

[Archaeological Survey Reports, vol. v, pp. 85-90.]

Mayo Mine.—Salt mine in the Pind Dādan Khān tahsīl of Jhelum District, Punjab, situated in 32° 39' N. and 73° 3' E. The mine lies in the SALT RANGE at the village of Khewra, 5½ miles north-east of the town of Pind Dādan Khān; and the mineral occurs in vast quantities, the deposits extending towards the summit of the hill above the village (1,650 feet above sea-level) and going down to a great depth below the present floor-level of the mine. When the salt was first worked is not known; but excavations existed on the spot as far back as the time of Akbar, and the miners have a tradition that their first settlement dates from the sixth century of the Muhammadan The existing mine was named after Lord Mayo in 1870. Under Sikh rule several mines were working in the hill; but the excavations were not made with any regard to economy or safety, and in consequence they have all either fallen in or are in danger of so doing. In 1869-70 a qualified mining engineer was appointed and a scientific system of working was introduced.

It is estimated that 534,512 tons had been excavated up to 1850, and from that year to the end of March, 1904, the outturn was 2,572,705 tons. It is calculated that a further supply of  $8\frac{1}{2}$  million tons is easily accessible in the part of the hill which has been explored, and that large quantities exist in its unexplored parts beyond the limits of the existing mine. mine has a maximum length of 1,405 feet, and is 2,691 feet

broad at its widest part.

A bridge across the Khewra gorge carries a tramway on which the salt is conveyed to the dépôt from which it is issued. This bridge is 929 feet above sea-level, and as the mine is higher than the bridge, the working is greatly facilitated. Ample space for extension exists on the north, south, and east, but on the west the gorge precludes tunnelling without going much deeper than the existing floor. West of the gorge, however, stands a hill with four times the mass of the mine hill, and undoubtedly containing rich deposits as yet untouched.

In 1903-4 the mine gave daily employment to 1,205 persons, chiefly belonging to the mining community, whose occupation is hereditary. They work in family parties, the women and children over twelve years of age assisting in the carriage of the salt from the excavations to the loading stations. A few outsiders are employed as porters and in loading or moving the trucks. The miners receive 10½ pies per cubic foot of space excavated, the payment covering the stacking of salt at the loading stations on the tramway. Government paid 1.4 lakhs in wages during 1903-4 for the mining and issuing of salt at Khewra and the special work connected therewith. For mining purposes the hill is divided into parallel blocks not exceeding 45 feet in width and running in the direction of the prevailing dip of the salt strata, alternating with similar blocks not less than 25 feet wide, in which no excavation is permitted except for tunnels, travelling ways, and loading stations for the tramways. These blocks, or pillars, which support the mine roof, are now generally 30 feet thick, and they are further strengthened by beds of marl which lie between the salt seams, and which are not removed when the salt is being The marl is impure salt, lying in beds of varying thickness between the seams of salt and thinning out as it dips down in the hill until eventually its place is taken by salt. Three tramways run through the mine, two of them being connected by a self-acting incline on which the loaded trucks draw the empty trucks up. The whole of the salt is carried to the dépôt outside the gorge in trucks which run by gravitation, but are hauled back empty by mules and ponies or are pushed back by men. The mine is intersected with tunnels which serve for ventilation as well as travelling ways. Rain-water is kept out by a network of drains at the surface, and most of the little water that percolates into the mine is caught up inside in masonry drains and flows out. The Mayo Mine supplied 2,264,187 maunds, or 87.6 per cent.

of the salt issued from the cis-Indus and Kālābāgh Mines division in 1903-4. Of this, 98.8 per cent. was removed by the North-Western Railway, which runs to the salt dépôt at Warthganj at the mouth of the Khewra gorge, for distribution over the Punjab (including Kashmīr and other Native States), the United Provinces of Agra and Oudh, Bihār and (in small quantities) Lower Bengal, Sind, Baluchistān, and the Central Provinces. The revenue (duty) realized from the sale of Mayo Mine salt in 1903-4 amounted to 46.9 lakhs.

