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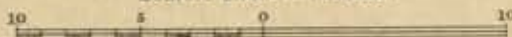


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Map OF THE JHELUM DISTRICT

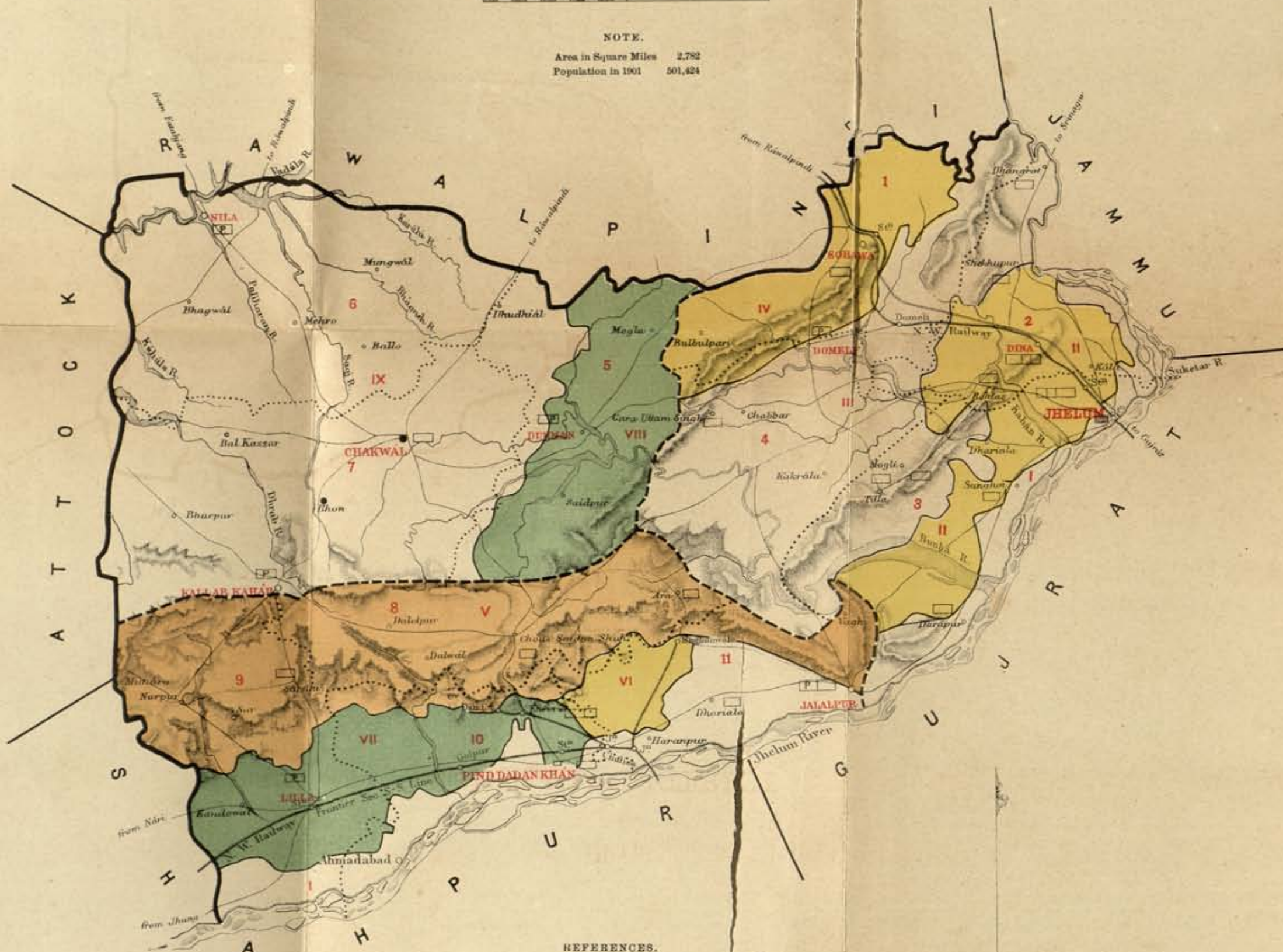
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Scale 1 Inch = 8 Miles.



NOTE.

Area in Square Miles 2,782
Population in 1901 501,424



REFERENCES.

Head Quarters of District	JHELUM	If a Police Station also, in red
" " " Tahsil	CHAKWAL	
" " " Thana	DOMELI	
Census Towns over 20,000		○
" " " 10,000		□
" " " Others		●
Villages		•
District and Tahsil Boundary		—
Tahsil		- - -
Assessment Circles		—
Quarries		—
Railways		—
Metalled Road		—
Unmetalled "		—
River		—
Police Outpost		—
REST HOUSES		—
District		□
Police		□
Public Works Department		□

ELEVATIONS.

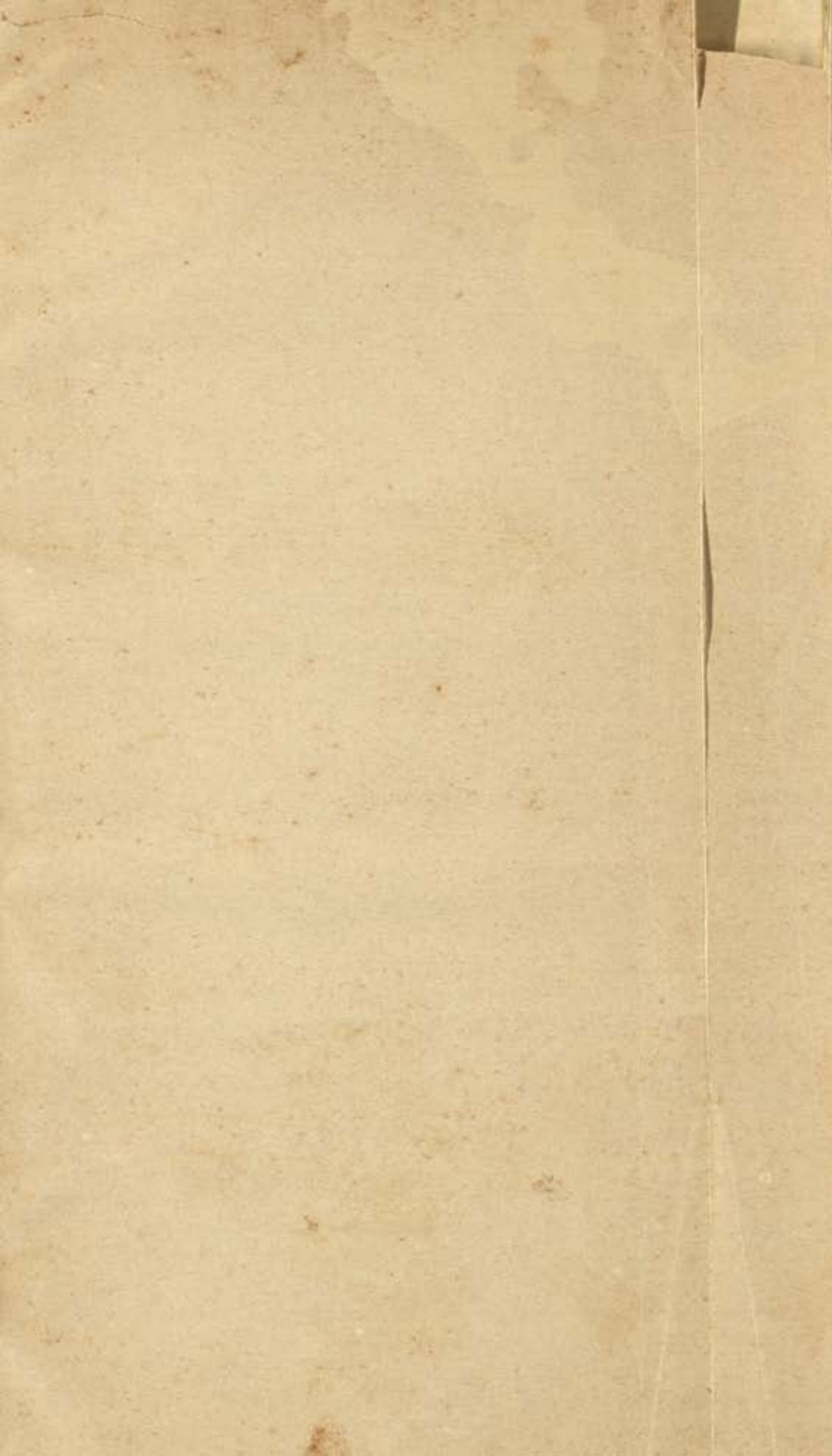
Jhelum	82'
Pind Dadan Khan	731'
Chakwal	1,550'

ASSESSMENT CIRCLES.

I River Bank	Uncoloured.
II Maldas	Yellow.
III Khaddar	Uncoloured.
IV Pabbi	Yellow.
V Hills	Burnt Sienna.
VI Phaphra	Yellow.
VII Thal	Blue.
VIII Ludi Patti	Blue.
IX Dhanai	Uncoloured.

QANUNGOS' CIRCLES.

No.	NAMES.
1	Sohawa.
2	Kala.
3	Jhelum.
4	Domeli.
5	Dhanai.
6	Nila.
7	Chakwal.
8	Dalwal.
9	Lilla.
10	Pind Dadan Khan.
11	Jalalpur.



GAZETTEER OF THE JHELUM DISTRICT
PART A. 1904.



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WITH MAPS.

30645

1904.

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INTRODUCTORY.

The materials for the revised edition of the Jhelum Gazetteer were collected during the Settlement operations in the District, which ended in 1901. The Gazetteer was originally drafted in 1902, but circumstances prevented its being printed at once, and by the time that it became convenient to have this done, in 1904, the Government of India had issued orders making radical alterations in the arrangement of District Gazetteers, and to some extent in their subject-matter also. A complete re-arrangement of the draft was therefore carried out, and a second partial revision was rendered necessary by subsequent orders. For the last $1\frac{1}{2}$ years the volume has been in the Press.

This explanation is given to account for certain defects that will be noticed: the arrangement is in places faulty, there is great want of uniformity in the dating of the information given in different sections and there are other shortcomings. It would have been better to re-write the whole volume, bringing every part of it up to date: but, holding an appointment outside the Punjab, with heavy duties of its own, I had neither time nor opportunity for doing so.

The statistical parts of Chapter I, Section C, were supplied by the Superintendent, Gazetteer Revision, Punjab: and Chapters III and IV, except the section on Land Revenue, have been compiled almost entirely by Mr. B. H. Dobson, I.C.S., Assistant Commissioner. For the rest of the volume I am responsible.

The former Gazetteer has naturally been drawn upon to a considerable extent, but comparatively little of the old volume could be left unaltered. The Historical section, Chapter I-B, and the remarks on the different tribes at pages 88 to 129, are, amongst others almost wholly new, or rather newly compiled. A copy of the former, with annotations by Dr. M. A. Stein, has been placed on record in the District office, and should be referred to when the Gazetteer is next revised; Dr. Stein's observations were received too late to be fully used in the present volume.

Copious extracts have been made from Mr. J. Wilson's recent Gazetteer of the Sháhpur District; these are usually, but not invariably, acknowledged where they occur.

A number of plates containing reproductions of photographs, intended to illustrate the scenery and antiquities of the District, are issued in a separate volume, of which about 250 copies are available. At the time when these illustrations were printed, the size prescribed for Gazetteers was foolscap; and it was not considered worth while to reprint them.

SRINAGAR :

29th July 1906.

}

W. S. TALBOT,

Settlement Commissioner,
Jammú and Kashmír State.

Errata.

- Page 10, line 22, *for* bels *read* bela.
- " 14, line 16 from end, *for* Chapter IV *read* Chapter II-B.
- " 22, line 8, *for* over a hill *read* over a kill.
- " 25, line 28, *for* or often *read* are often.
- " 25, line 34, *for* fatal, it is *read* fatal; but it is.
- " 37, lines 24-25, *for* near Jhelum *read* near the Jhelum river.
- " 47, foot-notes, *strike out* foot-note (2), from "The name" to end.
- " 83, line 17, *for* later *read* latter.
- " 89, line 7, *for* Kuddar Circle *read* Khuddar Circle.
- " 96, line 17, *for* Muhammad Khan *read* Wilāyat Ali.
- " 106, line 17, *for* The course *read* The curse.
- " 109, line 1, *for* with the Bábar *read* with Bábar.
- " 122, line 5, *for* remained *read* remain.
- " 126, line 1, *for* the Jhelum, Pabbi and Khuddar *read* the Jhelum Pabbi, and Khuddar.
- " 145, statement, heading of 3rd col., *omit* Rs.
- " 148, last line, *for* once so *read* once sown.
- " 160, line 4 from end, *for* another Chapter *read* another Section.
- " 163, line 29, *for* Circumstances, if *read* Circumstances: if.
- " 170, line 19 from end, *for* mu-kkur *read* mukhur.
- " 172, line 11, *for* The canal is *read* The canal was.
- " 188, line 20 from end, *for* an opening out *read* an opening cut.
- " 188, line 12 from end, *for* pool brine *read* pool of brine.
- " 192, line 13 from end, *for* 2'64, *read* 1'64.
- " 192, last line from end, *for* s. 4 *read* Rs. 4.
- " 197, line 9 from end, *for* valale *read* volatile.
- " 209, line 18, *for* scatch *read* scratch.
- " 209, line 21, *for* chains *read* chairs.
- " 211, line 5 from end, *for* registration ports *read* registration posts
- " 211, last line, *for* levied b the *read* levied by the
- " 213, line 6, *for* Tarakk *read* Tarakki.

LIST OF MAPS.

The maps noted below will be found useful for reference:—

I.—SURVEY DEPARTMENT MAPS—

1. Standard Sheets. Scale $1''=1$ mile, Nos. 138, 139, 140, 141, 163, 164, 165, 187, 188 and 189.
2. Jhelum District maps. Scale $1''=4$ miles, published 1899.
3. Sketch map of the Jhelum District. Scale $1''=8$ miles, published 1900.

II.—SETTLEMENT REPORT MAPS OF 1895-1901—

1. Map of the district showing main physical features, boundaries and communications.
2. Map of the district showing secure and insecure areas.

III.—ASSESSMENT REPORT MAPS—

1. Map of Tahsíl Pind Dádan Khán. Scale 4 miles= $1''$, published 1898.
2. Map of Tahsíl Chakwál and Tallagang showing physical features. Scale 4 miles= $1''$, published 1899.
3. Map of Tahsíl Chakwál and Tallagang showing tribal distribution. Scale 4 miles= $1''$, published 1899.
4. Map of Jhelum Tahsíl showing tribal distribution. Scale 4 miles= $1''$, published 1900.
5. Map of Jhelum Tahsíl showing physical features. Scale 4 miles= $1''$, published 1900.

CHAPTER I.—DESCRIPTIVE.

Section A.—Physical Aspects : Meteorology.

The District takes its name from that of the head-quarters town, which is correctly written *Jehlam*; but the common English rendering of the name, *Jhelum*, has the sanction of long usage and is adopted throughout this volume. The derivation of the name is not known.

The average length of the District from east to west is about 110 miles, while its average breadth from north to south is about 36 miles. The breadth, however, varies greatly in different places, as may be seen from the accompanying maps: across Tallagang Tahsíl it is barely 28 miles, but on a line drawn through Lilla and Dulla nearly 55. The superficial area has been variously estimated. The Topographical Survey of 1851-59, as subsequently corrected, gives it as 3,896 square miles; but this is said to be only approximate: the re-measurement made for the recent Settlement shows an area of 3,959 square miles, which is probably nearly correct; but there has never been a professional Revenue Survey, and the country is a very difficult one to measure properly.

