

CHAP. II, C.

Section C.—Mines and Mineral Resources.

Mines and
Mineral
Resources.

Kankar.

140. *Kankar* is found abundantly in most parts of the district at a distance of only 2 or 3 feet below the surface. Both the *bichwā kankar* or nodules is found and the solid block *bhātā kankar*. Licenses to extract it are given to private individuals on payment of annas 8 per 100 cubic feet of *kankar* dug, and to Government contractors and local bodies at annas 4 per 100 hundred cubic feet.

Salt.

141. Salt is still manufactured in the Jhajjar *tahsil* at Zahidpur or Asadpur (so called, to distinguish it from another Zahidpur, after the title Asad-ud-doulat of the Nawab Faiz Muhammad Khan who did much to encourage the industry). The works form a part of the cluster of manufactories known as the Sultanpur Mahal, which are spread over an area of about 20 square miles. There are now only four manufactories in the Gurgāon border, and Zahidpur; the last of the Delhi works, at Mubarikpur, adjoining the Jhajjar *tahsil*, having shared the fate of the Silanah works in Jhajjar and been lately closed down. Sultanpur salt is of fair quality and an analysis of the Zahidpur product made in 1905 showed it to contain 93.6 of sodium chloride as compared with 96 or 97 per cent. in Liverpool salt, but it cannot compete with the better Sambhar salt and the industry is rapidly decaying. Once there are said to have been 104 brine wells at work; in 1879 there were 20; by 1906 the number had sunk to seven and in the following year fewer still were worked. The average annual outturn of salt which was 121,000 maunds in the seven years ending 1880 sank to 92,000 in the following three and to 8,400 maunds only in 1906-07, while the price apart from duty has sunk from Re. 0-9-8 in 1878 to 3 annas the maund in 1907.

The salt is made exclusively from natural brine, the supply of which seems inexhaustible, as some of the works have existed apparently for 200 years, and no deterioration is observable. The brine is evaporated by solar heat in shallow *chunam* lime pans, which vary from 200 × 60 feet, to only 50 × 30, and in depth from 8 to 10 inches. To each well is attached one or more sets of pans, each set consisting on an average of about nine pans, so arranged that there is a slight fall from each pan into the one next beyond it. When, after the annual repairs, which take place about February immediately after the *Holi*, the pans are all in order, the highest is filled with brine from the well, and the brine is allowed to stand there for one, two or more days, according to the season and the weather, the period being shorter in the hot and longer in the cold weather. After thus standing, the brine is run into the second pan, the first being refilled and then from the second to the third pan and so on, until the brine reaches the last pan but one, and there it is allowed to remain, receiving perhaps

one or two accessions from its predecessor, until a commencement of crystallization is observed, when it is at once turned into the last pan and crystallization allowed to proceed. This is the most delicate part of the process; if the best salt is to be made and at the same time none wasted, the progress of the deposit (for the crystals form on the floor of the pans) must be closely watched. Up to a certain period nothing but edible salt is deposited; after that other allied salts begin to drop, and the edible salt must then be at once removed, and the mother liquor, of which no further use is made, run off: otherwise, especially at some works, the gross products of evaporation taken as a whole are bitter and uneatable. Not more than about six inches depth of brine at most is run into the first pan, and it is reduced to half that quantity, or even less, before it reaches the last but one pan. When the brine has sufficiently concentrated to be transferred to the crystallizing pan, the manufacturer skims the surface of it (taking care not to disturb the sediment) with some flat-curved instrument, usually a cow's rib bone, with which he succeeds in removing all the lighter impurities, together with leaves, straw, and the like that may have settled on the brine. In the cold weather the salt rarely crystallizes under a month from the date the brine is drawn, but in the hot weather a period of ten or fifteen days suffices.

The works are enclosed in a thick double cactus hedge and cover an area of about 20 acres, collectively known as the *āgur*. They have fallen entirely into the hands of *baniyas* and the professional manufacturers; the *āgris* are now merely labourers, earning the scanty pittance of 2 annas a day. In past days the ground rents were a source of large profit to the village owners, whose assessment in 1879 included Rs. 459 on this account, but for many years now nothing whatever has been recovered.

The brine is about 30 feet below the surface of the ground and some 15 feet in depth.

Besides the excise duty of Re. 1 per maund, a '*hakimi cess*' or royalty of 3 pies per rupee of duty is taken on Zahidpur salt.

142. Raw saltpetre is extracted in a number of villages, on payment of Rs. 2 license fee for each set of pans, royalty being demanded by the owners of the village from the actual workers. There are two saltpetre refineries, in Jhajjar and Sampla, for each of which a fee of Rs. 50 is taken.

Saltpetre.

The saltpetre is extracted from the impregnated soil in the neighbourhood of human habitations. It is treated with well water in a series of pans much in the same way as edible salt is manufactured. Refined saltpetre is similarly extracted from the raw product.

143. Useful building stone is found in the quartzite hills of Guriani, and the neighbouring villages.

Stone.

CHAP. II, D.

Section D.—Arts and manufactures.

Arts and
manu-
factures.Leather
workers.

144. Rohtak is pre-eminently a rural district and though nearly every village has its *khati* or *barhi* (carpenter) and *lohar* (blacksmith), its potter, its *chamars* (cobblers) and *jalahas* (weavers) and the common processes of cleaning, spinning and weaving cotton, of making shoes and thongs, the beds, carts and agricultural implements, the clothes and earthen vessels used by the people, may be everywhere observed, there is little in the industries of the district that deserves special note. The figures for castes and occupations will be found in tables 15 and 17 respectively.

The *chamar* of this tract of country is far more than a worker in leather. After Jats and Brahmans he forms the most numerous caste in the district, he is the indispensable agricultural labourer, and the village cooli or *begari* ('fag') and is as often a weaver as a worker in leather. When he tans at all he generally only rough tans the hides with a preparation of lime and soda and then sends them to Delhi to be properly cured. The real tanning of the district is mostly in the hands of the *khatiks* who numbered only 1,019 in the census of 1901. They preserve the skins of goats and sheep alone and dispose of them locally to the *chamars*. The skin after being soaked for a day or two in water is stretched on a frame on the ground, and then treated with a paste of *jowar* flour, crude salt and the juice of the *ak* (*calotropis procera*) plant. The skin is then put twice after intervals of four or five days into water and the hair scraped off, and lastly put for a few days into an earthen vessel containing a solution of lac and then rubbed over with salt and pulverized *kikar* bark (*acacia arabica*). The skin is ready for sale in fifteen days in the cold weather, but cannot be cured under a month in the hot season. The maximum price fetched is about Rs. 2.

Kalanaur was at one time famous for its saddlery which was made of bullock hide and highly decorated by the insertion of strips of different colours. Many of the native cavalry used to procure their equipment here, but the manufactories of Cawnpore and the adoption of a severer style of saddlery have driven the Kalanaur products out of the market, and the industry is practically decayed.

Pottery.

145. The pottery of Jhajjar which in the exhibition of 1864 was described as the best unglazed collection of the province, and figured again in the exhibition of 1909, is superior to the usual productions of the village *kumhar* (potter), being finer and better finished and showing some originality in colouring and design. The clay which is dug from one of the tanks near the city is dark grey and very tenacious and the chief colouring matters used are *bani*, a red clay largely obtained from Guriani in the same *tahsil* and applied before baking, and a mixture of *kikar*, gum and mica, the latter of which is fetched from the hill near Mahrouli in Delhi. They mak

excellent *surahis* (flagons), and sometimes mix in the clay saltpetre with a view to keeping the water cooler. Besides the vessels in common use by the people they also make butter-coolers, teapots, flower-pots, small toys and fancy vases. A peculiar product is the *sangpair* or foot-scraper, a small clay strigil with a rough surface which is effected by covering the surface with *bajra* grains which fall out after baking. Were Jhajjar more accessible by rail there would be a better market for this industry, but isolated as it is, excellent *surahis* are sold for no more than 3 or 6 pies each.

