PART A.

ghoro, 'a horse,' Tale for niche, 'below,' dhore for pas, 'near,' are CHAP. I, C. generally used. The hill dialect of the State is that of the Simla hills. In the towns the Persian character is generally used. Nágrí is used Descriptive. by Brahmans for religious purposes. Shop-keeper's account books are POPULATION. kept in Lande. In Patiála proper some Muhammadan shop-keepers use the Urdu character, but totals are shown in Lands numerals. A few of Language. the well-to-do Sikhs keep their accounts in Gurmukhi.

### TRIBES AND CASTES.

Nearly every caste in the Punjab is represented in Patiála, but the Jats. Jats. who comprise 30 per cent. of the population (485,170), are by far the strongest element. The Jats of the Malwa, in which the main part of the Patiala State is included, have been called the finest peasantry in India. A description of the Malwa Jat, and the points in which he differs from the lat of the Maniha, will be found in the Gazetteer of the Ludhiana District.

The lats of Patiála mostly claim Rájpút origin, and appear to have migrated from Jaisalmer into the Malwa, or the territory south of the Sutlei which stretches towards Delhi and Bikaner, about the middle of the 16th century, though the asli or original gots Man, Bhullar and Her, which are of the Shiv gotra, were probably settled in the Malwa before the other lats.

The Siddhus (42,405) are the most numerous and important sub-divi- Siddhu lats. sion of the Jats in Patiála. Besides the ruling families of the Phúlkián States and Faridkot, many families of note belong to the Siddhú clan. They claim descent from a Bhattí Rájpút, Jaisal, founder of Jaisalmer. The Siddhúsl are strongest in the Anahadgarh nizamat. They form an exogamous section and avoid one got only in marriage. The jagirdars of Bhadaur are described elsewhere. Other important families in this State are the jágirdárs of Talwandi, Kotli Sábo and Jiundán. The Siddhús are nearly all Sikhs.

Harike is one of the Siddhú septs, and is called after Chaudhri Hari, its Harike. ancestor. Chaudhrí Harí and his descendants founded 14 or 15 villages on both banks of the Sutlej, whence the name 'Harike pattan,' and Buddha Singh, one of his descendants, settled at Sekha in Barnala pargana. Sardár Bhág Singh, of this sept, was Bakhshí of the State, and Sardár Basáwa Singh became its Bakhshi and Adálatí and was afterwards a member of the first Council of Regency. His grandson, Sardár Bahádur Sardár Prítam Singh, is the present Bakhshi.

Mehta is also a munhi or sept of the Siddhu got or clan. It is named after Mehta. its ancestor Mehta, who founded the village of Mehta near Barnála. Sardárs Bahálí Singh, Bútí Singh, Dal Singh and Ranjít Singh of this sept all held the post of the Commander-in-Chief in the State.

The Cháhil Jats claim that Cháhil, their eponym, was born of a hill Cháhil Jats. fairy. They are numerous in Bhikhi, in which tahsil they own many villages, and they also hold scattered villages in tahsils Narwana, Amargarh, Bhawanigarh and Fatehgarh. Sardar Partap Singh, Chahil, maternal uncle's son of the late Mahárája Narindar Singh, was Bakhshí to the State. He was in command of the Patiála Contingent at Delhi in 1857, and his son Ranjít Singh is now the leading representative of the tribe. To support their claim they pay special worship to Gugá Pír, who was a Chauhán Rájpút. They worship Baland Jogí Pír, their jathera.

The Dhálíwáls claim to be Chandra Bansi Rájpúts by origin, through Dhálíwál Jata Dhálíwál, Bhattí, who migrated from Jaisalmer and settled at Kángar in Nábha territory in the 12th or 13th century. In the time of Akbar, the

For a detailed account of the Siddhús see Griffin's Rájas of the Punjab and the Afna-i-Barár Bans in 3 volumes by Wali Alla Sadiqi, published by order of the Faridkot Datbar.

PATIALA STATE. ]

arroes and Castes.

PART A.

CHAP. I, C.
Descriptive.
Population.
Dhálíwál jats-

chief of the Dhaliwals, Mihr Matha, is said to have given a daughter in marriage to that emperor, whence the Dháliwáls and the 35 Jat tribes which concurred in the bestowal of a Jat girl on the emperor acquired the title or status of Darbárí. The Darbárí Jats in this State are the Tiwánas of Chinarthal, the Jhalle Gils of Dhamot and Siawara, the Manders of Jarg. the Mangats of Rampur and Katani, the Jhij of Gidri and Bawani, the Panders of Gahlotí, and the Gandhás of Rauní. Darbárí Jats pay special fees to their mirásís at weddings. The Dháliwáls, after the decline of Mihr Matha's family, dispersed and some migrated into the State, where they are mainly found in tahsils Bhatinda and Bhíkhí, and in stray villages in Sunam, Amargarh and Sahibgarh. The main Dhálíwál septs are the Maní, Udí, Rúrcka, Dína and Rámana. The tribe is chiefly represented by the family of the late Sardár Gandá Singh, C.S.I., Bakhshí of the State, and his son Sardár Hazúra Singh is now an officer in the State forces. A man of note among the Dinákes was Mián Mahtáb Singh of Faridkot, whose daughter was married to Mahárája Mahindar Singh and became the mother of Mahárája Rájindar Singh.

Man Jats.

The Mán Jats say they migrated from the north, and claim descent from Mándháta, a Rájpút, by a karewa marriage. Mándháta settled in Ládowa in Ferozepore and thence in Akbar's reign the Máns migrated into the present nisámat of Anáhadgarh, in which they own many villages. Their chief sub-septs in this State are Maur, Sandar, Khawála and Párága, and they give their names to the villages of Maur, Mánwála, Mán Khera, and Mánsa. They avoid only the one gôt in marriages, and form no alliances with the Bhulars or Sher Gils. At weddings they give a rupee to all the mirásis, Brahmans and Bhats of the Mán villages, and this ceremony is called tapa or tappa. The Mánsáhia Jats regard themselves as superior to other Máns. Tradition says they owe their name to the fact that the head of the family paid the revenue due to the emperor punctually. Sardár Harnám Singh deorhíwála is the leading man among the Mánsáhía. Mahárája Rájindar Singh was married into this family.

Dhillon Jats.

The Dhillon Jats claim descent from Rája Karn, whose descendant Thal married a Jat wife. The Dhillons are said to have migrated from Delhi under the Mughals, and are now mainly found in tahsil Govindgarh and in scattered villages in Bhíkhí and Fatehgarh tahsils. Their chief subsepts in this State are the Mahna, Bangria, Gát, Jandí, Saráya, Garáh and Mutal. They only avoid the father's gót in marriage and make no alliances with the Dhindsa and Wal (Wal is a sub-sept of the Sekhons) on account of some old dispute.

Gil Jats.

The Gils trace their origin to their eponym, Gil, who fled from Rájpútána and settled in Bhatinda, where he married a Dhálíwál. Thence, in
the time of Sháh Jahán, the Gils migrated to Sáhibgarh and Sunám tahsíls,
in which they are now numerous. They are found also in tahsíls Rájpura and Bhíkhí. They have 11 sub-septs, Sher, Kak, Landra, Sihai,
Bhádon, Jhagar, Barála, Karora, Kand, Jají and Jhala, the last of which
is strongly represented in tahsíl Sáhibgarh, where it holds 11 villages.

Marral Jats.

The Marrals, returned as Jats in the Censuses of 1891 and 1901, are mainly Muhammadan, but a few are Hindus. The Muhammadan Marrals of Samána lay claim to an Iránian origin and say they are descendants of Yazd-i-jard, the last Sassánián king of Persia, who was conquered by the Arab Sa'd-waqás. They migrated from Kábul in the time of Prithwí Ráj, king of Delhi, under Malik Saláh-ud-dín. On the recommendation of the Nawáb of Samána the Malik

received a grant of villages in that part together with the title of Mande CHAP. I.C. or lord of 100 villages (mandal) from Khanda Rao, brother of Prithwi Raj. In the time of Ala-ud-din Khilji, Qutb-ud-din Marral obtained the fiefs of Descriptive. Samána and Malkána, and the latter, which is a basti of Samána, is still POPULATION. held in jágír by the Mandals of Karnál. Malik Sulemán Yár Jang, a Marral Jats. descendant of Nawab Arastujah Wazir-i-Azam of Haiderabad, Deccan, also holds a jágír in Samána itself. Malik Barkat Ali Khán of Samána is the Assistant Advocate at Patiála.

The Dhindsas claim descent from Raja Karn. They migrated from Dhindsa Jats. Sirsa in the time of the Mughal emperors and settled in Chaunda Mánví, in tahsil Amargarh, round which place they own a number of villages. They are also found in scattered villages in tahsils Rajpura, Ghanaur and Patiala, and Ubhewal in Sunam tahsal is a village of Muhammadan Dhandsas.

The Randhawas hold only two villages in Sahibgarh, and Mimsa Randhawa Jats. village in Amargarh tahsil, but they offer one or two points of interest. Their ancestors settled at Mimsa, near which, on their migrating thither from Tamkot, the axle of one of their carts broke, and its owners took this as an omen that they should settle at the spot. The others went on, and failing to persuade their comrades to accompany them, they uttered a curse upon them that they should be compelled to seek a new home every 12 years. Every 12th year on the 8th Sudi of Asarh they take a cart to the spot and worship it, and an uncle cuts a lock of hair from his nephew's head. On their return home, it is said, the axle of the cart invariably breaks on the road.

The Tiwana Jats claim descent from Lakkhu, seventh in descent from Tiwana fats. Tiwana, a Punwar Rajput. They migrated from Dhara Nagri in the 13th century, and now hold several villages in Sahibgarh and two in Ráipura tahsíls. Like Rájpúts, their women observe parda and they discountenance karewa. Their leading family is that of the Chaudhris of Chinarthal, and Sardar Sawai Singh of this family held important posts in the State under Mahárája Narindar Singh. Two Tiwána chaudhrís, Majlis Rái and Wazír Khán, were prominent chiefs of this tribe in the Mughal There is also a Muhammadan Tiwana village in Ghanaur tahsil,

The Saráhs or Saráís are mainly found in nishmats Anáhadgarh and Saráh Jats. Karmgarh-

The Káleke Sardárs belong to the Saráe gót. They trace their descent Káleke. from the Bhattí Rájpúts of Jaisalmer, and are named after their ancestor Chaudhrí Kála, who founded the village of Kályánwálí in Sirsa; his grandson Malúka founded Káleka near Dhanaula, where his descendants still hold land. Sardárs Gurbaksh Singh and Haria Singh, brothers-in-law of Mahárája Alá Singh, were fifth in descent from Chaudhrí Kála. Sardár Gurbaksh Singh was Mahárája Alá Singh's Díwán, and accompanied him in all his expeditions. He is best remembered for his services when Mahárája Ranjít Singh came to Patiála to visit Mahárája Sáhib Singh. Máí Fatto, wife of Maharaja Alá Singh, belonged to this family, and Maharaja Karm Singh also married into it.

The Pawanias are of Shiv gotra, like the Man, Bhular and Her, with the Pawania Jats. two latter of whom they do not intermarry. They migrated from Hissar and own four villages in tahsil Sunam.

The Ghumán Jats also claim Rájpút descent. Migrating in the time Ghumán Jats. of Jahangir from Rajputana, they settled at Sajuma in the Jind State and now hold 11 villages near Bhawanigarh, Ghumana in Rajpura, and a village in Patiala tahsil.

CHAP. I. C.
Descriptive.
Population.
Nain Jats.

The Nains' claim to be by origin Túr Rájpúts. Their ancestor Mainpál married a widow and his son Nain is their eponym. They hold many villages in the Bángar (tahsíl Narwána), such as Dhamtán Sáhib, etc., and stray villages in the Sunám and Patiála tahsíls. They are said to have migrated from Delhi, where they ruled prior to the rise of the Chauhán dynasty. Their sub-septs are Jája, Bamír and Naráin. Sardár Ude Singh, Nain, was Superintendent of the Palace in the time of Mái Askaur, Díwán and Judicial Minister, guardian to Mahárája Narindar Singh and member of the first Council of Regency. His son, the Mashír-Ala Sardár Bahádur Sardár Gurmukh Singh, is now (1904) President of the Council.

Mångat Jats.

The Mangats are only found in tabsil Sahibgarh, where they hold six villages.

Gandhe Jats.

The Gándhes are descended from Gandhú, son of Rája Gopál, Táoní Rájpút, by a Jat wife, and are found in tahsíls Banúr, Rájpura and Amargarh.

Sindhú Jats.

The Sindhos appear to have immigrated into the State from the Manjha in the 16th century and are found in scattered villages in tahsils Ghanaur, Rajpura, Amargarh, Bhatinda and Barnala.

Bhular Jats.

The Bhulars are said to have been driven from Mari in Ferozepore by the Siddhus and then to have dispersed. They own nearly the whole of seven villages in Barnala and four in Sunam tahsils. Their sub-septs are four in number, vis., Kosa, Munga, Dahr and Bhatia.

Garewai Jats.

The Garewál<sup>2</sup> or Girewál is a well-known sept which once held rule over Ráipur and Gujarwál in Ludhiána. Mahárája Narindar Singh married into this family, and one of its members, Sardár Ghamand Singh, became Bakhshí. Sardár Mihmán Singh was father-in-law, and his son Híra Singh brother-in-law of the Mahárája. Sardár Kishan Singh, also of this family, is now muatamad to the Punjab Government. They claim descent from Rája Mahán Chand of Chanderí in Indore, a Chanderí Rájpút.

Sekhon jats.

The Sekhon Jats claim descent from the Punwar Rajputs. They are named after their ancestor Sekhon, who had seven sons, after whom were named seven manhis or septs. Mai Askaur, mother of Maharaja Karm Singh, whose life sheds a lustre over Patiala history, belonged to this family, and her brother Sardar Diwan Singh was Commander-in-Chief. Two daughters of the family are now married in the Phulkian States, one to Raja Hira Singh of Nabha and the other to His Highness the Hon'ble Sir Kanwar Ranbir Singh, K.C.S.I., of Patiala. Maharaja Amr Singh made Daria Singh his Diwan. Himmat Singh and Sawai Singh were Bakhshis, Mai Singh was Adalati or Judicial Minister, and Sardar Sedha Singh was Diwan. They hold Bakhshiwala (in Sunam tahsil), Kaulgarh (in Pail), Kishangarh and Kanhgarh (in Bhikhi), and Karmgarh (in Anahadgarh tahsil).

Utwal Jate.

Among the Utwals the family of Chaudhri Charat Ram, member of the second Council of Regency, is the most important. His grandson Sardar Saparan Singh is now Financial Minister of the State.

Mander jats.

Sardár Bhagwán Singh, Mander, is a Judge of the Patiála Chief Court, His father Sardár Basta Singh held the post of Názim for a long time.

Mahil Jats.

The Mahils trace their descent from the Tor Rajputs. They came from Delhi. The clan holds Shahpur Khurd, Shahpur Kalan and Namol in Sunam tahsil and Khanpur in Dhuri. Sardar Fatch Singh of this tribe held high posts in the State, and was a member of the first Council of Regency. His son Sardar Man Singh is Nazim of Amargarh nisamat.

<sup>\*</sup>Nain is a Hindí Bhásha word meaning eye. There are said to be Nains in Blkáner also.

\*The sept is so named because a Chanderí Rájpút settled at Gire, a village in Rápar tabsíl, and fell in love with a Jat woman whom he kept as his mistress.

The following are some proverbs about the Jat peasantry:-

Chaná no jane báh. Fat na jáne ráh - "Gram does not require much ploughing, and a Jat can do without a path" (Cf. Maconachie, No. 1022).

Fat jatán de sále karde ghále mále- "Jats are all brothers in law of one another and keep their own counsel (combine to help one another); i. e., jam are closely related and scheme to protect one another." (Maconachie, Nov 938).

Fat, dhatta, bakra, chauthe bidhwa nar, yih charen birakke bhale, rajje karen bakar— "A lat, a bull, a he goat and fourthly a widow are good, if they have an empty stomach, and bad if a full one."

Rajjî bhains na khác khal raijá málí chale na hal raija. Fat badhówc kol rajjá makájan jás tal-" A fall fed she-buffalo does not eat khal (oilcake), a full fed he-buffalo does not go well in a plough, a full-fed Jat raises quarrels, and a well-to-do makijan becomes meek and quiet."

Fat næ jáne gun kará chané na jáne báh. Fat dá gár: khansurá chene dé gárá chhék-"The jat is not grateful and gram does not require much ploughing: but shoe-beating can correct the jat and whey digest the gram" of Maconachie, No. 936, for a more polite version).

Fat ganna na de hhelf de- "A jat does not give a stick of sugarcane when asked, but gives a bhelf (a lump of raw sug ir) when pressed."

This jekt laked nakin je tire na Fat nakin je phire na tind jeka bhanda nakin je rurkke nd—"There is no timber like tild if it does not solit, no caste like that of the Jat if he is true to his word, no utensil like tind (Persian wheel pot) if it does not tumble off."

Nat bidyā pāi Fat bidyā nakin pāi-" The tricks of a Nat (rope-dancer) can be known but not those of a Jat."

Tind our fat da it basak-" A tind and a 1st cannot be trusted"

Rann F ttl hor sab chattle-" A Jat wife for me; all the rest are a more waste of money." The last proverb shows that the Jat wife is the best and most economical and helps her husband in agricultural pursuits Cf. Maconschie, No. 37).

Rájpúts in Patiála number 65,296. Though they have beaten their Rájpúts. swords into ploughshares, they do not take kindly to agriculture and are far inferior as cultivators to the Jats. The Taonis and Chauhans are the largest sub-divisions of them in this State, but the Bhattis rank highest.

The Bhattis are Jádú-Bansi and are said to have been con-Bhatti Rájpúts. verted to Islám by Sayyid Jalál-ud-dín, Makhdúm-i-Jahánián, Jahángasht, in the time of Firoz Shah Tughlag. They are now found in scattered groups, but still own some villages in tahsil Bhatinda.

The Taonis claim Jadá-Bansi descent, thus-

Raja Salváhan of Pattan in Gujrát.

Raja Tán (grandson).

Uggar Sain (7th in descent from Tán).

Migrated from Agroha in 699 Bikrami and settled in this part of the Punjab becoming king of Burás.

Rája Gopál (7th in descent from Uggar Sain).

Dhīrpāl, or Nawab Abu'l-Karim, embraced Islam under Shahab-ud-din of Ghor after his victory over Prithwi Raj at Tarain (Tarawari) in Karnal District in 1193. his tomb is said to be at Banúr; which is a great Táoní centre, for Táonis a e numerous in that tahsil and in Patiála, Rajpura and Ghanaur. The Hindu Taonis hold Bular (in tahsil Patiala), Lilru, Nagla and Khelan in tahsil Banor, and Dhakansu, Tepla, Banwari, Pabra and Dhamoli in Rajpura. They have 12 septs, said to be named after the sons of Raja Gopal, via, Dhirpali, Ambpali, Bhatian, Motion, Rai Ghazi, Jaisi, Sarohd, Ajemal, Jhagal and Lagal, the last six being rais.

'The references are to 'Panjab Agricultural Proverbs' edited by R. Maconachie, 8 A. R.C.S.

CHAP. I. C.

Descriptive.

POPULATION.

Proverbs about

Táoní Rájpáts.

PATIALA STATE. ]

Descriptive.

Baráh Rájpúts.

Socially they have 14 chhats and 24 makans, the chhats in this State being Banor, Suhron, Ajrawar, Kauli, Ghanaur Patton, Khera Guiju, Shamdo, Chamaro, Manakpur and Jansla, and in Britis territory Kharar, Khanpur and Morinda.

The Baráh or Varáh Rájpóts claim descent from Binepál of Bhatinda and emigrated at a very distant period from Udaipur. They have a proverb-Behá más na chashde singh, bás, Variáh, ' the lion, the hawk and the Varahs never taste stale meat.' Rái Kálu of Kakrá neur Bhawanigarh embraced Islam in Jahangir's reign, so that their conversion is somewhat recent, and the Baráhs of Bakhtrí in tahsíl Sunám are still They own nearly 30 villages in tabsils Sunam, Bhawanigarh and Amargarh. Their organization is the usual Rajput one of chhats or villages of the first rank and makans or villages of the second rank, other villages being inferior to these in social status. The Barahs . have 12 chhats and 24 makáns, the chhats in this State being Samána, Talwandi, Kakra, Bhumsi, Jhal, Jhondan, in Nabha Baena, Badbar, Baragraon, in Jind Bazidpur, and in British territory Budlada and Moranda. Master Muhammad Khuda Bakhsh, Khan of Haryau Khurd, was the tutor of Maharaja Mohindar Singh. He also held the post of Canal Agent and that of Director of Public Instruction, Patiála State. His eldest son Muhammad Abdul Ghafúr Khán was a judge in the High Court of Patiála; of his younger sons Muhammad Abdul Majíd Khán is Foreign Minister, Muhammad Abdul Hamid Khán is Názim of Anábadgarh, Muhammad Abdul Hakîm Khân is State Vakîl at Ambâla, and Muhammad Abdul Azîz Khân is Colonel of Infantry.

Mandáhar Rájpúts. The Mandáhars are found in tahsil Narwána, and are said to have migrated into the Bangar from Ajudhia 2,000 years ago, and to have taken the ancient town of Kalait from the Chandels. That place and Bata are now held by Hindus, Badsíkrí and Hittho being held by Muhammadan Mandáhars. They call themselves Lachman. Socially they have 12 tapás (as they call their chhats) and 360 gáons or villages, the tapás in this State being Dhanaurí, Kalait and Badsíkrí. The Hindus in marriage avoid only their own gót. At a funeral they give pagris to their mírásis.

Jaté Rajpots.

The Játús give their genealogy as follows:-

Rája jairath of Pattan, Tunwar.

Játú.

Assar.

Harpáí.

Rána Amr, who migrated from his country and drove the Gujars from Khodána some 400 years ago. The Játús of Kánaud (Mohindargarh) tahsíl, in which they hold 25 villages, are his descendants. Játú was so called because he was been with long hair (jatán) on his body. The Játús do not intermarry with the Tunwars, and in marriage only avoid their own gót. At a wedding, both at the phera or circumambulation, and at the wadút or leave-taking, the bridegroom's barber spreads a sheet, called chhat, over the bridegroom's head and his father puts into it as much money as he can afford. The Játús also give tyág and lekh to their mírásís. Like the other Rájpúts of tahsil Kánaud, they are sun-worshippers and fast on Sundays.

Kachwáha Rájpáta, The Hindu Kachwahas or Kushwahas of pargana Kanaud, in which they hold seven villages, are called Shaikhawat because their ancestor was born through the benediction of Shaikh Burhan, Darvesh. On the birth of

PART A.

a male child they put a blue thread round its neck, and on the bathing day CHAP. I, C. (the third to sixth day after birth) a second thread is put round its neck, a tágra round its waist, and kurta on its body, all three of a blue colour. They worship the sun by offering water and fasting on Sundays. At a POPULATION. wedding they give tyág and lekh to a mírásí. The Shaikháwat Kachwáhás Kachwáha Rájdo not eat jhatka.

Descriptive.

Patháns live chiefly in the towns, and though they own land, rarely Patháns. handle the plough. Khiljís, Lodís, Mullagorís, Adilzais, Mámúzais and Umarzais are found in the State. Muhammad Námdár Khán, Umarzai, was a member of the last Council of Regency, and his elder son Muhammad Ashraf Khán is now Nazim of Karmgarh. His younger son Muhammad Sharif Khan, B.A. (Cam.), is a barrister-at-law. The Pathans generally marry among themselves and do not practise karewa.

Shaikhs (23,131) are chiefly found in the towns as traders and shop. Shaikha. keepers, but they own villages in the Sunam, Ghanaur and Rajpura tahsils. The Shaikhs of Karel in Sunam are the most important family. The social aspirations of converts from Hinduism, who are generally included among the Shaikhs, are expressed in the following couplet: Sal-i-awwal Shaikh búdam, sál-i-doim Mirsa; ghalla chún arsán shawad imsál Sayyid Mishawam-"The first year a Shaikh, the second a Mirza. If corn is cheap this year, I shall be a Sayyid."

Other cultivating classes are the Ahirs, Arains, Dogars, Gujars and Minor agricul-Kambohs, and in the hills the Kanets. The Ahirs, here as elsewhere toral classes: industrious cultivators, are confined to Mohindargarh nizamat. They Ahirs. are divided into two endogamous sub-castes, Jadú-Bansí and Gopál-Bansí, both claiming to be Jádú-Bansí Rájpúts by descent. The former subcaste comprises 64 gols, of which the principal are the Karira, Bhangar, Chaura, Gatwal, Dewa and Sanp. The latter worship black snakes and do not kill one if they see it. The Ahirs are devotees of Krishna. Their leading representative is Chaudhri Budh Singh of Nangal Sirohi, whose family has held the office of Chaudhri since the Mughal times. family also observes parda and discountenances widow re-marriage, which other Ahirs practise. Though usually landowners and cultivators, the Ahirs also take service in the army.

The Patiála Aráins belong to the Sirsewal branch and are said to have Aráins. immigrated hither from Sirsa. All are Muhammadans, except a few in Sanaur and Ajráwar, who are Hindus. Aráins are numerous in the Sirhind, Patiala and Rajpura tahsils, where they hold groups of villages and own land which they themselves cultivate. Their more important gots are Siyahi, Naur, Mund, Ghalan, Bhatian and Jatiali.

The Dogars, who are exclusively Muhammadans, came from Scohna Dogars. near Lahore in the time of Maharaja Ala Singh. Some of them were in former times Bakhshis of the State, and of these the most famous was Lakhna, Bakhshí of Alá Singh. The Dogars hold a considerable tract of land at Daska in Sunám tahsil, and one of them, Wazir Muhammad, is a Risaldar in the State service. They bear the title of Malik.

The Gujars are not as numerous as the Arains, and are a pastoral Gujars. rather than an agricultural tribe, bearing much the same character here as elsewhere. They hold many villages in tahsils Rájpura and Nárnaul. Some of them are Muhammadans and some Hindus. In this State their more important septs are the Bharwal, Lodi, Chichi, Bargat, Duchak, Katoria, Latala, Jandar, Chandíja, Gorsí and Ráwat, of whom the last regards itself as descended from Jagdeo Punwar, whose son Olan Palan married the fair daughter of Mor Dhaj, Katána Gujar. Males of the Chawara sept are believed to be able to cure pneumonia by touching the sufferer with a piece

CHAP. I. C. Descriptive. POPULATION. Guiars.

Kambohs,

of iron. The Gujars of Rasálpur (in Rájpura) and Ghel (in Fatehgarh) have considerable influence. Rahim Bakhsh, a Gujar, attained to the position of Bakhshi in the State in the reign of Maharaja Narindar Singh and was appointed a member of the Council of Regency on the death of Maháraja Narindar Singh.

The Kambohs are rather more numerous than the Khatris. They are divided into two endogamous groups, Bawani or the 52 gots and Chaurási or 'the 84 gots,' and are found in tabsils Banúr, Ghanaur and Sunám, the Kambohs in the latter being of the Bawani sub-caste, many of whom embraced Islam in the time of Qutb-ud-Din, Ibak. The Chaurasis at a wedding give a present to the Kamáchis, a caste of musicians, in remembrance of their having been delivered from prison without being forced to become Muhammadans by Diláwar Khán, Kamáchí, in the time of Shamsud-Din Altamah Their leading families are the Muhammadan Bawanis at Masingan, an ancient village in Ghanaur tahsil, the Hindu Báwanis of Hasanpur, and the Hindu Chaurasis of Mohi, Súratgarh and Jalalpur, all in tabsil Banúr. At the shant rite on the occasion of a marriage the Hindu Kambohs make a goat of mash flour, which is sacrificed by the maternal uncle of the bridegroom. The manner of sacrifice is to press it to pieces with the hands. Now-a-days seven cakes of mash are made instead of the goat. They celebrate the tonsure under a jandi tree.

Sainfs.

Sain's are chiefly market-gardeners. They are found in the Banúr and Rájpura tahsils, and are all of the Gola sub-caste, an endogamous group which avoids four gots in marriage and practises karewa. Sardar Sujan Singh is the leading Saint in the State.

Knisis.

Kaláls are found chiefly in the towns, though they sometimes own land. Sardár Bhagwan Singh, Deputy Inspector-General of Police, and Híra Singh of Banúr, jágírdár of Govindgarh in the Hoshiárpur District, are leading Kalais.

Kaneta

The Kanets are the agriculturists of the hills as the Jats are of the plains. They claim to be Rajputs who lost caste by karewa. Formerly peaceable and simple-minded, they are now becoming quarrelsome and fond of litigation. They have two divisions, Kanet and Khas, but these intermarry freely. They avoid four gots (locally called khels) in marriage. A wedding involves 7 pherus instead of the usual 4. Marriage ceremonies among them are of two kinds, biyah, in which the bridegroom goes with the procession, and paryana in which he stays at home. The Kanets have developed the karewa custom into what is called rit. A woman who is tired of her husband, leaves him for some one else. The new husband pays the old the value of the woman and nothing more is said. Women frequently change their husbands more than once,

Professional castes t Brahmans, !

Brahmans and Fakirs make up about 7 per cent. of the population Sayvids, Bhats, Bharais and Mirasis are of lesser importance, while the remaining professional castes in the State, such as Bhands, Dúmnas, Bangalis, Garris and Kapris, are few in number. The Brahmans in this State are found mainly in the towns, but some few hold land as proprietors, or trustees of religious endowments, in the villages, and they now own a few mazrás or villages, e.g., Brahman, Bhat, Malo and Chhajjú Mazras, and some villages in Ghanaur, Rajpura, Banur and Narnaul tahsils. The mass of the Brahmans belong to the Sársut branch, but the Gaurs are also represented, especially in the Mohindargarh nisamat and the Bángar tahsil.

PART A.