The Jhelum District is one of the Districts of the Ráwalpindi Division, and separates Ráwalpindi from Sháhpur, forming the southern half of the rough hill country at the head of the Sind-Ságar Doab. It lies between $32^{\circ}26'$ and $33^{\circ}15'$ north latitude, and $71^{\circ}51'$ and $73^{\circ}50'$ east longitude. On the north it is bounded by the District of Ráwalpindi, on the south by the Districts of Gujrát and Sháhpur, on the east by Kashmír territory, and on the west by the District of Míanwálí.

This large tract was divided into four Tahsíls. Tahsíl Jhelum occupies the whole eastern end, and all the west is taken by Tahsíl Tallagang, while the central area between is held on the north by Tahsíl Chakwál, and on the south by Tahsíl Pind Dádan Khán.

The District contains two towns of more than 10,000 souls, Jhelum with 11,703 inhabitants, and Pind Dádan Khán with 13,770 (1901).

The administrative head-quarters are at the town of Jhelum, which is very eccentrically situated in the extreme south-eastern corner of the District. There is an Assistant Commissioner stationed at Pind Dádan Khán, in charge of the Pind Dádan Khán Sub-Division, which comprises the Pind Dádan Khán and Tallagang Tahsíls.

Jhelum stands 15th in order of area and 21st in order of population among the Districts of the Province, comprising 4 per cent.

CHAP. I, A.

Physical
Aspects.

Name.

Area.

Boundaries.

General
description.

CHAP. I. A. of the total area, and $2\frac{1}{2}$ per cent. of the total population of British territory.

Physical Aspects.

General configuration.

The Salt Range.

Round Jhelum itself there is a wide expanse of level plain which is prolonged into a narrower strip along the course of the river; but elsewhere the surface is generally rough, broken and disturbed. Much of it is covered by the mountains of the Salt Range and its tributaries: this range first enters the District at its extreme south-west corner, where the spurs of Mount Sakesar descend into the village of Láwa, and the whole lower boundary of Tahsíl Tallagang is fringed by the northern ridges of the hills. Still, in this part of its course, the range keeps mostly to the District of Sháhpár; but when it reaches the boundary of Tahsíl Pind Dádan Khán it passes altogether into the Jhelum District. Here it consists of two distinct lines of hills running west and east at a distance from each other of about 5 miles inner measurement, generally parallel to one another, and each of them made up of a number of parallel ridges, though this parallelism is modified by a marked tendency to a linked or looped formation: at intervals of about 10 miles the two main lines of hills bend in towards one another, and mingle in a knotted mass: then they again separate, again run parallel and again unite. This is observable, not only in the range as a whole, but, though less regularly, throughout each of its separate components also.

The fashion of the hills.

A striking feature of the Pind Dádan Khán hills is the series of plateaux they enclose; the two parallel ranges, from 2,500 to 3,700 feet in height, support between them at an elevation of from 2,000 to 3,000 feet a series of fairly level uplands, richly cultivated and carrying a dense population: they are more fully described in a subsequent paragraph. The rocks which build up the range are throughout tilted at a very high angle; but there are few peaks which are either detached or conspicuous. On the south the range presents a monotonous line of parched and barren slopes, descending abruptly to the valley of the Jhelum river, which is rarely more than 700 feet above the sea, while on the other side they gradually sink down into the Chakwál plateau, a country which itself lies at from 1,300 to 1,900 feet above the sea level. With these differences of altitude in the surrounding country the appearance of the range differs greatly at different stand-points; from the south the view is dreary; the hills are almost entirely bare of vegetation; a few half-starved and sickly bushes only emphasize the general barrenness, which is not relieved by much grandeur of form. In fact, the east end of the range is decidedly tame; but towards the west, where the limestone rocks become predominant, there are often long lines of lofty cliffs, best seen in the narrow gorges which carry down the drainage of the interior upland to the Jhelum, of which the Nílí Váhn near Kandwál is one of the finest examples; but imposing as some of these gorges are, they are too barren and desolate to be called beautiful. On the north side of the mountains the plain

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country lies high, and the range has the appearance of a low, monotonous ridge, broken at long intervals by the higher peaks, such as Chel and Karangal. There is a fuller vegetation here: the long slopes of the hills are often covered with thick, low brushwood, *bāhekar*, *sanatha*, and *phulāhi* being most commonly met with, and there is also a good deal of wild olive. Real trees are, however, very rare; nor is this wonderful, for the rainfall is scanty, and it drains away almost immediately from the hill slopes, on which, too, the surface soil is often merely bare rock or stony débris: the wonder is not that trees should be so few, but that such vegetation as there is should be able to maintain itself. The country within the range is much softer: the upland of which it consists lies so high that the hills are completely dwarfed; and a rich cultivation makes some amends for the absence of forest trees.

What has been said applies chiefly to the main hills of the Salt Range in Tahsíl Pind Dádan Khán, though, with very considerable modifications, the same general arrangement may be traced in the more eastern ranges, which it now remains to describe.

Near the east boundary of Tahsíl Pind Dádan Khán the range has clearly been subjected to great disturbance: the northern hills, after culminating in the peak called Chel, which is the highest point in the District (3,701 feet), swing round to the southward in a broad sweep near the village of Phadiál. This lateral movement is continued until the whole chain reaches and is merged in its southern neighbour; but beyond this point of junction the southern hills themselves continue for about 5 miles till they reach the town of Jakúlpur: they then wheel abruptly to the north-east, and follow a short course to the bank of the Bunhá torrent, where they terminate. The country interposed between the overlap of these two lateral ranges is generally known as the Wagh valley, after the principal village contained in it. The hills which skirt this valley are generally looked upon as the furthest eastern extension of the Salt Range; but, as a matter of fact, either limb of the range is practically continued by a subsidiary line of hills right across the Jhelum Tahsíl almost to the eastern boundary of the District. In the northern limb this continuity is almost absolute; nearly opposite to the Chel, and at a distance from it of less than a mile, the great mass of Diljabba rises abruptly out of the plain country of Lúndí Pattí, and for some distance runs parallel to the general course of the Salt Range: but when the hills beyond the Chel sweep round to the southward, Diljabba takes no share in the movement, but follows its course uninterruptedly to the Ghorí Gala pass, where it joins the minor range which is generally known as the Níli hills, though it has in fact no local collective name, Níli being merely the name of the highest peak. From Ghorí Gala these hills stretch east and north-east across the Jhelum Tahsíl for a distance of 24 miles, near the encamping ground of Soháva crossing the line of the Trunk Road and of the North-Western

The Eastern Salt Range hills.

Subsidiary hills.

Diljabba.

The Níli hills.

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Tilla.

The continuation of the southern limit of the Salt Range is hardly less certain: the Wagh hills drop down sharply into the Bunhá torrent; but immediately opposite on the further bank the Tilla range at once begins its course. As seen from the west, the continuity of the two ranges can hardly be doubted; and what the surface of the country suggests is confirmed by the geological evidence. From the Bunhá these Tilla hills run eastward in general parallelism to the Nilí chain, rapidly culminating in the supreme peak of Jogí Tilla, thereafter as rapidly decaying, but as a series of low parallel ridges, (the 'Langarpur hills' of subsequent paragraphs), continuing across the valley of the Kahán and the line of the Grand Trunk Road near Ráthián. A few miles further on they finally vanish, but at a little distance to the northward a new range springs up in the hillocks called Batáí Dher, (close to the encamping ground of Dína), which may conveniently be regarded as a continuation of the Tilla range which has suffered some lateral displacement. From Batáí Dher this new range runs right up to the eastern boundary of the District near Dhangrot on the Jhelum being generally known as the Lehrí hills, after the name of one of the chief *mandís* or mother villages of the Iskandrál Gakkhars. In one respect these hills are peculiar; like the Salt Range they are generally scarped on one side and sloping on the other, but by what is almost, if not quite, a solitary exception in the District, the scarped surface is turned away from the river.

The Lehrí hills.

Affiliated ravines.

Throughout all these ranges the main hills are frequently belted on one side or both by a broad band of hard clay ravines, often of considerable depth, which all run parallel to the mountains and to one another. They are built of a hard nodular marl, dusky-red in colour, (not unlike the refuse of a brick kiln), and are generally almost bare of vegetation. Viewed from above, they present a peculiar appearance, like the successive waves of a shallow sea beating about the bases of the hills. These ravines are a class apart, never occurring far from the mountains, and near to them being more common on the northern side than on the south: ravines of other species are common all over the District, and will be separately noticed.

Divisions caused by the hills.

The double range of hills above described divides the whole District into three physically distinct portions, the first of these lying below the hills, the second within them, and the third behind them. Without pretence to strict geographical accuracy these may be termed the riverain, the upland, and the plateau.

The riverain tract.

The riverain is a broad alluvial plain spread out between the Jhelum and the hills. It stretches from Pandorí, in Jhelum Tahsíl to Kandwál in Tahsíl Pind Dádan Khán, and its length measured

along the course of the river is nearly one hundred miles. Its average breadth is about 8 miles but is subject to great variation, for, while near Jakálpur the plain is a mere thread, to the north, by Duliál, it spreads into a broad boss which pushes down a limb along the reverse side of the mountains, so as to fill up the area left vacant by the lateral displacement of the Lehri hills from the general line of Mount Tilla. This is the furthest extension northward of the riverain country, and here, near to the historic fortress of Rohtás, and amid the low rich lands which fringe the course of the Kahán, it terminates. Towards the centre this tract consists of fertile loam which gradually grows sandy as it approaches the river and stony as it approaches the mountains. It is seamed in all directions by the beds of hill torrents, which generally bring down fertilising floods, but sometimes sweep away fertile ground, or bury it in a layer of unproductive sand: very rarely new lands are thrown up, but these are generally small in area, poor in quality, and precarious in duration.

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Aspects.The riverain
tract.Character of
the riverain.

Beginning from the eastern corner of the District near the town of Jhelum, the country between the termination of the Langarpur hills and the river is a small and even, but slightly elevated plateau of good soil. On the banks of the Jhelum the land is rich, but slopes back from the river bank and receives little or no benefit from its waters. Further west at Jhelum itself, the river bank rises for a short distance to a stony eminence of conglomerate, but sinks again, beyond the Kahán *naddi*. From this point a strip of low and generally rich land along its banks stretches down to the Jakálpur hills. Above this strip, the land rises rapidly up to the high villages at the foot of the Tilla range, where the soil is poor and stony. In the intermediate strip the soil is generally fairly good and was formerly marked by an abundance of the *dhák* (locally known as *chichra*.) which is believed in these parts to be a sign of fertility: parts of this tract have, however, suffered much of late from the encroachment of mountain torrents.

Eastern
riverain.

Beyond Jakálpur and the Girjhák hills the narrow plain between the Salt Range and the Jhelum contains some of the most fertile and the wealthiest villages in the District. East of Pind Dádan Khán they are divided into three tracts,—villages just below the hills; the intermediate villages, which constitute, *par excellence*, the well tract of the District; and, thirdly, the villages along the river bank, where for the most part the soil is sufficiently moistened by the river floods, and requires no irrigation from wells. Of this part of the country Mr. Brandreth, who carried out the first regular settlement of the District, wrote as follows:—

Middle
riverain.

“The villages under the hills where wells cannot be sunk are nevertheless very rich and fertile. They receive the accumulated water of the hill slopes, the course of which they detain by lofty banks of earth. These detain the water long enough to thoroughly fertilize the field, and then breaking, let the water pass into the next one. Very little water gets

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beyond these villages except in unusual floods. At first, the water is rather salt, but after the surface soil has been washed, it is pure rain water, with just enough earth and salt to renovate the fields annually. If the rain is not sufficient, it leaves a salt deposit and destroys the harvest. The salt which these villages escape seems to collect in the villages of the middle tract, and year by year one or two wells are reported useless from salt accumulation. There are, however, more than 300 wells in the 15 villages, east of Pind Dádan Khán, and more are being sunk every year, so that it will be some time before the tract deteriorates materially. The soil here has also changed. In the villages under the hills, it is chiefly a reddish hard earth, which to the casual observer does not seem very fertile. In these villages it is a black pulverulent soil of the highest fertility, but becoming mixed with a good deal of sand as it approaches the river. The fertility of the soil, and the absence of ravines and unculturable land, render these villages capable of supporting a large surplus population. This, together with the very large area of each village, accounts for the great number of really large and important townships in this tract. The soil near the river is more sandy, and the moisture of the river affords an excuse for not making wells; and consequently the villagers are neither so industrious, nor so prosperous, as those where the continued labour required for the well develops different habits.

Western
riverain.

"Beyond Pind Dádan Khán to the west, the upper and lower class of villages alone remain. The middle class, or 'well' villages, have been, as it were, destroyed by the salt, whose destructive agency has rendered barren a broad extensive tract from Pind Dádan Khán to the end of the District. To the north is the same red soil, rendered fertile by the drainage of the hills and banked up with even more care; to the south is the rich and productive land along the banks of the river; but between is a desolate salt tract which, after even a moderate shower, is so slippery that it is hardly possible to ride over it till it dries."

The uplands

The second or upland region is the tract which lies between the double ranges of the hills. The uplands of the Salt Range proper lie altogether in the Pind Dádan Khán Tahsil, and those which are situated between the Tilla and Nili hills are all in Tahsil Jhelum. The two areas differ very widely, and it will be convenient to notice them separately. The Salt Range upland, which lies from two thousand to three thousand feet above the sea, was called by Mr. Brandreth "one of the most beautiful and fertile bits of soil in Upper India." It is fairly level throughout, and it is so hemmed in on every side by the mountains that it runs no general risk of denudation, and generally the soil is of very good quality, receiving also the benefit of much of the hill drainage which frequently brings with it a fertilizing silt. At the same time the upland lies so high that there is no room for the development of destructive torrents. This fortunate area is split up by the looped structure of the hills into three main basins named Vunhár, Kahún, and Jhangar, each of them crossed by small subsidiary ridges which divide it still further. All the three are very productive, and are somewhat densely peopled. Jhangar is commonly reckoned the most fruitful; but such superiority as it has, over the Kahún at any rate, is for the most part due to a larger rainfall and a more strenuous cultivation.

The upland
of the Salt
Range.

The upland of the Jhelum Tahsil between the Nili and Tilla hills is a very different area. It is commonly known as the Khuddar, or country of ravines, a name certainly well deserved, the surface of the whole tract being broken and distorted in a way which it is hard to realize without seeing it. It lies a good deal higher than the riverain, but it is much lower than the Salt Range upland, its average height being only about 1,200 feet above the sea, though perhaps long ago it may have been greater. To the south and west, on both sides of the Bunhá torrent, the land is high and sandy, (called here *bhúslí*), while further north and east about Bará Gowá, the soil is more mixed with clay (hence called *chikni*), and, lying lower, receives more benefit from the upland drainage. Just under Tilla itself, round Bheth, it is so stony as to be hardly culturable, and the ravines are of great depth; but beyond to the north, on the banks of the Kahán stream, below Rohtás, it is low, rich and fertile. Further north in the level tract, between the Lehri and Langarpur hills, a hard black soil appears (called *gholar*), the richest of any with abundant rains, but the worst in unfavourable seasons. The drainage of this portion fertilizes the remaining villages lying between it and the river, up to the Gakkhar village of Duliál, a tract familiarly called the *chhamb*, which contains much of the richest soil of the Tahsil. Though the superficial differences between a country of this kind and the uplands of the Salt Range are no doubt great and striking, nevertheless the two areas are radically homologous; but within the Salt Range there has been hardly any denudation, while in the Khuddar,—partly on account of its greater width and lower level, and partly on account of the peculiar hydrography of the District,—denudation has been incessant and excessive. There can be no doubt that this one reason is almost sufficient to account for all the differences which exist.