CHAP. II. D.

Arts and
Manu-
factures.

Rough coloured toys, such as are sold at fairs, are made in Gohana and Rohtak.

Good small bricks are baked in the district, the usual price being 1,000 per rupee. A considerable quantity of these are exported from Bahadurgarh and carried in camel carts to Delhi.

146. Of the ordinary hand-processes of cotton ginning and skutching, spinning and weaving no detailed account is necessary, for they are well known and fully described in several works. Reference may be made especially to Mr. Silberrad's monograph on "Cotton fabrics of the North-West Provinces" (U. P.). The ginning is done in every house in the small roller mill known as *charkhi* or *belna*, by the women of the family and in the case of *banigas* and other mercantile classes by the men as well.

Cotton
manufactures,
Cloth.

When the seed has been separated, the cotton is made over to the *penja* or *dhuania*, who is generally a *teli* or other Muham-madan, to clean it and separate the strands with his bowstring (*pinjan*). The spinning is entirely done by women and girls who may be seen at any spare time and especially in the evening seated together in some open space without distinction of caste, spinning the cotton on the wheel (*charkha*). The weaving is done by the *dhunaks*, *chamars* and *julahas*. The warp is first stretched by the women and children, and cleaned with a big brush (*rachh*) by the men who then stretch it on the loom (*kadi*) and weave in the woof.

The coarsest cloths used for men's clothing is called *khadar* or *kharbás* and sells for 20 yards to the rupee; a better quality is *painsi*; it is half as broad again as *khadar*, but only 8 yards are sold to the rupee. *Chaunsi* or *deoti* is closer and heavier than either of these: though very narrow, it costs five pice a yard. *Khes* is a heavy closely woven cloth used as a blanket. Its breadth is three-quarters of a yard and about 8 yards are sold for a rupee. Bedding on which to lie is made of the same quality, but ornamented with a pattern in colour. It is called *dotahi*.

But besides these common cloths, which are to a considerable extent giving place to machine-made piece-goods of European and Indian make, the town of Rohtak is celebrated for muslin

CHAP. II, D. turbans interwoven with gold and silver thread and for muslin of a particularly fine texture called *tanzeb* or "body adorning," which Mr. Lockwood Kipling considered to be the best produced in the province. This industry (itself dependant on machine-spun thread) has suffered by the death of its chief craftsman, Munawar-ud-din, but still more from competition with machine-woven cloth which must ultimately kill it entirely. There are now only two families employed in it.

Arts and
Manu-
factures.

Dyeing and
stamping.

147. Dyeing was once a speciality of Jhajjar and in by-gone exhibitions collections of country dyes sent from the district have shown a remarkable range of colour, but now aniline dyes, which are at once cheaper and less tedious to apply, have swept all away excepting indigo which is regarded more as a convenient disguise for dirt than as a colour. It is time and atmosphere rather than the inherent taste and skill of the Indians that have produced those delicate blends of colour which are associated in England with oriental taste. Some of the restorations lately undertaken in Agra, and of the modern work done in Rajahs' palaces show that Indian taste delights in every vivid and bright colour and that the crude contrasts so produced are not merely due to the demoralizing effect of European example. The aniline dyes afford an opportunity never before presented of gratifying this taste, though some of the most beautiful colours are now reckoned unlucky by Hindus, whose scale of auspiciousness begins with bright orange and goes through every variety of salmon and rose colour through scarlets and crimson to magenta. The greens in popular favour are a violent apple green and emerald green and the only blue that is really liked is the raw and crude Chinese blue of European colour-makers. As aniline dyes can be equally well applied everywhere there is now little export of dyed cloth from Jhajjar.

Cloth-stamping, as opposed to dyeing, is done by the *chhimba* caste in many villages. The cloth to be decorated is first washed in water and then steeped in a solution containing pounded *māwi* and *hāra* and after dyeing again immersed in a solution containing gum and alum when women's clothes are to be printed, and *guri*, gum and iron-dust in the case of floor cloth-quilts, etc. The dyed cloth is slightly damped again before the printing is done. This is effected with carved *shisham* wood dies made by the village carpenter and called *sāncha* or *chhāpa*. Gum is an important ingredient in all the colours employed. The work is not of much artistic value and it is chiefly done for local use.

Work in
stone and
wood.

148. Many of the village houses have well-carved door frames, though the work seldom shows originality. The masonry houses are often fine and some really delicate work is to be seen on some of the newer houses in Ahalana and particularly on the Jain

temple in Rohtak. The masonry *chaupals* of the village and many of the *shivals* are distinctive and handsome and Beri is famous for its masons. The ordinary village carpenter is a rough worker but his work is substantial. The country carts for instance are very strong as they needs must be to work on the bad roads of the district. Of late years an industry has sprung up in Rohtak of carving from a solid block of *shisham* closely folding tripods. These vary in height from a couple of inches to 3 feet or so, and are often well finished with heads of tigers, ducks, etc. Four and even five legs will be carved from one piece of wood. Lately an eight-legged specimen was produced. There is considerable demand for these and three or four families make a good living by the work. Exceedingly inferior articles of the same description are turned out by the Jalandhar and Hoshiarpur mistris in Simla. They have lately appeared in the Delhi market also.

CHAP. II, D.
Arts and
Manu-
factures.

149. The *thathiar* like the kettle-mender in England, may be constantly seen going his rounds between the villages and tinkering up the old pots and pans. His work needs no notice, but in the village of Nagar, a suburb of Gohana, there is a considerable manufacture of vessels of this sort. The census of 1901 returned 184 men as engaged in this trade (the figures by the way are not correctly added and the result is unreliable), of whom the bulk probably belong to Nagar. The workmen who are mostly Muhammadans are seldom men of capital but are financed by local Baniyas who advance them a maund of metal or Rs. 20 or so as wages, and the average remuneration allowed is 4 annas *per diem* a head.

Workers in
copper and
brass.

Copper vessels are chiefly used by Muhammadans but they often prefer brass or bell metal (*kansī*) owing to the difficulty of getting the former tinned, and the copper vessels used in the district are imported mainly from Delhi and Panipat while the raw metal is brought from Bhiwani to Nagar for conversion into brass pots. These are either made from old brass vessels bought up in the villages at the rate of Rs. 15 the maund or by uniting copper and zinc in the proportion of 24 : 16. The articles chiefly made are *lotas*, *bantas* (large vessels for water) and *katoras* (cups), and they are made by pouring the molten metal over baked earthen moulds. In the case of *lotas* and *bantas*, two moulds are required owing to the reversed curves for the upper and lower halves and these have to be subsequently soldered together and polished. The *katoras* are finished on a rough lathe.

So called bell metal or white-brass, known as *kansī* or *phul*, is worked in exactly the same way, the amalgam being of copper and tin in the proportion of 40 : 11 for best and 40 : 8 for second quality. The articles made of this metal are *katoras*, *thals* and *thalis* (big and

CHAP. II, D. small trays) and *ghariats* or gongs, but only the first require a mould while the other two are hammered out. The quality of the *Nagar kansī* is highly esteemed and the vessels are said not to sour food so rapidly as the manufactures of other districts. About Rs. 4,000 worth of this ware was reported to be made at Nagar in 1907 and about Rs. 500 worth of brass vessels of which only one third were retained for local consumption. The exports are mostly to Sonapat and Panipat.

Gold and
silver manu-
factures.