Nandana.—Place of historical interest in the Pind Dādan Khān tahsīl of Jhelum District, Punjab, situated in 32° 43' N. and 73° 17' E., 14 miles west of Choa Saidan Shah, in a remarkable dip in the outer Salt Range. Near by are extensive remains of a temple, a fort, and a large village. The temple is in the Kashmīrī style, but faces west, instead of east, as temples of that style usually do. Of the fort, two bastions of large well-cut sandstone blocks still remain. Nandana is mentioned as the objective of one of Mahmud of Ghazni's expeditions in 1014. Early in the thirteenth century it was held by Kamr-ud-din Karmāni, who was dispossessed by a general of Jalal-ud-din, Sultan of Khwarizm. The latter was defeated on the Indus in 1221 by Chingiz Khān, one of whose officers, Turti, the Mongol, took Nandana and put its inhabitants to the sword. It appears in the list of places conquered by Altamsh, who entrusted it to one of his nobles. In 1247 his son Mahmud Shah dispatched an army to ravage the hills of Jūd and the country round Nandana, to punish a Rāna who had guided a Mongol inroad in the previous year.

Nūrpur.—Salt mine in the Pind Dādan Khān tahsīl of Jhelum District, Punjab, situated in 32° 39′ N. and 72° 38′ E., in the Nilawāhan gorge, about 3½ miles south-east of the village of Nūrpur. It supplies only the local demand. In 1903–4, 4,000 maunds of salt were sold. The mine is an old one, worked during Sikh rule, but closed after annexation and subsequently reopened.

Pind Dādan Khān Town.—Head-quarters of the tahsil and subdivision of the same name in Jhelum District, Punjab, situated in 32° 36′ N. and 73° 4′ E., on the right bank of the Jhelum river, and on the Sind-Sāgar branch of the North-Western Railway. Population (1901), 13,770. It was formerly the dépôt to which salt was brought from the Mayo Mine, and from which it was carried across the river to the railway; but the bridging of the Jhelum at Haranpur, and the extension of the railway to Khewra, has ruined this trade. Brass vessels

are made in the town, which also has a considerable weaving industry, while its embroidered *lungīs* are often sold at high prices. Boat-building is largely carried on, and river boats of Pind Dādan Khān make are in request throughout the whole course of the Jhelum. Unglazed pottery of a deep red colour, ornamented with black patterns and remarkably strong and good in quality, is a speciality of the town, as are also stout leathern riding-whips made after English patterns. The municipality was created in 1867. During the ten years ending 1902-3 the receipts averaged Rs. 28,700, and the expenditure Rs. 28,100. In 1903-4 the income was Rs. 22,300, chiefly from octroi; and the expenditure was Rs. 27,000. The town has a high school, maintained by the municipality. There is also a Government dispensary.

Rohtās.—Fortress in the District and tahsil of Jhelum, Punjab, situated in 32° 55' N. and 73° 48' E., 10 miles northwest of Jhelum town, in the gorge where the Kahān torrent breaks through the low eastern spur of the Tilla range. fortress was built by the emperor Sher Shah Suri, after his expulsion of Humāyūn in 1542, to hold in check the Gakhars, who were allies of the exiled emperor. The Gakhars endeavoured to prevent its construction, and labour was obtained with such difficulty that the cost exceeded 40 lakhs in modern currency. The circumference is about  $2\frac{1}{2}$  miles, and the walls are 30 feet thick and from 30 to 50 feet high. There are 68 towers and 12 gateways, of which the most imposing is the Sohal Gate, a fine specimen of the Pathan style, over 70 feet in height, with exquisite balconies on the outer walls. The fortress was named after the fort of Rohtas in Bengal, the scene of a victory of Sher Shah. The northern wall is now a ruin, and within the fortifications lies the small but flourishing village of Rohtās.