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Physical Aspects.

The upland
of the Jhelum
Tahsil.

It might naturally be thought that a country like the Khuddar must be very barren; and the ravines undoubtedly operate to restrict greatly the area where cultivation is possible, while, after a certain limit is reached, they also make the breaking up of waste a more difficult and expensive operation than usual. Much labour, too, is required to keep formed fields of the better class from degenerating; and owing to the very irregular shape, peculiar situation and limited area of many of the cultivated plots, farming is sometimes necessarily more wasteful than on the huge homogeneous plains of the Punjab: but when all these deductions are made it still remains true that the better part of the Khuddar cultivation is very fruitful. The best fields are those which lie low, are well levelled and banked, and which have behind them a large area of waste and intractable ravines—useless otherwise—being invaluable as a catchment area for the supply of drainage water to the cultivated fields. There are of course many Khuddar areas of which the produce is very poor: except a few fertile earthy villages in the centre of the tract, the whole is a sandstone country,

Character
of the Jhelum
Tahsil upland.

CHAP. I. A. and the soil therefore usually light and sandy, and often very shallow; while the fertile embanked land in the ravines, or in broad open stretches on the banks of the principal torrents, is a smaller proportion of the whole than might be expected, the bulk of the cultivation lying high on detached plateaux between the ravines.

Physical Aspects.

Character of the Jhelum Tahsil upland

The plateau.

Physical differences in the plateau.

Beyond the northern ridges of the Salt Range, and the chain of the Nili hills, we pass through a belt of rough and sloping country to the wide plain which fills the whole Tahsils of Chakwāl and Tallagang, and which may be called the plateau. It is a high-lying area sloping down generally towards the north-west, but in some parts towards the south and east. Near the Sohán (or Sawán) *naddi* it is sometimes crossed by short ranges of very low hills. Eastward of Tahsil Chakwāl the entire plateau is absorbed into the Ráwalpindi District; and all that remains to Tahsil Jhelum is the long and narrow strip of broken and sloping ground behind the Nili hills, which is known as the Pabbi *iláqa*. In many places this large area is fretted with small ravines and gullies, and throughout it is scored by the deep beds of the mountain torrents which descend from the Salt Range, and mostly cross the tract northwards, with a remarkably straight course, in a direction which is nearly at right angles to its length, and receive during their journey the whole drainage of the country. Thus each area between two torrents assumes a slightly arched surface falling away towards the drainage channel on either side, the best and most productive portions being those which lie under the watershed where there is a large extent of level ground not troubled with ravines: as we draw near to the large torrents, the slope becomes severe, and the surface very broken and stony. It seems probable that the underlying rock which always crops out at the watershed is nowhere very far from the surface throughout the entire plateau, and whenever the ground ceases to be fairly level, the overlying soil, if left to itself and not banked up, is almost certain to be carried away from all the higher levels. In some instances, however, the land near these torrents is better than all the rest: this is the case when the streams leave their deep beds and run in a more open channel, when they are frequently fringed by a broad riband of level ground dotted with wells, and covered with a prosperous cultivation. Unfortunately these areas are neither very extensive nor very numerous: they are more commonly met with on the lower courses of the torrents near their points of junction with the Sawán. Outside of these low and level tracts, wells are very scarce throughout the whole of the plateau; such wells as there are being often mere holes scraped in the light sandy soil or cut in the porous sandstone at the edge of a ravine, and yielding very little water. Each village has, therefore, several banks often raised to a great height, in open uncultivated spots, which collect the drainage water in large ponds; and on these the cattle depend entirely. They sometimes dry up, however, in bad seasons, and the distress is then very great, for in

such seasons the wells often dry up also, and the villagers have to go miles for water. The western half of the Chakwál Tahsíl contains certain broad tracts of heavy clay soil, very productive in good years, but readily affected by drought: otherwise it may be stated as a general rule that the soil becomes coarser and more sandy as one proceeds from east to west through the plateau: at the same time the rainfall diminishes, and the holdings becoming larger and larger, the methods of the cultivators get rougher and more slovenly owing to the larger area that each has to deal with.

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Physical Aspects.

Agricultural character of the plateau.

The general aspect of the District is exceedingly rough and broken: away from the river it is rare to find two miles of level ground together, yet the whole result is hardly picturesque: the scenery suffers from the fatal wants of wood and water. But the principal peaks of the Salt Range, such as Chel, Karangal, and Tilla, are all imposing from certain points of view, while their summits afford fine views of the surrounding country: and some of the gorges on the south of the range are also very fine in their way. Of the scenery of the Salt Range uplands, the Gandhála valley near Choa Saidan Sháh is perhaps the best specimen; and the country round Choa itself has also considerable beauty, when seen at the right season, and from the right spot. But in general the viewpoint in these uplands is so high as to dwarf the surrounding hills. Of another character is the lake of Kallar Kahár, which has been often praised, perhaps more than it deserves, for one side is quite uninteresting; but the other is certainly striking, and the unexpectedness of a large sheet of water at this height amongst the hills must always give the lake a certain attractiveness. In the east of the District, too, fine views of the snows of the Pír Panjál can be obtained in winter from many points, with a wooded reach of the river, or in other parts the many successive ranges of the intervening hills, in the foreground. The billowy uplands of the northern plateau, again, are not without a decided charm of their own, when bright with the green and yellow of the growing spring crops. In the matter of scenery, therefore, while there is nothing of the highest order, the District may claim a large variety, including much that it is by no means to be despised.

General aspect of the District.

The drainage of the eastern end of the District is by means of the Kahán and Bunhá torrents into the Jhelum; that of the western by the Sauj, Gabhír, Ankar, and other streams into the Sawán and so to the Indus. These are all hill torrents, full to overflowing after heavy rain, and at other times practically dry: the only river properly so called is the Jhelum, which, rising far away in Kashmír, forms the east and south boundaries, and skirts the District for about 120 miles: in the old time it was called Vedasta and afterwards Vehat, from the first of which the Greeks took their Hydaspes, while the second is still in use among the rustics.

River system and lakes.

Until it has passed the base of the Salt Range spurs, its course is somewhat to the east of south, and its bank on either side is shut

Hydrography of the river Jhelum.

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Aspects.Hydro-
graphy of the
river Jhelum.

in by low hills covered with brushwood ; but having cleared the Langarpur hills and reached the open plain, it turns sharply to the south-west and maintains this direction till it joins the Chenáb about 240 miles below the hills. Here its banks are open, though it is not until it has reached a distance of about three miles above the town of Jhelum that the right bank is low enough to admit of inundation. The bed of the river, as long as it remains among the hills, is rocky, and the current dangerous, but about 8 miles above the town of Jhelum the bed changes and becomes sandy. This character it retains throughout its course past this District, the river flowing with a swift but generally tranquil current, in a bed the width of which gradually increases in its onward course ; though here and there rocks beneath the sand produce shallows or rapids, which are a great hindrance to navigation. The river, however, is navigable by the flat-bottomed boats of the country, from a point about 10 miles above the town of Jhelum, the depth of water being about 15 feet in summer, and 9 in winter. At the town of Jhelum the maximum recorded surface velocity is 8.66 feet per second, and the approximate maximum discharge in the same time is 200,000 cubic feet, the breadth of the stream at the same place varying from 2,000 feet to nearly a mile. The river is studded here and there with low sandy islands (called *bels*), which when first thrown up are barren, or covered with scrub tamarisk and the like, but are generally brought under tillage as successive floods deposit silt on them : similar land fringes the banks of the river, the whole being subject to quick changes both by diluvion and by accretion, due to the vagaries of the stream. The set of the stream against its banks varies greatly. It is said that the changes tend to be periodical ; but this is probably a delusion. For many years past, in the general result, Jhelum has suffered far more from diluvion than Gujrát ; and although there are from time to time signs of a change in this respect, the sæcular inclination of the river is nevertheless probably to shift to the westward, and, in places, this would lead to encroachment on this District, as indeed it has done in the last generation. The river water retains its coldness far into the hot season : it is always heavily charged with silt, and the deposit which it leaves is generally of good quality, but to suppose that it is always absolutely or nearly uniform is a mistake which has sometimes led to injurious consequences in the assessment of new alluvium.

Other
streams.

The remaining streams of the District consist merely of the sandy or rocky torrents which descend from the hills or issue out from the ravines. Such a torrent is called a *kas* or *kassi*. They make a great show on the map, but, except for a few days in the year, they contain little or no running water. After a storm of rain they are often impassable for many hours, but at other times they are merely wastes of sand, though in some few places a scanty stream of water flows all through the year, and many torrent beds

are dotted at rare intervals with permanent pools which are of great use both for man and beast : these are called *trimkan* or *dhan* ; and, even where the bed is dry, water can often be found by digging a hole a few feet deep through the sand. What is obtained in this way is sometimes little better than a foetid puddle, yet often in the hot weather, and sometimes in the cold weather too, it is the only drink for whole villages.

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streams,Watershed
of the Indus
and Jhelum,

Perhaps the most noticeable thing about these torrents is the peculiar disposition of the water-parting between the Jhelum and Indus. The natural temptation is to think that one slope of the Salt Range would drain to the one river, and the other to the second : but this is not so. The line of watershed runs right across the tahsíl and almost through the town of Chakwál, that is to say, that the whole of the east Salt Range, and all the auxiliary hills in the Jhelum Tahsíl, drain towards the Jhelum river. The long slopes of all these hills sink down towards the north, and the channels fed by them carry also by far the greater part of the drainage water which collects in the plain country below : there it is on the reverse side of the mountains, and has to force its way once more through the entire range before it can reach the river : but this is no easy matter, and many torrent beds run due east for long distances along the skirt of the hills seeking for some outlet where they may break through : the Sarúlí, the Bunhá, the Kutian, and the Karral (which is the chief source of the Kahán) are all instances. At length all these streams do break through, and pour the drainage of half the District through the Khuddar country of Tahsíl Jhelum, which perhaps may have been one reason for the great denudation which has happened there. There is a curious native tradition on the subject, which is in all probability the memory of a real event : the enormous Kas Bunhá breaks through the northern mountains at the Ghorí Gala pass between Diljabba and the hills of the Nílí chain ; this outlet, it is said, did not always exist : Núr Sháh, a poor *gházi* of Kashmir, had no horse to ride upon, so he mounted the wall of his house, which at once began to travel about with him : at last, so riding, he reached Ghorí Gala, where his horse straddled right across the breadth of the pass and there stayed. So the ways were blocked, and all Lúndi Pattí became covered with water and without inhabitants. At last, in the days of the Chughatta kings, the wall was thrown down, and the water passed through and the people came back. Inside the pass there is a remarkable wall-like ridge of rock, 60 feet or more in height and only a few feet in width, which no doubt suggested the first part of this legend. It is clear that the water must have cut through this ledge at some time and have swept destructively over the face of the country beyond ; but the pass is certainly much older than Bábar, in whose time the obstruction is said to have been cleared away : nevertheless, the unanimity with which every important tribe in Chakwál, as well as the Janjúas of the hills, claim

Native
tradition,

CHAP. I, A. for their forefathers the distinction of having been deputed by Bábar to carry out the work, perhaps indicates that the occurrence on which the story is based took place at no very remote age.

Physical Aspects.

Chief torrents.

The Kahán.

The two chief torrents which flow into the Jhelum are the Kahán and the Bunhá. The Kahán drains the centre and east Jhelum Tahsíl, and is formed of many branches which issue from the Nílí hills, and join one another near Domelí. After a course nearly due east, it pierces the Tilla range under the walls of Rohtás, and eventually falls into the Jhelum just below the Sadr cantonment. In the rainy season it is much vexed with quicksands; as indeed is the case with nearly every large *kas*.

The Bunhá.

The Bunhá rises in the Government *rakh* of Súrta, in Tahsíl Chakwál, and issues out on the north side of the mountains. Thence it turns east, and near Duhman is joined by the Kulian, the Kutian and the Sarúlí, thus receiving the whole drainage of the eastern part of the Chakwál Tahsíl, and a considerable portion of the Northern Salt Range. The united stream flows through the Ghorí Gala pass and across the west of the Khuddar country; then sweeps round the southern end of the Tilla hills by a gap between them and the last spurs of the Salt Range, and almost immediately afterwards spreads out into a broad waste of sand which is year by year extending its ravages. Its after course is short, and it falls into the Jhelum between Dárápúr and Bhimbar. Its bed at the Ghorí Gala is only a few paces in width, but below Tilla not far short of two miles across.

Minor torrents flowing to the Jhelum.

The other *kassís* which fall into the Jhelum for the most part come down directly from the southern face of the Salt Range or of Tilla. Some of them, such as that which descends on Kálá from the Langarpur hills, often do mischief; but most are unimportant. They flow in broad, shallow beds through a plain country; rarely contain much water, and many, especially in Tahsíl Pind Dádan Khán, disappear before reaching the river.

Torrents flowing to the Indus.

The Sawán.

In that part of the District which drains towards the Indus most of the torrents descend from the north slopes of the Salt Range, all of them falling directly or indirectly into the Sawán, which itself falls into the Indus. The Sawán comes into this District from that of Ráwalpindi, and thereafter forms roughly, but not exactly, the boundary between the two for a distance of nearly 60 miles. It is very treacherous, one night quite dry, next morning not to be passed without a goat-skin, and is often full of quicksands. Its first feeders in this District are the Karáhi, the Bhágneh, and the Sauj, which all join it near Dulla; and a fourth stream, joining it here from the side of Ráwalpindi, gives the place of meeting the name of Pachnand or 'Five Waters.'

Pachnand.

Other torrents.

West of Pachnand are many other *kases*. Of the principal Mr. Arthur Brandreth has given the following description. "The western part of Dhanní (*i. e.*, west Chakwál) is all drained by the

Khunála a small ravine near Kot Rúpwál, and by a great *nála* called the Dhráb, which is, however, only an affluent of the still greater Gabhír, the chief *nála* in this part of the District. The Dhráb rises at Kallar Kahár, and at first flowing north, bends round in a quadrant of a circle to meet the Gabhír near the village of Dhrábí. Its bed here is a vast plain of dry sand some two miles wide, with rich land all along it; but in some parts its bed is extremely deep and narrow." The Tallagang Tahsíl is mainly drained by two large streams, both called the Gabhír and both rising near Jába in the Sháhpur Salt Range. One curves to the east and then to the north dividing Tallagang from Pind Dádan Khán and Chakwál; the other to the west and north-west forming the boundary with the old Bannú District. Both fall into the Sawín *naddí*. The other streams which intersect this Tahsíl are the Draggar by Tallagang and Kot Sírang; the Ankar by Thohá Mahram Khán and Tamman; and the Letí. This latter forms the boundary of the Míal and Pakhar *iláqas* and was formerly the western boundary of the Tahsíl. Of the three, the Letí is the deepest, and has little culturable land on its banks, which are high and rocky; the Ankar at first is also between high banks, but latterly widens and has several prosperous villages on its banks. The banks of the Draggar are generally steep, but here and there expand and afford room for several flourishing little wells.