150. There is a great deal of silver and no little gold jewellery worn by both sexes in the district, the bulk of which is locally made. The work is all in the hands of *sunars* who are almost entirely Hindus. The general character of the work is somewhat massive and barbaric but the effect especially of the various arm ornaments worn by women is by no means inelegant. In the east of the district some jewellery is produced of a quality that finds a ready sale in Delhi, but the bulk of the *sunars* only make ornaments to the order of their local clients. A study of the many forms of the ornaments is interesting, and will often tell the religion of the owner and in a woman's case her civil condition, whether she is single or married, whether she has yet joined her husband in his house or not. It was estimated in the district monograph furnished in 1889 that the value of the annual import of raw gold and silver respectively reached Rs. 1,60,000 and Rs. 8,60,000, and that the net profit earned by the *sunars* of the district in working this into ornaments was not short of a lakh of rupees.

Glass bangles.

151. An enormous quantity of glass bangles is worn in the district, for women of every class and caste delight in them, and it is with sorrow that a widow has to break them off her wrists. The bulk of them are imported from Meerut and Panipat, but they are also made in Dawalah in the Jhajjar *tahsil* where there is a colony of some 50 families of *kacheras* engaged in the industry. The *kach* or rough slag glass, from which these people derive their name and their trade, is produced by smelting an alkaline earth found in Gurgaon, Muthra and elsewhere, and stocked in most bazars. It comes in three colours, the raw muddy green politely called white, dark brownish black, and yellow, and the *kachera* makes a fourth, red, by mixing 3 *chitaks* of copper to the maund of raw *kach*. His materials cost him about an *anna a ser*, and a *ser* produces about 80 bangles which are reeled off on a spindle after melting the slag in a furnace. As he sells them to the retailing *maniar* at 1,000 the rupee, his profits are of the scantiest and indeed seldom exceed two or three annas a day. There is a third class the *lakhera*, who often only sells bangles as the *maniar* does, but sometimes further decorates them with lac, whence his name.

152. There are now seven factories in the district (locally known as *penchh*). Of these one each at Rohtak, Sampla and Bahadurgarh are for cotton ginning only, and the remaining four at Rohtak for ginning and pressing. A soap manufactory at Rohtak came to an untimely end. Except for one factory which has two engines, all are worked by single engines, whose horse-power varies from 19 to 175. The average daily number of adult persons employed in all factories is 751 (male 436, female 315) and of children four. The operatives are mainly *chamars*, *dhanaks* and other menials drawn from the villages in the immediate neighbourhood of the factories. Their material condition is slightly above that of their fellow castemen.

CHAP. II, D.

Arts and
Manu-
factures.Factory in-
dustries.

Section E.—Commerce and Trade.

153. The trade of the district is chiefly in raw sugar, grain, *ghi*, cotton and hides. The cotton is mostly disposed of either direct to the mills at Rohtak or to banias who act as middlemen in connection with the local mills or with others in the Punjab. Of the sugar a great quantity goes by road to Bhiwani and is there disposed of to banias though much is bought up locally and put on the railway, whence it largely goes to Cawnpore and Sind. The great traders of the district are the banias of Beri and of Rohtak Mandi although small middlemen exist in most villages. The hide trade is chiefly in the hands of the butchers. Barter still survives amongst the small vegetable growers who hawk their produce round the villages and towns in exchange for an equal weight of grain.

General
nature of
trade of the
district.

154. The following figures, in even thousands of maunds, give the goods traffic at Rohtak station for the last four years :—

Rail-borne
trade.

Year.	INWARD.		OUTWARD.	
	Total.	Grain and pulses.	Total.	Grain and pulses.
1907	11,555	745	551	155
1908	1,000	578	612	112
1909	1,142	755	440	186
1910	752	370	371	104

The nature of the traffic varies of course from time to time with the needs of the district, the proportion of grain imported being very high in a famine year, though railway returns are

CHAP. II. E
Commerce
and Trade.

delusive as a famine year starting with a failure of the monsoon is not coincident with a calendar year. The figures for these four years however show that not only did Rohtak import much more grain and pulse than it exported in each year, but it imported a greater maundage of every kind. The explanation of this phenomenon appears to be three-fold. In the first place a considerable quantity of sugar is, as already stated, exported by road to Bhiwani and so excluded from the figures. In the second place the figures for grain and pulse include cotton-seed, and owing to the large number of stall-fed cattle in the district, the consumption of this commodity is far in excess of the local production. Thirdly, the principle exports are valuable out of proportion to their weight and bulk, *e.g.*, cotton, hides, *ghi*, and raw sugar. These are all weight for weight more valuable than grain. On the other hand, the imported articles not produced at all in the district as cloth, stone, iron, wood, oil, all weigh very heavy. The following figures compare the imports and exports at Rohtak station for cotton, *ghi*, hides and raw sugar (even thousands of maunds):—

Year.	COTTON.		GHI.		HIDES.		RAW SUGAR.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
1896	57	69	2	6	1	1	36	29
1897	10	52	7	4	1	1	37	217
1908	2	21	1	8	1	1	51	119

The inward traffic consists mainly of refined sugar from Bareilly and Shahjahanpur, cotton-seed from Cawnpore, Aligarh, Hathras, etc., cotton goods from Howrah and cheap grains from the United Provinces and the Panjab.

Section F.—Means of Communication.

Railways.

155. At the time of the first revised settlement in 1879 no railway touched the district, though the Farnukhnagar branch of the Rajputana-Malwa Railway terminated only one mile from the southern border of the Jhajjar *tahsil*. Two railways now traverse the district but of these the Rewari-Fazilka branch of the Rajputana-Malwa Railway merely cuts the south-west corner of Jhajjar with stations at Kosli and Jharli and is very little used. The railway of importance is the trunk line of the Southern Punjab Railway from

Delhi to Bhatinda and Lahore which was opened in 1896 and runs right across the district with the following stations in it:—

Stations.	Miles from Delhi.	Means of Communication.
Bahadurgarh	19	
Asandah	24	
Sampla	30	
Kharawar	36	
Rohtak	44	
Kharainti	54	

The effect of the railway was seen in the two most recent famines when large quantities of *bhusa* were imported from the Panjab at specially reduced rates. Vast heaps of straw were to be seen at the side of the line at every station and many cattle were saved which would otherwise have perished or been sold or driven out of the district.

A line has been sanctioned connecting Bhiwani and Rohtak, while one connecting Panipat with Bhiwani or Rohtak and running through the Gohana *tahsil*, should it ever be undertaken, would tap the richest part of the district and be of great convenience to the people.

156. The metalled roads of the district are the Gohana-Rohtak (20 miles), Rohtak to Bhiwani (18 miles within the district), Rohtak to Jhajjar (21½ miles) with a branch taking off from Dhandlan to Beri (5 miles). Two more feeder roads have lately been metalled, *viz.*, Mohin to Rohtak (20 miles) and Jhajjar to Bahadurgarh (19 miles) while the Sampla-Kharkhanda-Sonipat road of which 13 miles are in the district is now being metalled. Of these three the first is part of the old Hissar-Delhi road which was previously metalled 3 miles out from Rohtak and showed traces of older metalling at various further points of the length. This road used to be metalled from Rohtak onwards to Delhi, but the Rohtak-Bahadurgarh section was deliberately hacked up, every other mile, to prevent competition with the railway, a piece of economic vandalism difficult to surpass. Its restoration is very much to be desired. On the Bahadurgarh-Delhi section which except for about a mile is outside the district, wiser counsels prevailed and the road is still intact. These metalled roads are now maintained by the District Board with the assistance of an annual grant of Rs. 18,500 from Government. Besides these roads metalled roads surround the towns of Gohana and Jhajjar and the station roads at Rohtak include a good driving road linking up with those already mentioned and making a circuit of about 5 miles.

Metalled roads.

157. The unmetalled roads of the district are numerous and cover between 500 and 600 miles; many of them are strikingly broad but the heavy traffic of country carts soon spoils them and they are often bad for driving and riding alike. It should be possible when repairing them to raise a driving path on one side (separated

Unmetalled roads.