The Sársut Brahmans of the towns are usually of Athbans or Chhebans CHAP. I, C. status, and superior to the Bunjahis, who are found in the villages. Some are employed in the service of the State, or are engaged in trade or agriculture, but the majority are family priests. Their leading representative is POPULATION. Sardár Partáp Singh, now a Special Magistrate, and his father Sardár Brahmans. Jagdis Singh also held a high position in the State. Among the Gaur Brahmans the Maihtás form an important section, whose members do not accept alms or act as family priests, pádhás. In Kanaud tahsíl the family of Missar Jawala Singh still enjoys a jugir of Rs. 300 granted by the British Government for his services in 1857. Missar Naunidh Rái (Naudha Missar) of Nárike in Dhúrí tahsil was a great man in the State among the Brahmans. The Sársut Brahmans are divided into gotras, named after rishis, such as Bhardwai, Kaushik, Atash, Bashist, Marichi, Batsa, Mudgal, etc., but in marriages these gotras are not, as a rule, taken into account. The unit which is taken into account in marriage is the gôt or, as it is more usually called, the al; in Narnaul this unit is called sasan. It takes its name from the original sect of the section, such as Kanaudia, Bhatindía, etc. These gots or als are frequently split up into sub-sections, thus-

			( (i)	Malamma.
ι.	Joshí	***	(ii)	Marúr.
			(iii)	Bhárdwájí.
020	DANLS		( (i)	Khír Khána.
2.	Páthak	***	(ii)	Machhikhána.
	D1.6-1616	aárdwájí	$\vec{i}$ (i)	
3.	Dhardwaji		(ii)	Rúr.

Women of the Joshi section do not wear bangles of country glass, or more than four ear-rings (dandián).

The Khatris and Banias are the most important trading castes. The Commercial Baniás (80,764) are nearly five times as numerous as the Khatris and castes. Aroras combined.

The Banias are the principal trading caste of the State. They hold a Banias. good deal of land on mortgage, and, though only forming strong communities in the towns, are found scattered throughout the rural areas of the State. They also enter the service of the State freely. The 'Aggarwal branch is most strongly represented, but the Oswáls (or Bhábrás as they are called in the Punjab) and a few Mahesris are found in Mohindargarh nizamat and in the towns generally. The leading Bania family is that of the Qunuingos of Sunám, of whom Diwáns Gurdiál and Bishamhar Dás were the chief members. The main Agy rwal gots in this State are the Gar, Go'il, Singal, Jindal and Basal, while the Mangals of Sunam hold some posts of importance in its service. The Oswals have a distinctive custom at weddings. The bride puts on one pair of lac bangles, while a second pair, made of ivory, is

Nánú Mal, an Aggarwál Bania of Sunám, was Díwán of Mahárája Amt Siogh and Prime Minister of the State during the minority of Maharaja Sahib Singh-" Griffin's Punjab Rajas:" PATIALA STATE. ]

CHAP. I, C. Descriptive. tied up in a corner of her dopatta, or shawl, as a memorial of their Rájpút origin. Popular esteem is hardly the Banias' lot, as the following sayings show—

POPULATION.

Baniás.

'Baya, bisiar, Bániá, bais, bandar, bok, Jo in se rah- viára, soi siána lok'—'He who keeps clear of a baya (a bird), a snake, a Baniá, a crow, a monkey and a he-goat, is a wise man.' 'Yár már Bániá, pachhán már chor'—'The Baniá injures his friend, the thief only him who identifies him.' 'Jiska mittar Bániá use dushman ki kia lor?'—'He who has a Baniá for his friend, has no need of an enemy.' 'Jatti da jathera nahín, Bániá da khera nahín'—'A Jatti (Jat wife) has no jathera (literally, 'tribal ancestor,' who is commonly worshipped), and a Baniá no village.'

Khatris.

The Khatris form an important element in the towns. Though mainly engaged in trade, they are also largely employed in the State service, while some are landowners, though not themselves cultivators. The sub-divisions of the Khatris in this State are Kapúr, Khanna, Malhotra and Seth. Of these the Kapúr, Khanna and Seth sub-divisions are exclusively Hindu, Sikhs numbering only 1,695. The main division of the Khatris is into Bunjáhis and Sarins. The Bunjáhis have four independent sub-sections—Dháighar, Charghar, Báhrí and Bunjáhi. The first two consider themselves greatly superior to the rest. They avoid one got only in marriage as their circle is very limited. These two sections are interesting as an example of the impossibility of a consistently hypergamous system. When they found their choice of wives was becoming restricted, they began to take wives from the other sub-sections, though still refusing to give their daughters to those they considered their social inferiors. In the year 1874 A.D. an influential committee of Bunjáhí Khatrís was organised at Patiála to bring about equality among their sub-sections and to popularise inter-marriage among them, without restriction. The first step the committee took was to prevent the superior groups from getting wives from the inferior unless they were willing to give their daughters in return. The movement has attained a large measure of success. The most important gots are the Sconi, Matkan, Nanchahal, Tannan, Purí, Phandí, Budhwár, Duggal and Dháwan (all Bunjáhís). The Khatris of Pail are an influential body, whose members own land or are employed in the State. Rath Chand, Dahriwala of Ranjit Singh's court, was a Khatri of this place. Dewa Das Puri is now the largest The Khatris of Sunam were Qanungos under landowner at Páil. the Mughals and held various posts under Akbar. Rái Sáhib Lála Nának Bakhsh, Dháwan, is the Indian guardian of the present Mahárája, and his son Lála Gora Lál is a Magistrate at Patiála. The Sarins are mainly represented by the Sodhi and Khosla gots, of whom the former hold extensive mu afis as descendants of the Sikh Gurus. The Khoslas have long held important posts in the State, and of the sons of Lála Kalwant Rái, a former Díwán, Lála Shib Sarn Dás is Superintendent of Police, Lála Bhagwán Dás a member of the Council of Regency, and Lála Dwárka Dás Comptroller of the Palace. His younger sone, Lálas Rám Prasad and Shadi Ram, both B. As. (Cantab), are barristers-at-law.

Khatri customs.

Several Khatri göts have distinctive customs. Thus the Budhwárs send their parchit on the day before the tonsure of a son to invoke a bitch and a kite, and on the day of the ceremony feed the bitch and then the kite with a mixture of barley, sugar and ghi. It is regarded as a bad omen if the kite refuse this offering. The Puris celebrate the tonsure in the daytime, and the boy's sister, placing hairs plucked from his head on four bits of bread, buries them under an aunla tree, In the evening the boy touches a donkey's back with his

feet, and then beats the barber with seven shoes, giving him also some pice. CHAP. I. C. The Nanchahals of Pail reverence Baba Jagla, and the story goes that a woman once gave birth to a son and a snake. The latter was burnt in a Descriptive. hara (a small round vessel for heating milk), whereupon the boy also POPULATION. died. Hence the serpent, called Baba Jagla, is still worshipped, the tonsure Khatri customs. of the boys being performed at his shrine outside the town. The Kandrús also invoke a kite before a wedding and offer food to it on the day appointed for the ceremony; after the bird has accepted the food the members of the family may eat. On the return of the marriage procession the jandi tree is also worshipped. Milk is never churned on a Sunday by Kandrús. The Malhotras send the parchit to invoke a kite the day before the deokaj ceremony, and on the day itself offer the bird meat. At a wedding the ear of a goat is slit open and a mark made with the blood on the bridegroom's forehead prior to the phera rite. The Markins also summon a kite to the tonsure rite and feed it with bread, boiled rice and másh. The Kapúrs and Tannans observe the deokáj ceremony, and the husband kicks his wife who takes refuge in the house of the parohit. The husband then binds a wreath of flowers (sehra) on his head and follows her. At the parohit's house he eats some boiled rice and milk, and conciliates her with a present of jewellery. Among the Ghátís the parohit makes an image of a goat out of karáh parshád or sacramental food, which is pretended to be sacrificed, on the occasion of a tonsure, the rite being repeated for seven successive days. The Bates avoid the use of the madhani (churn) and glass bangles, nor may they weigh ght in scales. The Seonis avoid wearing red clothes or glass bracelets, and must not make baris, or chhappar of panni. The Balotas only celebrate the custom of clothing a child for the first time, palni, in the month of Asauj, after the child is five years of age. The day before the ceremony a jandi tree and a kite are selected, and on the day itself they make ready khichri of boiled rice and dál under the jands tree and first feed the kite with it. Five yards of red cloth are then offered to the jands and the boy is clothed in a shirt for the first time. The Sahgals have two sub-sections, (i) the Bajnas (baina, to ring), whose women must not wear ringing ornaments, and (ii) the Bainganis, whose women must not eat baingans or brinjal (Solanum Mongena).

The few Aroras in the State are found mainly in the Anahadgarh Aroras. nisamat and in the capital. Chiefly traders, they also enter the State service, and some few even own and cultivate land. The Utradhi branch is most largely represented, the chief gôts in the State being the Mánaktale, Sachdeo, Madan, Kataria, Kaleje, Dhingre and Bate. Sardár Dewá Singh, K.C.S.I., Arora, was President of a former Council of Regency, and his son Partop Singh was Diwan. The present representative of the family is a minor.

Amongst the pedlars the Maniars are found in large numbers, while the Maniars. Banjáras and Lobánás represent the carrying castes.

The Jhinwars are also called Kahars or, honorifically, Maihras. They Jhinwars. are Muhammadans, Hindus or Sikhs, but all worship Khwaja Khizr, the god of water, with offerings of wheat flour, cooked and sweetened, and sacrifices of goats. Hindus and Sikhs also reverence Bába Kálu, a saint to whom they make offerings in kind or cash at weddings and births. Some Ininwars of either sex and any age wear a kanthi or necklace of black wool and so are called Kanthiwais. These usually marry among themselves. The Hindus have two territorial groups, Deswal and Multani. These two groups usually marry each among themselves, avoiding four

CHAP. I.G.
Descriptive.
Population.
Ihinwars.

The Saggas.

gôts. Some of the gôts bear occupational names, e.g., the Bánbatas or rope-makers, Jhokas, firemen, Bhatiaras or cooks, who sell viands. Other gôts are the Khwás, i.e., sons of concubines, Rángrás, descendants of Rája Gopál, a Táoní Rájpút, by his Jhínwar wife, and Telis. Muhammadan Jhínwars earn their livelihood by basket-making and are distinct from the Muhammadan water-carriers who are called Saqqas. These two groups do not intermarry. The Saqqas have again three territorial groups, Sirhindí, Bágrí and Lahorí, which again are said to be endogamous. The Saqqa is a water carrier or menial servant, but the Jhínwar is not only a water-man, but a dolí-bearer and a basket, fan and matting maker, and he will also take to cultivation and service. The Jhínwars have a pancháyat system, with chaudhrís who settle all disputes. No one can enter the caste by adopting its occupation.

Náis.

Nái is a corruption of the Sanskrit nápik, 'one who cuts nails,' and the Nái's chief business is shaving and cutting nails, but he is the principal man among the clients (lágis) and like the Brahman parohit is entrusted with the arrangement of betrothals, with the distribution of bhajis on the occasion of a birth or wedding, and with certain duties on the death of a member of his patron family. At the Diwálí festival he brings hats (toys made of grass) as presents to his patrons (jajmán), and for these receives his lág or dues. Náis are by religion Hindus, Sikhs, or Muhammadans, the latter being termed Hajjam or honorifically khalifa. Hindu Nais are similarly entitled raja. Sikh Nais are called Naherna Sikhs. The Hindus worship Devi, Sultán and Gugá Pír, and pay special reverence to Sain Bhagat, the patron saint of the Nais, to whom they make offerings in kind at weddings. The Hindu Náis have 3 kháps or divisions, -(i) the Banbherus. descendants of Ban Bheru, the Nai; (ii) the Golas, or descendants of hand-maidens (goli); and (iii) the Baris. The latter appear to be those who for practising karewa were excommunicated by the Banbherús. Banbherús only are found in this State, and they alone follow the Khatrí caste system, having Dhái (21), Chár (4), Ath (8), Bárí (12), and Bunjáhí (52) groups, like the Khatrís. They are also following the Khatrís' lead in the matter of social reform. As a rule the Banbherús do not practise karewa, but the Kachcha Bunjáhí group of them permits it. Their góts are Phúl, Kánkí, Súngare, Lambes, Chhadir, Rajanwál, Bhattí-Lakhanpál, Sindhráo, Beot, Pesí, Manjhu, Kankardán, Balásí, Panju; Bhagrit, Pander, Arjanwál, Piye, Jallan, Káliye, Rikhi, Khatri, Rala, Seopál, Painsí, Sindhú, Gadaiwál, Bhuram and Rarya. names show that the caste is one of mixed origin, recruited from various castes. Thus the origin of the Khatri got is thus accounted for: A Khatri once went to a shrine for the shaving (jhand) ceremony of his son accompanied by his family. A Nai, however, could not be found, and the operation was therefore performed by the boy's uncle. When this became known the uncle was excommunicated and called a Khatri Nái. The Banbherus were Hindus originally, but some of them embraced Islam, retaining however their original caste system. Hindu women wear a ghagra (gown), but Muhammadans as a rule do not. The Ghagrail Banbherás are so called because their women wear the ghagra. The Turkmán Náís are Muhammadans, so called because their ancestors embraced the religion of the Muhammadans, who were generaly called Turks or Turkmans. The Gorias as the word denotes are Raiputs. In this State, Husainí, Bhattí, Goraya and Brah Hajjóms or Muhammadan Náis are found everywhere. The Husainis are Brahmans by origin, and the others Ráipúts. The Bunjáhí, Bárí and Ath groups of the Hindu Náis avoid four gots in marriage and the others only one, while Muhammadans follow the Muhammadan Law.

The Hindu, Muhammadan and Sikh Náis have their pancháyats and CHAP. I, C: hereditary chaudhris, with the usual powers and privileges. No one can Descriptive: join the caste by adopting the profession. In addition to their proper work they also take to agriculture, service and trade. They frequently practise POPULATION. native surgery. Their women work in their jajmans' houses on ceremo- Nais. nial occasions. The lags are-

Occasion	1,	Service,		Läg.
Rusn		take awests to the	Bridegroom's	Annas 8 to Re. 1.
Mundan Fansu Betrothal	Sh	ouse. aving. ring jhdnf	***	Re. 1 or some pice.  Ditto An 8 anna piece and pice amounting to Rs. 2½ (Khatris) or Rs. 4 .(Banifs).
Makákath Sánachiithí		ke letter to the l	oridegroom's	Some pice. Eight annäs.
Bann Shánt Ghorí Tel talát Pher a Bart Khat Sáhí Pagrtí	Mo	ndha bdndhna	•••	A couple of pice. Annas 4. Re. 1. Up to Re. 1. Re. 1. Four couple of pice. Rs. 2. Some pice. Some pice of Re. 1.

Chhimba, Chhimpa or Chhipa means (cloth) printer. The Chhimbas Chhimbas. dye as well as print cloth. They are Hindus, Sikhs or Muhammadans, The Hindus and Sikhs worship Deví, Sultán and Guru Rám Ráe, and visit that Guru's dehra every year. At weddings they offer a rupce and a narial to the Guru. Nam Dev, the famous bhagat, was a Chhimba, and is the patron saint of this caste. At a wedding they make offerings at his shrine. The Muhammadans resort specially to Piran Kaliar and Sadhaura. The Hindu Chhimbas are divided into three groups,-Tank, Rhilla and Dhobí. Those of the Tank section print cloth, the Rhillas work as tailors, and the Dhobis as washermen. The Tank being the name of a Rajput ' clan claim Rájpút descent. The Rhillas appear to be Robelas, a Rájpút clan, and some of their gots are the same as those of the Rajputs, but others belong to the Jats, e.g., Mán, Dhillon and Sarso are Jat, and Madahír-Uthwal and Punwar are Rajput. The Rain and Kamboh gots must have once belonged to these castes. Intermarriage is confined to the group, and the members of one group do not smoke or eat with those of another. The Muhammadan Chhimbas have three territorial divisions,-Deswals, Multánís and Sirhindís. The Sirhindís marry in their own group, but the Deswals and Multanis intermarry. The gots of the Sirhindis are :-Guslániye, Sing, Phapál, Jhakkal, Latthe, Sattar, Paintiye, Phutte and Bagicha. The Tank gots are :- Mardle. Mukkar, Bedi, Bharth, Tathgur, Sarjare Karír, Bhat, Dhaunku, Saráo, Ratan, Bhattú, Khurpe, Role, Káyath, Sábo, Parth, Jalla, Rikh Ráo, Pannal, Gúrá, Man, Mohal, Taggar, Brah, Ráin, Khatte Daddu, Hara, Hattu, Toki, Ponia, Parvi, Banjar, Kong, Bes, Kahtí, Patt and Parothí. The gots of the Rhillas are :- Lakhmára, Gandin, Kokachh, Thera Kachhot, Chirwal, Gadira Katotan, Nohatya, Kasab,

CHAP. I, C.
Descriptive.
Population.
Chhimbas.

Churmaband, Padla, Mid and Nattha. The Muhammadan Dhobis have five divisions, vis., Lahori, Sirhindi, Multani, Purbia and Deswal. Only the latter two are found in this State. They do not intermarry. The gots of the Deswal Dhobis are: - Goraya, Chauhan and Kanakwal, all Rajput clans. In marriage the Hindu Chhimbas avoid four gots, Muhammadans only one. They practise karewa, and the dewar (husband's brother) is considered to have a prior claim to the widow's hand. In addition to their own occupations they take to agriculture and service. Hindu Chhimb's do not grind turmeric except at a wedding. do not make baris Their females do not wear kanch bracelets or use Females of the Muhammadan Dhobis and Chhimbas wear no nose-ring, laung, ivery, glass bangles, or blue cloth. Muhammadan Chhimbas do not prepare achar and baris and will not make a double hearth. No one can enter the caste by adopting its occupation. There is a pancháyat system among the Hindu Chhímbas. The chaudhrl is hereditary and the panchayat settles all the internal disputes in the clan or caste. The chaudhri gives lug at marriages and gets a rupee and double bháif for the performance of his duties.

Sayyids.

The Sayyids who number 8,665 are an important community in the State. They are landowners (though not cultivators) in Samána, Banúr, Rájpura and Narnaul. The important clans are Bukhárí, Múswí, Tirmizí, Rizwí and Zaicí. The most important family is that of the Bukhárí Sayyids of Samána described below.

The Khalifas of Samána.

A descendant of Sayyid Jalal-ud-Dín, Bukhárí, settled at Samána in the 15th century. Several members of the family have distinguished themselves in the service of the State. Hakim Savyid Ghulim Hassan was Court Physician to three Mahárájas — Alá Singh, Amar Singh and Sahib Singh. His son, Sayyid Sa'adat Ali, was tutor to Maharaja Narindar Singh, and subsequently Foreign Minister. The title of Khalifa, or Tutor's sen, has thus become hereditary in the family. Of Sayyid Sa'adat Ali's six sons, two-Khalifa Sayyid Muhammad Hassan, C LE., and Khalifa Sayyid Muhammad Hussain-served in the Mutiny and continued to hold high offices, until the elder died in 1895. The younger, Khalifa Sayyid Muhammad Hussain, Mashir-ud-daula, Mumtáz-ul-Mulk, Khán Bahádur, is the present representative of the family. He was made Foreign Minister in 1870, and his services and those of his brother in connection with the administration and advancement of Patiála have been acknowledged by successive Vicercys and Lieutenant-Governors. The Khalifa is at present a member of the Council of Regency and his son Khalifa Sayyid Humid Hussain is Assistant Settlement Office of Rájpura. Another important family is that of Mír Taffazul Hussain Judge of the Patiala Chief Court.

Pirzadas.

The Pirzádas of Dharson hold half the village in mu'áfi. They are the descendants of Shah Hamza. The Pirzádas of Ajrawár in Rájpura are descended from Makhdúm Abdul Kádir 'Uzairi. The Pirzádas of Sanaur are descended from Pir Abdul Fatteh.

#### RELIGION.

Hinduism is the prevailing religion of Patiála. Of the total population 55 per cent. are Hindus, 22 per cent. Sikhs. and 22 per cent. Muhammadais. The Muhammadans slightly outnumber the Sikhs.

Gurdweras.

The principal Sikh gurdwaras are-1.- At Dhamtan, where there is a large gurdwara. Guru Tegh Bahadur once stayed for a month here in

or about the year 1575 A.D. (732 B.), when he was summoned to Delhi by the Emperor Aurangzeb, and the place is also famous for the Guru Sar Descriptive-Tirath, a famous tank which dates from the era of Ram Chandra, the Population. hero of the Rámáyana. H .- At Talwandi, famous as the Damdama Sahib. Guru Govind Singh dwelt here for 9 months 9 days 9 pahrs Gurdwaras, and 9 graris. The gurdwara is a large building, and a fair is held there on the 1st of Baisakh. It is regarded by the Sikhs as the fifth throne, ranking after Amritsar, Anandpur, Patna and Apchalnagar, and its makents are always consulted in important questions of doctrine. Guru Govind Singh re wrote the Ad Granth here. Some of the mahants still make copies of the book. III .- At Sirhind, the place where the two infant sons of Guru Govind Singh were buried alive in 1704 A D. by Bázid Khán, Sübáh of Sirhind. Two fairs are held at the gurdwara called the Fatchgarh or Fort of Victory, - one on the 12th of Poh, the other on the Hola. East of Sirhind near Rauza of Mujaddid All-i-Saní is the darbar of Mata Gujri, the mother of Guru Govind Singh. IV .- At Lakhnaur near Ambála is a gurdmá a of Guru Govind Singh, who lived there for five years as a child. The fair is held at the Dasehra. V.-There is a gurdwara at Bhatinda. In 1705 A.D. Guru Govind Singh stayed for a few days in the fort, and to commemorate his stay there a gurduára was built and Bhatinda re-named Govindgarh. VI.—At Bahadurgarh in tahsil Patinla is a gurdwara which commemorates a visit of Guru Tegh Bahadur in the time of Saif Khan in 1675 A. D.

The Sodhi Khatr's of Sangatpura are descended from Pirthi Chand, Sikh orders: the eldest son of Guru Ram Das. They possess a book (poths), a mala Souhis. or rosary, and a hat (top) of Guru Nanak, and hold villages worth Rs. 10,000 a year in mu'afi. There is a gurdwara at Sangatpura and a fair is held on the 1st of Bais ikh.

The masands or tithe-collectors of the Gurus were dismissed by Guru Masands. Govind Singh on account of their exactions and their oppression of the Sikhs, but other Gurus retained their masands, and at Ghursni, in Sähibgarb tahsil, the Marwahe Sarin Khatris, who are descendants of Bhái Bálú of Gondwal in Amritsar, whose shrine is at Dadan in the Ludhiána District, are still masands of Guru Ram Rai of the Dehra Dún. Bhái Bálú was appointed by Guru Amr Drs, and these masands now serve the gurdwara in Dehra Dún, and the darbars of Mata Rajkaur at Mani Majra and Bawa Gurditta at Kiratpur.

The chief dera of the Nirmalas is at Patiala, and its malant is the Nirmalas. head or Sri Mahant of the order. This dera is called the Dharm Dhaja and was built at a cost of Rs. 82,000 by the munificence of Maháraja Narindar Singh. Attached to it are also two villages worth Rs. 4,100 a year, granted as its mu' of. The present Sri Mahani is Bhai Udho Singh. There is also an akhara dependent on this dera at Hardwar, and at this akhára the Nirmalas are able to distribute bhandórá or alms to pilgrims, as is done by the Bairagis and Sanissis, but which the Nirmalas had no means of doing prior to the reign of Mahárája Narindar Singh. The dera of Bhái Sádhu Singh is at Patiála, and is noteworthy as containing the library of Bhái Tára Singh,1 a well-known Nirmala scholar in Gurmukhí and Sanskrit. The Nirmalas as a body study both these languages. At Barnála Báwa Gándha Singh, Nirmala, has a large dera, with a smalfer dependent dera at Patiála.

The author of a Gurmukhi keek or vocabulary of the Granth.

CHAP. I, C. Descriptive. POPULATION.

Hinda religious prders :

Diwanas.

The Akálís have the following deras at Patiála:—Those of Bháí Molak Singh, Bháí Bishan Singh and Bháí Rám Singh, Amritsaria, in front of the Motí Bágh, and of Bháí Híra Singh Hazúria north of the Mohinder College.

The origin of the Diwanas is very obscure. One story is that the order was founded by Bálá and Hariá, sons of Bahbal, a Siddhú Jat. Bálá, who remained celibate, was called diwana or the ecstatic by the Guru. Others ascribe their origin to Guru Har Rái, others to Guru Rám Dás, and others again to his grandson Guru Mihrwan, a view which is accepted by the Diwanas themselves. The Diwanas wear red clothes, with a necklace of shells and a peacock's feather round the pagri, and they do not cut the hair. They also carry an earthern cup, called thútha. This sect is mainly recruited from the Siddhú Jats, and is mostly found in Anahadgarh nisamat, Its members are generally cultivators. Marriage is usual. Their principal derás are at Sangat and Bahman Diwána, and they claim to levy a thútha (lit. cup) or benevolence of 11 mans of grain from each village every seventh year. Another dera was founded at Hadiaya by Hira, a descendant of Hariá in the time of Mahárája Alá Singh. Hira is said to have remained standing on one leg for twelve years, after which he slept on a bed which is still kept in the dera as a relic and is worshipped, as also is his samodh. The Diwanas also have a dera at Mansa which is attached to their head dera at Pir Kot. It was founded by Bhai Gurdas, who was married in Mansa and whose samadh is also there. A fair is held on the 14th badí of Chet. The dera of Bába Ram Dás is at Patiála, and a fair is held on the 8th sudi of each month at his samudh. On the death of a mahant the Diwinas distribute bhandará or alms. bochh.

Majhma Sháhía. The head dera of the Maihma Shāhis at Lopon in tahsil Sāhibgarh was founded by a lat peasant named Mohar Singh who once shot and wounded a deer, but it escaped, and on his pursuing it he saw a fagir sitting and washing the wound. He forthwith became his disciple and settled at Lopon, where on his death in 1835 a samidh was built to him. At this tomb a fair is held every year at the Holf. The Maihma Shāhi fagirs repeat the Sat-nām and have a Granth of their own, but they also follow the Sikh Granth. They wear red clothes and are mainly recruited from the Rām Dāsias and Mazhabis.

Bairágfa.

The Bairágís have four main sects, Rámánandí or Rámáwat, Nimánandí or Nimáwat, Bishan Swámí and Gória, of whom the first two are strongly represented in the State. The Ramanandis adore Ram, Lachhman and Sita, marking the trident on their foreheads, while the Nimánandis are devotees of Krishna and Rádhka and use the two-pronged symbol. These two sects combine, as it were, to form a third, the Sukhanand's, who observe both the Ramnaumi, or birthday of Ram Chandra, and that of Krishna, the Janam Ashtmi. The Sukhanandis are numerous in the jangal tract, and their stronghold is at Tapa in tahsil Anahadgarh. This place was founded by Sokha Nand, a Brahman, disciple of Bawa Madho Das. His samadh is worshipped here and a fair is held on the oth badí of Bhádon. People also worship the samadh of Mái Dátí, a girl who was dedicated to Sokha Nand by her father. In a similar way the Rámáwat sect has, in Mohindargarh, an offshoot in the Niranjní sub-sect founded by Dyil Dis, whose samadh is in Didwana in Jaipur. He imposed bhagwen or other coloured clothes and the custom of washing bread before eating it on his followers. The principal Niranjani dera is at Narnaul. The chief Ramanandi deras are those of Baba Sadhu Ram at Laungowal or Lalgarh, of Budh Ram at Tolewal in Sunam, Janki Das at Manwa

in Amrgarh, and Biásjí at Baretal in Narwana tahsils. At the latter CHAP. I, C. offerings are made on the 2nd sudi of Bhadon and Chet, and at weddings a rupee is offered by the people. The Nimanandis have a dera of Baba Descriptive. Rádhka Dás at Laungowál, to which a small private Sanskrit school is Population. attached. Another offshoot of the Bairagis is the sect of the Nirankaris, Bairagis. founded by Sarjú Dás, whose samádh is at Patiála. The Nirankárí dera is at Nange-ki-Kheri, which village they hold in mu'afi. The followers of this sect do not worship idols; they wear no clothes except a tagra of munj and a red langet, but besmear the body with ashes, and they use wooden shoes called kharáwán. They keep the hair uncut (jatán).

Of the ten Saniásí orders, four, Girí, Purí, Náth and Ban, are represent. Saniásía. ed in the State. Their most important centre is Páil, where members of the fraternity have been buried alive at a place called the Das nám ká Akhára. There is also a samádh here called Báwá Jádo Gir, at which manní (a sweet thick bread) is offered on Tuesday or on the 14th sudi of the month. There are also Saniasi deras at Sunam (of Ganga and Mathra Puris), at Dudién (of Nihál Gir), and at Chhajli (of Nand Ban). All these deras are in tahsil Sunam. At Sirhind is the samadh of Hardit Gir, at Narwana that of Bawa Sarsuti Puri, where a fair is held on the ikadshi of each month, and at Bhatinda of Gulab Nath, at which a fair is held yearly on the Guga naumi. Other deras are the large mat of Bhagwan Gir at Khanpur Ganda, of Jado Nath at Chaunda (in tahsil Amrgarh), and of Lachhman Gir and Parm Hans at Mansurpur. Besides their orders, the Saniésis have also five akháras,-Júna, Niranjaní, Nirwén, Atal and Bohgur. At Ujhana Khurd in tahsil Narwana is the shrine of Phalo, a Brahman who was a disciple of a Gir Saniásí and a protector of kine, wherefore milk and ghi are also offered at his tomb. His bowl (túmba) is also worshipped, being filled by peasants with grain at both harvests. Close to his shrine there is a plot of sacred ground kept by his disciples for grazing cattle. At Narwana, Ghaibí Sháh, Saniasi, has a shrine at which ghi, and at a boy's marriage a rupce, are offered. In times when disease is epidemic people offer a staff (sota) of kair wood, 11 sers of grain and 51 sers of puras on Sundays. No oath may be taken on this shrine. At Bata is the modern shrine of Bawa Sarsuti, Puri, who settled there in 1759. The offerings are ghi and milk. The fair is held on the Asauj sudi ikádshí.