CHAP. I. A.

Physical Aspects.

The Dhráb.

The two Gabhírs.

The Draggar.
The Ankar.
The Letí.

The torrents mentioned above are not utilised for purposes of irrigation, though a certain amount of land on the banks of a few of them benefits by their floods; but the District also contains several perennial hill streams, issuing from springs in the Salt Range, the water of which, when sweet, is used for irrigation. The valley of Choa Saidan Sháh is watered by one of these, and the villages of Kallar Kahár, Jutána, Chhúmbí, and Bághánwálá by others, but the whole area thus irrigated is only about 1,500 acres. The irrigation from floods in the otherwise dry mountain torrents, in the Pind Dádan Khán plain and elsewhere, stands on a different footing; here an elaborate network of embankments carries the flood water onto the successive fields of very considerable areas, and performs the work so thoroughly that no water as a rule finds its way to the river: the cultivation in some parts depends entirely on the sufficiency of these floods, and the right to make use of the water is often hotly contested by neighbouring villages. The cultivators of one village will make a drain and carry off more water than they have a right to, while the crops of another village depend upon having the channel open at once while the rain lasts. As there is no time for an appeal to the courts of law, the villagers proceed in a body and cut the new bank, and a fight sometimes ensues, in which not unfrequently lives are lost. Mr. Brandreth records that in one small village 200 acres of land were thrown out of cultivation by a wrong decision upon this subject. 'It is an undoubted law of the country,' he proceeds, 'that each

Irrigation from hill streams and torrents.

CHAP. I, A. village has a right to the surface drainage of its own lands, even though a bend of it runs through a part of a neighbouring village.'

Physical Aspects.

Lake of Kallar Kahár.

The only lake in the District is that of Kallar Kahár. It lies close under the northern slope of the Salt Range and is itself very salt. It is roughly circular, nearly a mile across when full, and perhaps about four feet deep. The reason of its saltiness is not properly known, but appears to be partly due to ordinary precipitation, and partly to brine springs. The villagers have a legend that the water was once fresh. One day, as the women were filling their pitchers, Bába Faríd, the holy saint of Pákpattan, came that way and asked for a little water to drink; but the women answered: 'How would you drink when the water is salt?' For they knew him not. 'Even so,' said the saint, 'the water is salt.' So he passed by; but in the evening the men came home to eat, and behold the water in the pitchers was salt, and the lake has been salt from that day.

Water supply of the District.

Speaking generally the District cannot be said to be well supplied with water. In the villages near the river, wells are usually met with, especially in the Jálap *iláqa* of Tahsíl Pind Dádan Khán; and throughout the riverain tract the water supply is never a serious difficulty, as wells could always be made even if there are none at present: but in and behind the hills, wells are decidedly uncommon; with a few rare and costly exceptions, the only spots upon which they are built are the stretches of level ground which sometimes fringe the course of a *kas*. Elsewhere, unless there is a natural spring, the only resource is a tank or a water hole, both liable to failure, when long journeys have to be made in search of water, the cattle often leaving their own villages for the same reason. Many of the natural springs are situated in the Government *rakhs*, and when—as sometimes happens—such *rakhs* are closed against grazing, great discontent always arises, partly at the deprivation of pasture, but chiefly at the deprivation of water.

Geology and Botany.

The geology of the District may be said to be the geology of the Salt Range, an account of which will be found in Chapter IV. Regarding the District as a whole the following synopsis by Mr. H. H. Hayden of the Geological Survey of India is given:—

The greater part of the District lies on the sandstones and conglomerates of the Siwálik series (upper tertiary), but towards the south, the southern scarp of the Salt Range affords sections of sedimentary beds ranging from cambrian upwards. The lowest bed is the salt marl and rock salt, which affords the material for an extensive mining industry. The age of the salt marl is at present unknown, although it is apparently overlain by a purple sandstone followed by shales containing lower cambrian fossils. These are overlain by the magnesian sandstone and salt pseudomorph zone (see provincial article on the geology of the Punjab). The salt pseudomorph zone is followed by a boulder bed and shales and sandstones of upper carboniferous or permian age, overlain by lower tertiary sandstone and nummulitic limestone. In this, the eastern part of the Salt Range, the fossiliferous productus limestone and ceratite beds are apparently absent, and there is a gap in the geological

sequence between lower permian and tertiary. Coal occurs in the lower tertiary beds at Dandot and Bāghānwāla, and is mined at the former locality, while the most important Salt mine in the range—the Mayo mine—is situated at Khewra.

See Manual, Geology of India, 2nd edition, page 109 (older palæozoic of the Salt Range) and page 118 (carboniferous and trias).

Wynne: Geology of the Salt Range, Mem. G.S.I., XIV.

Middlemiss: Geology of the Salt Range. Rec. G.S.I., XXIV, part 1.

CHAP. I, A.

Physical
Aspects.
Geology.

Kallar-shor.

Kallar-shor (or either of the two words separately) is the term applied to the efflorescence which appears on the surface of the ground, where the soil contains much salt of any kind, and is not well drained. It appears sporadically all over the District in the form of barren patches in otherwise fertile fields; but is a serious evil only in the Pind Dādan Khān plain, where it renders unculturable, and practically useless for any purpose, a strip of land roughly about 36 miles long with an average breadth of a little over a mile, reducing the fertility of a considerable area in addition. It seems to be now certain that this *kallar* is not, as was formerly supposed, directly due to salt washed down from the hills to the north, though temporary damage is sometimes so caused; but in general the evil arises from stagnation of the sub-soil water, when the salts are brought to the surface by evaporation and capillary attraction. Experience seems to show that in the absence of canal irrigation the area affected tends gradually to expand, increasing in years of deficient rainfall, and decreasing, though not probably, in the long run, to quite the same extent, in years when the rainfall is heavy, and counteracts the tendency of the salts to collect on the surface. This fact is the principal justification of the hope that it may be possible by means of canal irrigation, which is likely to be largely extended in the tract affected, to reclaim a large proportion of the *kallar* land. There is not at present (1902) much experience to go upon, but experiments are hopeful so far as they go: on the other hand must be noted the fact that in one or two localities land subject to river floods has been to some extent damaged by *kallar*; but this is very rare.

In 1897 some specimens of *kallar* soil were sent to Dr. Leather, Agricultural Chemist to the Government of India, for analysis, with the following result:—

Serial Number.	Sodium chloride,	Sodium sulphate.	Magnesium chloride.	Magnesium sulphate.	Magnesia.	Calcium chloride.	Calcium sulphate (gypsum).	Calcium carbonate (limestone).	REMARKS.
I ...	405	224	...	061	037	...	914	...	Old established shor, white, flooded by torrent from Salt Range.
II ...	1684	...	869	...	...	344	949	076	As above, but not so flooded.

CHAP. I. A.

Physical Aspects.

Kallar shor.

Serial Number.	Sodium chloride.	Sodium sulphate.	Magnesium chloride.	Magnesium sulphate.	Magnesia.	Calcium chloride.	Calcium sulphate (gypsum).	Calcium carbonate (limestone).	REMARKS.
III ...	1.408	.093	...	.284	.020	...	1.025	...	Old shor, dark surface, flooded from Salt Range.
IV ...	1.312	...	.442	...	...	.261	.631	.085	Similar to above in all respects.
V ...	.557	...	.228	...	...	.100	.342	.085	Recently thrown out of cultivation, white surface, not flooded from the hills.
VI ...	1.323	...	.040	.093	.025	...	.560	...	As above, but flooded from the Khewratorrent, and believed by owners to be affected by refuse salt mound there.
VII ...	.237	...	.152	...	...	.012	.190	.101	Still under cultivation; well irrigated; flooded by river, not by hill torrents.
VIII ...	.082	.086	...	...	.020	...	.124	.003	Under cultivation, white in places, subject to hill floods; has had some canal irrigation.

The samples analysed were vertical columns a foot in depth; the surface soil alone would no doubt yield a much greater proportion of salts. Dr. Leather remarked that the presence of gypsum in all these soils prevents the presence of that most objectionable constituent, sodium carbonate, or "black alkali;" and observed that the analyses do not show any distinct connection between the salts in the soil and the drainage from the hills; and in fact tend to show that there is no such connection, the worst specimen of all not being subject to hill drainage: but at the same time the description of the salts (the large proportion of chlorides, including as they do magnesium chloride especially), indicates that they are not the result of simple decomposition of the soil, as is most probably the case with the *usar* of the United Provinces. The salts in these specimens are, he thought, no doubt derived from some outside source; and though they may not come directly from the salt in the hills, they probably do come indirectly from this or some similar source; they may, for instance, be brought by underground water, which, as it evaporates at the surface, leaves the salts behind: the only remedy he could suggest was the cutting of open drains six feet deep through the tract affected, perhaps at the same time diverting any torrent believed to be doing damage; this land could be readily drained if the levels are favourable, for, unlike most of the *usar* of the United Provinces, it permits water to pass through it perfectly and rapidly. The levels, however, are not believed to be favourable, and as has been indicated above, the remedy must be looked for in another direction, from canal irrigation.

The District flora is not important ; but owing to the difference of level it varies a good deal from place to place. It does not appear to have been specially dealt with in any publication ; those interested in the subject will however find some information in an early notice of the "Vegetation of the Jhelum District," by Dr. J. E. T. Aitchison in the Bengal Asiatic Society's Journal.⁽¹⁾ Large trees in quantity are only to be met with in the riverain tract ; the *tāhli* or *shisham* (*Dalbergia sissoo*) is common round Jhelum, and in the Government *belās* in the river, and also occurs frequently in other parts of the plain country, but behind the hills it seldom flourishes, and is rare, though there are some fairly good plantations in some of the ravines of Chakwāl and elsewhere. Its uses are well known ; the leaves and young shoots are browsed by cattle and camels ; and the wood is excellent for boats, carriages, pack saddles and furniture. The *kikkar* (*Acacia arabica*) is common all through the alluvial plain, especially in the *Jālap ilāqa* of Pind Dādan Khān, where it often reaches a large size ; but in and beyond the hills it does not seem to succeed, being probably killed down by the severity of the winter frosts, by which this tree is readily affected in the first years of its growth ; where it grows at all it grows very rapidly. It is perhaps the most useful of the District trees ; the timber is hard and durable, considering its quick growth, good for ploughs and well wheels, for cart making and a variety of other purposes, while it is also useful for burning. The bark and the pods are valuable tanning agents, the latter also affording excellent food for goats and sheep, and the leaves too are freely eaten by all stock in times of drought. The gum that exudes from the tree is an astringent medicine.

The *ber* (*Zizyphus jujuba*) is well known near the river, and not uncommon elsewhere, but nowhere so important as in the arid Thal, where it grows plentifully and well, the fruit it yields being a not unimportant article of diet in those parts : what is not wanted for immediate use is dried in the sun and stored or sold. The leaves and young shoots are useful as fodder, and the wood is good for house-building and fuel. A small variety, called *beri* or *malla*, (*Zizyphus nummularia*), grows freely as a shrub, especially in Tallagang, where it is cut over every year, the dried leaves mixed with chopped straw being considered a valuable fodder for cattle, and particularly milch kine ; the branches are used for making hedges ; the fruit too, though small, is eaten.

The *phulāhi* (*Acacia modesta*) is the most common tree in the hills, and is plentiful in the plateau also : a few specimens are large trees, with heavy timber, but in general it is stunted, with gnarled and contorted trunk. It is perhaps the most important tree in the District, because it is the only one which is really plentiful. Goats and sheep feed on it. The wood is dark, strong, heavy, and close-grained : oil-mills are made from the largest specimens,

CHAP. I, A.

Physical
Aspects.Botany :
Trees

Shisham.

Kikkar.

Ber.

Beri.

Phulāhi.

(1) J. A. S. B., 1863, part II, p. 290.

- CHAP. I. A.** and ploughs, well-work, and all manner of agricultural and domestic implements from the smaller wood : for these purposes it excels all the other timber trees of the tract : a tree of very slow growth, its wood is correspondingly durable ; but if it is not cut down on reaching full maturity the timber soon decays and becomes useless.
- Physical Aspects.**
- Phuláhi.**
- Olive.** Next to the *phuláhi* the most common hill wood is the wild olive or *káú* (*Olea europaea*) ; this is seldom large, but some fine specimens may be seen near water on the top of Diljabba. The fruit is neither eaten nor crushed for oil, but goats and sheep browse upon the leaves, which are useful for cattle also in time of scarcity. The wood is very hard and good though small. Sticks, combs, charms, and rosaries are made from it.
- Dhrek.** The *dhrek* (*Melia sempervirens*) occurs, but is not very plentiful. It is generally seen near wells and houses, especially new wells and houses, as it grows very rapidly and is useful as a shade tree : the wood is of very poor quality, but is used for light rafters and the like ; also for plough yokes (*panjálí*).
- Bohr.** Near water very fine specimens of the *bohr*, or banyan tree (*Ficus indica*), and less often of the *pippal* (*Ficus religiosa*), are commonly seen : one of the former near Jakálpur is well known.
- Pippal.**
- Tút.** The *tút* or mulberry is of fairly common occurrence on irrigated lands in the hills, growing very well at Choa Saidan Sháh and Kallar Kahár : here and there it is found amongst the roadside trees on dry land, but never in any great size.
- Pilchi.** New lands thrown up by the river are usually covered with the *pilchi* or Indian tamarisk (*Tamarix gallica*) which never grows very big, and is only used for fuel and coarse wattle work. The oriental tamarisk (*Tamarix articulata*) is met with in the submontane tracts along the upper courses of torrents, being common in some parts of the Pind Dádan Khán plain, and also occurs to some extent elsewhere : it is generally called *pharicán*, or, in the west, *ruk*, *farásh* being an unknown word in this District.
- Farásh.**
- Other trees.** The *kangar* (*Pistacia integerrima*), which is a good wood for furniture, is confined to Tilla, as are the *simmál* (*Bombax heptaphyllum*) and the *chikrí*, (*Buzus sempervirens*). The wild date palm, or *khajúr*, (*Phoenix silvestris*) occurs on the same hill, and is also met with in the plain country near Pind Dádan Khán and at Wagh. On the very summit of Tilla there are some eucalyptus trees, some carobs, a grove of *chíl* pines, and some bamboo, (which ought however, properly to be mentioned among the grasses). Of these the eucalyptus and bamboo occur in the civil station of Jhelum also.
- Brushwood.**
- Jáhlí.** The *jáhlí* or *wan* (*Salvadora oleoides*) is sometimes a tree, but more commonly spreads into a bushy undergrowth : the berries called *pílú* are much sought after, and have been known to be exchanged for wheat, weight for weight, in times of considerable scarcity : it is common on the southern aspect of the Salt Range, but is never seen in or beyond the hills.

The leafless *karil* (*Capparis aphylla*) is common on rough lumpy ground, and though seldom more than a large bush it sometimes becomes a tree of small size: the ripe fruit (*pinjū*) is eaten, and the half ripe is pickled (*dela*). The wood is used for fuel, and for light lath-work in village houses.

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Physical
Aspects.

Karil.

The *chhachhra* is fairly common in the plain and in the hills, sometimes as a shrub, sometimes as a stunted tree, and is said to be a sign of fertility: its leaves are valued as fodder for milch buffaloes.