CHAP. II. F. by a ditch or mud embankment from the rest of the road) on which country carts could be tabooed, and light traffic only allowed; this would soon consolidate into an excellent track, like the canal banks where carts are interdicted, and repair would seldom be necessary. The more important of the unmetalled roads besides that already mentioned are as follows:—

- | | | |
|----------------------|-----|--|
| I.—From Gohana | ... | <ol style="list-style-type: none"> 1. To Panipat. 2. To Sonipat. 3. To Jind. 4. To Hisar. 5. To Mehm running onwards to Bhiwani. 6. To Kharkhauda. |
| II.—From Rohtak | ... | <ol style="list-style-type: none"> 1. To Kharkhauda and on to Sonipat. 2. To Jind. |
| III.—From Kharkhauda | ... | <ol style="list-style-type: none"> 1. To Jhajjar <i>viâ</i> Sampla and Chhara. 2. To Badli <i>viâ</i> Mandanthei. |
| IV.—From Beri | ... | <ol style="list-style-type: none"> 1. The Bhiwani-Delhi road running through Dubaldhan, Beri, Dujana, Chhara and Bahadurgarh. 2. The old customs line (see below). 3. <i>Viâ</i> Jahazgarh and Matanbel to Jharli station and on into Dujana State. |
| V.—From Jhajjar | ... | <ol style="list-style-type: none"> 1. To Badli (part of customs line). 2. To Farrukhnagar. 3. To Patandhi. 4. To Guriani with a branch to Kosli. 5. <i>Viâ</i> Salhawas to Kanaund. 6. Towards Dadri—of which the section connecting the Nawab of Jhajjar's two palaces at Jhajjar and Chhuchhak was once metalled. 7. To Dubaldhan, and thence joining the Bhiwani-Delhi road. |

The old customs preventive line of which mention is made above runs in this district from the western border to Mehm and thence through Busanah, Kalanaur, Kanhaur, Beri and Jhajjar to Badli. The customs establishment was removed in 1879 but all along the line may be traced the foundations of the patrols' huts and here and there remains of some crossing gate or of a cactus hedge. There were bungalows at Mehm, Busanah, Anwal, and Beri whose sites can be still traced, while the police rest-house at Beri is a part of the old salt bungalow. The Jind-Dadri road traverses the west of *tahsil* Rohtak running through Bainsi and Busanah. Besides these there are innumerable village roads, usually, as Mr. Fanshawe wrote, "about as straight as a corkscrew." These are generally below the level of the fields, often worn down to the kankar level, and are constantly flooded by rain or by some canal cut taken across them. They are constantly encroached on, and constantly altered, when some enterprising zamindar ploughs up

a section and drives the traffic into his neighbours' fields. A district officer who would devote some time and the necessary patience to this matter might with the goodwill of the people do much to improve these by straightening and demarcating them, any sufferer by a re-alignment being compensated from other common land.

CHAP. II, F.
Means of
Communica-
tion.

158. The lines that carry most traffic are firstly the Gohana-Rohtak road which in winter I have seen worn in the short space of two months by the heavy cotton-laden carts from a first class motor track to a series of holes which would each shelter a litter of pigs; secondly the Gohana-Bhiwani, Bhiwani-Rohtak, Rohtak-Delhi roads by the latter of which through traffic still goes at times in preference to the railway, fewer palms requiring grease by the way. The Gohana to Panipat and to Sonapat roads also carry a good deal of traffic, and the Rohtak to Bori and Jhajjar roads. The Jhajjar to Farrukhnagar road used to be much used but the decay of the salt trade, bad years in Jhajjar and the alteration of the railway system have destroyed this and the approaches to the fine bridge between Silanah and Durinah over the Sahibi have fallen into eloquent disrepair. The canal bridges are usually good and substantial but on the Bhulaut Branch they are usually nothing but planks. These till lately were unfenced and a source of danger—and often loss of their cattle—to the zamindars and of disgrace to Government. They have however lately been fenced though it is to be hoped that it will not be long before permanent masonry bridges take their place.

Traffic on
the roads.

The carrying trade is mostly in the hands of the rainland villages, for the canal estates have always use for their carts, and it is often financed by banyas. The carts (*gadi* and *ladha*) used are remarkably strong. Travellers on unmetalled roads usually go in the four-wheeled *rath* or the two-wheeled *tali* or *majholi*—both drawn by bullocks—while between the towns *ekkas* also ply freely on the pakka roads, and every evening lines of curious camel carts—sloping towards the front as if prevent the sleepy passengers falling out—start from Gohana, Mehm, Rohtak and Jhajjar, arriving and discharging their freight like sardines from a tin in the early hours of the morning. There are no navigable canals or water traffic of any kind in the district.

159. A list of bungalows, which (with the exception of the Rohtak dak bungalow governed by the ordinary rules) are available by the courtesy of the different departments concerned for the use of officers on tour, is given in Table 29 of Part B. Generally speaking the district is well served, but a bungalow is needed in the north of Gohana *tahsil* in the neighbourhood of Jagai—a troublesome village—at Sowanah or thereabouts in Rohtak, and at Kosli in Jhajjar. The splendid bungalows at Jhajjar and Chhuchhakwas are palaces of the old Nawab and that at Zahidpur his shooting-box.

Bungalows.

CHAP. II, F.

Means of
Communication.

Postal arrangements.

160. The post offices are controlled by the Superintendent, Southern Division, Rewari. The head post office in Civil Lines, Rohtak, has sub-offices under it in Rohtak town, Rohtak Mandi, Gohana, Mehm, Kalanaur, Kahnaur, Sampla, Beri, Bahadurgarh, and Jhajjar. Besides these eleven offices there are 44 other post offices scattered all over the district. From the head office there are three deliveries and three despatches daily. Rohtak, Rohtak Mandi, Kalanaur, Jhajjar, Beri and Gohana are served by the telegraph, and it is of course possible to telegraph from all Railway stations in the district, though experience teaches that when the railway telegraph only is available, it is quicker to walk than to wire. The Canal department also maintains a private line of telegraph between Delhi, Rohtak and all main junctions of *rajbahars*. In 1879 when Mr. Fanshawe wrote his Settlement Report there was no telegraph in the district.

Section G.—Rents, Wages and Prices.

Agricultural
wages.

161. The ordinary wage for a day's labour in the fields is two annas with food twice in the day. The food may be valued at about an anna and a half. Sometimes 3 annas without food will be taken. When labour is scarce, plague rife or the crop heavy, wages will rise to double this sum and the water-lifter ordinarily gets 4 annas a day besides his food. Fortunately lift irrigation is rare for it is expensive : it takes two shifts of two men each to work the lift and sometimes a fifth man is engaged to distribute the water in the *kharis* (beds). If they work by night as well as by day, they will be paid at double rates, or 8 annas per head. The crop-watcher gets 3 or 4 rupees a month and finds himself in food ; for this he will watch 50 *bighas* or so : an anna a *bigha* is a common computation. The cotton is generally picked by hired labour except in rainland villages where the crop is light. Women and girls of the lower caste pick the cotton in return for one-tenth of their pickings, though the fraction of the crop retained sometimes rises towards the end of the harvest as the bolls get scanty and the labour of picking is increased. This system is called *pui*.

A ploughman, or farm labourer, will often be engaged by the year. He is called a *barsodi* and gets in different parts of the district Rs. 12 to Rs. 36 the year. Besides this he generally receives his lodging, his food, and necessary clothing and bedding, though the amount given him in this way will vary somewhat inversely with his wage. These are direct payments for hired labour, but the custom prevails by which help in the fields is taken from the *chamar* in return for a share of the harvest, just in the same way that the blacksmith and carpenter are remunerated for their making and repairs of the farmers' tools, and the other menials of the village

for household service rendered. The blacksmith, carpenter, and chamar are in the eyes of the zamindar classed separately. Their services are intimately connected with agriculture, and more highly remunerated. The others, the potter, weaver, washerman, waterman, etc., are called *khanagi kamin* or household menials. Their services are less constant and less well paid.