The Gharib Dásis, who are followers of the poet Gharib Dás, are con- Gharib Dásis. fined to tahsil Sahibgarh. They wear red clothes, but no choti or scalplock, and burn their dead. They celebrate the Holi at Jandiálí in Delhi at the tomb of Gharib Dás. Some of the Gharib Dásis observe celibacy. At Gharáchon in tahsíl Bhawánígarh is the shrine of Báwá Fuorá Kutíwálá, a native of the Mánjha, who settled there in the Mughal times. He was a Sat Sáhíbía and practised austerities at the place where his shrine now stands. It is visited by people both from the Manjha and beyond the Ganges.

The acceptic order of the Udasis was founded by Srichand, son of Udasia Guru Nánas. The Udásís are always celibate. Some wear red coloured clothes (bh.:gwen), others go entirely naked except for a langoti, but rub ashes on the body. They congregate in monasterics (deras) and are divided into four dhúnas,—(1) Phúl Sáhib or Mísn Sáhib, (2) Bálu Hasna, (3) Almast and (4) Bhagat Bhagwan. There is also a Bakhshish Sangat Sahib which was founded by Bhat Pheru with the permission of Garu Govind Singh. They

<sup>&#</sup>x27;To these Ramanandi deras may be added those of B. Jamna Das at Banmauhra, of Lal Dás at Mimsa and Prem Dás at Náriko (all in Dhúrí tahsíl).

CHAP.I, C. Descriptive. POPULATION. Udásís.

pay special reverence to the Adi Granth. The four deras have one akhara and the Sangat Sahib another, so that they are only grouped into two akharas in all. The best known deras in the State are the dera of Bharam Sarúp at Páil; the dera of Sukham Dás, whose samádh is also revered, at Sirhind; the dera of Bhái Náma, whose samádh is also worshipped, at Laungowal; the de a of Avdhút at Thuléwal; that of Barham Deo at Katron; that of Ram Das at Lada; and that of Bawa Barham Das, whose samadh is also revered, at Ráesar. At Barnála is the dera of Balrám, the samádh of one of whose chelás, Bawá Dyil Dás, is also worshipped. Tasaulí (in Baner tahsíl) is the dera of Tahal Dás; at Nabha in this State is that of Sant Das; and at Banur that of Santokh Das, where there is also a somádh at which offerings are made at the Dasehra. At Tarkhán Májra (Sirhind) is the dera of Gursagn Dás, at Kaddon (Páil) that of Tahal Dás, where the samádh of Báwá Siddhú Dás is revered. At Akar is the dera of Bishan Das. At Patiala is the dera of Bawa Magni-Ram. The mahant of this dera is the Sri mahant of the Udasis. Bawa Magni Ram was a famous Udasi of the Mian Sahib dhund, who celebrated a great bhanda a. He built a chhattal in Patisla, and the street containing it is known by the name of Chhatta Magni Ram. Another Udasi dera is that of the sumadhan, also in Patiala.

Suthras.

The Suthras owe their origin to Guru Har Rái. They follow Guru Nának and keep the Adí Granth in their deras. They wear a seli topi of black woollen ropes twisted round their heads, a chhara (necklace) of the same stuff round their necks, a mark made with lamp-black and red lead on their foreheads, and carry two dandás (short staves) in their hands. They do not wear trousers (paijáma). Their head dera called the darbár of Jhangar Sháh is at Lahore. They have 8 sections (gharánas), 4 large and 4 small. Out of the four large sections three have their head deras (called gaddis) in this State. At Patiála is the gaddi of Mushtáq Sháh, at Sanaur that of Mahbúb Sháh, and at Sanghol that of Lál Sháh. The fourth gaddi is at Máler Kotla. Of the small sections there are two gaddis in this State, that of Tanak Sháh at Mulepur, and that of Sangat Shah at Jarg. There are mahants at each gaddi. Besides these gaddis, there are some small deras of this order.

Dádá Panthis.

There are deras of the Didá Panthis at Bhatinda and Patiála. At Nárnaul some Baniás are cailed Dádú Panthis. They are ghiristi (married) and followers of Dádú.

Bhái Múl Chand.

The patron saint of the Mahárája of Patiéla is Bháí Múl Chand surnamed the Baggi-bodiwála, 'white-locked,' a Dugal Khatri, who was born at Bhatinda in 1664 with a lock of white hair. His father having no son had besought Bába Ganga Rám, a Sársut Brahman, of Bhatinda, to bestow a son on him, and the Baba foretold that one would be born to him with a lock of white hair. The boy in accordance with his father's yow was given to the Bábá on his birth and became his disciple. The Bábá and Bhái Múl Chand left Bhatinda and settled in Sunam in the time of Mahárája Alá Singh, who founded the village of Bháí kí Pasaur near Sunam and conferred it on the Bhai in mu'ofi with some other lands. The Bháí died in 1764 and after his death a shrine was built about a mile from Sunam, which is held in reverence by Hindus and Sikhs. The popular saying runs, Bháí Múla bachna dá púra-Bhái Múla's words were fulfilled.' This shrine is visited by people from considerable distances, to fulfil a vow or obtain some desired blessing, and the offerings are taken by Bábá Ganga Rám's descendants.

When two opposite houses in a street belong to the same person he generally connects them by means of a roof. A street thus roofed in is called chhatta.

The samadh of Bábá Alá Singh at Patiala and his chullhát (hearths) at CHAP. I. C. Barnála are revered and offerings made at them It is also of interest to note that the samadh of Baba Sabbha Singh, brother of the founder Descriptive. of the State, is reverenced by the people. It is at Hadiaya in tabul Population. Anahadgarh.

Samádh of Bábá Alá Singh.

At Sajóma in tahsíl Narwána is the cave of Sukhdeo, son of the sage (Other Hindu Vivása (who wrote the Mahábhárata) in which he died after undergoing a shrines. long penance. Close to it is a tank called the Suraj Kund, and there is held here an annual fair on the 6th Bhadon sudi. At Kalait in Narwana tahsil is a tank sacred to the sage Kapal Muni, the author of the Sánkh system of philosophy, who flourished in ancient times. At Karáota in tahsil Kánaud\ Bhikam Ahir has a shrine. He was a resident of Khudana and was told by a Mahatma to set forth with a cart and settle wherever it stopped. This it did at Karáota, where he eventually placed himself alive in a samadh and waited till life was extinct. His fair is held on the Guga Naumi of Bhádon. At Mansúrpur in tahsil Bhawanigarh is the deval or shrine of Maghi Ram,1 who came from the east of the Jumna in the time of Maharaja Amar Singh. Becoming a disciple of Bawa Dit, a Vedanti, he eventually founded the Apo-Ap sect, whose members wear a blue topa, a gilti or loose wrapper of white cloth, and a langer. They keep the head and beard shaved. The sect worships the sun and calls its mahint Sahib or Master, as Magghi Ram himself was called. The mahant never leaves his room during his lifetime, in accordance with the rule laid down by the founder. At Ujhána in tahsíl Narwána is the samádh of Bábá Khák Náth, a disciple of Sidh Nath. It is said that the Pachadas of Kaithal lifted the kine of Ujhana and refused to return the booty; so the Bawa went to negotiate their ransom. He filled his beggar's bowl (tumbi) with water from a well and thus caused all the Pachadas' wells to dry up. The Pachadas seeing this came to the Bawa, who secured the return of the stolen cattle before he allowed the wells to fill again. The people out of fear refrain from swearing or taking an oath (sugand) on his name. It is said that he voluntarily gave up his life. He is worshipped on Sundays. At Phaphera in tahsíl Bhikhí is a samádh of Bhái Baihlo, Siddhú Jat, at which offerings are made. In the time of Guru Arjan he took a great part in digging the tank of Amritsar. There is a proverb about him-Bhái Biahlo kamm kare sab se paihlo, 'Bhái Baihlo is the first to help those who have faith in him.' Between Babiál and Ralla is the shrine of Baland Jogí Pír, the Fatherá of the Cháhil lats. He fought with the Bhattí Rájpúts at Changli Ghanaurí and was killed. His head fell on the spot, but his body remained on horse-

At Sirhind is the shrine of Shaikh Ahmad Mujaddid Alf-i-Sani, 2 a Muhammadan descendant of Shahab-ud-Din Farukh Shaha Alfaraqi, the Kabuli, who orders: came to India from Kabul. The family were first settled in Sunam, Nagshbandis.

or the grain of a harvest without first making an offering to the Pir.

back and fell fighting at a place between Babial and Ralia, where a shrine was built. There are also tombs of the dog, hawk and horse that were with him. The Chahil Jats do not use the milk of a cow after calving

<sup>&</sup>lt;sup>1</sup> So called because he used to sat out of an earthern pot (magght).

<sup>3</sup> Renawer of the 2nd thousand,' so called because he was born after 1,000 years had elapsed since the Prophet's death.

His shrine is said to be at Chhat or Lakhnautí, and is popularly supposed to be the tomb of Shaháb-ud-Dín Ghori.

CHAP. I, C.

Descriptive.
Population.

Muhammadao o rders : The Naqshbandis, but Imám Rafi-ud-Dín took up his abode in Sirhind in the time of Fíroz Sháh. Mujaddid, his descendant in the 6th generation, was born there in 1563. He was a disciple of Báqí Billa of Delhi and founded the Naqshbandí Mujaddadia order in India, introducing the practice of sikr khafí or silent prayer. He wrote many religious works, of which the Maktúbát is the most important, and died at Sirhind in 1617 at the age of 64. His tomb is the principal shrine of the Naqshbandís in India, and is a beautiful structure, built in the reign of Sháh Jahán. The urs is held on the 27th of Safar and is the occasion of a considerable gathering. Pilgrims from Kábul visit this shrine. The Naqshbandís absolutely forbid music and singing, but they are said to advocate the use of fine clothes and luxurious food.

The Qádrias.

The Qádria order was founded by Sayyid Muhi-ud-Din Abu Muhammad Abdul Qádir, Gilání. It uses both the síkr jali and khafi (loud and silent prayer), but regards the use of hymns in religious services as unlawful. Its members are distinguished by green turbans. The Naushahis, an offshoot of the Qádrias, have some minor deras in the Banúr tahsíl. At Páil is the shrine of Sháh Maula, a Qádria and a disciple of Sháh Daula Daryáí of Gújrát. The Qázís in his time were in power at Páil, and when he fired a rick belonging to them they scourged him, whereupon he foretold that their race would die out, and his prophecy has been fulfilled. Another Qádria shrine at Páil is that of Sháh Ghulám Fázil, a Gilání Sayyid of Sadhaura. At Banúr is the shrine of Lál Sháh, Qádria, a descendant of the well-known Shah Qumes of Sadhaura. The urs is celebrated on the 11th of Rabi-us-Sání. Nabí Sháh, the mast or spiritually intoxicated, was a fagir of the Qádria order, who smoked sulfa (charas) and tobacco, lived naked, and did not take food with his own hands, being served by Dittú, a Hindu barber, who eventually murdered him, whereupon a tomb was built in his honour at Sunam in the time of Maharaja Karm Singh. His urs is celebrated on the 12th of Safar.

The Jaidiff.

The Jalálís, an offshoot of the Suhrwardia order, said to have been founded by S. Jalál-ud-Dín Bukhárí of Uch, are fagirs distinguished by their glass bracelets. When epidemic disease breaks out among goats people offer goats to them to stop the evil. They repeat the words 'Panj Tan' and 'Dam Maula.' The Jalálís have a dera of Lálan Sháh, a Sayyid of Samána, at Ghanaur. Here lamps are lighted every Thursday. Sháh Nizām-ud-Dín, another descendant of Jalál-ud-Dín, migrated from Delhi and settled at Samána, founding the family of the Bukhárí Sayyids of that place.'

Madárie.

At Hájí Ratan, 3 miles from Bhatinda, is the shrine of Hájí Ratan, a large building with a mosque and gateway, and surrounded by a wall on all sides. Outside the shrine is a large tank, now nearly filled with earth, and a grove of jál trees. The site of the shrine is now surrounded by hillocks of sand. Ratan Pál or Chan Kaur (sic) was the Díwán of Bine Pál, Rája of Bhatinda, and with his aid Shaháb-ud-Dín Ghorí conquered that fortress, massacring the Rája and all his family. Ratan Pál then became a Muhammadan, and made a pilgrimage to Mecca. On his return he became known as Hájí Ratan, and on his death in 1321 this shrine was built by royal command. The mujáwars of this shrine are the descendants of Sháh Chand, a Madárí, who came from Makanpur near Cawnpore to Bhatinda in the time of Sardár Jodh. Madáris are one of the be-shara or irregular orders of Islám, and owe their origin to Badi'-ud-Dín Madár,

son of Abu Is haq, the Syrian (Shami). Besides the above it has a CHAP. I. C. dera at Manakpur in Banúr tahsíl, founded by Hájí Sháh Gharib Zinda Pír of Makanpur, and the takia of Murad Alí Sháh at Banúr. Descriptive. The latter is considered the Mir Dera or chief shrine, and offerings POPULATION. are made there at weddings. At Bhikhi is the shrine of Gudar Shah, a Madari fugir, who rode an ass and exhibited miraculous powers. The fair here is held on the 6th sudi of Magh.

Among the minor shrines are the tomb of Makki Shah, Shahid, at Pinjaur, Minor and that of Khaki Shahi, Shahid, at which latter churmas and batashas are Muhammadan offered on Thursdays. At Samana is the shrine of Imam Alf-i-Walf, believed shrines.

to be a grandson of the Imam Musa Riza, whose tomb is at Mashhad. He accompanied one of the earliest Muhammadan invasious of India and fell in battle. His shrine, a fine building, is said to have been restored by Shahábud-Din Ghori. It is believed that a tiger visits this shrine every Thursday night to worship the saint, which is locally known as the Mashhadwall. Other tombs at Samana are those of Muhammad Shah Ismail, or Pir Samánía, the first Muhammadan to settle at that place, which is now falling into disrepair; of Mír Imám-ulla Husaini; of Sháh Nizám-ud-Dín Bukhari, and of his grandson Abdulla II. These three shrines lie close together. At Patiála itself is the small shrine of Ja'far Sháh, the majsúb or distraught, who lived in the reign of Mahárája Karm Singh. At Narnaul is the fine tomb of Shah Quli, a Nawab of Narnaul, who accompanied Humáyún from Badakhshán. Sháh Qulí erected many fine buildings in Narnaul, such as the Khan Sarwar, the mandi or market, the Tarpolia Gate and a saráí. He died in 1592, and offerings of fried gram and gur are made at his shrine on Fridays. At Banúr is the shrine of Shaikh Painda, an Adalzai Pathán, whose ancestors migrated from the Sulemán Khel country in the Mughal period. This saint was a disciple of Nizam-ud-din of Thanesar, and his spiritual power was such that when he prayed the locks of doors burst open and trees bent to the ground. A Brahman woman used to come to him daily to hear the Qurán, and when she died none could lift her bier, so the saint directed that she should be buried beneath the place where she used to sit, at his feet. Offerings are made at this shrine on Thursdays. At Dharson in tahsil Narnaul is the shrine of Shaikh Hamza, a descendant of Shaikh Bahá-ud-dín Zakaría of Multán, who died in 1549. Evil spirits are driven out of men and women at this shrine. At Narnaul also is the shrine of Nizām Shāh, a descendant of Ibrāhím Adham. His ancestor Hazrat Almastauff came from Kábul to Hissár in the time of Halákú, and thence Qází Ain-ud-Dín migrated to Narnaul, where Nizám Sháh was born in 1500. He became a disciple of Khwaja Khanun Alai Taj Nagauri of Gwalior, and died in 1588, being a contemporary of Akbar. At his shrine are two mosques, one built by that emperor, the other by his son Jahangir. His urs is held on the 27th of Safar. There is a popular saying that 'bad az juma jo I re kám uske hámi Sháh Nisám' or Sháh Nizám helps those who , ork after (the prayers on) Friday. And he is supposed to fulfil the wishes of these who remain 40 days at his shrine. At Bhatinda is the tomb of Sayyid Mîrán Sháh built in 1738. Between Bhatinda and Hájí Ratan is the shrine of Máma Bhánja or 'The Uncle and his Sister's Son,' said to have been the leaders of Shahab-ud-Din-Ghorf's army who were killed in the capture of Bhatinda. At Sanaur is the tomb of Roshan Ali Shah, at which no one may remain after dark. Outside the walls of Barnála is the tomb of Pir Nasih Wali, at which lamps are lighted every Thursday. It is forbidden to remove pieces

CHAP. I, C. POPULATION. Minor Muhammadan

shrines.

of brick from this shrine. At Sunam is the shrine of Kazi Muizz-ud-Din, who came there from Mecca some seven centuries ago. In building Descriptive his shrine milk was used instead of water in the mortar, and the custom still subsists, milk being mixed in the whitewash used for the shrine. At Sanaur in tahsil Patiala is the shrine of Shah Wilayat Mubáriz-ud-Din Husainí, a descendant of the Imám Husain and a disciple of Háfiz Mahmúd Biábání, who came from Arabia nine centuries ago. His urs on the 27th of Rabi-us-Sani is the occasion of a large gathering. It is not permitted to cut even a twig from the trees in the enclosure of this shrine. At Bhatinda there is also a tomb of Surkh Biabani, at which salt is offered on Thursdays. At Kaulí is the shrine of Shah Husain, famous for its power of curing boils on the knee (sanua). The patient goes to this shrine taking with him a small axe, and in his circuit round the village when he meets some one he throws it down. This person picks up the axe and touches the sore with it. After completing a circuit of the village it is believed that the boil is cured, and the axe is then offered with some sweetmeat at the shrine. Saif Khán, a brother of Fidái Khán, a famous official of Aurangzeb, had been Súbáh of Kashmír, but he had a quarrel with the Wazir and, resigning his post, founded Saifabad, now called the fort of Bahadurgarh, 4 miles north-east of Patiala, where his shrine is still reverenced. He is said to have been in the habit of paying the workmen on his palace every fourth day with money taken from beneath a carpet spread on a platform, but when the men searched there for his hoard one night they found nothing, and he acquired a reputation for miraculous powers. Sajna Qureshi, called the Ghoránwála, has a shrine near the gate of the old fort at Sunám. He is said to have been a general of Taimúr who fell in battle at this spot, and clay horses are offered at his shrine. But nothing certain is known of this saint's origin or of that of Nizam Shah Palanwala, which is also at Sunam. The Ganj Shahidan also commemorates: the warriors who fell in some battle at Sunam, probably when Taimur attacked the fortress in 1398 A.D. At Páil is the shrine of Sháh Hasan Sirmast, a Pathén disciple of Qutb-ud-Din Bakhtyár, Kákí. The urs is celebrated on the 6th of Zil-Hij.

Chishtfs.

The Chishti order was founded by Abu Is haq of Sham (Syria), who became the disciple of Khwaja Mimshad Dinwari and at his command settled in Chist in Persia. Muin-ud-Din, the famous Chishti saint of Ajmer, first brought the tenets of the order into India, and its greatest organizer in the Punjab was Báwá Farid-ud-Dín Shakr-Ganj of Pák Patan, whose two disciples Alí Ahmad Sábir and Nizám-ud-Dín Aulia founded the two sub-orders, the Sabiria and the Nizamia, of whom the former wear white and the latter red (bhagwen) garments. The Chishtis use music in their devotions and the sikr juli or praying aloud, and should possess the qualities of tark, renunciation, isar, devotion, iskq, love of God, and inksar, or humility. Chishtis are permitted to wear coloured clothes. Their chief shrine in this State is that of Miran Bhik at Ghuram, and disciples of Bawa Farid are also found at Banur, Narnaul, etc. At Sanaur there is the shrine of Abu'l-Fateh, also of the Chishti order, son and disciple of Abu'l-Qádir (a Sabzwári Sayyid descended from Sháh Badr-ud-Din Is-haq), and son-in-law of the famous Baba Farld-ud-Din, Shakr Ganj. He was born at Sanaur in 1654 and died there in 1719. The shrine is a fine building erected after his death by his dis-

ciples, and his urs, which is called moflis, on the 21st of Rabi-us-Sání is the CHAP. I, C. occasion of a great gathering of the common people and darveshes who come from long distances. It is said that this saint was so affected by the Descriptive. singing of a hymn that he jumped into a well, but on the hymn being sung POPULATION. again he sprang out of it once more. His descendants are Pirzadas. Chientis. At Sirhind is another shrine, that of Bandagí Sháh Ismáil Chishtí, an Uvaisí Sabzwárí Sayyid of Tirmiz, descended from the Imám Jáfar, a disciple of Burhán Tandáwarí and a contemporary of Mujaddid-i-Alf-i-Sání. A large fair is held here on the 26th of Shawwal. At Banúr also there is a shrine of Nizám Dast-i-ghaib, a Músawí Sayyid called Roriwála Pír of the Chishti order, who came from Ardbil in the Mughal period. A person suffering from fever takes a piece of brick (ror) from the shrine and hangs it round his neck as a specific. Offerings are made here on Thursdays. At Sunám is the famous shrine of Mahmúd Banoí born in 1053, son of Quth-ud-Din, a Tirmizi Sayyid, and a disciple of Haji Sharif Zind, of the Chishti order. Having lived in Mecca for twelve years he returned with twelve disciples to India and settled at Sunam, where he died in 1119. The shrine is a fine building, and a great fair is held there on the first Tuesday in Chet sudf. Evil spirits, whether of men or women, are cast out at this shrine. Here also is the shrine of Khwaja Gauhar, a disciple of Pír Banoí, who accompanied him to Sunám. Sháh Sifti was a Nizámia Chishti, a disciple of Shah Husain, who came from Uch and settled at Sunám. He was a drinker of bhang and known as Sotánwálá, 'the keeper of the staves,' and staves and bhang are offered at his shrine. At Sanaur is also the tomb of Shah Shafqat, a Sábiría Chishtí, whose urr is held on the 14th of Jamádí-us-Sání. At Sanghera in tahsíl Anáhadgarh is the shrine of Shaikh Ahmad Chishti, a descendant of the famous Pir Jalal-ud-Din, Jahánian Jahángasht of Uch, whence the saint came in the Mughal period. The urs is held here on the 15th of Muharram. At Ráesar is the shrine of Sarmast Shah Chishtí, at which lamps are lighted on Thursdays, and milk and churi offered. At Narnaul there is another Chishti shrine, that of Shah Turkmán Muhammad Ata, a disciple of Sayyid Usmán Hárwani, and a spiritual brother of the great Khwaja Muin-ud-Din of Ajmer. This saint came to Narnaul in the reign of Qutb-ud-Din lbak and was martyred while praying on the 'Id in 1243. His shrine is a fine building of stone, and an annual fair is held here on the Ashra or 10th of Muharram. Another spiritual brother of the Khwaja of Ajmer, Shaikh Sadi Langochi, is also buried at Narnaul. At Samana is the shrine of Abdul Ghani Chishti, who died in 1624. The building, which is an imposing structure of marble, is called the Shah ka daira, and it is believed that touching the shrine for a few days is a certain cure for any disease. At night torches are said to be seen issuing from it. At Narnaul is the tomb of Mirán Táj-ud-Dín, 'Sher-sawár aur chábukmár,' 'the rider of the tiger with a snake for a whip,' a Chishti and a disciple of Qutb-ud-Din Munawar, of Hansi. His grandfather Usman came from Firmul in Persia, and settled in Narnaul near the Dhosi hill. This saint died about 500 years ago. He is worshipped by people of all sects, including Hindus, and is the patron saint of the Sangi Banias of Narnaul. Muhammadan bridegrooms before starting on the marriage procession drink water from a cup which has been placed on the slab of his tomb, near which are the graves of a tiger and a serpent. The saint's descendants are called Mirán-pote. He deters any one from attempting to build his shrine.

The cult of Mirán is widespread, especially among the women, as he Mirán. confers sons and aids his devotees in every difficulty. The ritual at a baithak or séance in honour of Mirán is as follows: On the Sundays and

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Mirán.

Thursdays of the light half of the month a cloth is spread on the ground, a lamp is lighted and 54 sers of gulgulas, sweet balls of flour roasted in oil, with some scent, are laid on the cloth. Dumn's meanwhile sing kafis or hymns in praise of Mirán, and these káfis produce ecstacy in the women seemingly inspired by Mírán, who throw their heads about, and, according to the popular belief, whatever they prophecy in this state comes to pass. As a matter of fact, however, there are two Miráns, one Zain Khán of Amrohá, the other Sadr-i-Jahán of Máler Kotla. The former had a magic lamp, by the light of which he could see the fairies dance at night, and by whose aid he used to call to himself a king's daughter with whom he was in love. The king, however, by a stratagem seized and killed him. Seven fairies called Bíbian, Bíbarian or Uparlian were in attendance on Zain Khan, and they also are worshipped by some women, dolas, guddis or dolls and new grain being offered to them on the Sundays, in the light halves of Baisakh, Jeth, Katak and Magghar, on mud platforms built for that purpose. The other Miran, Sadr-i-Jahan, was an ancestor of the Nawabs of Kotla, who is said to have married a daughter of Bahlol Shah Lodí. 1

Superstitions.

Khera, the site of a village, has come to mean the local deity. Hindus in Patiala believe that Khera averts plague and other epidemics. No image is made, but in the niche a lamp is kept burning on Sundays. The method of worship, when epidemics break out, is curious. A buffalo is taken to the site of Khera, where its ear is cut off and offered to Khera. The buffalo is then driven round the village with drums, and a mixture of milk, water, wine and curd is poured out in a continuous stream encircling (dhadena) the village. Khera is also worshipped at the start and finish of a marriage procession. Sitla, the goddess of small-pox, is worshipped by all Hindus and many Muhammadans. Every village has a shrine dedicated to her, and called Mat. Annual fairs are held in Chet at Chaparsil and Kapari, when offerings of wet gram and flour, yellow and black cotton seeds, and bread made of flour and sugar are presented. Devi-worship is very popular in Patiála. Many of the Hindus make long pilgrimages to the famous shrines of Mansa Deví, near Maní Májra, Naina Deví in Biláspur, and Jowala Mukhi in Kangra. The first eight days of Asauj and Chet are especially sacred to Deví.

Kátak and cowworship. The month of Kátak is held sacred by the Hindus. Every morning they bathe, and especially on the last five days of the month. In the evening of the Gopa ashtamí festival they feed the cows with flour-cakes and crown them with garlands.

Brahma worehip. Pipal worship is the only form in which Brahma worship obtains. After bathing, the devout water the pipal trees which grow near the ponds and rivers in honour of Brahma.

#### CHRISTIANITY.

Christian Mis-

Patiala lies in the parish of Ambala, and the Chaplain of Ambala pays it occasional visits. There is a small church, capable of holding 35 people. There are 122 Native Christians of all sects. The chief mission is that of the American Reformed Presbyterian Church which was established in 1892 in the reign of Maharaja Rajindar Singh by Dr. Scott, a Medical Missionary. The Maharaja gave him a piece of land 16 bighás in area with a number of valuable trees and permitted him to erect a house of his own on the site. Houses have also been built on it for the missionaries. The only other society working among the Native Christians in Patiala is

the American Methodist Episcopal Mission which was established in 1890. CHAP. I. C. In the village of Rampur Katání in Páil tabsíl an Anglo-Vernacular Primary School has been started by the Revd. Dr. Wherry of the Ludhiana American Mission, and in this 22 Jat and Muhammadan boys receive instruc- POPULATION. tion. There is also a Mission School at Basí, where 12 or 13 sweeper boys Christian Misare taught, but the school cannot be said to flourish.

## FOOD.

The poorer classes are the first to feel the effects of famine in every Food. part of the State, especially in Sardúlgarh, Narnaul and the Bángar adjoining the Hissar, Gurgaon and Karnal Districts respectively. The people express this fact in their proverbs, kal vich kaun mod? gharib- who died in famine? A poor man.' Other proverbs contrasting poverty and riches are :-Fis ki kothi men dane us ke kamle bhi siyane- He who has grain in his kothi though a fool is regarded as an intelligent man': Pet men payán rotián sabhe gallán motián + He whose stomach is full talks loud': Finnán kháe unná kamáe-' He will earn in proportion to what he eats.'