Shivgangā.—Valley in the Salt Range, Jhelum District, Punjab, situated in 32° 43′ N. and 72° 53′ E., 3 miles northeast of Malot. In it stands a small temple in the later Kashmīr style; and near Warala, a hamlet on the adjacent spur, a Buddhist sculpture was found by the villagers some years ago and set up by Hindus in a small temple at Shivgangā. Having recently been broken and thus rendered useless for purposes of worship, the Hindus allowed its fragments to be sent to the Lahore Museum, where it was restored. The relief originally contained eighteen or nineteen figures, the central one, a Bodhisattva, carved in a somewhat late stage of Gandhāra art.

Tilla.—An eastward continuation of the Salt Range in Thelum District, Punjab, 3,242 feet above the sea. From the Bunhā torrent the range rises rapidly to the culminating peak of Jogi Tilla and thence sinks as rapidly, but a series of low parallel ridges runs out across the valley of the Kahān. hill is sometimes used as a summer resort by officers of Thelum District. A famous monastery of Jogi fakirs is situated here.

Rāwalpindi District.—Northern District of the Rāwal-Bounpindi Division, Punjab, lying between 33° 4' and 34° 1' N. daries, configuration, and 72° 34' and 73° 39' E., with an area of 2,010 square miles. and hill It is bounded on the north by the Hazāra District of the and river North-West Frontier Province; on the east by the river systems. Thelum, which separates it from Kashmir territory; on the south by the District of Jhelum; and on the west by that of Attock. The District as now constituted forms a compact square, with the mountain tract called the Murree Hills jutting from its north-east corner, between Kashmir and This range extends southward along the eastern border of the District, forming the Kahūta Hills, which lie in the tahsil of that name, as far south as Bagham on the Ihelum river, and west to within a few miles of Rāwalpindi cantonment. On the west the slope is gradual, but the eastern escarpments run sharply down to the deep gorges of the Ihelum. The five main spurs are known generally as the Murree range, that on which the sanitarium of Murree stands rising to 7,500 feet, Charihan being very little lower, and Paphundi reaching 7,000 feet at its highest point. These hills form an offshoot of the Himālayan system. The valleys between them are often extremely beautiful; and the higher ranges are covered with a varied growth, the silver fir, ilex, hill oak, blue pine, chestnut, and wild cherry uniting to form dense forests on the Murree and Paphundi spurs, while the lower hills are well wooded with olive, acacia, and bog myrtle. view looking upwards from the plains is of exquisite beauty.

South-west of the Murree and Kahūta Hills stretches a rough high-lying plateau, about 1,800 feet above sea-level. The northern part of this includes the tahsil of Rāwalpindi and the Kallar circle of the Kahūta tahsīl. It is drained by the Sohān, which flows south-west, passing a few miles south of Rāwalpindi cantonment, below which it is joined by several tributaries from the hills. The southern part of the plain, forming the Gujar Khān tahsīl, is drained by the Kānshi, a stream which flows southward from the low hills south of Kahūta till near the town of Gūjar Khān, and then winds east-

wards to the Jhelum. The whole of this plateau is highly cultivated, the fields being massively embanked to retain moisture, while its numerous villages shelter a dense population. The Jhelum river, which forms the eastern boundary of the District, flows here between precipitous cliffs, which render it useless for irrigation; and it is only navigable below Dungā Gali, a point 40 miles east of Rāwalpindi town.

Geology.

The District lies entirely on Tertiary rocks. The oldest of these are the Murree beds, which run in a narrow band across its northern part. They are composed of red and purple clays, with grey and purplish sandstones, and are probably of miocene age. These are succeeded to the south by a great spread of lower Siwālik sandstone, which covers the greater part of the District and contains a rich mammalian fauna of pliocene age. It is overlain by the upper Siwālik conglomerates and sandstones, which occur to the south-west of Rāwalpindi, and at other localities. Still farther south the lower Siwālik sandstone is continuous with the similar beds of the Salt Range 1.