Chhachhra.

The *ghanira* (*Nerium odorum*), with its pretty pink and white flowers, (Jahāngir's diary tells us how much he was struck by this shrub when marching along a Jhelum *kassi* 300 years ago), is common in most of the torrent beds: its leaves are poisonous, and animals bred in the District always avoid it; but imported stock seems to have no such instinct. The stalks are used for pipe-stems and ox-goads.

Ghanira.

Two *salsolas*, called *lānā* and *lānī*, are abundant in the Thal, growing freely on *kallar* lands too salt to produce anything else. They afford excellent grazing for camels, and cattle will eat them too, if very hard put to it for food. *Lānā* is burnt to some extent to produce *sajji* or carbonate of soda, but the true *Salsola Griffithsii*, to which these plants are allied, does not seem to occur in this District, though common in Shāhpur, where the manufacture of *sajji* is comparatively important.

Lānā.

By far the most common of the hill shrubs are the *bahekar* and *sanatha* (*Adhatoda vasica*, and *Dodonaea burmaniana*): *bahekar* grows almost anywhere; though otherwise useless, it makes excellent fuel for the small native lime-kilns: the flowers are white, with rather an evil smell, but much beloved of bees. The *sanatha* often covers the entire slope of a hill and grows to a considerable size: it is a pleasant looking shrub with glistening dark-green leaves: it is very inflammable, even when green, and when thick has sometimes led to forest fires: except for fuel and light roof-work it is useless.

Bahekar.

Sanatha.

The straggling *ak* (*Calotropis procera*) with its broad leaves and woody stems is a familiar object in poor land in most Districts, and Jhelum is no exception: it is generally considered a useless weed; but it can be made to serve various purposes: the stalks are burnt, goats browse on the bitter leaves, fibre can be got from it, and the cotton-like down in the pods is considered a luxurious stuffing for cushions.

Ak.

A few of the commoner weeds remain to be noticed: the river flooded lands are often full of a thistle-like weed called *leh*; another weed is the thorny *pohli*, of which the seeds are edible. The most intrusive of all is, however, the *bukāt* or *pīyāzi*, an onion-like weed, which occurs all over the District, and may often be seen filling entire patches in wheat fields, having choked the growing corn: its black seeds are sometimes ground and eaten by the very poor in

Weeds.

CHAP. I. A. times of great scarcity. *Bhakhra* is another common weed, which produces in the autumn an abundance of triangular spiked seed-pods; in times of drought these are ground and mixed with flour to make a black and sour substitute for the ordinary wheat cakes. The *harmal* (*Peganum harmal*) is also common: it is useless, but does no harm.

Physical
Aspects.

Weeds.

A very useful weed (if it can be so styled) is the *chanāka* (*Diploaxis griffithsii*), a sort of wild oilseed rather like *tarīmīra*, but with a violet flower. It grows freely in Tallagang in favourable years, and the seed is collected and sold for export to Amritsar at 9 to 12 seers per rupee. It is there known as *khūb kalān*, and is used as a drug in fever and debility.

Garden trees.

Of garden trees some have already been mentioned above: the mango is uncommon; it grows in the gardens at Jhelum, but elsewhere are only two or three groves, such as those at Sangoi and Pind Dādan Khān, and perhaps a dozen isolated trees, some of good size, scattered about the District. Other common fruit trees, grown with the aid of irrigation, are the apricot (*khurmānī*); plum (*ālūcha*); fig (*phagwāra*), which also grows wild; peach (*ārū*); orange (*santra*, &c.); limes (*mittha* and *khatha*); pomegranate (*anār*); guava; loquat; plantain; a small green apple, and some others; grape vines also do well both in the riverain and the hills, in favoured places. The list is fairly imposing; but very little of the fruit grown is really good, the apricots of the hills being about the best. The walnut trees of the Choa Saidan Shāh garden deserve mention; they have grown to be fine trees, but their produce is not very bountiful. The climate is probably too hot for them.

Grasses.

The following list of the grasses found in the *rakhs* of the District is taken from a report made in 1894 by Mr. McDonell, sometime District Forest Officer, Jhelum, and latterly Conservator of Forests, Kashmir. It includes most of the grasses found in the District as a whole.

Panicaceae	...	<i>Cenchrus pennisetiformis</i>	...	Coarse, but fairly good.
		<i>Pennisetum</i> sp.	...	Coarse and poor.
Andropogoneae	...	<i>Andropogon forcolatus</i>	...	Not good.
		<i>Andropogon laniger</i>	...	Coarse, scented; eaten when young.
		<i>Heteropogon contortus</i>	...	"Speargrass", eatable when young.
Agrostideae	...	<i>Aristida depressa</i>	...	Eatable green; has spears when dry.
Chlorideae	...	<i>Cynodon dactylon</i>	...	Excellent, and fairly common.
		<i>Tetrapogon villosus</i>	...	A poor grass.
		<i>Aphida aristata</i>	...	Said to be good.
		<i>Anthistaria anathera</i>	...	Coarse, scented, eatable green.
		<i>Eleusine flagellifera</i> (?)	...	Good fodder grass, common in plains.

The following are less common than the foregoing:—

Panicaceae	...	<i>Panicum antidotale</i>	...	girham, kharanj	Bad grass.
		<i>Panicum</i> ..	...	...	There are three or four varieties, fair fodder when young.
		<i>Pennisetum</i>	Three or four species of this also, coarse, but fair.

(1) Elsewhere known as dāb.

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				Physical Aspects.	
				Grasses.	
<i>Andropogoneae</i> ...	<i>Manisuris granularis</i>	A fair grass.	
<i>Chlorideae</i> ...	<i>Ohloris digitata</i> ...	...	...	Ditto.	
<i>Festuceae</i> ...	<i>Eragrostis pilosa</i> ...	...	...	All of this species are tall grasses, not much known, but said to be good.	
	<i>Eragrostis plumosa</i> (and two others).	...	...	Grows on Tilla, a large grass, good when young.	
	<i>Arundinella</i> ...	...	...	Said to be a bad grass.	
	<i>Tricholaena</i> ...	...	Dadda ...	These are not grasses, but are included as cattle eat them at times: they mostly grow in damp or marshy places.	
<i>Cyperaceae</i> ...	<i>Cyperus tria</i> ...	...	...
	" <i>rotundus</i> ...	...	...
	" <i>niveus</i> ...	...	...
	" and others ...	...	...
	<i>Eriophorum cernuum</i> ...	...	...

The remainder of the list, giving the grasses that are very rare, is omitted: the original list would no doubt be available to anyone interested in the subject.

The same report contains an estimate, admittedly imperfect, as any such estimate must be, of the average amount of grass per acre yielded by the *rakhs* of the District: or rather of the amount of grass that they would yield if not open to grazing: the estimate was arrived at after small experimental cuttings, and various enquiries: it is unnecessary here to give the figure for each *rakh* reported on; good *rakhs* (only two so classed) were estimated to yield 50 maunds per acre; middling *rakhs* (all the important hill forests), 30 maunds; and poor *rakhs* (including a few small hill *rakhs*, and all those in the plains), 10 maunds per acre: the estimate is for three cuttings per year, dry grass.

The list was for grasses collected on Tilla hill, and is not, therefore, exhaustive, not noticing grasses common on cultivated lands, and some of fairly frequent occurrence in the hills too: *sawānk* (*Panicum colonum*), which is also cultivated to some small extent in the plain as a cereal, grows up freely in the crops of the autumn harvest, and is a useful grass: *dabbi* is common in poor land but is more harmful than useful: *kāhī*, common in the inundated lands on the river, is useful for thatching and some other purposes: the *dhāman* (*Pennisetum cenchroides*) is a good fodder grass, and not uncommon in parts. *Babbar*, common in parts of the hills, is considered the best material for the well ropes on Persian wheels. The most valuable grass of all is perhaps the *sarūt* (*saccharum munja*), which occurs chiefly in loose sandy soil near the beds of torrents, and is generally self-sown, but sometimes planted as a boundary, or as a protection from drifting sand. It grows in large stools, often 12 feet high, the lower part being formed of thick reeds called *kāna*, out of which springs the *tilli* or thin part of the stalk, which carries the large feathery white flower; and the whole is wrapped round by the leaf called *munj*. *Kāna* is used instead of rafters, when wood is scarce, and from it are made

CHAP. I. A. the heavy baskets from which the cattle get their feed, as well as
Physical chairs, stools, and the like: the *tillí* is useful for all light basket
Aspects work, while the *munj* is the common material for village rope-
making.

Fauna.

Leopard.

Of wild animals leopards occur in small numbers all down the Salt Range, but it is possible to be constantly on the hills for years without seeing anything of them: they are, however, seen occasionally; they are usually shot by means of sitting over a hill, or over a goat tied up in the jungle at night. They prey chiefly on the mountain sheep or *úriál* but at times do great damage to sheep and goats, sometimes also killing horned cattle. Tradition says that there used to be tigers also in the District not so very long ago, but, however this may be, there are certainly none now.

Lynx.

A curious animal was brought in for a reward by the villagers in the western Salt Range a few years ago, about the size of an ordinary village dog, light yellow in colour, with a cat-like head, and long pointed ears: it had attracted notice to itself by doing damage to the flocks: the people stated that it was the first specimen ever seen in the Salt Range, and it is to be regretted that it was not preserved for identification: it was probably some kind of lynx.

Hyæna.

Jackal.

The Indian hyæna occurs in the hills, but is not common: the jackal is occasionally seen and constantly heard, in all parts of the tract. There are said to be badgers in the hills, but they are certainly very uncommon.

Uriál.

The *úriál* or *húriár*, ('oorial'), (*Ovis vignei cycloceros*) affords the characteristic large game shooting of the District: as long ago as the fifties an officer who had been long in the District wrote of the rapid extinction of these mountain sheep, and the same line is taken in the last edition of the Gazetteer: whatever justification there may have been at that time for such gloomy forebodings, (and there was probably very little), there is certainly no reason for them now: *úriál* are found in the Tilla and Nili ranges, and throughout almost the whole of the Salt Range proper, so far as in this District; as well as in a good deal of the ravine country near the hills; and in some instances further away from them, as, for instance, in the north-east corner of the Tallagang Tahsil. It is not proposed to advertise the places where the best *úriál* shooting is to be had, which indeed vary more or less from year to year; but it may be said of all the country indicated above, that the sportsman is unlucky who in three or four hours walking does not see a fair amount of game; though he will usually have to work hard and long to secure a really good head: and of course it does happen occasionally that the *úriál* have left the particular neighbourhood, owing to the presence of leopards, or for some other reason, and that none at all are seen. The majority of the heads taken away by the casual visitor who comes for a few days' shooting are believed to be little over 21 inches or so, a size that is common enough: heads of from 24 to 26 inches are good, certainly well above the

average; and anything larger is extremely rare, though given plenty of time and good luck, a head of 28—29 inches, or even larger, may possibly be obtained. The largest head that can be vouched for is one of a trifle under 32 inches, secured near Rakh Samarqand in 1897, and this is probably about the limit now reached in this District, though still larger ones are talked about by the native *shikāris*.⁽¹⁾ The *úriāl* has the reputation of being difficult to approach, but the difficulty seems to have been a good deal exaggerated. The males and females separate during the rainy months, Sáwan, Bhádon and Assuj (mid-July to mid-October): the pairing season then follows, and lasts about 5 weeks. The young are dropped about the end of April, there being generally two: for the first three or four days they are helpless, and a considerable number are caught, and kept as pets, but almost always soon die. A male of one or two years is called *khíra*, *chapra*, or (at two years) *dúnda*: there is no special word for a three-year old: one of four years is *chauga*, and one of six *chhigga*, anything above that being a "full male:" the *chapra* has horns up to about 10 inches; the *chauga* up to about 21; in the *chhigga* the beard becomes prominent, black at first, but hoary white in very old age. The age can be told from the teeth. Many *úriāl*, without distinction of age or sex, are caught in traps (*kharakki*), in the fields of young wheat: the people have some excuse for this practice, which is difficult to prevent, for the damage done to growing crops by the *úriāl* at night is very great in and around the hills.

Should the *úriāl* at any time show serious signs of dwindling, it would be desirable to altogether prohibit shooting in a few selected Government reserves for a few years: if that were done there would be little danger of their extermination.

The *chinkára*, or ravine deer (the Indian gazelle, *Gazella benetti*) generally called *híran*, is common in a few parts of the Salt Range uplands, in most of the foot hills on the southern side of the range, and in the ravines in some parts of the northern plateau: they are said to breed twice a year in April-May, and October-November: bucks and does are almost always seen together, and the former seem if anything the more numerous, a point in which they differ from the *úriāl*: their horns are usually about 10 or 11 inches in length, but there are a fair number with heads an inch or two larger, and some are said to reach 16 inches, which is improbable; but those which live in the submontane tracts are better developed than those in the uplands, and may possibly nearly reach this size.⁽²⁾

Wild pigs are found in the Salt Range only, here and there in large numbers, when they do much damage to the crops: wolves,

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Physical Aspects.

Fauna.

Uriál.

Chinkára.

Pig.

(1) Rowland Ward's *Records of Big Game*, 3rd Edition, p. 382, gives heads of 39½, 38½, 36½, 35½ from "the Punjab." The largest definitely assigned to the Salt Range are 33½ and 31½ inches.

(2) Rowland Ward's *Records of Big Game*, 3rd Edition, p. 228, gives one head of 16 inches from Rájputána; the largest head from the northern Punjab is, however, 12½ inches only.

CHAP. I. A. foxes, and wild cats occur but rarely, and the same may be said of the porcupine: the hare is fairly common: and so are hedgehogs, rats and mice: the mungoose is often seen. There are no monkeys in the District, the *langurs* talked about at Choa Saidan Sháh, and naturally supposed by those who have not seen them to be monkeys, being really a kind of polecat; there are always a few of them in the Gandhála gorge, and they probably occur in other parts of the range also.

There are no black buck in the District, though there are plenty on the other side of the Jhelum in Sháhpur and Gujrát.

Rewards paid. During the six years ending 1900, rewards were paid for the destruction of 9 leopards and 55 wolves.

Birds. The blue rock pigeon is common, especially in the cliffs of the Salt Range; and the Indian stock-pigeon also visits the District in the cold season. The Himalayan cushat is met with in parts of the hills, and has been shot in July and September; it would seem, therefore, that it does not migrate. Sandgrouse (*bhatittar*), of several kinds, are found in fairly large numbers in parts of the District, particularly in the Thal, and in parts of the northern plateau. The grey partridge (*tittar*) is fairly common everywhere, but the black partridge is found very rarely if at all. Another partridge is the *chakor* (*kaunk*), which is common in most of the higher hills, while the small seese (*sussi*), is plentiful in the lower and more barren foot-hills and ravines. Quail, in large numbers, visit the District, especially the lower parts of it, in the spring and autumn, and are said to breed here to some extent, though this seems doubtful: snipe are very rare, there being no large marshes in or near the tract to bring them to the District; they are shot in small numbers in a *jhil* near Sháh Muhammad-wáli in the extreme north-west corner of Tallagang, also at Kallar Kahár, and in the marshy ground along the lower part of the Kahán torrent near Jhelum; jack seem to be more common than full snipe, but the numbers of both are insignificant. The ordinary bustard or *ubára*, here called *kharmohr*, is fairly common in parts of the plateau, especially in the west of Tallagang, the *táramíra* fields in the morning and evening being the best place to look for it. The demoiselle crane or *kúlan*, here called *kúnj*, is common in the plains near the river in the cool months, and also in the neighbourhood of the Sawán river on the northern boundary of the District, where the natives make a practice of catching them on the wing with a simple kind of lasso made of a long piece of cord with a stone at the end of it. The grey goose (*magg*) is fairly plentiful along the river in the winter, and is also met with at Kallar Kahár, and sometimes on the Sawán. Duck are also found in the season practically wherever there is water, and are especially numerous at Kallar Kahár, where they collect in thousands, but are approached with difficulty owing to the want of cover: mallard, teal, pochard, gadwall, and the ubiquitous shoveller are amongst

numerous varieties which visit the district: at places like the large 'tank' close to Chakwál, as many as six or seven kinds may be got in half an hour's shooting. Although there is thus a large variety to choose from, the district is certainly not at all a good one for small game shooting: almost everywhere there is something, but generally it is very little, and even moderately large bags are unheard of.