The grains which form the staple food of the people in the State are :-Bájrá or millet, gram, berrá, i.e. gram mixed with wheat or barley, jau, mikki or maize, rice, wheat, mandwa china, mash, mung, moth and masar. The proportion of wheat and rice to other kinds of grain used depends mainly on the means of the family - wealthy or well-to-do people, always eat wheat, which the poorer classes cannot afford. Rice is little used except at festivals and marriages. It is grown mainly in the Pinjaur nicamat, that produced in the hills being of superior quality. The hill people sell their rice if of good quality, retaining only the inferior kinds for their own use. This is also the case with wheat. The best kinds of rice, eaten by well-to-do people, are imported from Delhi, Amritsar and Bareli. Ordinary villagers in winter eat bread made of ground mokki, jowar, china or bajra with mang, moth, urd (pulses) and green sarson or gram cooked as a vegetable (ság). Khichri made of bájrá and moth or múng is also eaten for a change. In the hot weather bread made of wheat, berra or makki, with dál or gram porridge, is eaten. In the Bangar and Jangal báirá and berrá, in Mohindargarh barley and berrá, and in the Pinjaur nssamat makki, are generally eaten throughout the year. The regular meals are taken at midday and in the evening. Zamindars working in the fields generally eat a light meal in the morning. This consists of the previous day's leavings with some lassi or butter-milk. After working a few hours a heavy meal is taken at noon. This is generally brought to the fields by the women or children as the cultivators have no time to go home. Well-to-do landholders and townspeople eat pulses and vegetables of all sorts such as gobi, 'cauliflower'; begun or brinjal; tori, ghia, or kadú, 'vegetable marrow'; karelá or shalgam, 'turnip'; ala, 'potatoes'; malar, 'peas'; kakri, 'cucumber,' etc. with their bread. Poorer people make free use of gajar, 'carrots,' kakris, cucumbers, kharbúza, 'melons,' aria or khirá, phut, mahras, ber, pilú and niethá-especially in times of famine. The rotis or loaves eaten by villagers are generally thicker than those made in towns. Meat is but seldom eaten in the villages by Muhammadans and Sikhs as they cannot afford it, but at weddings and the like goat's flesh is eaten. Hindus abstain from meat owing to religious scruples. In the towns meat is generally eaten by Muhammadans and Sikhs. In the Mohindargarh nisamat the people generally eat rabri to fortify themselves against the hot winds from the Rájpútána Desert. This is made of barley, gram or bájrá flour with chháchh or butter-milk. Flour, lassi and water are mixed together and put in the sun, and when the leaven is ready salt is added and the mixture put on the fire till it is cooked. When eaten hot milk can be added, other-

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Population,
Foed.

wise it is cooled by keeping it a Whole night, butter-milk being added to it in the morning, and then it is squeezed, pressed through a cloth and eaten. Sattû of all kinds is used in the State. It is made from flour of parched grain (wheat, barley, gram, bāthú, rice and maize), sharbat of sugar, gur, shakkar, khand or būrā being added to it and stirril in. Parched grain, gram, maize, ghát, barley, jowár, etc., are also eate. In the Pinjaur tahsil sattû generally forms the morning meal. As soon as the maize is ripe the hill people roast a year's supply and grind it at leisure or when needed.

The use of gur, shakkar, khand, ghi, and spices of various kinds, dhania 'coriander'; mirch, 'red pepper'; lasan, 'garlic'; haldi, 'turmeric'; piyás, 'onions'; garam masálá, condiment, is not unusual, but is commoner in towns than in villages. Hindus generally abstain from eating garlic owing to religious scruples. Punjab rock salt is mostly used in the State except in Mohindargarh, where the Sámbhar Lake salt is used. Sweetmeats laddú, perá, julebí, barfí, rájásháhí, bálosháhí, galákond, lausiát and sohanhalwá are common in towns, but to the poor peasant they are a luxury. Chatni, achár (pickle) and marabba (jam) of all sorts, bándí, bhallá and ráita ate freely used in the towns, but are regarded as luxuries in the villages. The ordinary drink in the towns is water and in villages water and butter-milk (lassi). Milk is generally used in both. The favourite milk in villages is that of buffaloes and in towns that of cows. In the Mohindargarh nisamat goat's milk is also used. In the capital well-to-do people use various kinds of sharbats and araks (such as banafsha, keora, nilofar, baidmushak), zerated waters and ice in the hot weather. Wealthy Muhammadans and officials take tca, but the beverage is almost unknown in the villages. Hindu and Sikh Jats who can afford it drink liquor, frequently to excess, though the practice is looked upon with disfavour by all religions. Tobacco is very generally used amongst Hindus and Muhammadans alike. Smoking among women is very rare, but it is in vogue amongst the Hindu women of the capital, who also chew tobacco and take snuff. Only country tobacco is used. Cigars and cigarettes are confined to the official classes. Both Sikhs and Hindus take opium in the form of pills, which are always kept in a small tin-box, dabbi, in the turban or pocket (jeb, khisa). Drinking bhang or sukhkha is common among Sikh and Hindu fagirs, Akalis, etc. Hindus and Sikhs generally drink it on the Shib Chaudas in honour of Shiva, but some use it throughout the year, and others again only in the hot weather to ward off the effects of the heat, as it is supposed to have a cooling effect. The drinking of post, 'poppy,' and the use of chandú and charas is practically confined to some Hindu sadhs and Muhammadan fagirs

In an agricultural family the daily consumption of food may be roughly estimated as follows:—One ser for a grown man \{\frac{1}{2}} ser for a woman or an old man, and \{\frac{1}{2}} ser for a child. Thus a family consisting of a man, his wife, two children and an old man or woman will eat 3\{\frac{1}{2}} sers a day or 32 mans in a year.

DRESS.

Dress.

The dress of an ordinary samindár does not differ from that worn in the neighbouring British Districts. The dress of the villager is simple and made of khaddur (home-spun cotton cloth). It consists of a kurtá or kurtí, a short coat with a loop, a dhotí, bhotha or sáfa (waist cloth), pagrí or sáfá (turban), chádar (cloth worn over the shoulders) and a pair of shoes made by the village Chamár. Sikhs substitute the kachh (drawers) for the dhotí. Well-to-do landholders now use English materials, the dopatta (turban)

being made of two halves of a piece of superior muslin (sewn together CHAP. I. C. lengthwise), often coloured. They also wear a coat (made of thin or thick English cloth, according to the season, over the kurta) and a paijama, Descriptive. trousers.' Muhammadans wear, instead of a dhoti, a tehband or lungi. Population. In winter they have a khesi or khes (a sheet of very thick cotton material Dress, woven double), a kambal (woollen blanket), and a dohar or chautahi. A woman's dress consists of sutthan made of susi (coloured cotton material), a kurta and chadar and a phulkari (flowered silk coloured cloth worn over the head and shoulder). It is made of gahra or dhotar (thick or thin cloth) according to the season. When going out a woman wears a ghagrá (petticoat) over the paijama and a choli, angia or bodice of coloured cloth. Muhammadan women wear a paijama, kurta and chádar, but not a petticoat. At a wedding a somewhat better dress of various colours ornamented with gota is worn. In Mohindargarh nizāma! and the Bangar, an angia, gkagrā, and chādar (or orhnā) generally of a blue colour, are worn by the women, and among the lower classes they fix small pieces of country-made mirrors to the orhni, angia and ghagra. They also wear country shoes, but women of the higher classes wear country-made slippers. In Mohindargarh a sahri is also substituted for the petticoat and a tilk, a kind of pashwas, is also worn by the women of such classes as the Telis, Dhobis, Lohars and Maniars. The Jangal Jats wear very long turbans or sáfás. In the hills the men wear a topi, kurta and langotá, while the women wear coloured paijama, a kurta and a dopatta. In addition to these the men have a blanket made of home-spun wool (pattú). Among the higher classes the clothes of both sexes are usually made of English stuffs. At festivals and fairs women generally wear a sadri (waistcoat) over the kurti and carry umbrellas and handkerchiefs in their hands.

The fashion of wearing English fabrics is growing daily more common in the villages. In towns clothes made of English material are generally worn by both sexes, in both seasons, and country fabrics are only used by poor people. The dress consists of kurta, paijama, pagri, dopatta and coat. The dopatta is tied over the pagri, both being generally coloured. The coat is worn over the kurta. Shop-keepers generally use an angarkha. a kind of frock-coat fastened with loops, in place of a coat, and a dhotf in place of the paijama. Well-to-do officials use fine stuffs, and to the above dress they add choga, stockings and handkerchiefs which make a Darbári poshák. Chogas are generally made of fine muslin, broad cloth, silk and kamkhawáb. But the use of coats instead of angarkhás is daily becoming more common. Chogas are only worn in Darbar costume. Students and English-speaking officials generally wear suits in the European fashion. The educated classes also wear clothes made of the best Ludhiána and Guirát cloth. Officials and well-to-do people wear English shoes, boots and gurgábis (court shoes). Shop-keepers generally wear native shoes embroidered with gold cord, and only the lower classes use country shoes (júta). The Darbári poshák of an official is gaudy and variegated, consisting of a kurta, paijama and a coloured or uncoloured pagri, dopatta, sadri of kamkhawab or embroidered silk, angarkhá made of kamkhawáb or a coat instead of the latter, a kamkhawáb or embroidered choga, stockings and handkerchief. The old school of officials also wear a kamarband or waist cloth, but the fashion is now disappearing. The dress of women in towns is like that in villages, but it is made of English fabrics of various colours, and among the higher classes it is of etill better quality. Hindu widows weare a white chadar only. Hindu women when cooking or bathing often substitute a dhott for the paijama. Women when at home wear their ordinary dress and add a ghagra to the paijama when they go out. At weddings and other festive occasions, though the cut

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Descriptive.
POPULATION.
Dress.

of the garments is the same, the texture and colour are conspicuously different, and they wear light or deep coloured muslin or silk,-a dopatta bordered with pattha (silver or gold lace) and perfumed, a kurta of equally bright material, ornamented with gold and silver flowers, a jacket with gold lace, a very tight paijama made of fine stuff, and a silk ghagra over the paijama. Their persons are adorned with jewellery of all kinds. Muhammadan and hill women do not wear ghagrás at all. of respectable Muhammadan families when going out generally wear a burga or mantle. Both Hindus and Muhammadans, as a rule, wear the hair short, but Hindus keep the scalp lock or chots. Students and others who follow English fashions often wear the hair very short, and are adopting the habit of shaving the beard. The hair is washed with curds, soapnut and sarson or khali. Women generally wash the hair with lassi (butter-milk) and multání matti or gájní. Men anoint their hair with masáledár oil, made of sarson, or pholel, made of til and flowers. Women generally use ghi, but in towns oil is often substituted for it. Women do not usually cut their bair, and it is customary to plait it. In the Jangal, Bangar and the Mohindargarh nizámat Hindu women wear high chúndas, the hair being braided on the top of the head.

## DWELLINGS.

Houses.

The houses in the towns are nearly all built of burnt brick, and in some places of stone, with two or more storeys. The walls are wide and the foundations deep, to withstand heavy rainfall and ensure durability. Some few houses have under-ground cellars (teh khána or sardkhána) to protect their inmates from scorching heat and hot winds  $(l\hat{u})$  during the summer, and for the storage of property and valuables in troublous times. But the use of cellars is dying out, and the use of pankhás and khas tattis is on the increase. The new type of building is more commodious, better ventilated and higher than the old, but the materials used are generally inferior and less durable. Both Hindu and Muhammadan houses are built on nearly the same plan, and are surrounded by high walls to secure privacy for the They comprise a deodhi, 'porch,' leading into the street, a sahan, or behra, 'open courtyard,' a chanka or rasoi, 'cooking house,' a dalan and several kathris, 'rooms'. The baithak or men's apartment is separate from that reserved for the females, and has generally two entrances, one inside the deodhi and the other with windows opening into the lane. In it outsiders are received and entertained, as the female apartments can only be entered by members of the family and relations, and the baithak is generally better furnished than the female apartments. The official classes have their receiving rooms furnished in European style. Both portions are, as a rule, kept clean; and in a Hindu house the utmost cleanliness is scrupulously observed in the rasei, 'cooking house,' and with regard to all articles used in cooking. The houses are built closely together, the streets and thoroughfares being generally narrow and crooked. The cattle are generally kept in the deodhi, but the well-to-do classes use tawelás or stables for this purpose. The tops of the houses are approached by steps or wooden ladders, and in summer the inmates generally sleep on the roof in the open air with fans in their hands. The roofs are generally enclosed by parda walls built like lattice work in order to secure both ventilation and privacy. Latrines are generally built on the highest roof. Kikar, sál, faráns, shisham and deodár timber are used for building purposes, and the use of deodar is becoming more common, iron girders and rails being reserved for the dwellings of the well-to-do. The old chadar chhat, 'ceiling cloth,' is being gradually replaced by painted ceilings.

In villages a few rich people and money lenders live in pakka brick CHAP. I, C. houses, but the peasantry and artizans live in houses made of sun-dried bricks. The houses in a village are built close together, the doorway Descriptive of each opening into one of the narrow, crooked lanes which traverse Population. the village. Unlike the town houses the village houses are generally spacious, but this depends on the area of ground owned by the builder. Houses. All the people live inside the village except the Chamárs and Chúhrás, who have their houses a little way apart from the rest facing outwards. The houses of the peasantry are generally oblong in shape. The deodhi leads into the lane, and on one side of it the cattle are tied and fed at mangers; on the other side are, the beds of the inmates, or if there is plenty of room inside, cart gear is hung on the walls. The deodki is also used when it rains. The sahan is used as a sitting place by the inmates and for tying up cattle. The dalan is really the dwelling-house, and at one side of it is the rasel, chauka or shuldas, where food is cooked. In ... some places the jhulani is separate and rooted, and at the other side of the dalan is an earthen boths or kuthla, 'store-room.' The kethris, 'rooms,' are only used for storing grain, vessels, etc. In some houses there is no deadhi, and the courtyard is merely surrounded by walls into which the kathris, 'rooms,' open generally with ut a dalan. In crowded villages the tops of the houses are much used, and for getting up to the roof a wooden ladder is kept in the lane outside the door against the wall. Charri, stacked for fodder, and fuel are often stored upon the rook. In a village house there is an outlet in the roof called mogha, which serves the purpose of a sky-light and acts as a chimney to let out the smoke. In every village there is at least one charpal, hathai, paras, dharamsala, bangla or takia which is used as a place of meeting. In ing villages each patti has its own chaupál or hathái. These are all used as resting places for travellers and as sitting places for the villagers. The gates of They conside of a roofed platform the village are also used as hathais. with pillars open towards the road and form very comfortable places for shelter and test, where the people sit, smoke and chat. They also are used by the travellers. The Muhammadans call such places bangla, diwen khána or fahla. A takia is generally outside the village, and is in charge of a fagir, whose duty it is to keep a hunga always ready for use. Hindus call these places hathat or dharamsala, the latter being in charge of a sådhu. In Muhammadan villages there is always a mosque or masjid and in Hindu villages a temple or mandar. Outside and close round the village are generally a number of small pens or hedged enclosures called bára, gohára, gwora, bákhal and bagal, in which the women make cowdung cakes, oplús, páthián, or gohe; here cattle are tied and fodder stored in kups or chhaurs. In some villages the waste land adjoining the village site is used as a pirh or threshing floor. Round the village site there are bar or fipal trees, generally near the tanks, where the people sit and sleep in hot weather afternoons, and where the cattle also find shelter in that season. The village ponds, tobás, chharpar, dháb, johar, are excavations from which the clay has been dug from time to time to build the houses. During the rainy season the water from all round runs into them, carrying impurities with it and the water so collected is used by the cattle, while a separate johar or dhab is dug to supply drinking-water. In tracts where water is scarce the same pond is used both for bathing and drinking. Pipal1 and other trees are found round these ponds. In crowded villages the drinking wells are generally inside the village, but in most villages they are made outside. Unlike

<sup>1</sup> Pipal, bar and wim when artificially planted and grown together are called Trl-baini (i.e., a combination of three trees) which the Hindus regard sacred and often water. It is found near temples, wells, paths and ponds, both in towns and villages.

Descriptive. POPULATION. Houses,

CHAP. I. C. the towns the villages have no latrines. Men and women invariably go outside the village to answer the call of nature, which they collequially call jangal júnú or báhir jáná. In villages a kachchá house is called a ghar or makán and a pakká one a havelí: if it has two storeys it is called márí or atárí. A house with a thatched roof is known as a chhappar and a shelter without walls as chhan, jhungi, or jhopri. In the villages ze found agwars or nohras, 'stalls,' attached to the houses and generally built of pakká or kachchá bricks. These are used for the cattle as well as for sitting in. In the nizamat of Mohindargarh near the low hills there are thatched houses, the walls being made of the rough stone easily obtainable in the vicinity, but otherwise they are made of mud (ladáo or gáchí). There is generally a ním or pípal tree in every contyard. The houses of the peasantry in the Pinjaur tahsil, situated as they are in the hills, lie scattered, unlike the villages in the plains, in picturesque isolation. They are oblong in shape and built of stone, sometimes with two storeys. The outside walls are plastered with light red earth, and the upper roofs invariably gabled, thatched or slated. Slates are now the more common because they are safer and mo. durable. The houses are usually kept pretty clean. The inmates occupy both the storeys. On one side of the cottage is a shed for the cattle called an obra. In the hills kelo or deodar timber is generally used for building. Every year in the nauratra (September) the inside and outside is replastered by the women, while in the plains this is done at the Diwali festival.

Furniture and cooking utensils.

In towns the furniture is much like that of the adjoining British Districts, and many well-to-do house-holders and officials have European furniture. In the houses of the middle classes are beds, chairs, daris, mattresses, small carpets, cushions, reed stools covered with cloth or leather, takhtposh (Indian couch), floor cloth (if a printed gáhrá cloth it is called jájam and if made of long cloth chándní), chiks, safs or date matting, lamps, pictures on the walls, boxes and portmanteaux. Shop-keepers generally fix a khárwá or border cloth on the wall behind their sitting place to lean against. In village houses the furniture is simple and consists of the barest necessaries, such as bedsteads made of muni or cotton cord, etools (pihris), spinning wheels (charkhas), cotton rollers (belná), hand-mills (chakkí) for grinding corn, wooden boxes for keeping clothes, round reed boxes covered with leather (patiár), sur's or chatáis (made of date leaves), churn (madhání), small reed stools, or múhrás made of sugarcane, tatthás (pressed sugarcane), chhalnis (sieves) made of iron or bamboo, chhaj or súp (a winnowing apparatus), jhárnás (strainers), takrí (weighing scale), iron or stone weights (bats), ukhlí (wooden or stone mortar), músal (wooden pestle), kundi (mortar), sota (pestle), sil and batta (grinding stone), dátí (scythe), cháká (knife or scissors), dhunkí (bow for cleaning cotton), ateran (reel), kuhári (hatchet), gandásá (chopper for cutting fodder), khurpá, gharonchi (wooden stand for pitchers), chaunks or pairá (wooden stool), diwat (country lamp stand), diwas (earthern or brass lamps), baskets (tokrá, bohiá, chhábá, changer), earthern kothí made of mud or bukhárí (a small room half sunk in the wall) for storing grain and keeping dishes and valuables, and kuthla or bharola (large cylinder of mud used only for storing grain, with an opening a little above the ground through which the grain is allowed to run out when required). In the hills the following articles are to be found: kiltá (conical basket for loads), kiltá for manure, khaltú or khalrú (leather bag), and a kothú for storing grain called bárá or khanda made of wood. Kothi also is called pechhri in the plains. The bed clothes in summer consist of a dorá, chotakí (four-fold cotton covering), and

bachhoná (bedding) or darí. In the winter a lef, khindrí (quilt), and a rasáí CHAP. I, C. or blanket are used. The khindri, lef or godri is made of rough homespun cotton cloth stuffed with cotton. If the house-owner keeps fowls and Descriptive pigeons he has a fowl-house (khudda) in the sahan and a pigeon Population. house on the roof. The cooking and other utensils of Hindus are Furnitare and almost all made of brass and bell metal, the only ones of earthenware cooking uteralls. being the cooking pot (lauri) for sag vegetables and khichri, and the water jars or ghards, which if small are called matka, if big chati or mon, if made of brass baltohí, tokní, kujrá, gágar or kalsá. A list of the utensils is the following: - Parát and bátí (big basins for kneading flour), gadwá or lotá (brass pot), if with spout gangáságar ; thált (tray from which food is eaten); katora, belwa or chhanna (a big cup from which water or milk is drunk), if smaller katori, pendi or kauli ; degchi or degcha, dahindi patila, patili (cooking pots) ; dhakni, sarposh (cover for covering cooking pots); karchhi (spoon) if large, chamchá if small, doi if made of wood; gilás, gilásí, bhabká, túnbí (tumblers) for drinking water; tawá (baking iron) for baking bread; chimtá (fire tongs); sandásí for lifting cooking pots, etc., off the fire; karáhí (a large cup shaped like a frying pa if smalllondá ; and dol (iron bucket) for drawing water from wells. In towns pándán (betelnut-box), chilmchí (brass washing basin), ugáldán (spittoon), tub, bucket, dabba, katordan (brass food dish), tukkaş (utensils of various size fitting into each other), tokná or baltohá (large brass pitcher), and tapái or teapoy, (wooden or iron tripod), are also found. The Muhammadans use earthernware cooking pots (hándí). kunálí (basin for kneading flour), tabág (tray for eating), (cloth and chhábá also serve the same purpose), and payala (cup) for drinking purposes. The tinned copper dishes are: - Thálí (tray), katora (cup), gadwa or lota, both of copper or earthernware. Tavá is a flat circular iron-bake like that of the Hindus. The use of the mashak (skin) is common enough in the towns, but in the villages water is always carried in gharás by women and the mashak is only used by the servants of a well-to-do Muhammadan family. In the Jangal, Bángar and Mohindargarh, where water is scarce, men on a journey or going to their fields often provide themselves with a kíneá or kúhná (kiďs skin mashak) or with an earthern jhajjar, suráhí or kunji (goblet). The earthern vessels used for milk are as follows:-Didhori, dohá, dohará (used for milking into), or kárhní (boiling pot), taulá or jhakrá or jamaoná (for curdling milk), rirkná, baloní (churn), madhání or rái made of wood (churning apparatus). Brass pots are also used for milking cows. Hárá (mud fire-place) is used for boiling milk.

# BURIAL CUSTOMS, ETC.

A Hindu child under 4 is buried, and lepers are always buried. Burial customs: In Mohindagarh an infant under 6 months is buried in an open Hindus, plain, and a cup of milk put to mark the spot. When a man is dying he gives a dán of a cow and some grain to an Acháraj. This is called Baitarní Dán, and renders easy the passage of the giver across the stream of Baitarni which leads to Dharm Rai, the god of justice. The dying man is laid on a white sheet which is spread on the ground, over a couch of cow-dung and grass, with his head to the north and his feet to the south. Ganges water and a Tulsi leaf are put in his mouth and a Tulsi leaf on his breast, while " Ram Ram" is chanted in his ears. A white shroud is given to a young man or a widow, a red one to an old man, while that of a wife is ornamented. When the deceased has left grandchildren a shawl is thrown over the body, the biradari follow with

CHAP. I. C.

Descriptive.

Borial customs : Hindus. music and gongs, and silver flowers are thrown on the corpse. All the sons, but especially the eldest, shave their hair, beard and moustache. The bearers walk bare-footed. On their way home the mourners break a straw and throw it over their heads to show that they have broken off all connexion with the deceased. Many are the rites subsequently performed, but they are not peculiar to Patisla. To die on a bed is considered unnatural. In that case the kiria karam must be performed at Pehowa 45 days after death. When a child dies the mother stays at home for three days and may not stand upright before another married woman.

Muhammadana,

The Muhammadans are content with a far simpler ritual. The body is buried after a prayer has been read. For three days no food is cooked in the house, but a near kinsman gives a supper which is called Bhatti munh tuk or haure watte de roti. A mulia or hafis is appointed to read the Korán at the tomb for either three or long days. At the hul khwáni ceremony, which takes place three days after death, the haluma is recited 123,000 times. The Korán is also recited, and food given to mullas, fakirs and the brotherhood. The dastar bandi or formal recognition of the heir takes place on that day. Cooked food is distributed to fakirs on the 10th, 20th and 40th days. Food is distributed at various intervals after the death.

### OCCUPATIONS.

Occupations.

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Of the whole population 53 6 per cent, is dependent on agriculture, and the State has no important industries beyond those that are carried on in villages to meet the ordinary wants of an agricultural population.

## AMUSEMENTS.

Amusements.

Amusements are few. The life of the Jat is one continuous round of work and sleep. In the viliages mirásis are popular when there is time to listen to them, and in the towns dancing girls and rabsisis (professional singers) perform to the accompaniment of tambourine and guitar. Boys play at hide and seek (luk machái), prisoner's base (kaudi bádi), tip cat (gulli danda), cricket (phind tori or gendhalla), and other games. Kite-flying (patang bási) is popular with men and boys in the towns. In the hot weather men and boys are fond of swimming. Hawking is confined to the rich, as hawks are expensive. Wrestling by professionals is common, especially at fairs, while Indian clubs (mugdar or mugdarián) are often seen in the villages. Cock and ram fighting are reserved for special occasions. Chess and cards are common in towns. Strolling acrobats (nat) and jugglers (madúri) are very popular.

Fairs and festi-

Fairs and festivals are very numerous. Fairs are generally held in connexion with some shrine, but Hindus and Muhammadans frequent each other's. Cattle fairs are held at Karaota and Dharson twice a year. Nearly 20,000 head of stock change hands every year and purchasers come from the United Provinces as well as the Punjab. The Jhakri festival, to procure long life for children, and karwa for the long life of husbands, are celebrated by women only.

#### NAMES AND TITLES.

Names and Titles. Jats of good position use the Sikh title of Sardár. The Tiwánas are called Chaudhrí or Míán. Hindu Rájpúts are called Chaudhrí in Patiála Proper, Thákur in Mohindagarh, and Thákur or Míán in the hills. Brahmans are addressed as Pandit, Jotshí, Pádhá, or Missar; Khatrís are called Lála or Seth. Among the Muhammadans the Rájpúts are called Chaudhrí or Khán Sáhib, Sayyids, Mír Sáhib or Sháh Sáhib; Khokhars, Chaudhrí; and Marrals and Dogars, Malik; Aráíns are called Mehr.

# CHAPTER II.-ECONOMIC.

# Section A .- Agriculture.

It is impossible to give such detailed information on this subject as CHAP, II, A. has been collected in British Districts in the Punjah The Patiala State covers no less than 5,792 square miles of country, and includes such widely diversified tracts as the Himálaván tabsil of Pinjaur on the one hand, AGRICULTURE. and the arid plains of the Narnaul nizamat on the other. No regular settlement of the State had been attempted previous to that recently commenced, and none of the information regarding agricultural conditions, such as is collected in the course of a scientific scitlement, has yet been tabulated and recorded. The subject can therefore only be dealt with in the most general way.

Economic.

The Patiála loam may be sub-divided into hurd, light and sandy. Soils. The first of these is termed dakar, the second rausli and the third bhur. High land is called Bangar (Punjábí Dhaid) and low land Bet or Khádar. The land round the village site is nias. In the hills the soils are bangar or changar, katúl and kúl, the former being unirrigated and two latter irrigated land. First class bangar is called lehri and stony soil rara.

In the present settlement the terms will be those in use in the adjoining British Districts, and in future the returns will be kept according to the directions of the Settlement Department by patwaris. At present these terms are not strictly adhered to-

The Pawadh and Bangar tracts contain much dakar, while rausli and Comparison of bhur predominate in the Jangal and Mohindargarh. The dakar, being different soils. hard, requires much ploughing and good rain, while the rausli needs little ploughing and readily retains moisture. Dakar gets as much rain as it needs in the kharff, but not enough in the rabi. Rausli being capable of retaining moisture is the best soil for barani cultivation. Bhur is very poor land, but it requires little ploughing as the sub-soil retains whatever moisture it receives. Sometimes it produces a fine crop, but heavy rainfall is prejudicial to it.

There are few reliable statistics for the rainfall throughout the State. General agricul-The rainfall decreases gradually in proportion to the distance from the Himálayas and also becomes more capricious. Fortunately a very large portion of the country lying to the south-west of Patiála, and consequently beyond the belt of good and sufficient rainfall, is irrigated by the Sirhind Canal. The Hissar Branch of the Western Jumna Canal has also rendered secure a large portion of the Narwána tahsil. In the Banúr and Rájpura tabsils a small inundation canal<sup>2</sup> from the Ghaggar serves a number of villages. The flood water of the Ghaggar gives r. disture to considerable areas in the Banur, Ghanaur, Bhawanigarh and E. nám tabsils, and occasionally renders the raising of a rabí crop possible in the outlying portion of the Bhatinda tahsil in the neighbourhood of the village of Sardúlgarh. But the Ghaggar seems to be growing more and more capricious and elusive every year. There are a few wells in the tabsils of Patiala and Rajpura, and in parts of Dhuri and Bhawanigarh. Sirhind and Pail are sufficiently protected by wells, and

<sup>1</sup> See above, page 44.

<sup>\*</sup> This canal used to irrigate some villages in Ghanaur tahsil also, and may do so again. as a scheme for its improvement and extension is under consideration.

Economic.

CHAP. II, A. though they have no canal irrigation, these two tabsils are perhaps the richest and most productive in the State. They have, however, been heavily assessed and the people are by no means wealthy.

AGRICULTURE. General agricultural conditions.

There are no reliable statistics regarding cultivation except for a few tahsils in which settlement operations have reached an advanced stage, and it is impossible to generalise for the whole State from these. The most recent figures, which are given for what they are worth, show that of a total area of 3,737,457 acres, 2,964,711 acres are cultivated and 467,604 more are fit for cultivation. There are considerable areas of grazing lands and extensive tracts of State property in the Pinjaur tahsil (comprising the hill territory of the State), and on the banks of the Ghaggar, as well as in Chanarthal thána (Sáhibgarh tahsíl), not far from Patiála. There is a good deal of land which has not been broken up for cultivation.

In the hill tracts cultivation mainly depends upon small streams or kuls, some of which, leading from permanent springs, irrigate all the year round. In the higher hills both autumn and spring crops are raised on bárání lands. These generally receive all the rain they require. In the lower hills and in the Dun the early cessation of the rains frequently renders the raising of a rabi crop on barant lands impossible. There are considerable barani areas in the Banur and Rajpura tabsils, and owing to the dry and porous character of the soil and the comparatively rapid slope of the country, which carries the water off into ravines and drainages, the absence of rain in September means a failure of the rabi crops. In this area not less than 30 inches of rain are required in the year, of which, to produce a really bumper harvest, at least 5 or 6 inches should fall in January and February. The more arid tracts lying to the south-west of Patiála are, as above explained, largely protected by canal irrigation. At the same time a good and timely rainfall is of the ut most importance. In the Bhatinda tahsil a rainfall of 15 or 16 inches in the rainy season, distributed evenly between the months of July, August and September, and a couple of inches of rain in January, or early in February, mean a bumper harvest over a very large area, and a great access of wealth to the people. In the Narwana tahsil, which constitutes the southern extremity of the State, the soil requires more water than in Bhatinda. It will be seen therefore that owing to the quality of the soil more rain is required for bárání crops in those tracts where the rainfall is heaviest and less where it is lightest. This roughly speaking holds good throughout the State between the extremes indicated above. In the sub-Himálayán region 30 inches are not more effective than 15 in the southern and western extremities, and in the intermediate region the rainfall varies inversely with the distance from the Himalayas. In the outlying Sardolgarh thana, attached to the Bhatinda tahsil, irrigation from the Sirhind Canal is impossible owing to the intervention of the Ghaggar. Further north the Naili tract on either side of the Ghaggar is very insecure. A good harvest is occasionally raised on the sailab of the Ghaggar, but the process which has led to the gradual shrinkage of the Ghaggar for many years past seems to be still in operation. In the Narnaul nizamat a fair kharif crop can be raised with some 12 or 15 inches of rain well distributed through the autumn months. There are a certain number of wells which are worked in the winter months, but the rabi harvest is, generally speaking, inconsiderable, and in many villages sowings are never attempted.