CHAP. II. G.
Rents,
Wages and
Prices.

162. It was calculated at settlement that the payments made for agricultural help to the Lohar, Khati, and Chamar (calculated in some villages at a share of the crop, sometimes at so much per plough, or per crop,) amounted to 5 per cent. of the grain crop in the old Jhajjar tahsil and to from 3 per cent. to 10 per cent. in the north of the district. The dues and duties of the menials differ from village to village, but the following two examples from Sanghi and Salhawas are typical:—

The share of
the crop paid
to menials.

SANGHI VILLAGE.

No.	Name of menial.	Duty.	Dues.
1	Khati (carpenter).	To make the wood-work of all ordinary agricultural implements, beds, stools, charakhas (spinning wheels); to cut wood on the occasions of marriage. Wood is in all cases supplied by the owner or else paid for separately.	<i>Kharif.</i> Half ser per maund of the produce. Two bundles of jowar and bajra. One and a quarter sers per plough at sowing time. <i>Rabi.</i> Half ser per maund of the produce. Two and a half sers per plough at sowing time; one bundle of the crop containing about five sers of grain. At a daughter's wedding from 8 annas to Rs. 1 and food; on a son's marriage 4 annas and food.
2	Lohar (blacksmith)	To repair all agricultural iron implements; to fit all iron-work to the plough; the zamindar supplies the iron; coal is supplied by the blacksmith.	The same as those of Khati.
3	Chamar (tanner).	1. To supply begar ("fagging"); to repair all leather; to remove dead cattle. 2. To supply begar ("fagging"); to repair all leather; to remove dead cattle and to supply two pairs of shoes to the owner yearly; and to supply ox-goads and thongs when needed.	One-fortieth of the whole crop of grain. One-twentieth of the whole crop of grain.

CHAP. II, G.

SANGHI VILLAGE—continued.

Rents,
Wages and
Prices.

No.	Name of menial.	Duty.	Dues.
3		3. To supply begar ; to repair leather ; to remove dead cattle ; to supply shoes to all the members of the family when needed ; to weed the fields ; to assist in the reaping of the harvest ; to clear the fields before ploughing ; one Chamar to be daily present to assist the reaping of the harvest.	One-tenth of the grain crop (in Pana Delian one-eleventh). On a daughter's marriage from 8 annas to Rs. 5 and food for three days ; on a son's marriage from 8 annas to Rs. 1 and food. The skin of dead sheep and goats goes to the Chamar of the family ; one-thirteenth part of the flesh of cow, or, calf, sheep and goats, and one-nineteenth part of the flesh of buffalo go to the Chahra (sweeper), the remainder being the Chamar's share. When any buffalo, bull or other cattle belonging to a stranger or unowned dies, the skin is shared by all the Chamars of the village, and of the flesh one-thirteenth or one-nineteenth, as specified above, goes to the Chahras of the village, and the remainder is given to all the Chamars of the village.
4	Potter (Kamhar)...	To supply earthen vessels ; to carry rice and sugar on wedding occasions.	One chhaj (winnowing basket) of grain at harvest time. On a daughter's marriage from Re. 1 to Rs. 3 and food ; on a son's wedding from 8 annas to Re. 1 and food.
5	Kahar (water carrier).	To supply water to Hindu houses and to camps of Government officers visiting the village.	Five sers of grain at harvest. On a daughter's marriage from Re. 1 to Rs. 5 and food daily so long as he supplies water ; on a son's marriage from 4 annas to Re. 1 and food.
8	Sakka (Muhammaddan walterman).	To supply water to camps of Government officers visiting the village ; to sprinkle water at weddings.	Five sers of grain at each harvest ; on weddings 4 annas and food.

SANGHI VILLAGE—concluded.

CHAP. II, G.

No.	Name of menial.	Duty.	Dues.	Rents, Wages and Prices.
7	Chuhra (sweeper).	To supply begar; to sweep lanes and houses; to conduct the cattle to other villages and bring them back; to collect the people for an assemblage and to act as guide; to remove dead camels, horses, asses and mules.	Five sars of grain at each harvest; on a son's wedding Re. 1 and food; on a daughter's wedding Re. 1 and the refuse of the dinner of the whole barat (wedding party) and food for three days. One loaf daily from the house, which he cleans; gets shoes and clothes of the dead, the whole skin of dead mule, camel, ass and horse, one-thirteenth of the flesh of cow, sheep and goat and one-nineteenth of the flesh of dead buffalo or its young.	
8	Nai (barber)	To go on errands to relatives; to shave the heads of males; to clean the vessels of guests at weddings and funerals; the nai (barber's wife) accompanies the bride to the bridegroom's house.	One chhaj of grain at each harvest; Re. 1 at the betrothal of a son; Re. 6, one dhar (double sheet of cloth) and pice to the value of Rs. 2 at a daughter's betrothal; on a son's wedding Rs. 6 or Rs. 7; on a daughter's wedding from Rs. 7 to Rs. 20; food for all working days during a wedding; one loaf for each shaving; barber's wife gets half or one sar of grain each time she goes to dress the hair; she gets from Rs. 2 to Rs. 5 when she accompanies a bride to the bridegroom's house.	
9	Shekh	To guard the camp of Government officers, visiting the villages.	Four annas on a daughter's marriage. He is also in enjoyment of cultivating possession of land without rent.	

SALHAWAS VILLAGE

No.	Name of menial.	Duty.	Dues.
1	Carpenter (Khati).	To make the wood-work of all ordinary agricultural implements, beds, stools, spinning wheels, etc. Wood is supplied by the zamindar.	<i>Kharif—per plough.</i> Sowing time two and a half sars; threshing time fifty sars and sixteen bundles of jowar or bajra. <i>Rabi—per well, with eight bullocks.</i> Sowing time twenty sars; threshing time fifty sars and thirty-two bundles of wheat or barley with straw. On a daughter's marriage, if the carpenter supplies a charpai (bed), Re. 1-4 and food; if not, only 4 annas and food; on a son's marriage 4 annas and food.

CHAP. II, G.

SALHAWAS VILLAGE.—continued.

Rents,
Wages and
Prices.

No.	Name of menial.	Duty.	Dues.
2	Blacksmith (Lohar)	To repair all agricultural iron implements; to fit iron-work to the plough; iron is supplied by zamindar, coal by blacksmith.	At each harvest time blacksmith gets half the grain and patta (bundles), given to carpenter. On a daughter's marriage, if he supplies patta (flat iron to turn loaves) 8 annas and food; on a son's marriage 4 annas and food.
3	Tanner (Chamar)...	To mend shoes and all other leather things used in agriculture, to assist to reap the harvest, clear the fields and thresh the corn by turns; on a daughter's marriage to plaster the walls; to look after and clean the fodder and to keep guard; to drive the cattle to other places; to remove dead cattle except horse, ass, mule and camel; and to go on errands (begar).	Kharif per plough fifty sers of corn. Rabi per lao (well worked with eight oxen), if he supplies a kas (leather lacing to bucket), he will get four maunds of corn; otherwise only one maund and twenty, sers. Rabi—barani per plough. One maund of grain. When he goes to reap the harvest he gets every day one bundle with straw and food once a day. On a son's marriage, he supplies shoes for both bride and bridegroom, and gets in return Rs. 2-4. On a daughter's marriage he gets a rupee for cleaning the fodder and 16 takkas (=8 annas) for keeping guard at night. The skin and six-sevenths of the meat of dead cattle go to Chamar, one-seventh of the meat going to dhanak. On festivals and on days when he goes out on errands, he gets food twice a day.
4	Potter (Kumhar) ..	To supply two malkas (pitchers) at each harvest; on wedding occasions he supplies full lik (40 vessels) or half lik (20 vessels); to supply begar.	Kharif per plough, five sers of corn; rabi per lao with eight oxen, fifteen sers of corn. At wedding, if full lik, Rs. 1-4 and food; half lik 10 annas and food. On festivals also he gets food. The lik is not binding in the case of non-owners, Mahajans and Brahmins, and the potter charges from them the actual price of the vessels supplied to them at wedding time.
5	Kahar (coolly) ...	No kahars in Salhawas.	
6	Sakka (waterman).	Ditto.	