Amongst other birds may be mentioned the flamingo found in large numbers at Kallar Kahár in the cold weather, and found nowhere else, it is believed, in the Punjab, except on the neighbouring hill lakes in the Sháhpur part of the Salt Range: the crow and vulture are common, the raven sometimes met with, on at least one hill stream the kingfisher is seen, the golden oriole is occasionally found on Tilla and at Choa Saidan Shah, the beautiful little paradise-flycatcher occurring too at the latter place, where there are gardens there are generally parrots, blue jays are common, at certain times of the year large flocks of *tilliar* (the rosy pastor) visit the district, and wage war against the locusts if there are any about. The osprey has been said to breed on the cliff of Tilla, but it is not known to have been properly identified.⁽¹⁾ It remains to note that in a recent abnormally dry winter a number of wild swans were seen at different places on the Jhelum river, and two or three of them were shot.

Snakes are rather common, especially in the hills, in some parts of which (for instance, on the summit of Tilla) they abound: the commonest kinds are the cobra and *karait* (*Naja tripudians* and *Bungarus cæruleus*), and the *Echis carinata* and *daboia* are also believed to occur; crocodiles (*sansár*) are often seen on mud-banks in the river-bed, but very rarely do any harm. Lizards of different kinds are common, including the familiar house-lizard or gecko, tree-lizards, and several varieties living in holes in the ground, of which the large *goh* is the most important: a small spotted venomous looking lizard is occasionally met with in the hills, whose bite is commonly supposed to be instantly fatal, it is believed to be in reality harmless.

The *mahseer* and *rohú* are the commonest fish in the river: Tangrot (properly Dhangrot) in the north-east corner of the district, opposite the junction of the Púñch river with the Jhelum (there still a narrow impetuous mountain torrent), has a great reputation for its *mahseer* fishing: there are of course *mahseer* in the Jhelum itself, but the fame of Tangrot as a fishing place is derived from the Púñch river in the neighbouring State of Kashmir and in Púñch, and there seems unfortunately to be no doubt that this has very seriously deteriorated in the last ten or fifteen years, owing to the unmerciful way in which it has been subjected to poaching. Within comparatively recent years a system of netting

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Aspects.

Birds.

Flamingos,

Other birds.

Reptiles,

Fish.

(1) *Descriptive Notice of the District of Jhelum*, by L. Bowring, J. A. S. B., Vol. XIX, 1850, pp. 43-54.

CHAP. I. A. has been introduced, which is carried on chiefly in the cold weather, partly because in that season there are very few European fishermen about to see what is going on, but chiefly because the fish are then in a more or less comatose state, and their capture is thus rendered easy. It has been stated on good authority that a single contractor in the cold weather of 1898-99 netted over 16,000 lbs. weight of *mahseer* of all sizes from $\frac{1}{2}$ lb. upwards, and almost as many in the following year: not many years ago fish of from 30 to 60 lbs. were not uncommon, but, as would naturally be expected, the number of fish in the river is no longer anything like what it used to be, and it is a long time since there has been a good season. It was announced in the Press early in 1901 that efforts were being made to form a committee with a view to preserving the river: it is not known whether any practical action followed.⁽¹⁾

Physical Aspects.

Fish.

It is a curious fact that the agricultural population on the banks of the river make practically not the slightest use of the fish that is to be had at their doors for the catching; a villager who took to fish eating would be taunted by his friends with eating vermin (*kirā*): the fish caught, chiefly at Pind Dādan Khān and Jhelum itself, are consumed almost entirely by the town population.

Away from the Jhelum there is little opportunity for fish to live, but in some of the small streams of the Salt Range, such as that which rises in the sacred pools of Kitās, small minnow-like fish are numerous: in the pools of the same stream, which soon afterwards becomes salt and dries up long before it can reach the river, there are *rohū* of considerable size, up to perhaps six pounds or more: it would be more correct to say there *were* such fish, for a few years ago they almost disappeared and stories were heard of dynamite from the neighbouring coal-mines having been used. There are also eels in this stream near Choa Saidan Shah.

Insects.

Swarms of locusts (*makri*, *Acridium peregrinum*) often make their appearance in the district, occasionally doing very great damage to trees and crops: the last serious visitation of this kind was in late spring of 1891, when the young wheat crop in Tallagang and the part of Chakwāl adjoining was almost entirely destroyed, less serious damage being done in other parts of the district. In Tallagang this is well remembered as the locust year (*makri-wāla sāl*), from which the agriculturists commonly date events. Locusts have several times recently invaded the district, sometimes in great

(1) After the above was written, the Kashmir authorities, in February 1903, issued regulations, which have since been slightly modified, and now stand as follows: All taking of fish by improper methods (such as fixed engines, weirs and channels, dynamite, and poison) is prohibited; a close season for nets is enforced from 15th October to 15th July in Jungoo pool, and from 15th November to 15th July elsewhere. There is no close season for rods except that in the deep pools of Jungoo, Palak, Potah, and Lower Arno, and in the Junction Pool, including the Chukker (Jammu bank) all trolling or fishing, other than by casting with rod and line, is prohibited from November 15th to July 15th. The Reservation now extends from Tangrot up to Kotli, and includes all the branches up to three miles distance: the whole river is guarded by a staff of watchers. Fishing licenses cost (for rod fishing) Rs 10 for ten days or less, and Rs. 20 for a period not exceeding a year.

force, but have come at a season when they could not do very great damage. In the long run perhaps more harm is done by the *toka*, a kind of cricket, which is always present in the summer in great or small numbers, and sometimes does much damage to the autumn crops.

Mosquitoes and house flies are a familiar plague, except in the cold months, hornets are common about houses, and there are sandflies in plenty at certain seasons in the Pind Dádan Khán plains and some other localities, white ants injure the young crops in seasons of drought, besides doing damage to other property. The honey-bee is common in the Salt Range, and the honey is much appreciated by the people, though somewhat insipid.

There is no record of the temperatures in the district at different times of the year; but it is certain that the arid Thal in the plains west of Pind Dádan Khán is amongst the hottest regions in India; at Khusháb, in the Sháhpur District, which is similarly situated, the temperature in the shade rises day after day in the months of May and June to 115° or more in the shade: throughout the year the temperature is sensibly higher than in the rest of the district, with the exception of a few places in the same sort of situation, such as Domelí, which lies below the south face of the Níli range: the cold weather too is perceptibly shorter in these hot tracts, the heat being often unpleasant even in the middle of November and at the end of February. In the hills, on the other hand, though the climate cannot be called temperate, the heat never attains the extreme which is common in the plains of the Punjab; and in the winter a bitter north wind prevails, the cold being often severe: light snow falls every few years on the uplands, though it never lies long: and in the severe winter of 1892-93 there was a heavy fall, which covered not only the Salt Range, but practically the whole of the plateau to the north of it. Over the rest of the district the climate is that of the ordinary Punjab plain. The cold weather comes to an end in April, about the middle of which month the temperature begins to be uncomfortably high, and continues to rise through May and June, the hottest months, until the monsoon breaks, usually in the last week of June or the first week of July: with the coming of the rains the temperature falls considerably, though the damp heat which follows any cessation of the monsoon for more than a week or ten days is often severe; and the climate of the headquarters station is at such times particularly trying: the rains generally come to an end about the beginning of September. Towards the end of that month the nights begin to be sensibly cooler, and the beginning of the "cold weather" soon follows, about the middle of October, though the heat in the sun remains considerable for some weeks longer: through the winter months the district enjoys almost perfect weather with bright days and cold clear nights with generally some frost in the two coldest months, interrupted at more or less frequent intervals by spells of

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Insects.

Rainfall, temperature and climate.

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and climate.

cold, raw, rainy weather due to the winter rains, which usually begin soon after Christmas, and end with February, though earlier and later storms are not uncommon: towards the end of March the sun again becomes powerful.

The district is fairly healthy, but not remarkably so, the average death-rate for the years 1890 to 1900 having been 31 per thousand, which is not very different from the Provincial average: as elsewhere in the Punjab the people suffer severely in the autumn months from intermittent fevers, more especially along the bank of the river, when the floods subside, and the inundated lands begin to dry. In November and December the fever is often complicated with pneumonia and bronchitis, and dysentery and diarrhoea are common symptoms of the disease, while towards the end of the season enlargement of the spleen is often prevalent. As might be expected, the amount of fever is less in dry years than in those of heavy rainfall, but the difference is not, as a rule, so great as would be looked for. The worst year in recent times was 1892, when heavy rains and floods, combined with a severe epidemic of cholera, raised the death-rate to 53 per thousand, or 48 per thousand, excluding the deaths from cholera: while the following year, in spite of copious rains and unprecedented floods in the Jhelum river, had a death-rate of only 25 per thousand, the lowest figure reached in the ten years. Other prevalent diseases are guinea-worm, wherever the people are dependent on stagnant tanks for their water-supply, while eye troubles and skin diseases are common in all parts. Stone in the bladder occurs chiefly in the hilly tracts, in parts of which goitre also is said to be not uncommon, though it is very seldom actually seen. There is a small colony of lepers in one of the villages of the Jhelum Pabbí, which accounts for the great majority of the 123 persons in the district so afflicted; lepers are seldom seen elsewhere.

The regularity with which the death-rate, lowest in April (28 per thousand), rises to its highest (51) in November, is somewhat remarkable: the four months ending with June are the healthiest, with a death-rate of 28 to 32 per thousand; next come the rains, July to September, with February, 34 to 37; while the worst are the months of the autumn harvest and the winter cold, October to January, with the high rate of 46 to 51 per thousand.

The figures for the average annual rainfall at each station, as supplied by the Meteorological Department from statistics completed up to 1900 are as follows:—

	Inches.
Jhelum	23
Pind Dádan Khán	16½
Chakwál	17
Tallagang	18

and these averages may be taken as more accurate than those for the last ten years, from which they differ considerably. It should

be observed, however, that the rain-gauge stations at Jhelum and Tallagang are situated at the extreme east of those Tahsils, and the rainfall recorded at them is heavier than that of the tracts which they represent, for it is well known that the rainfall decreases rapidly as one goes westwards away from the Himalaya: the Pind Dádan Khán gauge also is correct guide to the rainfall of only a small part of the Tahsil, the central part of the plain. Experience seems to indicate an average rainfall somewhat as follows:—

	Inches.
Most of Tahsil Jhelum, eastern Chakwál, and the east and central Salt Range	22
Chakwál West, Tallagang East, eastern plains of Pind Dádan Khán, and western Salt Range ...	18
Tallagang West	15
Pind Dádan Khán Thal (the western plains) ...	12

For the district as a whole the rainfall is somewhat scanty and very uncertain, varying greatly from year to year: what, moreover, is almost as much of importance as the amount of the rain is its distribution in time; a small rainfall well distributed is infinitely superior to a heavy fall crowded into a few abnormal storms, with long intervals of aridity both before and afterwards: on this point no statistics can give any trustworthy information.

No destructive cyclones or earthquakes are on record: earthquakes do occur, very rarely, but though perceptible enough, they are too slight to do any appreciable damage. The destructive flood in Kashmir in July 1893, until recently the highest on record, was accompanied by very heavy and long continued rain in the lower hills and in the Jhelum District itself: the result was a flood of unprecedented volume in this part of the course of the river and immense damage, with great loss of property and some loss of life, was caused by it: the town of Jhelum escaped with little damage, but Pind Dádan Khán suffered very serious loss, which has no doubt contributed something to the decay of this town through the loss of its trade. The damage done was, however, chiefly in the villages of the *sailáb* tract along the river side, where great loss of crops, stock, and other property occurred.

Earthquakes.
Floods.

Subsequent experience has shown that, as might have been expected, even a heavy flood in Kashmir does not necessarily imply any great rise in the level of the stream after it leaves the hills. The valley of Kashmir in 1903 experienced an inundation considerably exceeding in severity that of 1893, but the river did no damage lower down: the fact is that the Jhelum river of the Punjab plains takes but a fraction of its volume from the drainage of the Kashmir valley, though the fraction is no doubt a fairly considerable one.

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Section B.—History.

History.

THE materials for the history of any particular tract are its antiquities—ruins and coins—its present races or tribes and their traditions, and the evidence of the historians and travellers in whose pages it is mentioned. In the case of this district we have the aid of all these, though until we come to comparatively recent times the information that they furnish is generally extremely meagre and fragmentary, and there is often considerable doubt as to its proper interpretation.

It will be well first to notice the various places of historical or archæological interest in the district, and to discuss briefly the information offered by its more portable antiquities—coins and the like: after a passing reference to tribal history and traditions, the historical evidence will be dealt with, and finally some account of the recent history of the tract will be given. To some extent, however, these subjects overlap.

ARCHÆOLOGICAL REMAINS.

Archæological
Remains:
Jhelum.

The site of the present town of Jhelum is not old, but the mound on which the railway bungalows are built is undoubtedly of great age, and many antiquities were obtained from it in the excavations when the railway was under construction: these objects, which are described by General Cunningham in his *Archæological Survey Reports*, Vol. XIV, pp. 41—43, are of two kinds, one probably dating back to the time of the Greeks, and the other to the flourishing period of Kashmirian rule, to which most of the existing temples in the district appear to belong. They included 3 iron tripods of Greek form, 2 brass bowls, a complete stone pillar, and 23 pillar bases of the same fashion: the pillar, shown in Plate XVI of the volume above referred to, is now in the Museum at Lahore (as is also a *lingam* pillar with a rude head on one side of it, apparently from the same source). Cunningham considered it to be in the later Gupta style, not later than the 7th or 8th Century A.D.

In the village of Kálá, about four miles north of Jhelum, is a pilaster, evidently the left jamb of a doorway, of stone, about 7 feet high, having an image at the bottom, but in the upper part just like the ordinary pillars obtained from old Hindu or Jaina temples, and like the one from Jhelum referred to above: it is clearly from the same temple. This Kálá pillar was published by General Abbott in *J. A. S. B.*, 1847, plate 24.⁽¹⁾

Rohtás.