Agricultural calendar.

The agricultural year begins with the nimani ikadshi in the month of Askr. Accounts are cleared up or renewed, lands are newly rented, and general agricultural operations then begin, though cane and cotton have been sown long before. The rains are due on this day, as the proverb saysadhe har bairi ke bar- Rain falls in the middle of Asar even at an enemy's door." The monsoon generally breaks towards the end of Asar, and another CHAP. II, A. proverb celebrates its coming - Sawan aya he sakhi ghar ghar hoi tij; unka Sawan kya kare, jis ghar bail na bij -- "Sawan is hailed by every one, but what good is it to a man who has neither bullock nor seed "?

AGRICULTURE.

In the month of Asauj the rabi crops are sown. In the month of Katak Agricultural the kharif harvest is cut, and cotton picking begins. The reaping of the rabi crops commences from the middle of Chet and ends in Baisakh. Sugarcane is sown in Phagan and the boiling of the juice commences in Maghar andends in Magh. Cotton is sown before the kharif sowings: bari tu kyun roi, main Sawan men kyun boi-" Cotton, why are you weeping? Because I was sown in Sawan." Pickings finish in Magar. The following proverbs show the months in which rainfall is advantageous or the reverse :-Je minh pia Dewáli jaisa phúsi! jaisa háli-" With rain at Dewáli, the good and bad cultivator are on equal terms." Barse Phágan náj chuágan-" The falling of the rain in Phagan increases the grain four times. Barse

The following calendar shows the ordinary round of the agricultural work of the year :-

Chet ghar na khet-" If in Chet, nor house nor field remain."

No.	Name of I	Control of the second	English menth.		Remarks.
1	Chet	-61	March-April	***	Cane planting, irrigation for wheat, plough- ing of kharif crops, and reaping of sarson and barley.
2	Baisákh	***	April-May	***	Reaping and threshing of rabi crops. Cotton is sown and cane is watered.
3	Jeth .	***	May-June	***	Completion of threshing and storage of rabi crops, grain and fodder. Cane watering and cotton sowing continue.
4	Asár	***	June-July	***	Cotton sowings finished; sowing of bajor commenced; commencement of rain, and rabi ploughing.
S	Sáwan	***	July-August	er,	Kharif sowing completed; ploughing for the rabi continued.
б	Bliádon	***	August-September	134	Ploughing for the rabf crops; watering and hoeing of cotton and maize.
7	Asauj	***	September-October	***	Ploughing for and sowing of rab! crops.
8	Kátak		October-November	***	Rabi sowing completed; harvesting o
9	Maghar	991	November-Decembe	T	Threshing of kharif crops; cotton picking and cane pressing.
10	Poh	***	December-January	141	Cotton picking completed; cane pressing and watering of rabi crops.
11	Mágh	***	January-February	***	Watering of rabf crops; pressing of can completed; ploughing for cane and rabf.
12	PhSpan	440	February-March	***	Watering of rabi crops.

The a ea that a bullock can plough varies largely. Where the cattle are Area under poor and the men few, a plough covers little ground. In the Pawadh a plough. pair of bullocks can cover 50 kachche bighes and in the Jangal 70 or more.

<sup>1</sup> Philsi (or phadi), lit, means ' laggard.'

Economic.

AGRICULTURE.

Agricultural operations: Ploughing.

Throughout the State bullocks are generally used for ploughing, but in some parts of the Jangal and in the Mohindargarh District camels are also used. Only one camel is yoked to the plough.

Irrigated lands are ploughed after flooding. For wheat and maize the fields are ploughed after 4 or 5 waterings, and for cane after 6 or 7, but sugarcane fields are generally ploughed with the aid of the winter rains. The unirrigated lands are always ploughed after the first rain. After ploughing the surface is levelled with the sohaga, so that they may retain the moisture. For some crops the fields are only ploughed once or twice. With regard to ploughing there is a proverb: Sawan bahi sawani, Bhadon ki bhadwar, Assu men bahi na bahi bargi jan-" Ploughing in the month of Sawan produces an autumn crop, in Bhadon bhadwar grass, and in Asauj, plough or not, it's all the same." There is another proverb showing the number of ploughings required for certain crops: Pachis báhi rájrán, sau bah kaméd, jún jún búhwe kanak nún tún tún páwo sobol-125 ploughings are required for carrots, 100 for sugarcane, and the more you plough the wheat field the better will be the crop." The first ploughing is done by the Hindus after consulting Brahmans, and sometimes the advice contained in the following proverb is followed: Euch oakur, mangal dátí-" Sowing on Wednesday, on Tues , the sickle."

Hoeing.

Hoeing is called gudái or nidái if done by hand. It is done in a sitting posture with the khurpa or ramba, but in the Bangar and Mohindargarh it is done standing with the kasola. The irrigated crops are generally heed after every watering. The cotton and cane require a large number of hoeings: Jaguddinahin dopatti, tu kyūn chugne ái kapatti—"If you did not hoe your cotton earlier, why have you come to pick cotton, O bad woman?" In the Bet cane is hoed by the kasola and khurpa Hoeing is very good for crops; the grass and weeds are uprooted and the earth round the plant is loosened. Hoeing is confined to irrigated lands, except in the hills, where the land is hoed for all kharif crops.

Hedging.

In some places where sugarcane is largely grown, hedges are put round the fields, the branches being tied with tatthás (pressed cane) to make the fencing strong. This is done in the Bet, in the Páil and Basí tahsíls, and is called baté wálí bár. In the Mohindargarh District these fences are generally built of mud and in some places branches of trees are stuck upround the field. Fences are generally made of kíkar, berí and malla, or any other available material.

Reaping, stacking and threshing.

There afterwards binds into sheaves and stacks (ian) in the field. The sheaves are then taken to the threshing floor (khalwira), a piece of hard ground chosen for the purpose. The place is swept clean and the crop is spread out there in a heap 2 or 3 feet high; the thresher or phala is drawn round and round by two bullocks driven by a man or a boy. By this process the straw is broken up fine and the grain is separated from the grain and husks. Winnowing follows and requires a wind. The mixed straw and grain is tossed in the air with a tangli and thus the grain is separated from the straw. Afterwards it is put in the winnowing sieve (chhaj) and allowed to fall gradually from above, the wind blowing away the remaining straw from the grain. Every kind of grain except maize is treated thus. In the case of maize the chhatlis (k::kris) are cut and piled up and then beaten with rods and the grain separated from the chhatlis. In the Bet the maize is threshed.

Agricultural implements and appliances; The implements of the agriculturist are few in number and very simple. The common plough (hal) is used in all parts of the State; it opens the soil to a depth of 8 or 10 inches and produces a fine tilth. The plough

[ PART A.

contains the following parts : beam (halas), share (phálá), coulter (cháo), CHAP. II, A. block (munna) and handle (hathail). The beam is fixed to the panjali (a kind of yoke) which passes over the heads of the bullocks. A bamboo Economic. stick with a big iron nail at the end of it called prani or paint is used to AGRICULTURE. goad the bullocks. Por is a hollow tube of bamboo, with a leather mouth Agricultural through which the seed is drilled. In Mohindargarh and the hills seed is implements and sown broadcast (chhitta or bakher). Maize and wheat are sown broadcast appliances. everywhere. Sohága (roller) is a broad beam of wood to which the cattle are yoked. A man stands on it and drives them. It is used to preserve moisture as well as for crushing clods. A sohága with wooden teeth is called gahan. Jandra is a rake without teeth, used for parcelling land into kiaras. A kara or iron rake worked by bullocks is used for levelling very hard soils. The kahi or mattock is generally used in making irrigation channels. The ramba or khurpa is a trowel with crooked handle and is used for hoeing (gudái). In the Bangar and Mohindargarh tracts it is done by a kasola. The blade of a kasola is like that of a khurpa, only somewhat broader, but the handle is a long one of bamboo, and the labourer works it standing. Dátrí (sickle) or dúchí as it is called in the hills is used for reaping crops. Phala or jeli is used for threshing and tangli for winnowing. Tangli is also used for collecting fodder. Salanga (a pitchfork) or uchain is used for making hedges. Gandása or gandásí (chopper) is used for chopping fodder and gandála for making holes for hedging. The cotton is ginned by helna (a hand cotton press). The sugarcane mill is known as kulhari, belna or charkhi; and dal is a word for a basket used to lift water from below. It is worked by two men. Small carts are used to carry the harvest from the fields and for manure. In the Simla hills the dách is used for cutting wood, the jhan for breaking stones, the jhabal or mend for turning stones. The adú, an iron nail, is used in breaking stone. The ramba or khilni is used for breaking clods. The yoke (panjáli) is called chawáyan in the hills. The agricultural implements in the Mohindargarh nizamat merit special mention as the names, and sometimes the implements themselves, differ from those in use in the main portion of the State. The sohaga or leveller is called mech, and the jandra or toothless rake used for parcelling the field into kiaris is replaced by the dantuli, a rake with nine or ten teeth and a handle of her or bamboo wood. A list of the more common agricultural implements in the Phulkian States is given below for reference:-

Adú, an iron-nail used for breaking stone (Simla hills). Bangri, a trowel (in the Bet), like the ramba or khurpa.

Bel, the collection of three pans for boiling sugarcane juice.

Belna, a hand cotton-press. The sugarcane mill is known as kulhári, belna or charkhi, and bel is the collection of three pans for boiling juice.

Cháo, the coulter of a plough.

Charkhi, a sugarcane mill.

Chawayan, hill name for panjáli (q. v.)

Dách, a hatchet used for cutting wood (Simla hills).

Dál, a basket used in raising water, worked by two men.

Dantáli, a wooden rake with 9 or 10 teeth and a handle of ber or bamboo wood (Mohindargarh).

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Agricultural implements and appliances. Dátrí or dátí, a sickle used for reaping crops: called dáchí in the hills.

7ahan, a sohága (q. v.) with wooden teeth.

andála, for making holes for hedging.

Gandási, a chopper.

Gundása, a chopper used for chopping fodder,-cf. gandási.

Hilas, the beam of a plough.

Yathail, the handle of a plough.

fandra, a rake without teeth.

Thabal or mend for turning stone (Simla bills).

than, for breaking stones.

Yahi, a mattock, generally used in making irrigation channels.

Kara, an iron rake worked by bullocks for levelling very had soil.

Kasola, a trowel, -cf. ramba.

Khilni, an implement for breaking clods,-cf. ramba (Simla hills).

Khurpa, a trowel,-cf. ramba.

Kohári, or common axe for cutting wood.

Kulhárí, a sugarcane mill,-cf. charkhí.

Mech, a leveller (Mohindargarh),-ef. sohága.

Munna, the block of a plough.

Paini, a goad for driving bullocks,-cf. práni.

Phála, a ploughshare.

hala, used for threshing, -cf. jeli,

Por, a tube of bamboo hollowed for ploughing.

Prání, a goad for driving bullocks,-ef. painí.

Panjálí, yoke of a plough.

Ramba, a trowel with crooked handle, used for hoeing, gudái (Bángar and Mohindargarh),—cf. kasola and khurpa.

Ramba, used for breaking clods,-cf. khilni (Simla hills).

Salanga, a pitchfork, used for making hedges, -cf. uchain.

Sohaga, a wooden beam used as a roller.

Tangli, for winnowing, also used for collecting fodder.

Uchain, a pitchfork, used for making hedges,-cf. salanga.

Rotation of craps. The dofasli dosála system obtains on unirrigated lands, that is to say, a rabí crop will be sown in land which has just borne a kharíf crop, and when the rabí has been harvested, the land will lie fallow for a year, and then bear its two successive crops as before. The same system is carried out on inferior irrigated land, but good irrigated land bears two crops every year (dofasli karsála). Sugarcane and cotton exhaust the soil and are not planted in the same land in two successive years. The subject of crop rotations however is not really understood, and there is none of the intricate sequence and alternation which obtains—for example—in a rice-growing country. The most frequent crop admixtures are wheat and gram, and barley and gram. These are grown together partly with a view to increasing the yield, and partly because one or other crop is likely to succeed even if there is too much rain for gram or too little for wheat or barley. Barley of course requires less rain than wheat, and in the extreme south-west wheat is rarely seen even on canal-irrigated lands.

In the Bangar tract, which corresponds to the Narwana tahsil, CHAP. II, A the people are singularly careless about manure, and large supplies accu- Economic. mulate in and around the village site. Elsewhere the available supply is made full use of, though in the plains it is used largely as fuel, and the fields AGRICULTURE. only get what is left.

No new agricultural implements have found their way into the Implements, State, nor are there any model farms or experimental fruit gardens. There and fruit culture. is a small amount of fruit culture in the Himálayás.

According to the last Census (1901) 429,731 males and 896 females Number of have a direct interest-permanent or temporary-in land and its cultivation. sgriculturists. Besides these, there are 551,406 persons dependent upon their labour.

Well lands generally, and sometimes univergated lands, are cul- Partnerships. tivated by agricultural partnerships or lúnas, if the owner is poor or cannot cultivate his land single-handed for lack of oxen or some other cause. These partnerships are of different kinds. Thus the ji ká síri is the man who contributes his personal labour only, and the ek hal ká sírí one who contributes a whole plough. In the Bángar lánas are common on unirrigated lands, and the associated partner receives a share of the produce based on the nature of his contribution to the partnership. Thus if the partner cultivates single-handed with the owner's bullocks, he receives half. If two or more men help the owner and provide the seed, each paying his quota of the revenue according to his share of the batái, the owner finding the bullocks, they receive and. If the partner merely assists in ploughing, he receives 1th. If the partner be a woman or boy who merely watches the crop, grazes and waters the cattle, or renders such lighter service, his or her share is from 4th to 4th of the gross produce.

Large landowners employ one or two permanent kámás or farm Farm lahourers. servants. These get a fixed wage in cash and kind-one rupee a month, some clothes, and a fixed share of the produce, varying with the crop. The siri or sharer is a grade above the kama. These two classes returned themselves as farm servants in the Census. Field labourers (masdur saraati) are employed by most, if not all, cultivators at seed time and harvest. Landless Jats, Núngars, Chúbrás and Chamárs are thus employed. In the Census they returned themselves according to their caste and not as farm labourers and hence the small number of labourers shown in the Census Report, working out at an average of three to each village. Nábha has an average of under three, and Ludhiána of less than five. There are 1,100 villages in Pinjaur tahsil, where no farm labourers are found. If these are deducted, the average for the State will be five to a village. In the hills much of the field labour is done by the women. Throughout the State women are largely employed in cotton-picking.

In the hill tracts potatoes, ginger, turmeric and rice are the most Crops. valuable crops, but a good deal of Indian corn is raised for food, Table 19 of In Páil and Sirhind a fair amount of sugarcane is cultivated, as also in Part B. parts of Patiála, Dhúrí and Bhawanigarh. Cotton is grown in all but the sandier tracts, such as the Barnála, Bhíkhí and Bhatinda tahsíls, and forms the staple produce in Narwana. A certain amount of rice is cultivated in Rijpura, Banúr, the Sutlej Bet and in Pinjaur tabsíl. In Narnaul the main crop is bajra. Wheat is the principal rabi crop in the northwestern half of the State, and barley and gram, or mixtures of the two, are

CHAP. II, A.
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Cotton.

the most important rabi crops in the south and west. In years of good rainfall there is always a considerable amount of sarson exported from the south and west.

Cotton is generally sown in irrigated lands in the Bángar and Jangal tracts. In the Pawádh it is also sown in unirrigated lands. It is sown in the dákar or raustí soils, the land being generally ploughed three or four times, commencing in Mágh, and the seed sown during Baisákh and Asár. Whether it be sown on well or canal lands irrigation is necessary before sowing, unless there has been sufficient rain. The crop requires watering and on well lands it is watered every 10 or 15 days unless rain falls. It is sown broadcast, 5 sers kachchá of seed to a kachchá bigha, and 4 or 5 hoeings are given. The picking commences in Kátak and ends in Maghar. This work is generally done by women and the cotton is separated from the seed by the belna (hand gin). Some seed (barewen) is kept for sowing and the remainder given to the cattle. It is a favourite food for milch-cows and buffaloes in the cold season. Only ordinary country cotton is sown every year.

Sugarcane.

Sugarcane is generally sown on well lands, but in the Bet it is sown in sailab and also on barani lands. It is sown near wells, as during the hottest months it requires more frequent watering than any other crop. Chan or dholu are the kinds of canc generally sown. The land is ploughed 8 or 9 times or even 20 times, commencing in Maghar. All the manure available is spread on the fields and ploughed in. The planting is done from the beginning of Chet to the middle of Baisakh. The seed consists of port having ankh (cuttings with eyes) cut from the last year's crops and kept in a pit for the purpose. In planting one man drives the plough and the other follows him laying down the joints in the furrows at intervals of 6 or 7 inches. After this the whole field is rolled with the sohaga. About 4 or 5 canes spring from the eyes (ankh) of the cuttings. The field is watered every seventh or eighth day, and hoed generally after every other watering. The hoeing (anhi guddi) is done with a kasoli and a straight khurpi. The cane grows to a height of 8 or 10 feet. The juice is extracted during the months of Magar, Poh and Mágh. All the cultivators have shares in a cane-mill. The canes are cut at any fime of the day, and fied in bundles, after stripping each cane and removing the flag (gaula). Afterwards the canes are carted to the belna or cane-mill. The mills used are of two kinds, one of iron, the other of wood, the former requiring fewer men than the latter, but as the cane has to be passed through it in small pieces it is rendered useless for any purpose. The pressing is done by two horizontal rollers, and when the bullocks move round, the juice (ras) runs into a jar, whence it is taken to a boiling shed and boiled in pans. In some parts two pans are used, and in others three, the three pans being called a bel. In the Bet only one pan is used. For boiling and turning the juice into bheli (lumps) of gur or shakar they generally employ Jhinwars, a sweeper only being engaged to keep up the supply of fuel. In the Bet the produce when boiled assumes the form of rab mixed with some liquid. Bels and iron mills are hired, the rate of hire for a mill varying from Rs. 28 to Rs. 32, and for a bel from Rs. 5 to Rs. 8. The wooden mills are made or repaired at the joint expense. Ponda sugarcane is grown in the villages near some of the towns in the State, and is generally sown by Arains. It requires a great deal of manure and constant attention, but on the other hand it fetches a high price.

Wheat.

Wheat is sown in irrigated and sometimes in unirrigated plots. It is generally sown sanwi (i.e., once a year) and sometimes in land which has

borne a maize crop. The land is ploughed at least 4 or 5 times, commenc. CHAP. II, A. ing in Bhadon, and the seed is sown in Katak, 5 sers of seed going to a kachcha bigha. It is watered 4 or 5 times on irrigated lands, and hoed z or 3 times. It is reaped up to the middle of Baisakh. There is a AGRICULTURE. proverb, kankî kunjîn mehna je rahen haisákh-" It is a great stigma Wheat, for wheat to remain unreaped and for the cranes (kulans) to remain in the plains after Balsakh" (the cranes generally migrate to the hills before Baisákh). There are several varieties of wheat sow in the State. The Idl or bearded red is grown everywhere. The sufed (white) or dudi is generally used for flour (maida). Kankú has a thicker and harder grain, Kunj wheat is also sown in some parts. The bearded red wheat being cheaper is consumed by the mass of the people, the kanku and sufed being used by the richer classes. The grain is eaten or sold and the surplus straw also sold. In the hills it is sown after the middle of Asauj and garnered from Jeth to the middle of Asár.

Maize is generally sown in irrigated lands, but in some villages of Maize. the Pawadh and in the Bet it is also sown in unirrigated lands. If the rains are good it does not require much labour, few waterings suffice, and it ripens very soon. The sánwi crop gives a good return. After 4 or 5 ploughings the seed is sown during the first half of Sawan. In the hills it is sown in Jeth. It requires 2 or 3 hoeings and 3 or 4 waterings, provided there has been good rain. The crop generally takes 21 months to ripen and is reaped in Katak. There are generally from 2 to 4 cobs (chhallis) to a stalk. In the hills it is gathered from the middle of Bhadon to the middle of Asauj. The zamindars generally live on maize for the greater part of the year and the bullocks subsist on its straw. The hillmen prepare sattu for a whole year at a time and eat one meal of it every day. The seed generally sown in the State is yellow in colour. In the Mohindargarh nizamat and the Bangar tahsil maize is only grown in small quantities.

The cultivation of barley (jau) is like that of wheat, but it is sown Barley. later and ripens earlier. It is reaped in the month of Chet.

Gram is sown after one or two ploughings in rausli and dakar soil Gram, after the middle of Asauj. The seed required for a kachchá bigha is 4 sers. It is not irrigated from wells, nor is it hoed. It is reaped from the middle of Chet. The outturn is 7 to 10 kachcha mans a kachcha bigha. The crop entirely depends on the rains in Sawan. In most places mixed gram and barley, or wheat and gram, are sown. This combination is called berra. Rape-seed (sarson) is generally sown in addition to or mixed with gram, berra or wheat, and is reaped first. Sarson is also sometimes cultivated in irrigated plots as a separate crop. It is used for oil. Rái and tárámira are also sown mixed with gram or on the ridges (ádán).

Bájra is the most important kharif crop in all the more sandy parts Bájra. c. the State and is largely grown in the Mohindargarh nizamat, where it is also sown in irrigated lands. It is sown as soon as the rain falls in Asar, about two sers going to a bigha. In the Mohindargarh nizamat it requires 4 or 5 ploughings as well as a hoeing in Sawan, but in other parts of the State it requires only one or two ploughings and is not hoed at all. It is reaped in Kétak, with the stalk in Mohindargarh and without it in the rest of the State. It yields 7 mans a bigha in Mohindargarh.

In the Mohindargarh nisamat joar is the main kharif crop and is Joan. sown in irrigated as well as in unirrigated lands, but in other parts it is generally sown on barani lands and used for fodder. It is sown

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CHAP. II, A. in Asir after 5 or 6 ploughings, about 24 sers of seed going to the bigha. For fodder 4 sers per kachchá bigha are sown. It is hoed as well as loosened by ploughing. It is reaped in Maghar. The average yield per bigha amounts to 5 mans. The fodder yield per bigha is 15 mans hachcha.

Kharif pulses.

The kharif pulses are moth, mung, mosh and guara. These are sown alone (narohe) as well as mixed with joar. Bajra and mung are also grown mixed with másh. Moth, cháwala, múng and guára are generally sown in the rausli and bhur soils, but mash is sown in dakar or rausli and sometimes on wells. These pulses are sown in Sawan and reaped in Katak. In the hills masar is grown as well as in Khadar plots in the spring. Til is sown in moth, mung or jour crops, but it is generally sown round a cotton crop. Guára is sown alone in the Jangal. An occasional field of alsi (linseed), hálon and metha is to be seen everywhere.

Rice.

Common rice is grown everywhere and the best rice in the hills. Satthi and dhan are sown and siri is planted. It requires a low land full of water (dabri and in the hills kiári). The soil is ploughed 4 or 5 times, commencing in Poh. At the time of sowing the land is ploughed with a plough which has a wooden share, and is levelled 3 or 4 times with the gahan. When the water becomes clean it is sown from Baisakh to Sawan, about 4 sers going to a bigha. It is heed once or twice, but siri requires more hoeings. It is reaped in Katak and yields from 11 to 3 mans a kachcha bigha. Ziri is planted in Sawan and reaped in Katak. Zīri vields 5 mans a kachcha bigha. In the hills begam, siri and jhinjhan are sown in kiáris from the middle of Asár to the middle of Sawan and cut in Katak. Rice is not sown in the parganas of Jabrot and Kaimlí.

Other crops.

There are no other crops which call for detailed mention. San is produced for agricultural purposes and sown in Asar. It is cut in the beginning of Katak and steeped in a village pond for 5 days, after which it is taken out and dried and the fibre separated from the stick. San and sankukra are generally sown round cotton and cane crops. Indigo is grown in the Bhawanigarh, Patiala, Narwana, Sirhind and Pail tahsils, the green crop being steeped in water and the dye made into balls after the usual native method. The poppy is grown in some villages of the Sirhind, Banúr and Páil tahsíls, and to some extent in the hills for post only. Kangni and china are usually grown on a small scale, but in bad years or when the price of grain is high they are more freely sown. Tobacco is grown on well lands. Chillies are planted in Aráin villages and are largely grown in the Sirhind, Patiála and Ghanaur tahsils. The yellow and red kinds are generally sown. The seedlings are planted in Asar, and picking continues from Katak to Poh. The yellow coloured mirch is largely exported and the red consumed locally. Garlie and onions are also grown. Saunf, coriander and ajwain are also grown by the Aráins. Fine water-melons are produced in the Jangal tract. In towns and in villages near towns, vegetables of all sorts, kharbusas and sweet potatoes (shakar-qandis) are grown on well lands. Potatoes and arbis are grown in the hills and the latter also in the plains, both to a smaller extent. Sanghárás (water-nuts) are sown in ponds. In the Mohindargarh risámat pála, a thorny-bush, grows spontaneously on bárání lands, the average produce being from one to two mans a bigha. It is an excellent fodder for cattle and fetches a good price. In the Jangal tract chúra (trefoil) is sown in Asauj for fodder only. Cattle are grazed on it during the months of Magh, Phagan and Chet.

Hill crops.

Mandwa or koda is sown in Baisakh after one ploughing in Bangar soil and is cut in Katak. In the hills, and indeed everywhere, poor people make chapátis of it. Báthú is sown like mandwa.

Kulthi is sown mixed with wheat. Ginger, turmeric and kacholi are CHAP, II, A. sown on kals in the month of Jeth in all pargands except that of Haripur. They require water every 5 or 6 days if rain does not Economic. fall. They are ready for digging in Maghar. Oghla is sown in AGRICULTURE. Jabrot in Bangar soil in the month of Asar. It is hoed twice and Hill crops. reaped in the middle of Katak. The hillmen make chapatis of oghla flour. It is also eaten on fast days by Hindus in the plains and called phalwar.

The prospects of extension of cultivation are not encouraging, Extension of The apparent waste of agricultural resources is due to the marked cultivation. inferiority of the soil and in the case of the Naili tract on the Ghaggar to the want of a steady and reliable rainfall. The State is already well served by railways, and there is little scope for the development of irrigation.

Agricultural calamities may be grouped under three heads: (1) scar- Calamities of city of rain which causes famine; (2) occasional pests; (3) animals season. and insects which destroy the crops. (1) A history of the famines is given in Section H below. (2) Agast or agath or jhola is a northerly wind which blows for a day or so about the 22nd of Bhádon and breaks maize stalks, cane and cotton. Frost (pála) injures sarson, cane and cotton very largely. Blight (due to cold winds from the north or west) causes great damage to wheat and barley when the grain is forming in the ear. Hail (ola) injures pulses, wheat, barley and gram. Lightning does occasional harm to cotton, pulses, gram and san, and sandstorms in the month of Phágan do great injury to the gram. Both indeed injure any crop when ripe or nearly so. (3) Black buck, pig and jackals do great injury to the crops, especially Animals and sugarcane. Locusts (tiddi) generally appear in Bhadon and Asauj. Sundi insects. is a green caterpillar which attacks the gram and sarson stalks; good rains in the cold season destroy this insect, otherwise its ravages among the unirrigated crops are severe. Young cane plants are destroyed by kansua and full grown by tela and pukhi (black and white insects). Whiteants (seonk) eat the roots of unirrigated rabi crops. Rain is fatal to all these insects. When clouds follow rain kungi appears on the wheat and barley heads, but a few days of sunshine remove it. Field rats also cause some damage. Rice is destroyed by katrú and būdha; a red insect destroys kharif crops, while the maha destroys pulses by an oil which it excretes.

The cultivators have various devices to protect their crops from Zamindárs destruction. They crect platforms resting on trees (manha) on arrangements to two-forked sticks struck in the ground and there they sit watching their fields, fie'd, shouting and shooting mud pellets from their gopias (slings). They also make scarecrows (darna) to frighten the animals and they light fires along their fields to keep away the pigs. Rákhás (watchmen) are also kept.

No accurate figures are available showing the number of live-stock in Live-stock. the State. Every one tries to conceal his cattle in order to make out his condition to be worse than it is. As there is not much public grazing land cattle are not generally bred by the samindars. In some villages big landowners have taken to cattle-breeding and in the Jangal tract fair stock is raised. The Bangar tract is suitable for cattle-breeding, but on account of the scarcity of grazing lands the people of the Bangar are growing poor. Though the people of the Jangal and Bangar use home-bred cattle for agricultural purposes, still large purchases are made from outside. The Mohin-

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CHAP. II, A. dargarh District is noted for bullocks and goats; bulls for breeding are imported. There are two big cattle fairs where 20,000 bullocks are sold every year. Draught and plough cattle are generally purchased from local dealers or the nearest markets. The draught and plough bullocks cost from Rs. 30 to Rs. 80 each. In the Jangal and the Mohindargarh District they generally cost from Rs. 50 to Rs. 80 and even Rs. 100. Camels are generally kept in the Jangal and the Mohindargarh District. They are used for draught, ploughing and riding. Plough camels cost about Rs. 60 each. Milch cows are generally kept by Dogars and Gujars. In villages and cities buffaloes and cows are kept for their milk. The cultivators make the milk into ghi before selling it. The Bangar was formerly noted for its cattle, but the supply from the Bangar is decreasing. The best cows cost from Rs. 40 to Rs. 60, and huffaloes from Rs. 80 to Rs. 100: ordinary cows only cost from Rs. 15 to Rs. 25, and buffaloes from Rs. 50 to Rs. 60. The goats and sheep are kept in almost every village for milk and wool respectively. Donkeys and mules are kept by potters and brick-makers. Pigs are kept in many villages by sweepers and Dhanaks. Fowls are also kept by sweepers. In the time of the Mughal emperors the Jangal produced fine horses and was famous for them, but now-a-days horse-breeding does not exist except in the Moti Bágh Stud at Patiála.