Botany.

The vegetation of the higher portions of the Murree subdivision is that of the temperate Himālaya, with a few Kashmīr and Oriental species intermingled. At lower levels it is similar to that of the Outer Himālaya, from the Indus valley to Kumaun; but trans-Indus types, e.g. Delphinium, Dianthus, Scabiosa, and Boucerosia, are frequent, and extend for some distance into the extra-Himālayan part of the District, whose flora is that of the western Punjab, but on the whole rather scanty. Trees are mostly planted, and Indo-Malayan species, such as the mango, &c., thrive rather poorly.

Fauna.

Leopards are found in the Murree and Kahūta Hills, and very rarely the gural. The District is a poor one for sport.

Climate and temperature. The climate of Rāwalpindi is considerably cooler than that of the Punjab plains. The hot season lasts only three months, from June to August, and the nearness of the hills lowers the temperature during the succeeding months, even when there is no rain in the plains. The cold in winter is very severe, and a trying east wind prevails in January and February. The District on the whole is extremely healthy for Europeans, while the natives are robust and of fine physique.

Rainfall.

The rainfall in the plains is fairly copious, varying from 29 inches at Gūjar Khān to 41 at Kahūta; in the hills the average is 53 inches. Heavy winter rain from January to

Wynne, 'Tertiary Zone and Underlying Rocks in N.-W. Punjab,' Records, Geological Survey of India, vol. x, pt. iii.

March is characteristic of this District, 8 inches or more frequently falling in the three months.

In ancient times the whole or the greater part of the country History. between the Indus and the Thelum seems to have belonged to a Turanian race called Takkas or Takshakas, who gave their name to the city of Takshāsīla, the Taxila of the Greek historians, the site of which has been identified with the ruins of Shāhdheri in the north-west corner of the District. At the time of Alexander's invasion Taxila is described by Arrian as a great and flourishing city, the greatest indeed between the Indus and the Hydaspes; Strabo adds that the neighbouring country was crowded with inhabitants and very fertile; and Pliny speaks of it as a famous city situated in a district called Amanda. The invasion of Demetrius in 195 B.C. brought the Punjab under the Graeco-Bactrian kings. Later they were superseded by the Sakas, who ruled at Taxila with the title of Satrap. At the time of Hiuen Tsiang the country was a dependency of Kashmir.

Mahmud of Ghazni passed through the District after his defeat of Anand Pal and capture of Ohind. With this conqueror claim to have come the Gakhars, a tribe still of importance in the District. The first mention of them in the Muhammadan historians occurs in the memoirs of Bābar. who gives an interesting account of the capture of their capital of Parālah. It was strongly situated in the hills, and was defended with great bravery by its chief Hāti Khān, who escaped from one gate as the Mughal army marched in at the other. Hāti Khān died by poison in 1525; and his cousin and murderer Sultan Sarang submitted to Babar, who conferred on him the Potwar country. Thenceforth the Gakhar chieftains remained firm allies of the Mughal dynasty, and were able to render efficient aid in its struggle with the house of Sher Shāh. Salīm Shāh attempted in vain to subdue their country; but in 1553 Adam Khān, Sārang's successor, surrendered the rebel prince Kāmrān to Humāyūn. Adam Khān was subsequently deposed by Akbar, and his principality made over to his nephew Kamāl Khān. During the flourishing period of the Mughal empire, the family of Sarang retained its territorial possessions, its last and greatest independent chief, Mukarrab Khān, ruling over a kingdom which extended from the Chenab to the Indus.