SALHAWAS VILLAGE—continued.

CHAP. II, G.

Rents
Wages and
Prices.

No.	Name of menial.	Duty.	Dues.
7	Chuhra (sweeper)	To remove dung; to sweep (houses); to remove dead bodies of camel, ass, mule and horse; to supply the village begar.	Gets one loaf and rabri from his peasants; gets the skin and flesh of camel, ass, mule and horse. On a daughter's wedding the sweeper gets half the refuse of dinners, the dhanak gets the remaining half, and the sweeper also gets 8 annas in cash. On a son's wedding 8 annas and food.
8	Barber (Nai)	To shave the polls of males; to go on errands to relatives; to clean the vessels at weddings; to supply begar. The wife of the barber dresses the hair of women.	Kharif per plough, ten bundles with straw; rabi per lao (well worked with eight oxen), one maund of grain; food is given for shaving and hair-dressing; on a daughter's marriage from Rs. 5 to Rs. 10; on a son's wedding from Rs. 4 to Rs. 10 and food; and food on festivals.
9	Dhanak (weaver and scavenger).	To collect the people; to act as guide; to bring and take, to and from, the villages of relatives, horse, ass, mule and camel; to supply begar.	At weddings he gets from 4 annas to Re. 1 and food; exempt from hearth fees and water dues; gets one-seventh of the flesh of dead cattle from the Chamar; gets daily loaf and rabri from the peasant.
10	Chhipi (tailor)	To supply mandha (serving) on a daughter's marriage and also to supply cloth.	Gets a rupee for the mandha; the cloth is returned to him; also gets food; is paid for the sowing of clothes.

163. Apart from their duties in keeping the *zamindar's* imple-
ments in good order the carpenters are often employed in house
building and other similar occupations. Such services are remunerat-
ed separately. The skilled mason or carpenter generally receives
4, or occasionally 6, annas a day, and his food and tobacco twice on a
liberal scale, which costs about 3 annas. Sometimes he will be
paid 7 or 8 annas a day and in that case he receives nothing in
kind. Occasionally the rates will be found to be 4 annas with food
or 5 annas 4 pies with none. It must be understood that all these
are standard rates and liable to many minor variations.

164. Mr. Fanshawe noted thirty years ago that the menials
were not on such good terms as formerly with the owners. They are
certainly often on ill terms now. Each party rather insists on its

Skilled la-
bour.Relations be-
tween owner
and menials.

CHAP. II, G. dues than is mindful of its duties. Custom too is gradually loosening. High wages in the Panjab and elsewhere tend to make men dissatisfied with the old arrangements and in some villages menials are difficult to get. The big village of Mahmudpur has no potters. Probably there will be great changes in the next thirty years. Even now the Jats are attempting to standardise the dues of the *nai* (barber), and in most villages to reduce them, but it is unlikely that the ultimate victory will rest with the employers.

Development
of rents.

165. There has been a great development of rent since last settlement, when Mr. Fanshawe (paragraph 83) showed the whole area held under rent by non-occupancy tenants as only 123,775 acres including the area held at revenue rates. Now the area, excluding land held at revenue rates, is 259,194 acres (see Settlement Report, paragraph 27). Kind rents are taken on 77,303 acres against 3,936 at last settlement, and cash rents on 181,891 acres. Kind rents are relatively commonest in irrigated lands, which means that the land-owners on the whole command the situation; they take kind rents when the returns of agriculture are secure, but stand out for cash in the precarious *barani* tracts. The kind rent is unusually high in this district, being commonly half for irrigated crops except cane, and half or one-third in unirrigated land, but adjustments have to be made owing to the system of divisions in force. It is the almost invariable practice in the irrigated tracts that the landlord should pay that portion of the seed and water charges which he retains of the crop, and receive from the tenant a corresponding contribution to the land revenue. In unirrigated lands too it is common enough to find seed and revenue shared. Full details of the prevalence of this system and of the actual rates of division in force will be found in paragraphs 29 and 30 of the Settlement Report.

Cash rents are dealt with fully in paragraph 28 of the Settlement Report. Economic rent is not yet fully developed and this is specially true in newly irrigated circles where the rent taken on canal land, where let at all on cash rents, is the same as for dry land. No doubt the soil of a village is very uniform, but the prevalence throughout an estate of a single dry rent, or of two rates—one for firm and one for sandy land—shows that custom is still a determining factor in the pitch of the rents. A somewhat higher rate will be paid for land near the village site, or for 'umra' land, that is, land in good condition from having borne an unirrigated *rabi* crop, especially gram. Business-like instincts, letting at the most favourable moment, demanding a rise with a favourable year—these are considerations which appeal to the Baniya owner rather than to the Jat. The actual rents recovered are compared in Chapter III C below with the demand of the land revenue. According to the table given in paragraph 83 of Mr. Fanshawe's report the average cash

rent thirty years ago was just under Rs. 1-12 per acre. As will be seen below the average on the poorest class of land, bhur, is now Rs. 1-9-2, on other rain land Rs. 2-2-4, on well lands Rs. 5-10-6 and on canal lands Rs. 6-14-4. CHAP. II, C.
Rents,
Wages and
Prices.

166. Prices fixed at settlement which were based on a careful scrutiny of the transactions in banyas' books in a number of villages for the past twenty years represent the average values at which it was assumed that the producer would be able to dispose of his crops during the currency of settlement. The prices fixed for the main crops were in annas per maund :— Prices of
food grains.

Jowar	21	Moth	23	Wheat	32
Bajra	25	Mung	30	Barley	21
Cotton	48	Mash	30	Gram	22
Indigo	40	Gowar	20	Gechni	27
Raw sugar	43	Til	60	Sarson	46
		Chaulah	22		

Compared with the prices fixed thirty years earlier, sugar remained stationary, rice and indigo (unimportant crops) showed a large decrease, and the other crops were all enhanced in value in greater or less degree. After making allowance for the relative produce per acre of different crops it was estimated that there was an effective rise in prices in the different *tahsils* varying from 17 to 27 per cent. The rise for the district as a whole may be put at 25 per cent.

Experience since the prices were fixed shows that they were very low and that, if a rise in assessment is to be based on prices, a far larger enhancement of revenue might have been claimed than was actually taken. But these are only the prices at which the produce is assumed to sell. The actual prices at which the ultimate consumer buys from the grain-dealer are very much higher as is shown in table 26. Wheat, for example, has touched 80 annas, jowar, barley and gram 64. The rise in prices since 1879, thus considered, is in the case of most grains seldom below and often in considerable excess of 100 per cent. More will be known of the very complicated causes of this rise when the enquiry now being instituted by the Government of India into the matter is complete.

SECTION H.—FAMINE.

167. In a district* of which even now but a small part is protected by irrigation and in which the rainfall is so notoriously precarious as it is in this part of the Panjab it is but natural that famines are frequent, and that each has its name and serves as an epoch in the history of the countryside. Early famines
in Rohtak.

* This article down to the end of paragraph 170 is taken, with slight changes, from Mr. Fanshawe's Settlement Report.