Discases.

The prevalent diseases among the cattle are (1) wabd or mari, an epidemic disease, which spreads among cattle. The majority of those affected die the day after the appearance of the symptoms. (2) Galgotii is a swelling in the throat, very fatal in its effects. The animal gives up taking food. Markhar, rora or chapla is the foot and mouth disease. It is an infectious disease, and though not fatal, it makes the cattle useless for a long time. For this disease the people bind kikar ká kas on the feet of the animal and make him eat a loaf of mash flour plastered with oil. Paralysis (ogu), diarrhoca (mok), choking (patta lagná) are other common diseases. (3) Nikála is a kind of boil which sometimes causes death. Gur, wine, the bark of the kikar tree and pepper juice are given.

Defects in caltie.

Almost all Hindu and a good many Muhammadan samindars avoid purchasing cattle if they are (1) black, (2) sat danta (having 7 teeth), (3) dhall talwar or hank pukar (having one horn upside down), (4) dhaul jibh (white tongued), and (6) ek mandla (wall-eyed).

Horse-breeding.

There is a breeding stud in Patiála belonging to the State. In 1903 the stock consisted of 5 horses, 1 pony, 3 donkeys and 25 mares. At the beginning of the year the young stock consisted of 23 fillies, 23 colts and 22 mules; during the year 19 foals were dropped. The stock disposed of during the year included 11 horses sold at a total of Rs. 2,985, and 16 mules sold for Rs. 4,760. One hundred and twenty-two mares from the Districts were covered during the year, and covering fees realised Rs. 218. The actual cost of the stud for all charges amounted to something under Rs. 22,000.

Irrigation.

Irrigation is effected by canals and wells, both kachchá and pakká. Masonry wells are worked with a bucket or Persian wheel, Jats using generally the bucket and Arains the Persian wheel, while some Kambohs and Sainis of the Banúr tahsil use the dhingli.

Irrigation by wells is carried on in the Pawadh and the parts of the Jangal tract adjoining it. In the Jangal, where the water is far below the surface, irrigation by wells is impossible. In the Mohindargarh nizamat wells are also used, though not on a large scale. The water of the Pawadh and Jangal wells is generally sweet and useful for cultivation. In Mohindargarh some of the wells are sweet, but others are brackish and

only useful after rain. Wells are usually from 15 to 40 haths deep; those CHAP. II, A. of the Jangal being sometimes 130 haths deep. They generally have one or two bidhas or kohirs, but there are some with 3 or 4 bidhas. The cost of construction varies according to the depth and size of a well. It may be AGRICULTURE. estimated at from Rs. 250 to Rs. 800. In most villages buckets (charsa) Irrigation. are used for raising water. These are worked by 4 men and 2 pairs of bullocks. The bucket is fastened to one end of a rope and the other end of the rope is attached to the yoke of the bullocks. The rope (lás) works over a wooden wheel or pulley (bhauni), raised a little above the well on a forked stick; when the bucket rises to the top, it is emptied into a reservoir (khel) by a man standing there for the purpose, repeating Bagge lîle jorî wâlia sohnia bhái bira, belî tera Râm aur Rabb hai—"O, beloved brave brother, with a pair of blue-white oxen, God is thy protector!" and other similar chants to warn the driver against the risk of loosing the rope from the yoke too soon. They can work for 3 or 4 hours at a stretch. The charsa costs nearly Rs. 30. It is very difficult to judge how much area can be irrigated by a well. It depends on the depth and capacity of the well and on the supply of water. The zamindurs say that a single bucket well can irrigate 4 or 5 bighas (kachchá) in one day. In the villages where sugarcane is largely grown and Porsian wheels. Aráins are cultivators there the Persian wheel (rahat) is generally used. Each requires 2 or 3 men and a pair of bullocks. A Persian wheel will irrigate a smaller area than a bucket well, but it is not so troublesome. The wheel costs about Rs. 25.

The opening of the Sirhind Canal has greatly mitigated the effects of Canal irrigation. droughts in the Jangal. The area irrigated by this canal naturally varies with the rainfall. The Western Jumna Canal irrigates 100 villages of the Narwana tahsil. A detailed account of canal irrigation in the State is given below.

#### CANALS.

The idea of irrigating Patiála territory from the Sutlej river Canala: originated with Mahárája Narindar Singh in 1861, and a survey was Sirhind Canal, made by Captain (afterwards General) Crofton in 1862 at his desire at the cost of the State. The project was however dropped for a time as the cost was considered prohibitive for the irrigation of such a limited area. A partial estimate for a combined British and Native States system was submitted by Captain (Colonel) Robert Home in 1869 and sanctioned by the Secretary of State in 1870. The closure of the account after construction took place on 31st March 1889. The three Native States-Patiála, Jind and Nábha-were associated in the construction, under the \*erms of an agreement executed on 18th February 1873. The Sirhind Canal was first estimated to command 4,027 square miles in British territory and 4,450 in that of the Native States, 2,970 square miles of the latter being in Patiala. This estimate was subsequently corrected on the completion of the system to 5,322 square miles in British territory and 2,998 square miles in the Native States, and on this the charges were debited in the proportion of-

				F	er cent.
British	***		***	***	64
Native S	tates	***	***	***	36
					-
			Total	199	100

Economic,

Each State contributed the cost of the construction of its own distributaries, and other charges were distributed amongst the States as under:—

AGRICULTURE, Sirbind Canal,

					Per cent.
Patiála	1999	***	200	***	83.6
Nábha	***	200	201	***	8.8
Jind		222	***	***	7.6

Total ... 100-0

These proportions are still adhered to. The total cost to the Patiála State up to the end of 1901 was Rs. 1,14,61,277. The water is shared between the British and Native States Branches in the proportions of 64 per cent. and 36 per cent., the 36 per cent. received in the First Feeder at Mánpur, in Patiála territory, being divided between the three States in the same proportion as given above, vis.—

				1	Per cent.
Patiála	***	666	5200	***	83.6
Nábha	***	127	110		8.8
Jind	***	***	***	***	7.6
			Total	***	100,0

The canal was originally designed as a navigable waterway. The main line of the Native States Branches from Manpur to Patiala is at present navigable. The Choá Branch from Rauní Regulator (6 miles 1,430 feet above Patiala) was to have been made navigable and continued on to meet the Western Jumna Canal. Fortunately the locks and extension were never constructed. Irrigation began on the Patiala Distributaries in the rabi crop of 1884-85. The Native States Branches take off at mile 39 of the Main Line, on which there is no irrigation. The feeder lines are in length approximately—

						Miles.
1	Feeder	***	***	44.0		18
11	Feeder	***	1.7.4	***		14
III	Feeder	***	***	***	***	9

the total length being 39 miles 4,514 feet. From the first feeder the Lisâra Rájbáhá takes off, and at Bharthala, the end of the first feeder, the Kotla Branch takes off. This is 98 miles 188 feet in length, and ends in a reservoir at Desu. There is a British Rájbáhá (Dabwálí) at the tail entitled to the escape vater. The Patiala Distributaries on this branch are the Máhorána, Sheron, Barnála, Longowál, Jagú Kotdunna, Bhíkhí, Bhainí, Ghuman, Talwandí, Jodhpur, Bangí, Rághowálá and Pakka. At the beginning of the second feeder the Rájbáhá Bhagwánpura takes off and at the end, at Rohtí, the Ghaggar Branch.

On the Ghaggar Branch the Patiála State Rájbáhás are the Bhawani- CHAP, II, A. garh, Newada, Nidampur, Ladbanjara, Kharial, Sunam, Kotra, Dialpura, Economic. the end of the third feeder, the Choá Branch and Patiála Navigation Agriculture. Channel bifurcate. On the Choá Branch the working rájbáhás of the Sirhind Canal, Patiéla State are the Samana and the Karamgarh. This branch tails into the Ghaggar Nála. The Navigation Channel has one rájbáhá taking off, known as the Baradarí Rájbáhá. It principally irrigates gardens around Patiála. The total length of the Patiála Distributaries as constructed is (in 5,000 feet miles)-

A large drainage line, known as the Sirhind Nala, is syphoned under the first feeder through 9 arches of 25 feet span. The present maximum discharge of the first feeder is 3,000 coaces, about 60 per cent. more than originally designed. A feature of the Sirhind Canal is the large extent of the distributary channels, the idea being to bring the water within the boundaries of each village in a Government channel. Under this system hardly any village water-courses pass through the lands of another village. The system greatly increases the canal officer's powers of control over the distribution. The minors were originally designed to run in groups, half at a time. For this reason double the number of pipes for a given area was allowed. This has lately been altered on the Patiála Distributaries. discharging capacities of the rájbáhás have been increased so as to allow the minors to run all together, and when there is not sufficient water in the branches to supply all the rajbahas at once, the rajbahas are run in groups.

The fixing of permanent outlets has now been begun. When they are all fixed, the irrigated area should become more regular, though the predominating cause of fluctuations of area is, of course, the rainfall, both as regards quantity and time of year. As noted by Mr. Higham, in the completion report of the Sirhind Canal, there is never likely to be the constant and intense demand on the Patiéla Branches that has arisen below the 50th mile of the British Branches. except on the tail rájbáhás of the Kotla Branch. A line drawn from the 50th mile of the Abohar Branch to the tail of the Ghaggar Branch just divides the Sirhind Canal into the two sections of fair and intense demand, owing to the nature of the country. Nearly all the enormous increase of irrigation on the British Branches has taken place below this line. The maintenance of the minors has up to now been in the hands of the samindars. This it was hoped would lead to economy, but the samindars hopelessly neglect the channels, and they have now been taken over by the State Canal Officers and should in future be far more efficient, as regards carrying capacity. An increase of irrigation, from this cause, may be hoped for. There is very little lift irrigation done. The average camindars prefers trusting to luck for sufficient rainfall to lifting water. The samindars are good cultivators, but quite incapable of arranging matters to the best advantage as to the distribution from their outlets amongst themselves. A man will take water when he can get it and put it in his field, though the crop may not want the water, and be damaged, rather than let another cultivator have it. The great hope for the Patiala Distributaries is a steady increase in high class kharif crops, such as maize, sugarcane and cotton, and a steady increase of kharif irrigation. The supply is at

Economic. AGRICULTURE. Sirhind Canal.

CHAP. II, A. times so low in the rabi season that the rajbahas barely get a ten-day turn per month. In consequence, when the season's rains are also unfavourable, a crop sown with a constant supply during sowing time cannot be brought to maturity and a large amount is ruined. A statement showing progress made in the increase of revenue is appended (A), another showing cost and income (B), and a copy of a report on the possible extension of irrigation to at present unirrigated tracts with a list of the bridges on the navigable portion of the canal (C). The State also receives irrigation from the British channels in the Bhatinda, Ludhiána and Ferozepore Divisions. A statement (D) shows the British Rájbáhás and the villages irrigated by them.

The Banur Inundation Canal,

There is one inundation canal in the Patiála State. This was constructed in the time of Mahárája Karm Singh, and much improved in the year 1915 in the time of Maharaja Mohindar Singh. It takes off from the right bank of the Ghaggar river about 5 or 6 miles above the old town of Banúr, from which it takes its name. It used at times of heavy flood to run (some 25 miles, as the crow flies) as far as Bahádurgarh Fort. But for some years it has not run below the 12th mile. In all probability its alignment might be improved. There is only one channel, and village khands or water-courses take off from it. Little irrigation is done in the kharif as in years of ordinary rainfall the country is mostly flooded; while in the rabithe supply falls so rapidly that the crops sown are difficult to mature, though, fortunately owing to the proximity of the hills and general flooding in the rainy season, crops do not need many actual waterings. Both flow and lift irrigation are used.

[ PART A.

109-134.

(A).

Statement showing areas irrigated and net revenue realized from Patiála
State Sirhind Canal.

CHAP. II, A.

Economic.

Arcas irrigated and revenue realized, Sirhind Canal.

			Area irri- gated, in acres.	Gross Revenue (collections).	Working Expenses.	Net Revenue.
			3	Rs.	Rs.	Rs.
end o	f 1883-84 (1940)	***	819		****	444
31	2884-85 (1941)	***	***	5,479	28,072	-22,593
ч	1885-86 (1942)	***	4.341	8,495	77,119	-68,712
м	1886-87 (1943)	***	47,920	26,504	1,71,390	-1,44,886
33	1887-88 (1944)	844	77,981	1,33,190	2,72,504	-1,39,314
$\vec{n}$	1888-89 (1945)		121,901	1,89,933	3.97,035	-2,07,102
22	1889-90 (1946)	***	131,841	3,40,014	3,67,537	-27,525
n	1890-91 (1947)		184,545	5,16,342	3,67,742	1,48,600
h	1891-92 (1948)		191,362	6,49.943	3,29,563	3,20 <sub>1</sub> 382
st	1892-93 (1949)		114,859	5,84,520	3,59,437	3,25,080
11	1893-94 (1950)	***	102,073	3,26,989	3.03,160	23,829
**	1894-95 (1931)		95,293	4,14,683	2,55,812	1,58,87
15	1895-96 (1952)	***	227,996	4,39,305	2,58,528	1,80,77
н	1896-97 (1953)		321,066	9.95,033	2,94,646	7,00,38
**	1897-98 (1954)	***	279,798	11,81,263	4,25,546	7,55,71
12	1898-99 (1955)	***	304,515	10,18,525	4,27,621	5,90,90
30	1899-1900 (1956)	411	372,599	13,66,795	3,85,864	9,20,84
19	1900-01 (1957)	***	199,081	11,48,244	3,94,527	7,53,717
	Total	***	2,777,151	93,85,079	51,16,103	42,68,976

CHAP. II, A.

Economic.

AGRICULTURE.

Capital outlay, Sirhind Canal. (B).

Statement showing Capital Outlay, Sirhind Canal, invested by Patiála State.

		Direct Capital Outlay during the year,	Direct Capital Outlay to end of the year.	Simple Interest Charges at 4 per cent. on Caphai Outlay to end of previous year plus § outlay daring the year.	Net Revenue (as per collimb V of State- ment No. IV).	Stupple Interestiuss Net Revanue.	Net Revenue less Simple Interest.
	1	Rs.	Rs.	Rs.	Rs.	Rs,	Rs.
To end of 1883-84 (1940)	***		89,42,530	19,67,336	***	19,67,356	66
, s884-85 (1941)		4,19,358	23,71,885	3,65,288	- 22,593	3,88,881	
1885-85 (1942)		5,49,116	59,27,004	3,85,938	- 68,714	4,54,572	114
1885-87 (1943)	1,000	8,23,171	1,07,44,175	4,13,304	- 1,44,886	5,58,190	***
1887-88 (1944)	444	3,24,044	1,10,68,219	4,35,248	- 1,39,314	5,75,569	***
,, 1888-89 (1945)	***	50,296	1,11,18,505	4,43,734	- 2,07,103	6,30,836	***
is 1889-00 (1946)	***	- 6,754	1,11,11,751	4,44,505	- 27,523	4,72,028	
» 1890·91 (1947)	400	3,49,525	1,14,61,177	4,51,460	I <sub>0</sub> 48,500	3,02,860	200
,, 1891-92 (1948)	***	- 8,955	1,14,59,317	4,58,630	3,20,382	E,38,348	565
11 1892-93 (1949)	100	- 17,706	1,14,34,605	4,57,738	3,25,083	1,33,655	100
# 1893-94 (1956)	***	63,231	1,14,97,817	4,58,640	23,829	4,34,820	10
in 1894-95 (1931)	***	46,574	1,15,44,411	4,60,865	1,58,871	3,07,974	+41
ss 1895-95 (1951)		8,589	1,15,53,000	4,61,948	1,80,777	2,81,171	***
1, 1898-97 (1953)	99	28,819	1,15,81,819	4,62,695	7,00,387	(100)	2,37,60
# 1897-98 (1954)	***	1,992	1,15,83,741	6,63,311	7,55,717	100	3,92,40
1898-99 (1955)		28,060	1,15,71,501	4,05,111	5,90,904	100	1,25,79
1895-1900 (1935)	200	3,693	7,16,75,494	4,00,946	9,30,841	-	45,89
49 190 <b>6-01</b> 1957)	***	24,386	r,16,99,880	4,67,507	7,53,717	***	3,55,21
38							-
Total		sie .	1,16,99,830	9,53,434	43,65,976	65,59,153	13,95,99
Belaceentotetest Charges etaudi g.	eut-	•••		(800)	**	1-8	52,63,15
Total	1120						***
10141	101	***		1000	***	27	65,50,15

(C).

List of Regulators and Bridges, etc., from Manpur to Patiala Navigation Channels.

CHAP. II, A.

Economic.

AGRICULTURE.

Regulators and Bridges, etc., Sirhind Canal.

	CE FROM		REGULA FALL, RA BRID	PIDS OR	
Canal miles.	Feet.	Name of work.	Number of spans.	Width of spans.	Remarks.
		1, II AND III FEEDERS,			
***	***	Månpur Regulator	202	444	
3	2,340	Foot Bridge, Maksúdra	2	45	£ 100 mm
4	2,700	Road Bridge, Ramnagar	3	33	
5	2,020	Foot Bridge, Ráno	2	45	
7	1,366	Foot Bridge, Dhamot	2	45	-
2	3,850	Dhamot Syphon	***	***	Total area of water-way = 27' square feet; width of each
8	1,400	Road Bridge, Dhamot	3	33	barrel = 10 feet.
9	2,484	Foot Bridge, Jandálí 🐝	2	45	
11	1,800	Lisára Syphon ***		444	Total area of water-way = 312 square feet; width of each
11	4,850	Road Bridge at Jargari	3	33	barrel = 15 feet.
13	4,982	Foot Bridge at Sirthla	2	45	
15	1,700	Sirthla Sypbon	088	***	Total area of water-way = 10 square feet; width of barrel =
15	4,514	Regulator for II Feeder	2	28	Kotla Branch takes off here.
19	940	Bhagwanpur Cart Bridge	2	29	
21	984	Mohlgwåra Foot Bridge	2	45	T-
21	1,612	Mohlgwára Syphon	***		Total area of water-way = 250 square feet; width of barre
23	800	Ghanawal Foot Bridge	1	50	== 10 feet.
24	1,190	Bhore Cart Bridge	2	29	

# CHAP. II. A.

List of Regulators and Bridges, etc., from Manpur to Patiala

Navigation Channels—concluded.

AGRICULTURE,

Regulators and Bridges, etc., Sirhind Canal.

	ce from		REGUL. FALL, RA BRIT	ATORS, PIDS OR OGES.	
Canal miles,	Feet.	Name of work.	Number of spans.	Width of spans.	Remarks.
		I, II AND III FERDERS-			19
26	1,590	Sirhind Nullah Syphon		***	Total area of water-way = 1,062 square feet; width of barrol = 25 feet.
28	624	Road Bridge, Kotlí	2	29	
29	2,140	Foot Bridge, Bhojo Májra	1	50	
31	1,650	Third Feeder, Head Regulator.		30	Ghaggar Branch takes off here.
32	1,614	Foot Bridge, Rohts	ī	45	
35	2,180	Road Bridge, Rakhra	ı	30	
36	580	Rakhra Syphon		***	Width of barrel = 7 feet.
38	3,376	Kallián Syphon		***	Total area of water-way = 390 square feet; width of barrel = 13 feet.
38	4,599	Foot Bridge, Kallian PATIALA NAVIGATION CHANNEL.	1	45	
***	350	Road Bridge, Rauni	ı	26	
3	2,110	Road Bridge, Ablowal	1	30	
4	3,550	Foot Draw Bridge		***	
4	4,600	Girder Cart Bridge	1	39'5	Built by Patiála State.
5	1,903	Railway Bridge, North- Western Railway.	1	39.6	Rájpura-Bhatinda line.
s	2,780	Road Bridge, Labori Gate	1	20	
5	4,750	Road Bridge, Sirhindf Gate.	τ	30	

Statement showing British Rajbahas irrigating Patiala State villages and their lengths in the State.

- 10	,										
DISTRI-	Total,						328			11 Jahren	
Average arrual irrigation bone prom each Distri- butary.	Rabí,					1200	14				
AVERAGE DONE P	Kharff.						1	-			
	Number of villages irrigated.					_	ęq				
	Total length of each Distributary.	Miles, Feet,					7 3,171				
ATE.	'0 83 A	Feet;	4,688	490	1,193	220	223	1,990	3,377	2,257	3,733
Lengih Lying Within State.	D):Ference of length,	Miles, Feet,	cs.	0	g	0	С	0	O.	0	н
LYING W		Feet.	4,688	4733	1,588	3,985	4,453	1,758	1,777	13	4,704
Lengih	ů.	Miles, Feet.	C2	153	91	10	10	10	30	12	64 65
, -		The each	FEI	4,242	395	3,765	4,249	4,768	3,400	2,756	146
	From	Miles, Feet,	Head	1.5	16	91	9.1	18	61	40	Et.
		ART.	:								
	Name of Distributary.	SARNA MAJOR DISTRIBUTARY.	Ŧ								
	or Dist	Majos D	1								
	NAME O		Direct								
	moisivtd to small	l &	Direct		,noi	eiviO	[ sbi	úżski	 a		-

CHAP. II, A

AGRICULTURE,

British Rájbábás irrigatiog Patiála State villages. PATIALA STATE. ]

Canals.

[ PART A.

CHAP. II, A.

Economic.

AGRICULTURE.

British Rájbáhás irrigating fatiála State villages.

Statement showing British Rusbands irrigating Patidla State villages and their lengths in the State-continued.

Ditte	TO 10 4	Sec. 111111111111111111111111111111111111				4 0 0				
HSTRI-	Total,			44			iri pe	359		83
Average annual trrigation done from each Distri- butary.	Rab£			ı	- 2-16.		1	12		:
AVERAGE DONE FI	Kharff			ī			:	ž	7.55	:
	Number of villages irrigated.			. C9			1	er)		CI
	Total length of each Distributary,	Miles, Feet,		090 %			2 93	2 2,333		9325
LERGIII LYING WITHIN STATS.	46	eë t	3,757	645	735	783	93	3,098	4,234	3,265
	Difference of length.	Miles. Feet,		0	٥	I	eş	+	0	0 3,265
		Feet	4,042	515	0/9/1	0	2,000	3,698	4,464	3,000
	To	Miles, Feet.	60	0	O	11	m	6.3	4	0
		Feet	245	4,870	935	4,217	1,907	009	230	4.735
	From	Miles, Feet.	ts	00	6	6	18	61	ti	c)
	). 	1		-		-15	*	3		i
	STRIBUTA	TRIBUTARY					I			:
	NAME OF DISTRIBUTARY.	SAHNA MAJOR DISTRIBUTARY-	Misson No. A.	ALLES AND ALLES			Minor No. 4 Branch	Minor No. 6		Minor No. 7

115

			31	ATI	- 1			Town I	C	ana								'AR	
		932		1		376	271	2.546			2,099	596	929	559	1,827	16	1,139	3	1,680
				;		1	:				;		į	i	4	1	ŧ	:	:
		1		2			:				1	Ī	:	ī	1	:	:	:	:
0	,	4		í		n	8				Ó	ès	CI	· (c)	C4	H	H	Ē	e).
		N N		1,733	-	4,439	2,000	1,405			2,713	1,500	4,500	6,450	1,006	200 200 200 200	4,000	492	2,500
		n		0	-		65	35		-	17	9	-	4	1/9	+	61	0	4
2,050	1,295	787	1,080	1,733	120	4,319	2,000			3,900	3.813	1,500	4,500	1,4553	900'1	233	4,000	492	2,500
0	o	1	63	0	D	E.	CA.	:		O/	1.	ψ	н	4	NO	÷	eq.	0	4
3,920	1 9,475	3 1,497	S 500	0 1,733	0 120	1 4.671	3 2,000	:		005'6 6	27 3,419	Tail	Do.	4 1,453	Tail 5	Tail	Ω0,	4 1,532	Tail
	0					ė.		1			10				الهرسا	ejes		6	
0 1,870	1 1,180	2 710	4 4,420	Head	Do.	0 352	Head	:		Head	19 4,605	Head	Do.	Do,	Do.	Do,	Do.	4 1,040	Head
ī				:	į		1	1	ARY.	1		ŧ	:	ŧ	ì	4	2	:	i
í				ŧ	1		Ĭ	Total	MARIBUT	1		3	ī	1	ŧ	ź	•	*	**
MARKET AND OFFE				Minor No. 8 Branch	Minor No. 9		Minor No. 1-A.		BRADAUR MAJON DISTRIBUTARY.	Direct ***		Minor No. 2	Minor No. 2	Minor No. 3	Misor No. 4	Minor No. 4 Branch	Minor No. 7-A.	Minor No. 8	Minor No. 9

CHAP. II. A,
Economic.
Agaicultura.
British Rájbáhás
irrigating Patiája
State villages.

PATIALA STATE. ]

Canals:

[ PART A.

CHAP. II, A.

Economic.

AGRICULTURE.

British Rájbáhás irrigating Patiála State villages,

Statement showing British Rajbathles arrigating Patidla State villages and their lengths in the State-continued.

n Sini	Jiniai j	W III PALLED S							1 2	AKI II
RIGATION DISTRI-	Total.		46	119	40	282	560	184	142	10,183
Average annual terigation pone yean butary.	Rabí.		:	ŧ	:	:	:	:	:	:
AVERAGE DONE 7	Kharif.		:	:		i	1	i	i	
	Number of of villages irrigated.		1		1	**	es	63	ю	:
		Feet	1,500	4,114	1.345	1,00,1	4,175	133	4,500	291
	Total length of each. Distributary,	Miles Feet	1	1	0	1	4	7	63	52
STATE.	10 pg	Feet.	1,500	4,114	1,345	1,061	4,115	133	4,500	
S NITHIN S	Difference of length.	Miles, Feet	1		0	н	4	н	C)	1
LENGTH LYING WITHIN STATE.		Feet		4,114	1,345	1,00,1	4,115			
LENGIR	To	Miles, Feet	Tail	¥	0	1	*	Tail	Do.	1
	From	Milas, Feet.	Head	Do.	Do.	Do.	Do.	Do.	Do,	***
		By T	i	9	E	Ĭ	:	:		1
	RIBUTARY	BHADAUR MAJOR DISTRIBUTARY-	ī	Ξ	i	į	ŧ	÷	:	Total
	NAME OF DISTRIBUTARY.		Minor No. 9 Branch	Minor No. 10	Minor No. 11	Minor No. 12	Newar Branch	Minor No. I	Minor No. 2	E

CHAP, II, A.

Economic.
AGRICULTURE.

Britisk Rájbáhás irrigating Patiála State villages,

AT	IÀ	LA	ST	ATE	. j					Canals.							[	PAR	Т
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	6555			*		i	:	:	141				5 476		:				
	c	¢.		1		63	69	×	f						01				
	1961			3,687		2,700	249	1,250	4,447						1,029				
	*	+		*		53	Ci	0	=						7				
4,000	7	\$,261 5	1,623	233	1,530	2,700	549	1,250		7.060	160	2,756	1,600	1,461	000	3,196	310	4,015	4.572
	•	63	0	0			<sup>+</sup> 61	0	:	61		0	0	0	0	0	0	1	9
4.000		6rB	1,250	1,888	3,500	3,500	1,593	1,350	1	3,463		1,929	4.450	1,995	2,752	2,000	860	2,388	1,139
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			i			i	ī		į	3.		-			-			-	
I			***			***	:	:	Totai	DISTRIBUTAR									
Direct			Badhata Minor			Minor No. 1	Minor No. 2	Minor No. 3		PHUL MAJOR DISTRIBUTARY,									

PATIALA STATE. ]

Canals.

[ PART A.

CHAP. II, A.

Economic.

AGRICULTURE.

British Rájbáhás irrigating Fatiála State villages,

State ment showing British Rajbahas irrigating Patiala State villages and their lengths in the State-continued.