In 1765, during the total paralysis of the Mughal government, Sardār Gūjar Singh Bhangī, a powerful Sikh chieftain, marched from Lahore against Mukarrab Khān, whom he

defeated outside the walls of Gujrāt. Mukarrab Khān retired across the Jhelum, where he was soon treacherously murdered by his own tribesmen; but the traitors forthwith quarrelled over their spoil, and fell one by one before Sardar Gujar Singh. The Sikhs ruled Rawalpindi with their usual rapacity, exacting as revenue the last coin that could be wrung from the proprietors, who were often glad to admit their tenants as jointsharers, in order to lighten the incidence of the revenue. Gujar Singh held the District throughout his life, and left it on his death to his son, Sāhib Singh, who fell in 1810 before the power of the great Ranjit Singh. Another Sikh Sardar, Milka Singh, fixed upon Rawalpindi, then an insignificant village, for his head-quarters. In spite of Afghan inroads and the resistance of the Gakhars, he soon conquered on his own account a tract of country round Rawalpindi worth 3 lakhs a year. his death in 1804, his estates were confirmed to his son, Jiwan Singh, by Ranjit Singh, until 1814, when, upon Jiwan Singh's death, they were annexed to the territory of Lahore. Murree and other hills long retained their independence under their Gakhar chieftains; but in 1830 they were reduced after a bloody struggle, and handed over to Gulāb Singh of Kashmīr, under whose merciless rule the population was almost decimated, and the country reduced to a desert.

In 1849 Rāwalpindi passed with the rest of the Sikh dominions under British rule; and though tranquillity was disturbed by an insurrection four years later, led by a Gakhar chief with the object of placing a pretended son of Ranjit Singh on the throne, its administration was generally peaceful until the outbreak of the Mutiny in 1857. The Dhunds and other tribes of the Murree Hills, incited by Hindustani agents, rose in insurrection, and the authorities received information from a faithful native of a projected attack upon the station of Murree in time to concert measures for defence. The ladies, who were present in large numbers, were placed in safety; the Europeans and police were drawn up in a cordon round the station; and when the enemy arrived expecting no resistance, they met with a hot reception, which caused them to withdraw in disorder, and shortly after to disband. In 1904 the tahsils of Attock, Fatahjang, and Pindi Gheb were transferred from Rāwalpindi to the newly constituted Attock District.

Archaeolegy. The principal remains of antiquity are described in the articles on Mānikiāla and Shāhdheri. The country round the latter place abounds in Buddhist remains, the most interesting of which is the Balar stūpa.

The population of the District at the last three enumerations The was: (1881) 471,079, (1891) 533,740, and (1901) 558,699, people. dwelling in 2 towns and 1,180 villages. It increased by 4.7 per cent. during the last decade. The District is divided into four tahsils, Rawalpindi, Kahūta, Murree, and Gūjar Khan, the head-quarters of each being at the place from which it is named. The towns are the municipalities of Rawalpindi, the administrative head-quarters of the District, and MURREE, the summer station.

The following table shows the chief statistics of population in 1901 :--

2 - 1 - 1 - 1 - 2 -	square es.	Nun	nber of	on.	n per	re of	of thle
Tahsil.	Area in sq miles	Towns.	Villages.	Population	Population square mi	Percentag variation population tween 18 and 190	Number persons a to read a
Rāwalpindi .	764	I	448	261,101	341.7	+ 7.4	24,924
Murree	258	1	120	52,303	202.7	+ 14.3	1,463
Kahūta	456		231	94,729	207.9	+ 2.6	3,119
Güjar Khān .	568	•••	381	150,566	265.1	- I·2	6,513
District total	2,010	2	1,180	558,699	278.0	+ 4.7	36,019

NOTE.—The figures for the areas of tahsils are taken from revenue returns. The total District area is that given in the Census Report.

Muhammadans number 466,918, or more than 83 per cent. of the total; Hindus, 57,325; and Sikhs, 26,363.