CAHP. II, H. The *kāl* (more properly *akāl*) best known to the people
Famine. occurred in the following years:—

A. D.	Sambat.	Names.
1753-54	1810	Dasá.
1782-83	1840	Chálishí.
1802-03	1860	Sáthá.
1812-13	1869	Unhattará.
1817-18	1874	Chauhattará.
1833-34	1890	Nawwíá.
1837-38	1894	Chauránawá.
1860-61	1917	Setirah.
1868-69	1925	Pachísá.
1877-78	1934	Chautísá.
1886-87	1940	Chalísá.
1896-97	1953	Tiropaná.
1899-1900	1956	Chhapaná.
1905-06	1963	Tiresathá.

From the terrible *chālishá*, which lasted three years and in which grain sold at five *seers* the rupee (the equivalent of much less at present values), a very large number of villages of the district date their refoundation in whole or in part. Curiously enough no sayings or songs regarding this famine have been traced, but its terrible ravages have been described by a master pen in *The Rajas of the Panjab*.

In the *sáthá* famine, grain sold at 10 *seers* the rupee, two consecutive harvests having failed. Mr. Fanshawe, writing in 1880, found the efforts made by Mr. Perron to alleviate distress in this famine still gratefully remembered by the people. The *unhattará* famine was most severe in the *Bágar* country, from which large numbers flocked to Rohtak, and especially to the Jhajjar *tahsil* and settled as cultivators. Grain sold at 7 or 8 *seers* per rupee. The *chauhattará* like that of 1877-78, was a fodder famine chiefly; the price of grain did not rise above 12 *seers* for the rupee. The *nawwíá* famine was very severe; grain is said to have been altogether unprocurable, though prices did not rise to

an unprecedented pitch. Of this famine the people have a saying CHAP. II. H
"Baniya bhar gaya kothi men, Bálak rowe roti men," meaning that Famine.
 "the shop-keeper hid in his house, and the child wept over its meals," and expressing the trouble and hunger which fell on all. The *chauránwá* famine was less severe again.

168. The *sattrah* famine was the first in which relief was regularly organised by the British Government. It was severest in Marwar and Bikanir, and thousands of hunger-stricken people swarmed in from these parts. The rains of 1859-60 were poor, and those of 1860-61 failed almost entirely, so that the *Najafgarh jhil* ran dry—an occurrence unknown before—and grain sold in Rohtak for some time at 8 *sers* the rupee. In the official report it is stated that nearly 500,000 people were relieved by distribution of food and in other ways, that nearly 400,000 were employed on relief works (chiefly tanks and a few roads) and that Rs. 34,378 were spent on these objects. Rs. 2,47,971 of land revenue were ultimately remitted. The number of deaths from famine was put at 144, but the Commissioner considered it impossible to guess the real number of persons who died from gradual starvation. The *kair* (or *karil*) bush yielded an abundant supply of berries, as it seems always to do in the famine years, and the people lived largely on its fruit for weeks. The stores of the country had been generally exhausted by three bad harvests previous to the actual famine year, and the villages were most severely tried by it, though fortunately not permanently injured; the loss of cattle was considerable, but nothing like that in 1877-78. The following sayings of the *sattrah okál* are common in the mouths of the people:—

*Parte kál Jullahe mare, aur bich men mare Tebi,
 Utarte kál Baniye mare, rupiye ki rahgai dheli;
 Channa chironji hoyaya, aur gehun ho gae dakh;
 Sattrah bhi area paru chalisa ka bap;*

that is, "In the beginning of the famine died the weavers; in "the middle the oil-men; at the end the traders; and a rupee "became worth only half its value; grain sold at the price of "pistachio nuts and wheat at the price of raisins; the famine of "seventeen was more severe than that of forty." Of the same famine there is a well-known song of some length, from which the following couplets are taken:—

*Bodi Banniyán ne kardiya mol.
 Tut gai takhri, phat gai bat.
 Ji gae Baniya mar gae Jat.
 Tut gai gadi mar gae hail.
 Be muklawa ho gai gail.*

"The traders collected old and bad grain, and sold it for an enormous price. The beam of their scales broke, and their

CHAP. II, H. weights were worn away (by constant use), the trader lived, and the Jat died. The carts remained useless, for the oxen were dead; and the bride went to her husband's house without the due formalities." The last line is most expressive of the intensity of the distress: the parents being no longer able to feed their daughter, she was forced to go in an irregular way to her husband's house, a terrible breach of marriage etiquette.

Famine,
1868-69.

169. In the *pachisa* famine of 1868-69 the distress in Rohtak was as severe as in any part of the Punjab. In the early months of 1868 there was a fair amount of rain, but the fall of July, August, and September failed entirely, and before the end of the year grain was selling at 10 *sers* the rupee, and relief works had to be started. The showers which fell elsewhere in January and February did not extend to the Hissar division, and misery became intense throughout the summer of 1869, till at last good rain fell in September, and saved the district from a possible repetition of the events of 1780-83. 719,000 destitute persons received relief; 1,250,000 were employed at various times on relief works; Rs. 1,33,000, nearly; were spent in alleviating the calamity, and Rs. 2,09,269, of revenue were in all remitted. Of the money granted, Rs. 12,000 were given in the shape of advances Rs. 25,000 were spent in the purchase of food, and the rest was expended on works—chiefly the clearance of village tanks. The special feature of the relief in this famine was the amount made up by voluntary subscriptions of the people themselves, which was nearly Rs. 45,000. The loss of life was considerable, although at the time this was not admitted; the loss of cattle was nearly 90,000 head, and some 50,000 were said to have been sent off to the hills in order to save them from starvation.

Drought,
1877-78.

170. The next drought took place during the progress of the revised settlement in 1877-78, and the loss of cattle in these years was perhaps greater than had ever been known before. There was but little rain in June, none in July or August, and only two inches in September, when it was too late to sow anything. Grass withered away from the face of the earth, the cattle began to die in large numbers in the autumn of 1877, and famine prices were soon reached. Matters were made worse by the gambling transactions of the traders in grain (*badni*); credit was refused to the cultivators; food stores began to be largely exported from the district, and the people in consequence became greatly exasperated. In the beginning of the trouble, the unhappy death of Mr. Moore occurred, and presently disturbances commenced. Highway robberies grew common, grain carts were plundered, and finally

the bazar at Badli was attacked and gutted by the Jâts of the place. CHAP. II. H.
The prompt and severe punishment which followed this outbreak prevented similar designs from being carried out, but there was still an uneasy feeling on the country side which did not die away for some months. The winter rains again failed, and the mortality among cattle became terrible; still no relief was considered necessary by Government: the revenue demand was not even suspended. Fortunately, good rain fell at last in July and August 1878, and though the later rains were scanty, an abundant crop of fodder was obtained and a fair crop of grain. During the cold weather of 1877-78, the aspect of the country was desolate beyond description. There was literally no crop in the rain-land villages; in a ride of 20 miles not even two or three plots were to be seen. The grass had wholly disappeared, and nothing but thorns and weeds met the eye. The loss of cattle amounted to 176,000 in one way or another, by sale, deaths, or transfers. Ultimately Rs. 80,000 of the collections due in the spring of 1879 were suspended, and this gave a little relief. Of this drought the people quote the following lines :—

Famine.

*Ek roti ko bail bika aur pisa bik gaya unt,
Chautisa ne kho diya baina gai ka bunt.
Chautisa ne chautis mare, jiye Baish Kosai,
Oh mare takri, aur us ne chhuri chalzi.*

“An ox sold for a piece of bread, and a camel for a farthing: the year thirty-four has destroyed the stock (root) of oxen and of buffaloes. The year thirty-four has killed thirty-four tribes (out of the thirty-six); two only, the trader and butcher, have survived, the one by use of his scales and the other by use of his knife (to slaughter the cattle).