	1									4.			
RIGATION DISTRI-	Total,			799	275	609	168	947	198	1,050	040		600
Average annual errigation denk from bach Distri- butary.	Rabí,		1500	1	;	:	:	:	3	:	1		1
AVERAGE DUNK FI	Kharif.				1	i	i	i	1	Ī	:		97.6
	Number of villages irrigated.			+	1	1	cq	a	1/3	CV	es		Н
		Feet,		1,240	4,925	4.460	1,000	2,500	2,000	3,000	000'1		2,703
	Total length of each Distributary.	Miles, Feet,		es .		н	eq	ø	භ	83	01		es
ATE.	8 4	Feet.	-	1,240	4,925	4,460	1,000	2,500	2,000	3,000	1,000	_	2,703
Евисти сугме мутши State.	Difference of length.	Miles, Feet.		ea	1	+	eq.	ব	63	63	ei		ci
LYING W		Feet.		1,240	3,625	3,000			18	7/20	-		1 300
Семети	E O	Miles.		C4	v	ee	Tail	Do.	Do.	Do.	Do.		r
		Feet		2	2,700	3,540							597
	From	Miles. Feet.		Head	64	0	Head	Do.	Do,	Do.	Do.		10
			norteld.	2	:	i	1	1	ŧ	:	***		1
	STRIBUTARY		*RIRUTARY-	ı	1		1	# # P	1	ž	:	Mehráj Eranch.	:
	NAKE OF DISTRIBUTARY.		PRUL Major Distributiony-concid.	Minor No. 1	Minor No. 5	Minor No. 6	Minor No. 7	Minor No. 12	Minor No. 13	Minor No. 14	M inor No. 15	Mehráj	Minor No. 8
	Name of Division.		-110				-			·pyu	03-	noisi	AIC

ATIAL	A S	TAT	e. ]					Cana	ls.		1					[ P	ART	A
1,023	620	217	11,700		ŧ	250	1000	645			5743,	)	696	712	1,616	1,410	494	10,934
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ŧ	1	ŧ			***	ŧ	:				***		I	:	:	i	1	
¥	es	1			ī	1	1				1.4		\$16	ex	νη	S	-	1
4,203	4,000	4,150	018,1		504	811	104	7.16			2,586		200	0	0	4,000	3,000	86
co	cs	0	44		0	1	0	~			50		4	£4	9	6	Н	47
2,953	4,000	4,150			504	118	104		100	799	116	[ 1/9'1	200	c	0	4,000	3,000	
0 8	es	0	1		D	ia.	0	1		0	16	7	M.	Ø	9	0	н	ŧ
8 3,000	Tail	Do.	1		22 3,236	3 1,488	0 3,000			1 4.196	154 454	26 1,903	Tail	Do.	Do.	Do.	Do.	
x 1,577 6 1,750	Head	Do.			22 2,732	1,370	0 2,836		-	1 3,397	2 348	18 4,532	Head	Do.	Do.	Do.	Do.	]:
i	i	:	ī	ARY.		F	ŧ		ARY.	i				:	i	1	1	:
i	i	urse	Total	Distribut	Ē	:	i	Total	DISTRIBUT	ŧ			1	i	:	:	į	Total
Tungwáli Branch	Minor No. 3	Phúsmandí water-course		Kot Bhai Major Distributary.	Direct	Díwán Branch	Sibián water-conrse		BATHMAN MAJOR DISTRIBUTARY.	Direct			Minor No. r	Minor No. 2	Niya Pind Branch	Ballúána Branch	Ballúsna Minor	95

CHAP. II, A.

AGRICULTURE.

British Rájbáhás irrigating Patiála State villages. PATIALA STATE. ]

Canals.

[ PART A.

CHAP. II, A.

Economic.

AGRICULTURE.

British Rájbáhás irrigating Patiála State villages.

Statement showing British Rabjahas irrigating Patiala State villages and their lengths in the State-continued.

			LENGTH LYING WITHIN STATE,	WITHIN STATE,		7	Average doke p	Average annual irrigation done from rach Distri- butary.	DISTRI-
NAME OF DISTRIBUTARY.		From	Ta	Difference of length.	Total length of each Distri- butary.	Number of villages intigated.	Kharif.	Rabi.	Total.
		Miles, Feet,	Miles. Feet,	Miles Feet.	Miles, Feet-			train 1	
BHATINDA MAJOR DISTRIBUTARY,	TARY,		Œ					DLIK	
Direct	2	3 1,798	18 1,195	13 4,397	13 4 397	60	ī	į	3,582
Bhatinda Minor	:	r 3,250	0 \$	2 1,750	2 1,750	-	Ē	:	594
Jai Singhwála Branch	Ī	Head	Tail	4 1,000	4 1,000	÷	1	i	216
Mehta Branch	1	Do.	Do.	12 2,000	12 2,000	00	:	ŧ	1,395
Total	1				39 4,147		1		6,287
TEORA MAJOR DISTRIBUTARY.	R.Y.								
Teona	ŧ	Head	0 1,000	000'1 0					1
		5 1,614	12 4,750	7 3,136	3 7 4,130	च	5	1	1,614
Mithri Branch	i	Head	0 508	0 508	~	-			
	_	1 0	2 375	1 375	5000	CH.	:	ŧ	273

597		308	TAT	194		0			als.	gho's		5693	1.1	[ PA	RT A.	CHAP. II, A
M	2,877	63	7		1,540	8,210		892	*	13		9			54.594	Economic Agriculture.
ì	i	ŧ	ī	i	4			ŧ	į			**	1		i	British Rájbáhá irrigating Patiál State villages.
1	:	1	÷	ŧ	1			Ī	į			ŧ			ı	
4	2	47	9		ະາ			C4	**			61	-	1	25	6)
0	3.240	3,000	4,000	4,000	3,000	2,259		4,828	621/	7		3,470	3,430	0005	1,754	
9	14	*	10	**	9	48		3	0	0		ci	0		272	
0	3,240	3,000	4,000	4,002	3,000			4,828	179			3.470	3.430			
w	71	¥	1/3	н	9			74	٥			en.	ò			9
Tail	16 1,972	Tail	Do.	Do.	Γο.			a 4,828	64 1 49			2 3470	0 3,430	1		
Head	1 3.732	Head	Do.	Do,	Do.	***		Head	Do.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Head	До,	:	ı	
	1	:	:	i	ŧ	1 1	gY.	i	ī	<u> </u>	·	:	i	:	F	
1	I	wald Branch	ditto	ditto	ŧ	Total	DISTRIBUTAL	. 9	i	Total .	DISTRIBUTAR	÷	I	Total	Divistors	
Bajak Branch	Domwala Branch	Minor No. 2, Domwálá Branch	Minor No. 3,	Minor No. 4,	Jangirána Minor		LALBHAI MAJOR DISTRIBUTARY.	Direct	Minor No. z		LAINEI MAJOR DISTRIBUTARY.	Direct	Min Branch		Total Ehatinda Division	

	122			U.		121 441
	PATIA	LA STA	TE.]	Canai	s.	
CHAP. II, A. Economic.		IGATION ISTRI-	Total.	1	303	1,749
AGRICULTURE, British Rájbáhás icrigating Patiála State villages,	the State-continued.	Average annual treigation bone from each Distributany.	Rabí,		808	995
	State-c	AVBRAGE DONE PI	Kharlf.		9110	754
			Number of villages irrigated,			63
	llages and their lengths in		Total length of each Distri- butary.	Miles, Feet.	\$ 1,610	7 1,240
	Hages a	SPATE.	gth.	s, Feet,	2,075 2,555	

Statement showing British Rajbahas irrigating Patiala State vil.

			LENOTE LYING WITHIN STATE.	WITHIN STATE.			AVSRAGE DONE P	Average annual irrigation bone from back Distributions	IGATION ISTRI-
Name of Distributary,	i	From	To	Difference of length.	Total length of each Distri- butary,	Number of villages irrigated,	Kharlf.	Rabí,	Total.
		Miles. Feet.	Miles, Feet.	Miles, Feet,	Miles, Feet.				
Ráota Major Distribulary	ŧ	17 3,230	22 4,840	5 1,610	019'1 \$	_	638	808	1,446
Minor No. 7, Méri Distribulary	ŧ		4 4,700		1 4,630	e .	911	187	303
		5 3,325		2000		,	_		
Tetal Ferozehore Division	1				7 1,240	63	754	995	1,749
ABOBAR BRANCH.									
Pakhowál Major Distributary	ŧ	Head	2 2,280	2 2,280	2 2,280	C8	:		136
BHATINDA BRANCH,	-								
Dehlon Major Distributary	i	0 250	0 650	2 848	699	-			er er
		0 4,820	1 268						>

[ PART A.

PATI	AL/	STA	TE.				0	anı	als.						[ ]	AR	r A.	
820		137	1,866	274	642	195	2,734	748	935	213	701	1,253	233	533	107	2,754	E Au	dap. II, conom
1		i	ı	ī	I		:		1	i	:	Ī	7		i	1	irri	tish Rájb: gating Pat te village:
1		1	1	***	- :	i	I	÷	:	Ė	i	:		i	ŧ		ł	
et		**	60	eı	E	rı	, gh	eg	5	n	*	L/3	6	64	CI.	IO	67	
2,580		1,134	2,855	4,000	2,000	3,000	4,060	3,000	2,000	0	2,500	2 500	2,125	3,000	0	4 500	4,000	
n		-	п	0	*	0	60	PN	4	es	*	to	eq	ы	63	12	4	
2,580		2,184	2,855	4,000	2,000	3,000	4,063	3,000	2,000	0	2,500	1,500	2,125	3,000	0	4,500	4,000	
60		н	11	0	н	0	90	61	10	61	*	60	OI .	44	ဗ	13	4	
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Tail o	125	Tall 8 2,613	Tail 13 15	Tail o 4,000	000'2 1	3,000	Tail 20 4.110	Tail 2 3 000	Tail 4 2,000	Tail	Tail 4 2,500	Tail 8 1,500	2 2,125	Tait 2 3,000	Tail o	Tail 13 4,500	Tail 4 4,000	
نبب		بب	بہا	بينا			-	,		-		فدروا		سب	-			0.0
0 3,430	0 4,675	7 \$79	1 2,160	Head	Do.	Do.	2 20	Head	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	Do.	
i	ŧ			:	:	ŧ	:	:	:	:	1	i	i	•	:	i	1	
1	Yo. S		Kaiás Major Distributary	Kalás Rajbáhá, Minor No. 1	Minor No. 2	Minor No. 3	Kalian Major Distributary	Kalian, Minor No. 1	Minor No. 2	Minor No. 3	Minor No. 4	Minor No. 5 ***	Minor No. 6	Minor No. 7	Minor No. 8	Kardr Branch of Kalian	Karúr, Minor No, 1	
Raikot, Minor No. 6	Do., Minor No. 8		Major D	Rajbah	Ditto,	Ditto,	n Majo	n, Min	Do., Min	Do., Min	Do., Min	Do., Min	Do., Min	Do, Min	Do, Mir	r Bran	r, Min	

CHAP, II, A.

Economic.

AGRICULTURE.

British Rájbáhás Irrigating Patiála State villages.

Statement showing British Rajbahas irrigating Patiala State villages and their lengths in the State-concluded.

A STAT	TE.	Cana	145,					- 1	PA
IGATION ISTRI-	Total		480	924	188	313	735	17,774	74,117
Average annual iprication done prok each Distri- butary.	R,bf.		1	I	2	1		ŧ	
AVERAGE DONE F	Kharif.		:	3	5	:		ı	
	Number of villages irrigated.		64	9	e	d	9	49	135
Or I	ngth istri-	Teet teet	000'3	3,000	3,000	0	2,000	1,433	4,426
	Total length of each Distri- butary.	Miles Feet	9	ক	es	en	9	801	387
TATE.	Jo 81	Feet.	2,000	3,000	3,000	0	000'8		
WITHIN S	Difference of length.	Miles	65	4	OI	6	9	I	
LENGTH LYING WITHIN STATE.	o H	Miles, Feet.	Tail 3	Tail 4 3,000	Tall 3 3000	Tail 3	fail 6 2,000	ı	1
	From	Miles, Feet,	Head	Do.	Do.	Do.	Do.	i	
			1	1	-	ŧ	1	!	
	RIBUTARY.	cs-candd	i	:	1	ŧ	1	es Division	GRAND TOTAL
	NAME OF DISTRIBUTARY,	BRATINDA BRANCH—concld.	Karár, Minor No. 2	Minor No. 3	Minor No. 4	Minor No. 5	Minor No. 6	Total Ludhidus Division	GRANI
		EQ	Karér,	Do.,	Do.,	000	Da,		
	ine of Division.	N		-		-	anàidh	ng.	

Norg. Totals by Divisions given in column 7 show the actual number of villages irrigated in each Division, and not the correct totals of figures given against each channel in that column, as a village irrigated from more than one channel is taken as a separate village against each channel.

Agricultural conditions in Nárnaul closely resemble those of Sirsa. CHAP. II. A. If the Sirsa Branch of the Western Jumna Canal could be extended to Nárnaul, this outlying tract of Patiála might be rendered secure. At present many wells in Narnaul have run dry, owing to the prolonged Ackieutture. drought with which the last century closed. There are also Famine Protecpossibilities of tank-storage in Narnaul, though Mr. Farrant is inclined tive Schemes. to mistrust them. Speaking of Famine Protective Schemes in general Mr. Farrant writes-

Economic.

There are several small tracts in the Patiála plains that require to be considered in connection with this subject of famine protection; but of these there are only two for which co-operation may be expected (and could be asked) from the Government. These are (a) the Nárnaul tract and (b) the portion of the Narwána tahsil that is situated east of the Ghaggar river and adjoins the Sirsa Branch irrigation. The other portions are small and isolated and could only be dealt with locally.

With regard to the Narnaul tract, it is evident from an examination of the map that any schemes for irrigation from a canal would have to form part of a project for the irrigation of the adjacent Districts of Rohtak and Gargaon. Such a project would have to be on a considerable scale, and would either consist of an extension of the existing Western Jumna Canal (which is improbable), or of a new canal from the Jumna river taking out above Delhi. As to whether such a scheme is possible, having regard to the physical features of the country, it is not possible to say here; but any such canal could only hope for a supply of water during the flood season, as there are already three canals fed from the Jumna-the Eastern and Western Jumna at Dádúpur, and the Agra Canal with its head-works at Okla below Deihi. It is evident then that any scheme for the protection of this tract by a monsoon canal would have to form part and parcel of a much larger scheme to be carried out by the British Government.

Nothing has been said about irrigation from tanks and wells, because these are after all only minor works in which the only assistance required of the Government would be in the matter of professional advice perhaps. Something will be mentioned further on regarding storage tanks and wells.

The only other matter requiring reference to the Government with a view to assistance is the possibility or otherwise of extending the irrigation of the Sirsa Branch to the tract of land lying between the northern boundary of the present irrigation and the Ghaggar river. There is also a small tract lying between the southern irrigation boundary and the boundary of the Jind State which is unprotected so far and to which it may be possible to extend the irrigation.

Besides the tract of Patiala territory referred to in the two preceding paragraphs, there are other small patches which feel the pinch of famine, but they are situated close to canal-irrigated country and are not in such urgent need for works of amelioration. At any rate such works would be local and such as would not depend upon the co-operation of the Government for their execution.

There is first the Sardólgarh tract situated on the left bank of the Ghaggar river, which thus cuts it off from irrigation by the Sirhind Canal. It is doubtful whether any irrigation could be done from wells except in the immediate neighbourhood of the Ghaggar, as the spring level is probably too low. This is, however, a
matter for enquiry. Further, any project for damming up the Ghaggar and storing
water, besides being very costly, would meet with disapproval from the Government,
and would raise thorny questions regarding the rights of the villages lower down
especially as canals have been taken out of this river near Sirsa. Then again the Ghaggar here runs in a fairly deep channel, and the greater portion of the water dammed up would be useless for irrigation as it could not command the country. The cost of a bye-wash to pass flood waters would alone be a very costly item.

The best way to irrigate this tract, if the levels permit, is to carry the water of the Boha Rájbáhá across in an iron tube syphon; if the levels permit this will be not only much less costly than any scheme for storage, but a perfectly sure preventive of famine, which a storage tank would not be

The next tract is that situated between the Ghaggar river and the irrigation boundary of the Ghaggar and Choa Branches of the Sirhind Canal. This is liable to inundation not only from the Ghaggar river itself but from the Choa nullah, is sparsely populated, and so close to irrigated country that it can never feel the pinch of famine very severely. Water for cattle can be had at no great distance-a very great advantage.

F PART A.

CHAP, II, A. Economic. AGRICULTURE.

Famine Protective Schemes.

Extensions could be made from the Karmgarh Rájbáhá into a portion of this tract, but no irrigation would be done in years of good flood, and the channels would be liable to be damaged. The circumstances are not so urgent as in the preceding case; and extensions of the canal system would have to be cautiously made.

For the country on the left bank of the Ghaggar and situated between it and the Sirsa Branch, if nothing can be done from the Sirsa Branch Canal as suggested above, it is possible that it may be supplied with water from the Karmgarh Rájbáhá, but levels would require to be taken. Even if the levels are favourable the scheme would be costly and would only be taken up after careful study of the whole question. Much might be done in the meantime to ameliorate the condition of the people by improving village tanks, taking care that there is sufficient catchment area for each.

The area near Patiála City and lying between the Patiála nullah and the Ghaggar is irrigated partly from the Banúr Canal and partly from cuts made from the Ghaggar. The wells are not deep either, and the country is safe. But the condition might be improved by improving the Banúr Canal alignment and taking the canal on to the watershed instead of passing it into the drainage line as has been done below Banúr. The canal could then serve more country.

To return now to Nárnaul. If this cannot be irrigated by a canal from the Jumna, either direct or from an extension of the Western Jumna Canal, recourse must be had to wells, wherever these are possible under the conditions or storage tanks. These cannot be undertaken without careful surveys and unless the conditions are favourable. These conditions are dealt with in the accompanying short note on storage tanks. It is probable that in the near future artesian wells will be tried for such tracts as this, but they will be costly, are always more or less speculative in character, and unless experts are employed in sinking them the result is sure to be disastrous.

To touch on some other points mentioned in Khalifa Sayyid Muhammad Hussain's notes. Nothing can be done with the Sirhind and Choa nullahs except perhaps improve their outfall and make them more effective as natural drainages. The country traversed by them below the feeder line at any rate is already irrigated by canals, and they are occasionally called upon to act as escapes for the canal,

With regard to the Sarsúti, correspondence is already pending with the Government on the subject, and nothing further need be said here.

Irrigation in the hills is already carried on extensively by means of ingeniously devised kuls; and any system of pipe irrigation is altogether too costly to be thought of until the demand for it is shown to be really urgent.

As the greater portion of the water due to light falls of rain is absorbed into the ground, and is rapidly lost by evaporation. it is unnecessary to take into consideration Rainfall. for storage purposes any rainfall outside

the monsoon months, July, August and September. The average for these months cannot be obtained for Narnaul itself, but for adjoining tracts the following have been taken from the Weather Reports of the Government of India:-

> ... 12'01 average 1st June to 30th September. Sirsa Bikáner ... 9'26 ditto ditto. Delhi ... 24'75 ditto ditto.

Average ... 15'34

Assume that 12 inches is the average for Nárnaul.

The catchment area will depend on the proportion of rainfall running off. In Mysore, where the monsoon rainfall is about 10 inches, the proportion of run off Catchment. is assumed to be 0'25 (Molesworth).

Mr. Binnie's observations for small rainfalls gave much smaller proportions for the Central Provinces. It is only possible to make a rough guess and to assume that for Nárnaul the ratio of run off will be one-sixth. That is, 2 inches will be available out of the 12 inches of rainfall for storage purposes.

One square mile of catchment then will yield 640 x } equals 106 67 feet acres of water; CHAP. II, A. A foot acre is simply a large unit of messure or put in another way, 6 acres of catchment and is equivalent to one acre covered one ment are required to give 1'o depth of Economic. foot deep, equals 43,560 cubic feet.

water per acre of the tank.

AGRICULTURE.

Assuming different depths of water in the storage tank, we have the following tive Schemes. table :-

Famine Protec-

			Depth o	f water in s	torage tank	Ε.,		Catchment requ per acre of tar	ired nk.
101	eet							60	acres.
15	ü	***	***	***	***	***	440	ga	10
00	ji.	44.6	***	***	***	***		120	94
25	iii	***	***	***	***	***	3.0	150	100
30	29	***	***	100	***	***	***	180	18
35				***	614	400	411	210	12

For a storage tank of one square mile (640 acres) and 20 feet deep, the catchment area required will be 640 x 120 acres, or 120 square miles. This question of catchment it will be seen imposes a limit on the size of the storage tank which must be adapted to the available area on which it is possible to collect the rainfall. In fact larger collecting areas will be necessary as the rainfall will be distributed over three months or so, and as there will be loss by evaporation and absorption in the tank and consumption of the water for irrigation purposes, it will readily be understood that smaller capacities in the reservoir will suffice.

This brings us to the question of the loss by evaporation and absorption. In Molesworth the loss of water in tanks in Raj-Evaporation and absorption. pótána is given as o'027 feet (average) per day all the year round. These depths appear to be very small according to experience on the Punjab Canals. On the other hand, it must be remembered that practically impervious soil is selected for building storage tanks on, and that to build one on more or less porous ground would be waste of money. Measurements in the hospital tank at Patiala gave the rate of sinkage at o'r feet per day, or from 3 to 4 times the above rates. In the escape channel at Patiála the rate was o'r to o'r feet per day. No one would think of constructing a storage tank on soil like this. In old established tanks the small rates of sinkage are doubtless accurate; but for present purposes a rate of sinkage of o'r feet per day or 3'o feet in the month should be allowed. Even this rate will probably be exceeded for some time in a new tank.

Now it is evident, the loss from evaporation and absorption being so heavys that the stored water should be used as quickly as possible. But here the difficulty that presents itself is this. In a good year of average monsoon rainfall there will be a full tank, but no demand for irrigation. The water will have to be kept till September or October for the rabl sowings and the loss will be very great. In a year of scanty rainfall the tank will not be full at any time perhaps, and certainly dry until good rain falls. If the rain is late no kharif could be sown, and the water would have to be stored for the rabi sowings. If the rains ceased early, on the other hand, the water stored could be used in maturing the kharif crops. In both these latter cases, however, the stored supply would be short. These three cases then will be considered-

- (1) Rainfall normal in quantity and distribution.
- (2) Rainfall late.
- (3) Rainfall ceases early.

CHAP, II, A.

Economic.

Famine Protective Schemes. The next point to settle is the distribution of the 12 inches of rainfall. This may be assumed to be practically as follows: -

June-	61	days	777.	1'00 i	nches
July -	31	**		4:50	20
August-	31		***	4.20	33
September	-20	33	4400	2'00	4.0
	92 (	days	410	12'00 i	nches

and further that in case (2) above the rainfall will be 5'5 inches in the first two months and in case (3) above 6'50 inches in the last two months.

Now in the case of normal rainfall (1) where the water must be stored for use in rabi sowings as the loss will be go feet vertical before the water is brought into use, and another 3 feet at least while irrigation is going on, or 12 feet in all, it would not be much use in having a catchment that will give a less depth than 200 feet gross, or 11 feet net.

Water used in irrigation

In this case the ratio water used in irrigation equals to equals this. A storage tank it's feet deep would be required then with a ratio of 120 to 1, the calculation being as follows:—

Month		Day.	RECEIVED F	ROM LOSS BY	Balance in	Total depth in tank at end of month,	
			Catchment, feet depth	Evaporation, feet depth.	tank storeds feet depth.		
June July August September		10 31 31 20	1.66 7.50 7.50 3.33	1 0.7 3 00 3 00 2 00	g 66 4*50 4*50 F33	n 65 516 966 1100	
Total	144	92	20'00	9 00	11'00		

In the above calculation it should be remembered that a catchment of 120 acres has been allowed per acre of storage tank. Similarly if double this or 240 acres of catchment per acre of storage were allowed the gross depth collected would be 400 feet and the net depth 49 equals 31 feet. That is to say, with this ratio of catchment the storage tank would have to hold 31 feet of water.

In the II feet tank above, with 8'o feet used for rabi sowings, 3 feet acres of irrigation would be done, or I foot acre for every I3 acres of catchment.

The deeper the tank the more the irrigation done, but on level country it would seldom be possible to get any great depth in a tank and still command the country. Another difficulty. In hilly country, on the other hand, the catchment area would probably be limited, and a very costly dam would be necessary to store any large quantity.

In this case of normal rainfall water stored for rabf sowings (which is all that could be attempted) a tank I square mile in area to hold II feet water net would require a catchment area of 120 square miles, and the area sown, allowing 0'75 depth (for irrigation and waste), will be  $640 \times 8 \times 4$  to equals 6,800 acres roughly. The crop would still be liable to failure if the winter rains were unfavourable. The cost of the bund, &c., would be about Rs. 3,00,000. Assuming 4 good years in 7, and a rate of Re. I per acre, the return would be  $\frac{4 \times 6 \sqrt{800}}{y}$  equals Rs. 3,000 about, or say Rs. 2,000 at most after deducting maintenance charges, equivalent to 0'67 rupee per cent.

In the other two cases the quantity stored with the same ratio of catchment to tank, vis., 120 to 1, would be still less, vis.—

The Land Take						and China
Rains late	+14	3.50	110	9.47	0.04	5.83
Rains stop ea	rly	5000	0007	40.0	1114	5.10

and the further losses before using the water being taken at 3 feet at least, the area irrigated would be 2.83 and 2.16 feet acres per acre of tank, or 1 foot acre for every

42 and 55 acres of catchment respectively. The returns will of course be proportionately CHAP, II. B.

To sum up, the assumptions are that --

Loss by evaporation and absorp-

Ratio of catchment to tank area ...

12 inches, distributed as stated. One-sixth.

One-tenth feet depth per day. 120 to 1, i.e., 120 acres of catchment per acre of tank.

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RENTS, WAGES AND PRICES.

Famine Protective Schemes.

Then the following depths may be stored :-

... 11'0 the conditions being favourable as ... 5'16 regards command; (a) Normal year (b) Rains late (c) Rains cease early ...

and the following areas may be sown, on an average of seven years:-

4×8× 4 equals 200 equals \* Average for (b) and (c) 21 feet acres, and 1 acre 42'67for every 17 acres of catchment. 3×8\*×\$ equals 10'00.

Total for 7 years equals 52'67 acres per acre of tank, or average equals 7 acres, say, per acre of tank.

In a tank of 1 square mile area (640 acres) the catchment will have to be 120 square miles, the cost of a bund will be about Rs. 3,00,000, the average area irrigated per year will be 4,480 acres, bringing in Rs. 4,480 gross revenue, or say Rs. 2,500 net, and a return of about o'8 rupee per cent. In fact it is doubtful whether the working expenses would be met as it is doubtful whether any crop sown could be matured. If this were the case, taking a 4 per cent, interest rate, it would mean that Rs. 12,000 a year were being given to the tract sown to enable it to try and raise a crop.

# Section B.-Rents, Wages and Prices.

Cash rents are very rare throughout the State. Even the tenants Rents. whose occupancy rights have been recognised generally pay kind rents at the same rates as tenants-at-will. These rates are much the same in ordinary villages held on the pattidári or bhaidchára tenures as they are in samindari villages, except that in the latter rents are raised by the imposition of various cesses. The landlord's share of the produce is sometimes as low as 4th, but for the whole State 4rd may roughly be said to be the average. One-fourth is common in the remote "Bangar" and "Jangal" tracts, lying to the south and west of Patiala. In the central region and is the prevailing rent rate, and in the sub-montane strip of country to the north and east of Patiala is common. Lands irrigated from wells generally pay at the higher rates, except in the dry areas to the west and south, where the soil is inferior, and the expenses of working wells very heavy.

Wages .- In towns wages are paid in cash and in villages in both cash Wages of labour. and kind. A coolie in Patiala may get as much as 6 annas a day, while in a Table 25 of Past village he would get 3 annas only. A carpenter earns from 8 to 12 annas a day in Patiala as against 4 to 5 annas and some food in the villages. Respers are paid in cash or kind, or both. Cash wages now vary from 6 to 12 annas according to the seasons. Wages in kind consist of a bundle of the cuttings-straw, grain and husk, weighing about 3 kachchá or 12 pakká maunds.

Prices. Prices seem to have risen 11 or 12 per cent, since Sambat Retailand whole-1847.

sale prices. Tables 26 and 28 (a) of Part B.

CHAP. II, C. Economic. FORESTS.

peasantry.

On the whole the agricultural population of the State is well off. Their mode of living is simple, their food plain. The houses are kept in good repair, and the plough and well cattle look healthy and There are parts of the State-the Mohindargarh fairly well fed. Prosperity of the nizumat, the Narwana, Rajpura, Ghanaur, and Pinjaur tahsils, and the pargana of Sardúlgarh-with no canal-irrigation and very few wells, where at times of scarcity there is a considerable amount of privation. But increased communications and the proximity of more favoured tracts has taken away from famine half its terrors. The improved condition of the peasantry is entirely the growth of recent years, and is due largely to the introduction of canals and railways, to the establishment of large grain marts, and to the better prices for agricultural produce that have followed the improvement in communications, The Jat of the Jangal is perhaps the most prosperous man in the State. His revenue is light, his land is newly irrigated, and his prosperity shows itself in pakká houses (a modern idea) and a profusion of jewellery. The Bángar Jat again is comfortably off. The Western Jumna Canal has transformed him from a shepherd and cowherd into a farmer. He avoids meat and alcohol, but is prone to greater extravagance on occasions of marriages and funerals than the Jat of the Jangal. The Pacháda and Bágri Jats, who are Muhammadans, have suffered from bad seasons and famine. The Pachádas are notorious for cattlelifting and extravagance, while the Bagri Jats, who emigrated from Bikaner in the famine of Sambat 1905, are honest and hardworking, The lat of the Pawadh has to work unceasingly to make a living out of his waterless land. The assessment here (now under revision) is comparatively heavy. The Rajput is not so well off as the Jat. He relies more on the money-lender; he is lazy and his women do no work in the fields. It is quite uncommon for a Rajput to keep a stock of grain. When he threshes his grain he hands it over to the bania and borrows it back from him as he wants it. The general rise in prosperity has been accompanied by a rise in the price of cattle and agricultural implements, but this hardly discounts the rise in the selling price of corn. Litigation is increasing, and the expenditure on marriages and the like is extravagant. In the hills the standard of living has always been lower, but here too it is rising, and the Kanet is fairly prosperous. He does a great trade in grass and firewood, while the hill stations provide him with a variety of occupations at a handsome wage.

# Section C.-Forests.

Forests.

The forest area in the State is 109 square miles, of which 72 are class. ed as first class demarcated forests and 37 as second class forests. These lie entirely in the hills, ranging from 8,000 feet above the sea to the foot-hills which rise from the Ambála plains at Rámgarh. The Dón extends from Ambala to Nalagarh. The country is broken and scored by ravines, while reckless denudation has reduced the forest trees to scrub and low jungle. The hill tracts proper are in contrast to the Dun. The smaller tract, which is about 9 square miles in extent, is an island in the middle of Keonthal State, lying to the south of the Phágú-Mahású ridge close to Simla. It is well wooded with oak (quercus dilata and semicarpifolia), deodar and pine. The larger hill tract extends over about 300 square miles to the south of the

Dhámí and Bhajií States till it merges in the Pinjaur Dán. Parts of this CHAP. II, E. tract are bare, parts covered with low scrub, and parts well wooded with oak (quercus incana) and pine. To the east of the Asni river, round Chail, a good sized mixed forest of pine, oak and deodár stretches across the ARTS AND upper slopes. There are forests of chil (Pinus longifolia) on the ridges between Dagshaf and the Dun, and also between Solon and Kasauli; while Forests. the Thádúgarh Hill to the south of Kasaulí is covered with a valuable stretch of bamboo.