About ten miles north-west from Jhelum lies the great fort of Rohtás. After expelling Humáyun in A.D. 1542, the emperor Sher Sháh Súr found it desirable to take measures against the return of the exile, and against his friends the Gakkhars: he therefore visited the Jhelum hills and selected the spot, where the Kahán torrent bursts through the low continuation eastwards

(1) On a Sculpture from the Site of Bukephalia, *J. A. S. B.*, 1847, p. 664.

of the Tilla range, for the construction of a great fort, to be named after the fort of Rohtás in Bengal, the scene of a previous victory. The Gakkhars did all they could to boycott the builders, and with such success that for a short time an *ashrafi* was paid for each stone, but eventually the work was completed, in 1543 A.D., at a cost which, according to two historians, works out at about Rs. 40,25,000.⁽¹⁾ The Gakkhars made a feeble retort by building some insignificant fortifications near the village of Sultánpur, which still remain. The fort of Rohtás has a circumference of about $2\frac{1}{2}$ miles, and a dividing wall in addition, about $\frac{1}{3}$ mile long: the walls are at their base in many places 30 feet thick, and from 30 to 50 feet high: there are 68 towers or bastions and 12 gateways, and the walls are everywhere pierced for musketry or archery, and here and there for cannon: in the parapets near the gateways are machicolations, from which molten lead could be poured on attacking troops. The fort has never stood a serious siege, and even in mediæval warfare would have taken a large army to hold it, for some of the gates are remarkably easy of access, and but poorly constructed. It is now in parts ruined, especially on the north side, where a considerable section of the walls has collapsed; in other places the foundations of soft sandstone have worn away, leaving the walls supported only by the excellent mortar with which they were constructed. Many of the gateways are, however, still imposing, the finest being the Sohal Gate facing Tilla, which is over 70 feet high: the balconies on the outer walls of this gate are fine specimens of the work of the time, and the whole gateway is perfect in spite of the use to which its upper part has been put as a district rest-house. The best gateways after the Sohal Darwáza are the Khwás Khání, where the road from Jhelum enters the fort, and the Langar-khána, on the north side. The northern part of the fort is separated from the rest by an interior wall, much the same as those on the outside, so as to form a kind of citadel (*andarkot*): within it is a small high building of incongruous appearance, said to have been erected by Mán Singh in the time of Akbar. The fort contains two *báolís* or wells with long flights of steps on one side giving access to the water, now no longer to be found in them: the citadel contains a small ruined mosque of the same period as the rest of the fort: and there are several inscriptions over the gateways, but nothing of importance. In the body of the fort is the small town of Rohtás, with a flourishing bázár, where old coins are generally to be found, chiefly Indo-Scythian, and *dáms* of the Súrí Kings, and of the Mughal Emperors. Rohtás was subsequently visited by many of the Mughal Emperors and other rulers and invaders; but it is not associated with any important historical event, and is chiefly remarkable for its size and massiveness, and as an example of labour wasted.

(1) *Wáqáit-i-Jahángíri* (Elliot, Vol. VI, p. 397), reckoning the *dám* as $\frac{1}{10}$ rupee; and *Tárikh-i-Dáulá* (Elliot, Vol. IV, p. 419), counting the *Bahloli* as $\frac{1}{10}$ rupee.

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History.

Rohtás.

The best general view of the fort is perhaps that to be obtained from the opposite side of the Kahán torrent to the north: the first view of the walls as the place is approached from the Jhelum side is also striking.

Until the construction of the Grand Trunk Road, Rohtás was a halting place on the main road between Lahore and Pesháwar: about a mile to the north is a disused *serai* in fair preservation, of about the same period as the fort itself or somewhat later.⁽¹⁾

The following are extracts from an interesting article on Rohtás in the *Pioneer* of October 10th, 1897:—

"Through the gorge in which the fort stands the little river Kahán winds its way. In olden times this gorge must have been often used for traffic from the mountainous country north of the Salt Range to the plains south of it. It is pretty certain that Alexander brought his boats from the Indus on carriages to the Jhelum this way, for there is no other pass available for wheel traffic in this portion of the range, but how he made this available is, and must ever remain, a mystery. How Alexander managed his transport department from the Indus to the Jhelum is a chapter of history that cannot be written. Many and many a time the Gakkhars of the country north of the Salt Range had used the defile. Armies from Ghazni and Samarkand used it also. So that in mediæval times it must often have witnessed armies of cavalry going on their way to the rich plains of the Punjab and northern India, to Siálkot, once the capital of a rich district ruled by Hippostratus and Zoilus and Straton, to Lahore, to Delhi and to Ajmír. It must have witnessed their return thinned in their numbers by warfare and disease, but laden now with plunder—vast quantities of gold, silver, and precious stones, immense stores of rich cloths, and, worst of all, innumerable slaves, young men and maidens doomed to a life-long captivity. There was no advanced post of Hindustán in the Punjab proper. The forts protecting the country were south of the Sutlej. There was no unity amongst the Rájas of India. They did not regard themselves as a nation, and in those good old times, free from oppression and rapacity and exhaustive taxation, there was no cohesion and no *National Congress*. The Sultáns of Delhi never dreamt of making a fort in so advanced a spot. More than a score and a half of them lived and ruled and repelled invasions from the north (when they could), but they were too much engrossed with either spending the revenues of the country on their personal pleasures, or heaping them up uselessly in their treasury, to think of any wasteful public works for the protection of the country.

"The Mughals came this way to India. Bábar says, 'Advancing five marches from the Sind the sixth brought us close by the hill of Jud below the hills of Balnáth Jogi, on the banks of a river.....where we encamped.' This was when he was on his way to Pánípat, to conquest and to empire. After five years of incessant warfare and turmoil, this pass saw his return—a corpse. In his train as conqueror he had primitive cannon which he used to some purpose at Pánípat. How he managed to transport them through the northern Punjab we do not know, but cannon could go where carriages laden with boats had gone eighteen hundred years before. His army was composed of both cavalry and infantry as well as artillery.

(1) In a "Descriptive Notice of the District of Jhelum" by L. Bowring, J.A.S.B., 1850, p. 43-64, it is said to have been erected (with the shrine of Sháh Jamál, near Rohtás) by Sháh Jahán, who reigned from 1627-1658 A. D.

His infantry were chiefly bowmen. On his return we can imagine the bier borne with every sign of grief and pomp. In the five years of his Indian life the pass had seen much military traffic. He had not forgotten his army left behind at Kábul, and he was constantly sending presents of plunder from his army of victory to their brethren in arms, the army of occupation in Kábul.

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History.

Rohtás.

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"The two first Mughals made friends with the turbulent Gakkhars who inhabited the country north of the Salt Range. When Humáyun, the second Mughal, had been driven from Hindustán, and his brothers had also been expelled, their conqueror, Sher Sháh, who was a consummate general, saw at once that he must build a fort to hold the Gakkhars in check and also to be an obstacle in the return of the expelled emperor. He selected the gorge of the Káhan for the fort, and he could not have chosen a better spot. It overawed the Gakkhars, and it was in the direct road from Kábul to Lahore. Fortune more than smiled on Sher Sháh. The daughter of the Gakkhar Chief, Sárang Khán, fell into his hands, as did also that doughty chieftain himself. The daughter was given to a favourite general, Khwás Khán, and the chief was flayed alive and his skin stuffed with straw. The mercies of the olden time were tender and their chivalry renowned.

* * * * *

"Now for the utility of this stronghold. Sher Sháh died, and ten years after his death Humáyun returned to India. 'Tátar Khán Kasi, the governor of Rohtás, although the fort had been strengthened, made no resistance and fled; but Adam Khán, though he owed service, did not join the army.' Yes, it is true Adam Khán owed service, but he would not give it to the family of the murderers of his father, he preferred showing his friendship to the old friends of his family the Mughals. There is no excuse for Adam Khán. The very purpose for which the fort was constructed it did not fulfil.

"One of the gates of Rohtás, that is now pretty complete, is named after Khwás Khán, who married the daughter of the Gakkhar chief, Sárang. This general was not in favour with Islám Sháh, who caused him to be foully murdered. There is some doubt as to where the corpse was buried. Some say Delhi, some Khwáspur, between the Jhelum and Chenáb. Tradition has it that the tomb is the one outside the gate of the fort, near the gate named after him. That tradition is almost certainly wrong.

"Akbar just rested a night at Rohtás on his way to Kábul. Jahángír, the son of Akbar, and grandson of Bábar, went to Kashmír several times during his reign. In his diary he jotted down the most trivial things. He noticed both Rohtás and Tilla. Of Rohtás he says that it was constructed by Sher Sháh amongst the ravines where it was scarcely conceivable that so strong a position could have been obtained.

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"On another occasion Jahángír tells us that he stayed at Rohtás and got some small partridges called *taihu*, and that its flesh is more tasty than that of another kind of partridge called *kabak*.⁽¹⁾ He was a great sportsman, and was a connoisseur of game when cooked and on the festive board. Once more Jahángír visited Rohtás. He had been on a forced journey to Kábul in the company of Mahabat Khán, a creature of the heir-apparent, who afterwards became Sháh Jahán. He was to

Probably *Kewá*, *chikor*.

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all intents and purposes a prisoner of this man. Núr Jahán, the beautiful wife of the emperor, was a woman of many resources. She obtained troops from Lahore, and ordered Mahabat Khán out of the way. He was obliged to obey. Jahángír advanced to Rohtás and there for a while held his court, but the glory was departed from it. Rohtás has no palaces, and the emperor and his suite must have lived in the weather worn tents that had been to Kábul and back. Jahángír visited Kashmír once more, but he did not take Rohtás either in going or coming back. He returned to Lahore to die.

"The other Mughal emperors seem to have made no use whatever of Rohtás. But the Durráni invaders of the Punjab knew its value, and they maintained a garrison and governor there to keep open their communications with Kábul; but these invaders were only in power for a time, they soon had to betake themselves to Kábul and to stay there. In the confusion that ensued the Sikhs rose into power. Ranjít Singh at the beginning of the present century obtained Lahore. Soon after he tried to get Kashmír, and in returning from one of his unsuccessful expeditions against the unhappy valley passed through Rohtás. One of the most touching events in his life is connected with Rohtás. His general, Hari Singh, had been slain in battle against the Afgháns at Jamrud. The Mahárája heard of his death when in camp at Rohtás and the news caused him to weep, for Hari Singh was one of the few men whom Ranjít Singh trusted and loved."

Tilla.

The monastery of Jogís on the summit of the isolated peak of Tilla, which rises to a height of over 3,200 feet about 20 miles west of Jhelum, is undoubtedly one of the oldest religious institutions in Northern India: it is now known as Tilla Gorakh Náth, or more usually as Jogi Tilla or Tilla simply; but was formerly called Tilla Bálnáth, and the name is still well known: the Jogís say that Bálnáth was a prominent disciple of Gorakh Náth, the legendary founder of the institution. Cunningham (*Ancient Geography of India*, pp. 164-6) sees a reference to the place in a curious fable related by Plutarch (*De Fluviiis*), to the effect that, when Porus was preparing to oppose Alexander in B. C. 326, the royal elephant rushed up a hill sacred to the sun,⁽¹⁾ and in human speech implored him to cease his opposition to the invader; and that the mountain was afterwards called the "Hill of the Elephant:" in this Cunningham finds further proof that Tilla Bálnáth is referred to, and that the monastery was in existence in the time of Alexander, "for the Macedonians, who had just come from Persia, would almost certainly have mistaken the name for Fílnáth or Pílnáth, the 'Elephant.'" All this, however, is mere conjecture, which has no critical foundation. All that is really known of Tilla is that the institution is of venerable age; for how many centuries it has been in existence there is nothing to show. Of popular traditions regarding the place there are plenty: Rája Vikramáditya of Ujjain may be taken to be an historical personage, but the popular story connecting him with Tilla has no historical foundation;

(1) Cunningham's statement that Tilla Bálnáth means "Hill of the Sun," is not, however correct.

the popular tradition states that his elder brother, Rája Bharthrí, resigned the throne to become a *faqír* and a member of the Tilla monastery, as Gorakh Náth's disciple: details of his journey and his acts there are given, and one of the oldest *samádhs* on the hill is known as that of Rája Bharthrí: he is said to have founded the similar institution on the Koh Kirána hill in Jhang. If he lived at all he lived nearly 1,500 years ago.

Tilla again is connected by tradition with the name well known in folk-songs of Púran Bhagat, a son of Rája Salwáhan of Siálkot, another semi-fabulous king, of whose times there is really no historical information: Púran is said to have joined the Jogí fraternity on being restored to life by their head, and to have subsequently founded a well-known monastery in the Rohtak District.

Bálnáth of the Jogís is mentioned in the time of Sher Sháh Súri⁽¹⁾, and Abul Fazl in the *Afn-i-Akbarí* writes of "the temple of Bálnáth Jogí, which is called Tilla Bálnáth," as being held in veneration by the *faqírs* of Hindustán.

The old *jágír* held by the Jogís of the village of Naugirán is referred to in a *sanad* of Akbar as an ancient grant: it has recently been restored after over forty years' resumption, due to the misconduct of the late *gaddi-nashín*, with whose connivance the murder of a *faqír* at Tilla was said to have been committed. There are numerous other *sanads* of later kings relating to this *jágír* in possession of the Jogís.

Tilla is supposed to have been sacked by Ahmad Sháh Durrání about the year 1748 A. D. It is probably due to this that there is practically nothing on the surface or in the present buildings on the hill to show the antiquity of the place: it is believed, however, that it has never been examined by a trained archaeologist, and it is possible that remnants of earlier buildings might be found: one such remnant is probably the handsome carved stone doorway in the courtyard of the monastery, which recalls, both in material and style, the sculptures found in the Gandhála valley near Choa Saidan Sháh.⁽²⁾ The present buildings are an irregular straggling pile of no great distinction: separate from them are a number of masonry tombs, large and small, of past Jogís, for their custom is burial not cremation; and there are various storage tanks, of which the largest, the Kwár Sar, is merely an ordinary embanked pond on a large scale. There is a fine masonry tank near the monastery: the rude figures surmounting the steps on one side seem to be comparatively recent. The conspicuous shrine on the rocky pinnacle to the west (the summit of the hill), commemorates a visit paid to Tilla by the Sikh Gurú, Nának.

(1) Elliot, Vol. IV, p. 415.

(2) Ancient pilgrimage places in India, still flourishing, rarely show any old remains. Continual restoration and rebuilding account for this.

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Tilla.

The Jogís of Tilla have at times in their recent history been remarkable less for piety and good behaviour than for the want of these qualities: at the present time, however, the institution is in good repute, and the *gaddi-nashin*, Pír Sahj Náth, enjoys the esteem of his Muhammadan neighbours as well as of the Hindús. The curious use of the Muhammadan title of Pír will be noticed: in this the heads of the Jogís at Kot Sárang, Makhad, &c., follow the example of the parent institution: these are only two of the nearest of the many branches which have from time to time been thrown off from Tilla: if the Jogís are to be credited, they still keep up relations with such branches as far off as Nepál and Afghánistán, in addition to many in British territory: they claim, and apparently with correctness, that theirs is the original Jogí foundation from which all others have sprung.⁽¹⁾ Formerly a great place of pilgrimage, Tilla has in latter days much declined in this respect, possibly owing to the competition of more accessible places. -

Diláwar.