171. Famine spared the district for some time after this and for eighteen years Rohtak enjoyed a spell of unusual prosperity. With the year 1895-6 when the rains and the crops largely failed a lean cycle began which lasted for eleven years, and contained three famines and four years of scarcity. The first of the three famines was in 1896-7. The rains of June 1896 gave hopes of a good year, but the next 3 months were practically rainless and the autumn crop again failed. Rain-land villages had literally no crop, and no hope for the spring. Relief works began in November 1896 and lasted till July 1897 when heavy and general rain enabled them to be closed. This was not relatively a severe famine, for there was large stock of fodder and grain in many of the villages and the zamindars had not yet been exhausted by a long series of bad years. More than three quarters of the number of people on relief works, which rose to 11,000, were menials. Rupees 96,300 were spent in alleviating the distress and suspensions were granted amounting to rather less than three and a half lakhs of rupees.

Famine of
1896-7.

CHAP. II, H.

Famine.

Famine of
1899-00.

172. The famine of 1899-00 was far more severe in itself and the people had much less resistance left with which to meet it. The monsoon broke well in July and then ceased abruptly, almost entirely. Hot winds in August and September dried up the tanks and withered the crops. Fodder was so scarce that, as the Deputy Commissioner reported, it was a common sight in the morning's ride to see people guarding patches of the *jhar-pata* as carefully as they would in ordinary times a valuable sugarcane crop. Over twenty thousand buffaloes and cows were sold at the autumn cattle fair and the total sales were just double the figure of the corresponding fair of the previous year, while the average price of all animals sold fell from Rs. 28 to Rs. 14.

No *rabi* crops could be sown except on the canal and fears of famine soon became a certainty. Relief works opened in November 1899, (though ordinary district board works for the relief of village menials and famine test works had been in progress for some months before) and a maximum of well nigh 43,000 persons on relief works was reached in July 1900. No less than 355 villages were affected, and 255 of them sent men on the works, while gratuitous relief was distributed in 308. Of those relieved no less than 54 per cent. were Jats and Muhammadan, a clear indication that the famine had touched the strongest classes. Not till the end of August 1900 were the relief works finally closed, by which time the total expenditure had reached seven-and-a-half lakhs of which all but Rs. 46,000, contributed from District and Municipal funds, was borne by the Provincial Government, while land revenue had to be suspended to the amount of Rs. 5,60,467. This famine is remarkable as the first in which the Southern Panjab Railway was in full working order in the district. This railway which had already in 1898 brought into the district two-and-quarter lakhs of maunds of food grains and pulses more than it had carried from it, conveyed from January 1899 to the end of August 1900 nineteen lakhs of maunds into the district, and took away less than half a lakh. Of this disastrous series of years the people say—

“Trepan men pu” gai chowwan men gaya bij.
Pachpan men ne-ja gaya aur chhapan sab chiz.
Satawan ke sal men laga mahina jeth
Haiza ki bimari hui chuta munh aur pet.”

“In '53 stores were exhausted; in '54 seed would not germinate.

In '55 they could not subscribe to a wedding, in '56 everything went.

In '57 jeth started well; then came the cholera and stomach and mouth were emptied.”

173. The famine of 1905-06 which coincided with the beginning of the re-settlement operations fell upon a people exhausted by years of scarcity who had seen but one really good year's harvests since its predecessor six years before. In July good rain had fallen but that was practically the end of the monsoon, and the winter rains fell upon a soil unsown, though the falls of February and March saved the irrigated crops, reduced prices and brought some fresh water into the exhausted tanks and brackish wells. Few villages had any reserve of fodder, and before Christmas *jowar* straw was selling at 12 bundles for the rupee and the rate rose to 10. Fodder came by road from Hissar and vast quantities of *bhusa* were imported from Bhatinda and the Panjab, the Southern Panjab Railway Company granting concession rates of carriage, and brisk sales took place at the stations along the line. Even so, it was impossible to keep all the cattle, and the sales of buffaloes topped the figure even of 1899 but better prices were obtained all round as good rain fell in Hissar and elsewhere. The buffalo is the Jat's stand-by and their sale is an index figure; if the transfer of all cattle did not exceed that of the previous famine, it was only because fewer were left to sell. Prices, thanks to the railway and to the fact that famine conditions were confined to this district, never ruled as high as in the two preceding visitations, but by January 1906 wheat had already reached 11 *seers* at Rohtak, barley 14, gram 13½, *jowar* 13 and *baira* 12, while at a distance from the railway prices were higher still.

CHAP. II, H.
Famine.
Famine of
1905-06.

As a food famine, this calamity compares closely with that of 1896-97 and was much less severe than the intervening one. Only 288 villages were affected and only 157 in the first degree. The maximum number of persons relieved which was reached in May 1906, was 13,188, about half the persons relieved being agriculturists. No poor houses were opened and no deaths from starvation occurred. It was severe enough however to cause a marked rise in crime, and it is worth remark that in over 50 per cent. of the cases of theft, food for man or beast was the article stolen. As a fodder famine it was far more severe than either of its immediate predecessors. Every tree that was edible by cattle was stripped of its leaves—even in some areas not officially declared affected—for there were no reserves. In some villages literally no cattle were to be seen.

Test works started in January 1906, and relief works in February; they were closed in August, after abundant falls of rain in that and the preceding months. The total expenditure of the famine was Rs. 1,14,230, of which a little over Rs. 9,000 was borne by district and municipal and the remainder by provincial funds. Suspensions of the year's revenue amounting to Rs. 5,77,877 were made and Rs. 3,05,780 of old arrears were remitted.

CHAP. II. H. Rupees 2,78,594 was also distributed in takavi for purchase of
Famine. bullocks and seed, and working of wells.

The famine was the first worked in the Panjab under the new Famine Code. The railway was of immense assistance, for besides the vast quantities of *bhusa* imported the imports of grain from August 1905 to July 1906 exceeded the exports by 14 lakhs of maunds and prices were kept down, though it is possible that but for it, the Baniyas would have held larger stocks of grain at the beginning of the scarcity.

General
reflections on
famine.

174. The effect of famine in this district before the adoption of systematic relief measures by the British Government is shown in the deserted sites to which almost every village can point. With a famine code and a railway system such disasters are impossible, but little or nothing has been done yet to save the cattle whose wholesale loss in famines leaves an impress on the condition of the countryside which it takes years of prosperity to obliterate. As population increases less and less pasture land is left, and the process of breaking up the soil has in many villages been carried too far, and everywhere to the limit of safety. In this respect the famines of old days effected an automatic adjustment. The zamindar plants the crop that pays, not the crop that saves, and pure fodder crops are little grown until famine already has the people in its grip, when except in canal villages the opportunity is passed. In years of ordinary rainfall *dáb* grass is abundant and its hay will last for several years. It should not be beyond the power of Government to insist on its preservation, but it must insist, for the Jat will not look far enough ahead. If he grumbles in a good year he will bless the Sirkar when the lean year comes.

The liability to famine affects the peoples' choice of families in which to marry their daughters; for every one strives to get a few acres of canal land to cultivate in years of drought, and so great is the burden of this to the dwellers in canal villages that they will not intermarry with their less fortunate fellows if they can help it. The songs are full of reference to this—

"*Mere bebe he, naddion par dharti dede he,*"

"Sister give me land upon the canal"—and again

"*Mere bhaiyone nahron par dharti boio ne,*"

"Brother, sow some land on the canal."

The classes that feel scarcity soonest are always the menials and the *purdah* classes—Rajputs, Pathans, Shekhs, Biloches, Saiyids, &c.,—and the latter are unfortunately often prevented by pride from coming on famine works. That the district in years of good rainfall produces such excellent crops is no doubt largely due to the constant fallows enforced by drought.