Economic. MANUFACTURES,

The State forests have suffered severely from neglect. Until quite History. recently the villagers had full use of the forests without check or hindrance. The Dun has been entirely stripped, and it is only the comparatively late colonization of the Simla Hills that has saved the forests on this side. Even here large areas of forest were sacrificed by the peasantry to form grass rakhs whose produce they sold at great profit in the various cantonments near. The question of maintaining the sources of the fuel supply, both for the people and the hill stations, received attention in 1845 and probably earlier. In 1860 Lord William Hay directed the attention of the State to the urgent necessity of protecting its forests and husbanding their produce. Since that time the matter has never been entirely lost sight of. In 1861 a forest protective establishment was instituted. The forests were placed under the Civil nisamat, and between 1861 and 1870 many changes in the control tending to more effective management were carried out. British officers of the Forest Department made reports on the fuel supply in 1876 1878 and 1888. On receipt of a letter from the Punjab Government in 1879 the State took action, appointed a Superintendent of Forests, and introduced the Conservancy Rules proposed by Mr. Baden-Powell. This was really the first step towards effective management. In 1885 the present Názim of Forests, Pandit Sundar Lál, who had passed the Forest Ranger's test in the Imperial Forest School at Dera Dun, was appointed, and he at once stopped the reckless cutting for lime burning, charcoal making, &c. In 1890 a Forest Settlement was carried out by Mr. G. G. Minniken, who also prepared a Working Plan which was accepted by the Darbar. Besides the forests proper the State owns 12,000 acres of bir in the plains. Considerable quantities of kikar and dhak flourish in these birs, which are under the control of the Názim of Forests.

## Section D.—Mines and Minerals.

An account of the mineral resources of the State will be found Mines and mineon page 2 under the heading " Geology."

# Section E.—Arts and Manufactures.

The figures in the margin show the distribution of the whole popula- Principal industion into agriculturists, non-tries and manufactures. Actual Depend-Partially agriculturists and partially agriculmorkers. onts. turists. agriculturists. No statistics of Agriculturists ... 381,003 475,870 4,873 manufactures in the State can Non-agriculturists 312,678 487,141 be given. Patiála produces 4.873 Total ... 693,681 963.011 little of artistic interest. Silver cups are made at

Patiála and Nárnaul, and gold and silver buttons at Nárnaul. Gold and

Economic. COMMERCE AND

Principal indusfactures.

TRADE.

CHAP. II. F. silver wire is made from bars of silver (kandla) moulded in the State mint. Thin sheets of gold are wrapped round the silver to make gold wire, while for silver wire pure bar silver, with an alloy of copper to stiffen it, is used. The wire is then used in the manufacture of gold and silver lace (gota) which is said to be superior to that made in Delhi, though it is not so light as the best quality. Flattened wire (bádla) is woven with silk thread to make gota and twisted with it to make zari. Then again zari and silk thread are woven to make katún. Ivory bracelets, surmedánís (boxes for collyrium) and combs are made to a small extent. Páil is famous for carved door-frames. At the capital there is a large manufacture of brass and bell-metal ware and it is noted for its phul ke kaul (light cups). There is a large market for handsome bedsteads woven with cotton string. The silk azarbands, daryái (silk cloth) and chúria (striped silk) of Patiála are well known, and though the two last materials are inferior to those made in Amritsar, the first is quite as good. Bhadaur manufactures good bellmetal cups and brass ware, and is noted for its tukkas (sets of cups). Kanaud also manufactures these wares, as well as iron pans and spoons. Sunám excels in cotton pagris, khes and chautahis, a gold lace chautahi costing from Rs. 50 to Rs. 100. Súsi is manufactured at Patiála and Basí, the latter being very fine in quality. At Nárnaul country shoes, silver buttons and nut-crackers (sarota) are manufactured, and at Nárnaul and Samána páyas (legs) for beds are made. Páil makes elaborate country shoes. At Ghurúán and Chaunda iron dols (buckets) and pans are made, and at Rauni and Dhamot iron gágars or water-pots. Coarse cotton and woollen fabrics are manufactured throughout the State, and at Pinjaur baskets, stone kundis (pestles), ukhlis (mortars), chaunkis and sils (curry-stones). At Sanaur neat fans of date palm leaves are made. Country carts, baihlis, raths, and wheels are also made in some places, and raw sugar (gur and shakkar) in the Pawadh villages. In the Bet khand is manufactured. One pan only is used there, and the work is carried on on a small scale. Sajji is made in the Anahadgarh nisamat. There is a State workshop at Patiála, where repairs of every sort are done, and furniture and carriages are made. Iron work and painting is well done. There is a cotton-ginning factory at Narwana near the railway station. It was started in Sambat 1954 by Lúla Kanhaya Lál. It is worked by steam, generally in the cold weather, as cotton is obtained in these months. This factory exports nearly forty thousand maunds of cotton annually, the seed being consumed locally. In some parts of the State saltpetre is manufactured. There is a press called the Rajindar Press at Patiála, where a Vernacular paper (" Patiála Akhbár") is issued weekly. Some of the official printing, English and Urdu, for the State is done here, although most of it is done outside.

## Section F.—Commerce and Trade.

The surplus grain of the State, consisting of wheat, grain, barley, sarson, millet and pulse, is taken to the nearest railway station or market for export or sale. There is a considerable import of khand, shakkar and gur from the United Provinces. Cotton is exported from Narwana to Bombay. Red chillies are exported to Hathras and loaded at the nearest railway station. Country cotton yarn is also exported. Ghi is

exported from Narwana to the adjoining British Districts, but the CHAP. II. G. amount produced is not sufficient to meet the requirements of the State. Kali (whitewash) and chana (lime) are exported from Narnaul and Pinjaur. The grain marts in the State are Patiala, Dhuri, Barnala, Bhatinda MEANS OF COMand Narwana, but grain is also carried to the adjoining British marts and MUNICATION. to Nábha. y.

Economic. Commerce and

## Section G .- Means of Communication.

Four lines of rail pass through the State. The Raipura-Bhatinda line Railways. belongs to the Patiála State, but is worked by the North-Western Railway. The agreement was that "All costs, charges and expenses incurred by the North-Western Railway in connection with the maintenance, management, use and working of the Rájpura-Bhatinda Railway and the conveyance of traffic thereon properly chargeable to Revenue Account shall be paid out of the gross receipts of the amalgamated undertaking and so far as possible out of the gross receipts of the half year to which they are properly attributable, and in each half year there shall be deducted from the gross receipts of the Rájpura-Bhatinda Railway 55 per cent. of such gross receipts and the balance after making the said deduction shall be paid over to the Patiála Darbár." By a later agreement the amount to be deducted was reduced to 52 per cent, of the gross receipts. The principal stations are Rájpura, Patiála, Dhúrí, Mansurpur, Barnála, Tapa and Bhatinda. The Ludhiána-Dhúrí-Jákhal Railway has stations at Dhúrí and Sunám, while the Southern Punjab line passes through the south of the State with stations at Mánsa and Narwána. Bhatinda is a large junction, connecting with Ferozepore, Sirsa, Delhi, Samasata and Bikaner. The main line of the North-Western Railway goes north from Raipura, leaving the Patiála State at Sirhind. The Mohindargarh nizámat is 1 traversed by the Rewarf-Phulera Railway.

There are 1841 miles of metalled roads as detailed below, maintained Roads in plaise. by the State: -

- Patiála to Sunám, 43 miles, with branches to Sangrár at mile 24. and to Samána at mile 4.
- Patiála to Rájpura, 16½ miles, joining the Grand Trunk Road at Ráipura at mile to; a branch takes off to the Kaulí railway station. The only bridge of importance is over the Patiála Nálá at mile 2.
- 3. Basí to Sirhind, with branches to Bárá Sirhind, Amkhás, Gurdwára Sáhib, Bazár Basí and circular road round Basí, 9 miles. At mile 2 is an old bridge (bridge arches) built in the time of Muhammadan kings over the Sirhind Choá.
- 4. Patiala to Bhunnarheri, 81 miles. This road is chiefly maintained for shooting, but is also in line with the direct road to Kaithal. It is also largely used for grass and wood traffic from the surrounding villages and birs going to Patiála.
- 5. Patiála to Majál, 41 miles. This branches off from mile 3 of Patiála-Bhunnarherí Road. This road is also for shooting parties, and for grass and wood traffic.

Economic.

 Patiála to Sanaur, 4 miles. There is a large bridge in mile 1 over the Patiála Nálá. This road carries heavy passenger and grain traffic.

MEANS OF COM-MUNICATION. Roads in plains.

- 7. Nábha to Kotla Road. Total length 18 miles, of which 8 miles lie in Patiála State.
- Barnála-Dhanaula Road. Total 6½ miles, of which 3¼ miles lie in Patiála. This is a feeder road to the railway.
- Patiála-Nábha Road, 13 miles. This is at present maintained for the State by the Irrigation Department.
- to Ablowal Road, 4½ miles. This is a road from the railway station to Ablowal bridge, parallel to the south bank of the Patiala Navigation Channel. It is an alternative road to the one running parallel to the north bank of Patiala Navigation Channel, as the road on one bank is not able to cope with the traffic.
- 11. Nábha-Bhawánígarh Road. Of this road 5 miles lie in Patiála State. It is a feeder line from nisámat Bhawánígarh to Nábha.
- 12. Branch road from mile 4 of Sunám-Samána road. This is 14 miles in length, total distance to Samána being 18 miles.
- 13. Kotla-Sangrúr Road, 11 miles, which lies in Patiála State.
  - 14. Barnála-Hadiáya Road, a feeder road, 41 miles in length.
  - 15. Patiála City Roads, 10 miles.
  - 16. Patiála Civil Station Roads, 15 miles.
  - 17. Patiéla Cantonment Roads, 31 miles.
  - 18. Motibágh and sides, 1 mile.
  - 19. Báradarí-Rájbáhá Road, 3 miles.
  - 20. Ablowál bridge to Báradarí, 11 miles.
  - 21. North-Western Railway Approach Roads, 2 miles.

Besides, the following roads are now being metalled:-

- Basí-Alampur Road, 5 miles. This continues through British territory to Rúpar. Government is also metalling the portion in its own territory.
- 2. Jákhal-Múnak Road, 4 miles. Feeder road to Jákhal railway station.

- A- -

3. Bhatinda-Mandi Roads, 3 miles.

PART A.

The following unmetalled roads are maintained by the State :-

CHAP. II, G.

(a) Múlepur Road, 5 miles. Joins Grand Trunk Road at Serái Banjárá and leads to Mulepur.

Economic.

(b) Tangauri Road, 12 miles. Forms part of the District road from MUNICATION. Ambála to Rúpar.

MRANS OF COM-

(c) Banúr-Rájpura Road, 9 miles. This is now being bridged, and eventually it is intended to metal it.

Roads in plains.

- (d) Ghanaur Road, 8 miles, from Sambhu railway station to Ghanaur.
- (e) Chaparsíl Road, 3 miles. Branches off from the Patiála-Rájpura Road in mile 6 to Chaparsil, where a fair is held annually.
  - (f) Alampur Road, 5 miles. Now being metalled.
  - (g) Ghuruán Road, 3 miles.
  - (h) Khamánon Road, o miles.
  - (i) Ghagga-Samána Road, 15 miles.
  - (i) Hadiyáya-Bhíkhí Road, 16 miles.
  - (k) Jákhal-Múnak Road, 4 miles,
  - (7) Nárnaul to Kánaud, 13 miles.
  - (m) Kánaud to Basí, 11 miles.

Total 113 miles.

In the hills, the metalled road from Ambála to Simla, which is maintained throughout by the Punjab Government, runs for great part of its length through the Patiála State.

The following roads in the hills are maintained by the Patiála State: - Roads in bills.

- 1. Kandeghát-Cháil, 221 miles. Crossing the Asní river in mile 8, a large bridge of one span 110' clear is now under construction. Chail is the sanitarium of the State, about 7,300 feet above sea level.
  - 2. Kandeghát Bázár to Srínagar Kothí, 1 mile,
- 3. Sáírí Road. Direct road from Kasaulí to Simla viá Sáírí: portion maintained by the State, 15 miles.
  - 4. Jutogh-Arki Road, 51 miles.
  - Dagsháí-Náhan Road, 41 miles.
  - Mamlik-Kunhiár Road, border of Sáírí Road, 4 miles.
  - 7. Pinjaur-Nålagarh Road, 104 miles.
  - Sabáthú-Kasaulí-Kálka Road, 14 míles.
  - Cháil Municipal Roads, 5 miles.

Total 80 miles 7 furlongs.

Road I will admit of cart traffic after the Asni bridge is built; all the other roads are mule or rickshaw paths. A road from Chail to Kufri, about 16 miles, has lately been made and opens direct traffic with the Hindústán-Tibet Road and Simla. The total annual cost of maintenance of roads in the Patiála State is at present about one lakh of rupees per annum. The Sirhind Canal is navigable from Rupar to Patiala. Country produce is conveyed to the railway in carts or on camels and donkeys.

There are serdis at the principal towns and railway stations and List of restdåk bungalows at Patiála and Bhatinda.

bouses. Table 29 of Part B. Polymetrical Table No. 30 of Part B.

CHAP. II, H.

#### POSTAL ARRANGEMENTS.

Economic.

FAMINE.

Post Offices.
List of Post
Offices, Table 3;
Working of Post
Offices, Table 32
of Port B.

Originally the postal arrangements of Patiála were confined to the conveyance of official communications which were carried by sowars and harkarás retained in the various sadr offices at a total cost of over Rs. 30,000 yearly, and no facilities were offered to the public for the exchange of their private correspondence. In Sambat 1917 (1860 A.D.) in the reign of Mahárája Sir Narindar Singh, G.C.S.I., the postal system was organized under the control of the munshikhana (Foreign Office). Runners' lines were laid between various thanas of the State, and the public allowed to post letters at these thanas at a charge of two Mansuri paisas per letter prepaid, four Mansúri paisas unpaid. A special officer on a salary of Rs. 30 per mensem was appointed by the munshikhana as munsarim of the postal arrangements. The postal service was given out on contract to one Ganga Ram, who undertook the appointment of the runners, and sarbaráhs or overseers. All postal articles were made over to the runners, who were responsible to the Deputy Superintendents of Police; these officials received the moneys paid for postage from the runners, and remitted them monthly to the treasury, where the balance, after paying the amount due by contract to the State, was handed over to the contractor. The method of payment of postage was by British stamps bought by the contractor at their face value and retailed by him. Stamps used on public service were registered and their value credited to the contractor. Postal articles for British India were despatched already stamped through Rajpura, where a clerk was stationed who delivered them to the British Post Office, paying the usual rates. Similarly articles from British territory were despatched by a clerk stationed at Nárnaul. There were no facilities for money orders, insurance, or other minor branches of postal business. In Sambat 1940 (1884 A. D.) a Postal Convention was signed between the Imperial Government and the State (Aitchison's Treaties, Volume IX, No. XXX), which was modified in 1900 A. D. By this agreement a mutual exchange of correspondence, parcels, money orders and Indian postal notes was established between the Imperial Post Office and the Patiála State Post, registered value payable and insured articles being included. Stamps surcharged with the words "Patiala State" are supplied by the British Government to the Patiala State at cost price and are recognized by the Imperial Post Office when attached to inland correspondence posted within the limits of the State. When the convention was signed the late Lála Hukam Chand and Lála Gaurísbankar of the Punjab Postal Department were lent to the State as Postmaster-General and Postmaster of Patiála, respectively, to re-organise the postal system of the State. Lala Hukam Chand was succeeded as Postmaster-General by Lála Raghbir Chand in Sambat 1951 (1894 A.D.). By an agreement of 14th August 1872, the British Government agreed to construct for the State a single line of wire (on the standards between Ambala and Lahore) from Ambala to Rájpura, and thence to Patiála at a cost of Rs. 15,500, the Mahárája agreeing to pay the actual cost of construction and of the maintenance of the line and the office at Patiála. The receipts are credited to the State under clause 6 of the agreement. The officials are to be natives in the British Telegraph staff. The Telegraph Act (VIII of 1860) and any other Acts passed are to be applied to the lines, and jurisdiction with regard to offences against the Act is regulated by the sanad of May 5th, 1860.

# Section H .- Famine.

From the general description of the physical conditions of the State it will be clear that the results of a failure of the rainfall are very different in different parts of the State. In the Bet and Pawadh, where there are

numerous wells, and in the Jangal and Bangar which are protected by CHAP. II, H. canals, the effect of deficient rainfall is not very serious. In the parganas of Sardúlgarh, Akalgarh, the Nailí, Narwina tahsil and the nisamat of Mohindargarh, where there are few wells and no canals, a deficiency of rain FAMINE.

has a serious effect on the crops and causes famine. Pamines. The earliest famine of which men talk is that of Sambat 1840; known 1783 A.D. as the chálla or chalisa. This was a terrible famine which lasted for more than two years. The people could not get grain and lost their lives either from want of grain or from sickness brought on by bad food, and most of the people left their homes. The next famine was in Sambat 1869; it is 1812 A.D. known as the dhauna or the famine of 20 sers. It lasted for 8 or 9 months. Both harvests failed and the people suffered heavily. The nabia was the famine of Sambat 1890. Both harvests failed, and the 1833 A.D. price of grain rose to 38 sers kachchá per rupee in the course of the famine, the rate before it having been 4 maunds per rupec. Sambat 1894 also brought a famine, but it was not so severe. In Sambat 1905 1848 A.D. there was also scarcity in the Jangal tract. The famine of Sambat 1917, commonly called the sathhra, was a severe one. Both harvests 1860 A.D. falled and the rate rose from 3 maunds kachcha to 17 or 20 sers kachcha. Three lakhs and thirty-one thousand maunds (pakká) of grain were distributed by the State to its subjects, and Rs. 3.75 000 of land revenue remitted in the famine-stricken areas; relief works were also opened, State employés and others were allowed grain at low rates and the value deducted from their pay in instalments after the famine had ceased, The famine of Sambat 1925 was felt throughout the State. It is commonly 1868 A.D. called the pachia. Though the crops on wells were good, prices rose to 25 sers kachchá. In Sambat 1934 famine was felt all over the State. No 1877 A.D. rain fell in Sawan, and there was no crop on unirrigated lands. The Bangar and the Mohindargarh nizimal suffered severely. Collections of land revenue were suspended, but recovered next year. As in Mohindargarhi the people did not recover from the severe effects of the famine, relief works were opened there. In Sambat 1940 also there was a scarcity 1883 A.D. of grain, but it was not serious and did not affect the whole State. The famine of Sambat 1953 made its effects felt on every part of the 1897 A.D. State. Rain fell in Sawan, and crops were sown, but dried up for want of rain. The rate rose to 8 sers pakká per rupee. Takáví to the amount of Rs. 10,000 was distributed in Anahadgarh and Mohindargarh. Reliet works comprised a kachchá road from Barnála to Bhikhí, which, employed 2,312 persons and cost Rs. 36,400; repairs to the forts at Bhatinda and Ghuram (Rs. 4,914); and additions to the mausoleum of Mahárája Alá Singh (Rs. 37,800). Grain to the value of Rs. 14,864 was distributed and blankets to the value of Rs. 7,000. The American Mission also distributed grain with assistance from the State. In Sunám a charitable institution (sadábart) fed 80 persons taily. The total expenditure on relief works came to Rs. 1,97,830. The famine of Sambat 1956 was severely felt throughout the State, but 1900 A D: more especially in Sardúlgarh, Narwána, Akálgarh, Sunám, Bhawánígarh and Mohindargarh. The year was rainless, following a succession of bad harvests, and the grain famine was aggravated by a water famine in Sardúlgarb and a fodder famine everywhere. Twenty-eight villages were affect. ed in Anshadgarh, 281 in Mohindargarh and 104 in Karmgarh. Lála Bhagwan Das, the Diwan (now Member of Council), was made Central Famine Officer, with assistants, as prescribed in the Punjab Famine Code. Poor-houses and kitchens were opened -the poor-house at Patiala has never been closed—and relief works on a large scale were started. As in the former 1900 A D.

lamine, rich men came forward and subscribed largely to the Famine Fund.

CHAP. II, H. FAMINE. Famines.

The relief works, which were various and of no permanent importance, were Economic. kept open from January to September, and gratuitous relief was given till December. 10,395 were employed, on an average, every month on relief works, while 5,270 were relieved gratuitously. The total expenditure was Rs. 3.81,722. Land revenue was suspended to the amount of Rs. 2,58,715. while Rs. 2,02,208 were remitted in Mohindargarh.

Patiála poorhouse,

In connection with the famine relief operations a kitchen was first started in the Samadhan at Patiala at a cost of Rs. 150 per day. Subsequently, on the 1st Baisakh 1957, a poor-house was established on the lines of the Famine Code in Ablowal, near Patiala, under the control of Lála Bhagwán Dás and the direct supervision of Abd-ul-Hakim Khán, M B , Assistant Surgeon, and the relief was strictly regulated according to the Code. The average weekly number relieved in the kitchen was highest in Phágan (3,939), and in the poor-house at the end of Baisákh (2,465). After Asauj 15th the poor began to leave the poor-house, so that the inmates fell to 304 early in Kátak and to 228 in Maghar. The total cost of the kitchen in the Samadhan and of the Ablowal poor house was Rs. 27,115 from Phágan 1st, 1956, to Maghar 17th, 1957. Of this Rs. 24,465 were spent on food, Rs. 1,446 on establishment, Rs. 40 on clothes, and Rs 802 on miscellaneous items. The railway fares of 61 persons were paid by the State to enable them to return to their homes, in addition to 333 who were sent back to Bikaner and Hissar without cost to the State and 738 residents of less distant localities who were sent home on foot with three days' food. Large numbers left the poor-house of their own accord without giving information as to their homes. There were many opium-eaters among the poor, the daily number for the week ending 13th Baisakh 1957 being 87, and they were induced to take large quantities of food and reduce their doses of opium, with the result that only two opium-eaters remained on the 1st Katak 1957. As the opium was reduced by degrees no bad effect on their health resulted. The numbers in the poor-house on the 10th Maghar 1957 were as follows: - Hindus 38 (of whom 33 were inhabitants of the State), Muhammadans 44 (31 of the State), Chuhras and Chamars 34 (22 of the State) ; and 38 in the hospital (14 of the State). There was no case of cholcra, and only 12 cases with 4 deaths from small-pox, 235 cases with 8 deaths from dysentery and 301 cases with 13 deaths from fever. Thus out of 3,929 in-door and out-door patients only 46 died and the rest were discharged cured. The average daily number of in-door and out door patients was 91'30. Except malarial fever no disease broke out in the poor-house, and the general health of the inmates was good. A school was opened for the children. All who were able to work were given light work according to their strength. As the number of compartments was small, they were made to build more with bricks made with their own hands. They were also made to twist cord and make charpais for the sick among them. As no help was rendered by the police or army, respectable famine stricken men were employed as sepoys on annas to per day, and they worked very satisfactorily.

# CHAPTER III.-ADMINISTRATIVE.



# Section A.-Administrative Departments.

During the minority of the Maharaja the State is administered by a Council of Regency consisting of three members. There are Administrafour High Departments of State, the Finance Department (Diwani tive. M. 1) ; the Foreign Office (Munshi Khuna); the Judicial Department Auministrative (Adalat Sadr); and the Military Department (Bakshi Khana). The DEFARIMENTS. Finance Minister-Diwan-in the early days of the State had full Government powers in all matters connected with the land revenue and the treasury. officials. He decided land cases and was sometimes allowed to farm the land Table 33 of revenue. Maharaja Karm Singh put a stop to this practice and organised Part B. the Financial Department. The Diwan is now the appellate Court in revenue cases, and all matters of revenue and finance are submitted to him. The Foreign Minister-Mir Munshi-transacts all business with other Governments, signs agreements, contracts, etc., and conducts the external affairs of the State. The Judicial Minister-Adálati-is a recent creation, dating from the reign of Mahárája Karm Singh. The Commander-in-Chief-Bakhshi-formerly combined the duties of Paymaster with his own, but the office now is purely military 1 Maharaja Rajindar Singh created a Chief Court of three members to hear appeals from the decisions of the Finance, Judicial and Foreign Ministers.

CHAP. III, A.

The State of Patiala is now divided into five nisamats or Districts, Administrative and these nizamats are each sub-divided into, on an average, three tahs is, Divisions. there being in all sixteen tabsils in the State. The Nizamats and Tabsils are :-

#### Nizamats.

### Tahsils.

1. Karmgarh, also called place its head-quarters } are.

(1. Patiála, also called the Chaurásí, in the Pawadh.

Bhawanigarh, at which J 2. Bhawanigarh or Dhodhan, partly in the Pawadh and partly in the Jangal.

3. Sunám, mostly in the Jangal.

4. Narwána, comprising the Bángar.

I The Bakksht.-This officer's title is translated into English sometimes by Paymaster-General, at others by Adjutant-General or Commander-in-Crief. Blochmann, Ain, I. 261, has Paymaster and Adjutant General. None of these titles gives an exact idea of his functions. He was not a Paymaster, except in the sense that he usually suggested the rank to which a man should be appointed or promoted, and perhaps countersigned the pay bills. But the actual disbursement of pay belonged to other departments. Adjutant General is somewhat nearer to correctness. Commander in Chief he was not. He might be sent on a campaign in supreme command; and if neither emperor, vicegerent (wakil-i mutlak), nor chief minister (wakir) was present, the command fell to him. But the only true Commander-in-Chef was the emperor himself replaced in his absence by the wakil or wastr. The word Bakbshi means 'the giver' from P. bakhshidan, 'to bestow,' that is, he was the giver of the gift of employment in camps and armies (Dastor-ul-Insha, 232). In Persia the same official was styled. 'The Petitioner' ('áris). This name indicates that it was his special business to bring into the presence of the emperor any one seeking for employment or promotion, and there to state the facts connected with that man's case. Probably the use of the words Mir 'Arz in two places in the Ain i Akbari (Blochmann, I. 257, 259) are instances of the Persian name being applied to the officer afterwards called a Bashshi The first Bakhshi (for there were four) seems to have received, almost as of right, the title of Amir ul-Umara (Noble of Nobles); and from the reign of Alamgir onwards, I fied no instance of this title being granted to more than one man at a time, though in Akbar's reign such appears to have been the case (Ain. I. 240. Blockmann's note). (From an article In the Journal of Royal Asiatic Society, 1896, pages 539-40, by W. Irvine, on the Army of the Moghals).

CHAP. III, A.

Administrative.

ADMINISTRATIVE DEPARTMENTS.

Administrative Divisions.

Nieamuts.

Tahsils.

Amargarh, also called Basí, at which place its₹ head-quarters are.

1. Fatehgarh or Sirhind, in the Pawadh. 2 Amargarh, in the Jangal, also known as Dhúrí, where the present tahsíl headquarters are.

3. Sáhibgarh, also called Páil, where the head-quarters are, mainly in the Jangal and partly in the Pawadh.

 Anshadgarh, also called (1. Anshadgarh, Barnala, at which place 2. Govindgarh or Bhatinda, 5 in the Jangal, its head-quarters are. (3. Bhikhi,

4. Finjaur

... { Rájpura, } in the Pawádh ... { Shanaur, } in the Himálayán area.

the Narnaul called nizamat.

5. Mohindargarh, popularly (1. Mohindargarh, also called Kanaud, from the name of the old fort and town at which its head-quarters are.

2. Narnaul.

Of these five nisamats the first three comprise all the main portion of the State, and Pinjaur also includes the detached part of the State which lies in the Simla Hills and forms tabsil Pinjaur. The nizamat of Pinjaur however is mainly composed of the Pawadh tract, which forms the northeastern part of the main portion of the State. The nisamot of Amargarh comprises the rest of the Pawadh (Fatehgarh and part of Sahibgarh tabsils), and the northern part of the Jangal tract (the remainder of Sahibgarh and the whole of Amargarh tahsils). Karmgarh Nizamat comprises the south central part of the main portion of the State, including the tabsil of Narwana which lies in the Bangar tract south of the Ghaggar. Anahadgarh medmat lies wholly in the Jangal and Mohindargarh in the Bagar. Mohindargarh consists of the outlying block of Patiala territory, which is really a part of the Rewat on the borders of Rajphtana. The head-quarters staff of each nisamat consists of a Nazim, two Naib-Nazims, and a Tahsildar in charge of the head-quarters tabsi'. Nazims date from the reign of Mahárája Narindar Singh, when, under the name of Munsarim hadbast, they were appointed to introduce cash assessments. The Nazim is practically a Deputy Commissioner with the powers of a Sessions Judge in addition. He hears all the appeals of his Naib-Nazims and Tabs'ldars, whether civil, criminal or revenue. Karmgarh and Amargarh nisámats have each two Náib-Názims; Anáhadgarh has three, - two at Barnála and one at Bhatinda; Mohindargarh one, posted at Nárnaul; and Pinjaur two-at Rájpura and Sanaur. The Naib-Nazim is the court of original jurisdiction, both civil and criminal, the Tabsildar having criminal jurisdiction in a few petty cases only. The Tahsildir is the court of original jurisdiction in revenue cases, and as criminal powers in cases falling under Sections 425 and 441-447 of the Indian Penal Code. The Tahsilder of Pinjaur has the powers-civil and criminal-of a Naib-Nazim. The Tahsildars have no civil cases and hardly eny criminal. Hence they work with a small establishment, consisting of a Sidha-navis, an Ahlmad and two Mudwan Sidha-navis. Only the Tahsildar