The most numerous tribe is that of the land-owning Rajputs, Castes and who number 101,000, or 18 per cent. of the total population. occupations. Next come the Awans with 39,000; after them the Jats, Güjars, and Dhünds, with 35,000, 26,000, and 23,000 respectively. Other important agricultural castes are the Sattis (17,000), Maliars (17,000), Gakhars (13,000), Mughals (13,000), Janjūas (8,000), and Pathāns (7,000). Saivids and Kureshis number 13,000 and 9,000 respectively. The Khattrīs (30,000) and Arorās (6,000) are the only commercial castes. Brāhmans number 15,000, including 1,000 Muhiāls; Shaikhs, partly agriculturists and partly traders, 12,000. Of the artisan classes, the Julāhās (weavers, 23,000), Tarkhāns (carpenters, 17,000), Mochīs (shoemakers and leather-workers, 13,000), Kumhārs (potters, 10,000), Lohārs (blacksmiths, 8,000), and Telis (oilpressers, 8,000) are the most important; and of the menials, the Chuhras and Musallis (sweepers and scavengers, 14,000) and Nais (barbers, 7,000). Kashmīrīs number 18,000. Of the total population, 64 per cent. are dependent on agriculture. Many of the leading tribes, Gakhars, Janjūas, and Rājputs,

enlist in the Indian army. Sattis, Dhaniāls, Brāhmans, and Khattrīs are also enlisted, and many of them have been distinguished for their courage and loyalty.

Christian missions.

The American United Presbyterian Mission was established at Rāwalpindi in 1856. It has a church in the town, and maintains an Arts college, a large high school with two branches, and three girls' schools. There are Roman Catholic Missions at Rāwalpindi and Murree, and at Yūsufpur, close to Rāwalpindi cantonment. Native Christians numbered 511 in 1901.

General agricultural conditions. More than 98 per cent. of the cultivation depends entirely on the rainfall. In the hills the rain is abundant, and the cultivation, which is carried on in terraced fields along the hill-sides, is classed as secure from famine. Three-quarters of the crops are grown in the autumn harvest. The rest of the District is an undulating plateau, much cut up by ravines. The soil is usually a light-brown fertile loam, the fields are carefully embanked, and the tillage is generally good. The rainfall is sufficient; and the regularity and abundance of the winter rains protect the District from a grain famine in the worst years, while the proximity of the hills mitigates a fodder famine. The spring crop is the principal harvest.

Chief agricultural statistics and principal crops.

The District is chiefly held by small peasant proprietors. The following table shows the main statistics of cultivation in 1903-4, areas being in square miles:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.	Forest
Rāwalpindi .	764 258	380	7	37	67
Murree	258	62	3	37 16	157
Kahūta	457 567	151 346	I	21	179
Güjar Khān .	567	346	I	39	9
Total	2,046*	939	12	173	412

<sup>\*</sup> These figures, which do not agree with the area as shown on p. 163, are taken from later returns.

The chief crops of the spring harvest are wheat and barley, the areas under which in 1903-4 were 325 and 18 square miles, while in the autumn harvest jowār, bājra, and pulses covered 33, 180, and 50 square miles respectively.

Improvements in agricultural practice. The area cultivated has increased by 9 per cent. since the settlement of 1880-7. The people exercise considerable care in the selection of seed for wheat and maize. Loans from Government for sinking wells are rarely taken, as the country is not adapted for wells.

The cattle are small and not good milkers, and attempts to Cattle, improve the breed by the introduction of Hissār bulls were not ponies, and successful. The cattle of the hills are small, but hardy. A fine breed of camels is kept; they are not adapted for riding, but make excellent pack animals. Horse-breeding is popular, and many good animals are reared; a good deal of mule-breeding is also carried on. The Army Remount department maintains 26 horse and 91 donkey stallions, and the District board 8 pony and 5 donkey stallions. A large horse fair is held yearly at Rāwalpindi. Large flocks of sheep and goats of inferior breeds are kept in the Murree and Kahūta Hills.

There is very little irrigation. Of the total area cultivated in Irrigation. 1903-4 only 12 square miles, or about 1 per cent., were classed as irrigated. Of this area, 2,946 acres were irrigated from wells and 4,870 acres from tanks and streams. In addition, 3,512 acres were subject to inundation from various streams, and the canal irrigation is entirely from private channels taking Only 1,103 masonry wells were in use, all off from them. worked with Persian wheels by cattle, but there were over 543 lever wells, unbricked wells, and water-lifts.

The forests are of some importance, comprising 152 square Forests. miles of 'reserved,' 76 of protected, and 249 of unclassed forests under the Forest department, besides 21 square miles of military reserve, and about one square mile under the Deputy-Commissioner. The most important are the hill forests of Murree and Kahūta. The others are forests only in name, consisting merely of scrub or grass. In 1904-5 the revenue from the forests under the Forest department was Rs. 45,000, and from those under the Deputy-Commissioner Rs. 900.

The District produces no minerals of commercial impor-Minerals. tance. Lignite is occasionally met with in the Murree Hills, and petroleum is found in small quantities near Rāwalpindi. Gypsum occurs in considerable quantities. A little gold is washed from the beds of various streams.

The District possesses no important indigenous manufac- Arts and tures, but cotton is woven everywhere, and the silk embroidered manufacphūlkāris of Rāwalpindi are of some merit. Lacquered legs for bedsteads and other pieces of native furniture are made locally, and there is some output of saddles and shoes. principal factories are the North-Western Railway locomotive and carriage works, where the number of employés in 1904 was 1,455; and the arsenal, which in the same year gave employment to 569 persons. Besides these, there are the Rawalpindi

gas-works with 170 employés, 2 breweries with 391, a tent factory with 252, an iron foundry with 123, and four smaller factories with an aggregate of 150. With the exception of the Murree Brewery, all of these are situated at Rāwalpindi town.

Commerce and trade. Trade consists chiefly in the supply of necessaries to the stations of Rāwalpindi and Murree, and the through traffic with Kashmīr. The District exports food-grains and oilseeds, and imports piece-goods, rice, hardware, tea, and salt. A good deal of timber comes from Kashmīr. Rāwalpindi and Gūjar Khān are the chief centres of trade.

Means of communication.

The District is traversed by the main line of the North-Western Railway, with a branch from Golra junction to Khushālgarh. The metalled roads are the grand trunk road, which runs by the side of the main line of rail, and the Kashmīr road and the Khushālgarh road from Rāwalpindi town. These are maintained from Provincial funds. A service of tongas runs between Rāwalpindi and Murree, but a railway connecting the two places is projected. The unmetalled roads, which are all under the District board, are not fit for wheeled traffic, the place of which is taken by pack animals.

Famine.

Although the District has from time to time suffered from scarcity, it has not, at any rate since annexation, been visited by serious famine, and the hill *tahsīls* may be considered as quite secure.

District subdivisions and staff. The District is divided into four tahsīls, Rāwalpindi, Gūjar Khān, Murree, and Kahūta, each under a tahsīldār and a naib-tahsīldār. The Deputy-Commissioner is aided by five Assistant or Extra Assistant Commissioners, one of whom is in charge of the District treasury. During the hot season an Assistant Commissioner holds charge of the Murree subdivision, which consists of the Murree tahsīl.

Civil and criminal justice.

Civil judicial work is disposed of by a District Judge subordinate to the Divisional Judge of the Rāwalpindi Civil Division, one Subordinate Judge, and two Munsifs, of whom one sits at head-quarters and the other at Gūjar Khān. There are two Cantonment Magistrates in the Rāwalpindi cantonment and several honorary magistrates in the District. Civil litigation presents no special features. The predominant forms of crime are burglary and theft, though murders are also frequent; but serious crime is rare in the hill tahsīls, and the Muhammadan peasants of the Rāwalpindi and Gūjar Khān tahsīls are industrious and peaceable.

Land revenue.

For a long period prior to 1770 the greater part of the District was subject to the Gakhars. They realized their