The ruins at Diláwar and near Dárápur are thus described by Cunningham at page 161 of his "Ancient Geography of India":--

"The ruined city near Dárápur, which has been described by Burnes⁽²⁾ and Court⁽³⁾, is situated on the west bank of the river, 30 miles below Jhelum, and 10 miles above Jalápur. In their time the old mound was unoccupied, but about 1832 A. D. the people of Diláwar abandoned their village on a hill to the west and settled on the site of the ruined city. Before that time the place was usually called Pind or "the mound," although its true name is said to have been Udamnagar or Udinagar. The ruins consist of two large mounds just half mile apart, with two smaller mounds about midway between them. The south mound on which Diláwar is situated is about 500 feet square at the top and 1,100 or 1,200 feet at base, with a height of 50 or 60 feet. The north mound on which old Dárápur stands is 600 feet square and from 20 to 30 feet in height. Between these mounds the fields are covered with broken bricks and pottery, and the whole place is said to be the ruins of a single city. The walls of the Diláwar houses are built of the large old bricks dug out of this mound, which are of two sizes, one of 11½ by 8½ by 3 inches and the other of only half this thickness. The coins which I obtained belonged to the first Indo-Scythians, the site must therefore have been occupied certainly as early as the second century before the Christian era. Its foundation is attributed to Rája Bharati,⁽⁴⁾ whose age is not known.

The coins of Muhammadan rulers found at Diláwar are noticed elsewhere.

(1) The Jogís of Tilla are Kanphattas, and as the name implies they pierce the ears and wear large rings in them, generally of wood; they wear generally clothes of a light brick-dust colour; do not wear the sacred thread or the scalp lock, but wear thick cords of black wool: they do not abstain from flesh; do not marry, being recruited chiefly from Khatrias, Aroras, and Brahmans. They consider that Shiv himself was the founder of the Jogí community, and especially worship him as the greatest of all gods. Properly speaking the Jogí is a follower of the Yoga system of philosophy, mainly a belief in the power of man over nature by means of austerities and the occult influence of the will; to the Jogí of the present day this survives chiefly in the traditions regarding the doings of their former representatives, and has little or no influence on their conduct, though educated men are quite prepared to see the traditional miracles repeated, should a Jogí of sufficient holiness make his appearance at Tilla.

Mr. MacLagan, Census Report, 1891, paragraph 57, suggests that the Jogí order is possibly of Buddhistic origin.

(2) "Travels in Punjab," &c., ii, 51.

(3) Journal, Asiatic Society of Bengal, 1836, 472-3.

(4) Perhaps Rája Bharthri, see note on Tilla above.

Another very old site is at Dhamiak (always so pronounced locally, but written usually Dhamak), about six miles north of Soháva Railway Station: the present village is built on the old site, which can never have been of great size, and in consequence there is nothing left of the old buildings, except the materials used for building many of the present houses, these are mostly small-sized bricks, but the very large ones also, which are almost always proof of great age, have been obtained here. It is practically certain that Dhamiak was the scene of the assassination of Muhammad bin Sâm, better known as Muhammad Ghauri, the first of the Sultáns of Delhi (A. D. 1193—1205): he had had much trouble with the Gakkhars during his reign, and was slain in the centre of his camp while marching from Lahore to Ghazni by a band of those whose relatives had been killed in the fighting with his troops. The name of the place is variously given by the historians as Damek or Damiak, Barmhek, and Rathak. The principal Gakkhars now deny that their tribe was concerned, but the old high road from Lahore, through Rohtás, Chakoha, and Bakrála, passed on through Dhamiak to one of the Hathia hamlets and so out of the district; Dhamiak is still in the heart of the Gakkhar country, and the story of Muhammad Ghauri's death is not unknown to local tradition. It seems clear, therefore, that it was here that he was killed.⁽¹⁾

About ten miles east of Dhamiak in the wild hills near Jhelum is Makhiand, a hamlet of the large village of Lehri: here some large plaster heads in the Gandharian style of art ⁽²⁾ were unearthed a few years ago, and the foundations are visible of an ancient building, possibly a small Buddhist monastery, though of this there is no certain evidence; but the size of the site is small, and to judge from the small amount of material about, the building was perhaps never completed. The situation is a very fine one, on a hill overlooking a fold of the river; opposite on a rocky crag is the picturesque fort of Rámkot, and beyond the view extends over the many intervening ranges to the snows of the Pír Panjál. The neighbouring parts of the Kashmír territory are said to be rich in archæological remains.

Makhiand.

A good deal has been written about the ancient city of Girjhák, of which the modern town of Jalálpur is the successor: Cunningham (Ancient Geography of India, p. 163) estimated that Girjhák may have been three or four times the size of the present town of about 3,500 inhabitants. "Girjhák of Sindh Ságar" is mentioned in the Aín-i Akbarí. (Gladwyn, Vol. II, p. 263), and it is probably correctly stated that it was in Akbar's time that the new name of Jalálpur was

Jalálpur.

(1) This matter is alluded to in more detail below, in the notice of the Gakkhars: it is at least doubtful whether the Gakkhars were concerned in the assassination, but there seems no reason to doubt that it took place at Dhamiak.

(2) Generally assigned to the second and third centuries A.D.; Burgess, *Buddhist Art in India*, p. 84 ff.

CHAP. I. B. adopted in honour of the Emperor (Jalál-ud-dín Muhammad Akbar). The old name is still applied to the remains of a small Janjúa fort on the Mangal De hill behind Jalálpur. Cunningham
History. elsewhere writes of the place as one of the oldest sites in India, and says that it extended for a considerable distance along the base of the hills to the west. It must be said, however, that whatever the age of the place, there is nothing on the spot to prove it; the inextensive ruins on the hill to the west are merely those of a mosque, and of rough stone huts, such as the villagers build at the present time, together with a modern Hindu temple. The identification of Jalálpur with Alexander's town of Bukephala is discussed further on. Here it is enough to say that there is no trace of anything Greek in the place now.

Jalálpur.

Old Bhera. About thirty miles further down the river, close to Ahmadábád, is a short range of low hillocks called *burárí*, on which are the signs of former extensive habitations: this is another suggested site of Bukephala (see below); the modern town of Bhera lies just opposite on the left bank of the Jhelum, but it is known that it was originally on the right bank, and everything points to the Ahmadábád *burárí* as its old site. Cunningham identifies the place with the capital of Sopeithes, a local prince of Alexander's time; ⁽¹⁾ this seems very doubtful, but of the great antiquity of the site we have the evidence of the numerous ancient coins found on it, and we know that it was at Bhera or Bheda that the Chinese pilgrim Fa-Hian crossed the Jhelum about the year A. D. 400⁽²⁾.

The town was taken by Mahmúd early in the 11th century (Elliot, Vol. II, p. 29), and again by Turti, a general of Chingiz Khán in 1221 A. D. (Elliot, Vol. II, p. 392). Bábar's Memoirs show that in his time, eleven centuries later, the town was still situated on the right bank of the river: it was the furthest limit of his first invasion of India.⁽³⁾ New Bhera, on the left bank of the river, was founded by Sher Sháh about 1540 A. D., when he selected the site for Rohtás fort.

Malot.

Of the history of Malot very little is known; Cunningham's identification⁽⁴⁾ of this place with the Singhapúra of Hiuen Tsiang was doubted even by himself, and later investigators, such as Dr. M. A. Stein, have decided against it. The fort is said to have been built by Rája Mal, a Janjúa chief, whose descendants still hold the village: in their genealogies he comes at some twenty generations or 600 years back, but this tells us nothing of the age of the temple, that is Malot's principal feature, and which was no doubt built much

(1) Ancient Geography of India, p. 155. See also Archaeological Reports, Vol. V, p. 96.

(2) Beal's translation, Chap. XV.

(3) Cunningham has a notice of Bhera also in Archaeological Reports, Vol. XIV, p. 35; he says the original name is stated to have been Bhadrávatí Nagari after Rája Bhadra Sena, who gave a horse for the Aswamedha sacrifice.

(4) Archaeological Reports, Vol. V, p. 85.

earlier. Malot is situated on one of the highest of those precipitous spurs which at intervals project slightly from the southern edge of the Salt Range and command a wide view over the plains below: on the extreme edge of the cliff are the temple and gateway described below; for some distance below them the stony sloping surface of the spur, connecting Malot with the Salt Range upland, is bare except for extensive remains of former houses built roughly of stone, just like those now in use: then about 500 yards from the temple is the present village, ending on the north side with a sharp drop of perhaps 100 feet, roughly walled at the top, with a gateway and tower of comparatively recent date; the slope then drops down to join the main body of the range. The only remains of much antiquity are the temple and gateway already referred to, which are in the earlier Kashmirian style of architecture: they are built of a coarse sandstone, which has in places suffered much from the action of the weather: the few sculptures which remain are much mutilated. The following account is abridged from that given by Cunningham in his *Archæological Reports*, Vol. V, pp. 85 to 90:—

“The temple is a square of 18 feet inside, with an entrance porch on the east towards the gateways: on each side of the porch there is a round fluted pilaster, or half pillar, supporting the trefoiled arch of the opening, and on each side of the (inner) door there is a smaller pilaster of the same kind with a similar trefoiled arch. . . . The four corners of the building outside are ornamented with plain massive square pilasters, beyond which each face projects for 2½ feet, and is flanked by two semi-circular pilasters supporting a lofty trefoiled arch.

“On each capital there is a kneeling figure under a half trefoil canopy, and from each lower foil of the arch there springs a smaller fluted pilaster for the support of the cornice. In the recess between the pilasters is a highly ornamented niche with trefoiled arch, flanked by small fluted pilasters. The roof of the niche first narrows, and then widens into a bold projecting balcony, which supports three miniature temples, the middle one reaching up to the top of the great trefoiled recess. The plinth of the portico and the lower wall outside are ornamented all round with a broad band of deep mouldings nearly two feet in height, beneath which is the basement of the temple still four feet above the ruins. The general effect of this facade is strikingly bold and picturesque, . . . rather marred by the introduction of the small pilasters for the support of the cornice.

“The exterior pyramidal roof of the temple has long ago disappeared, but the interior roof is still intact. That of the porch is divided into three squares, gradually lessened by overlapping stones. In the temple itself (by the same method of overlapping stones) the opening is reduced first to an octagon, then to a circle, which is gradually narrowed until small enough to be covered by a single slab: this slab is gone, but the rest is intact. Though not accurately measured, the height of the cornice above the basement is almost exactly 30 feet, inside from floor to spring of dome about 28 feet 4 inches, the remaining 1½ feet being accounted for by the floor.

“The interior of the temple is quite plain, and there is no trace of statue or pedestal of any kind. It is said, however, that a *lingam* was once enshrined in the centre of the room. This is most probably true, as this form of temple in Kashmir would seem to have been peculiar to the Brahmanical worship of *Māhādeva*. The figures that are still left on the outside are so much mutilated

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History.

Malot.

"The gateway is situated 58 feet due east of the temple. It is a massive building, 25 by 24 feet, divided into two rooms, each $15\frac{1}{4}$ by $8\frac{1}{4}$ feet. On each side of these rooms to the north and south there are highly decorated niches for the reception of statues covered by trefoil arches which spring from flat pilasters. Each capital supports a statue of a lion under a half trefoil canopy, and on the lower foils of the great arch stand two small pilasters for the support of the cornice, like those which have already been described on the outside of the temple. The roof is entirely gone; but judging from the square shape of the building, it must have been pyramidal outside, with flat panelled ceilings of overlapping stones inside.

"The shafts of the large pilasters have 12 flutes in the semi-circle. The capitals are of the true Kashmirian style of Doric, with the usual ornamented torus; but the spread of the cavetta, or hollow moulding above it, is greater than in any of the Kashmirian examples, which are more like the apophyges of the Greeks. But the base is the most peculiar feature of the Malot pilasters. It is everywhere of the same height as the plinth mouldings, but differs entirely from them in every one of its details. These bases have a curious opening in the middle: the mouldings thus cut away are portions of a semi-circle, and as the complete semi-circle would have projected beyond the mouldings of the basement, it seemed probable that this device of removing the central portion was adopted to save the making of a projection in the basement to carry it. The effect is perhaps more singular than pleasing. At first it seemed that these pilasters were without bases, but as these peculiar mouldings are found nowhere except immediately under the pilasters, they are clearly intended for bases, however strange and unusual their forms may appear.

"The people have no tradition about the temple, and ascribe its erection to the Kauru-Pándu, or Kauravas and Pándavas. The same thing is said of all the temples in Kashmír."

The article is accompanied by a general plan, not very accurate, a ground plan of the temple and gateway, and a sketch of one of the pilasters, showing the peculiar base referred to above. To judge from the description, the buildings must have been in much better preservation in 1872-73 than they are now. The temple was visited in 1848 by General Abbott, whose account in the *Journal, Asiatic Society of Bengal*, 1849,⁽¹⁾ is accompanied by a sketch of the temple.

The ugly excrescence on the roof of the temple was added in Sikh times to serve as a look-out place.

Shivganga.

About three miles north-east from Malot, on the road to Dalwál, is a valley irrigated by a small perennial stream: by one of its pools are two temples, one old and the other recent: the latter was built for the reception of a Buddhist sculpture found about fifty years ago by villagers ploughing their fields at Warála, a village on the next spur of the hills to that on which Malot is situated: this sculpture consists of a somewhat elaborate group, about $1\frac{1}{2}$ by $2\frac{1}{4}$ feet, which was taken from the finders by certain Hindús of Dalwál and set up by them in the small Shivganga temple: having recently (1901) been broken by some mischievous person, it became useless to them, and the fragments were secured and sent to the Lahore

(1) *Remains of Greek Sculpture in Potowar*, by Capt. James Abbott, with seven plates.

Museum, where the piece was restored; same fragments, however, are missing. The central figure, some 15 inches high, is, according to Dr. Burgess, a seated Bodhisattva, very probably Maitreya; to right and left, separated from it by highly ornamented pilasters, are standing figures of Buddha (about 8 inches); above, on either side, are cross-railed balconies, with four figures, which may represent Devas; at the top is a seated Buddha adored. The modillions above and below the balconies are interesting, being carved with animal faces. The whole slab (which originally contained 18 or 19 figures, some now missing, others mutilated), is a sort of small shrine, to which the passer-by would pay reverence, and repeat a *mantra*.⁽¹⁾ It does not seem to belong to a very early stage of Gandhára art. The Warála site, where it was found, does not seem to have been further explored.

The older temple at Shivganga is in the Kashmirian style, apparently of a rather late period, but it has been "restored." In it there is (or at any rate was a few years ago) a fine black stone image of Durga, of considerable age.

Going eastwards along the Salt Range the next places of interest are Kitás and the Gandhála valley, separated from Kitás by a lofty hill, both about 8 miles from Shivganga, and in a straight line 10 miles from Malot. The remains at these two places may conveniently be considered together for reasons that will appear further on. They will first be described as they now are.

Kitás⁽²⁾ is situated in the centre of the Salt Range, opposite Pind Dádan Khán, from which town it is 15 miles distant, at a height of over 2,000 feet above the sea: it lies between low stony hills, at the head of a small ravine that gives access to the eastern end of the great Rahún upland; it is remarkable chiefly for its sacred pool visited every year by thousands of pilgrims who come to bathe in its holy waters; these are fed by springs in the pool itself, from which issues the small stream flowing down by Choa Saidan Sháh, and so into the Gandhála valley and down to the plains. The pool is of irregular shape, about 200 feet long, 150 broad at the upper end, narrowing to 90 at the lower end, where it is spanned by a low stone bridge: it is reputed to be bottomless, but soundings did not show a greater depth than 23 feet. The water is pure and clear, and is crowded with small minnow-like fish. Round the pool has grown up a little colony of Brahmans, in charge of the various temples surrounding it, and of the houses for the reception of the pilgrims who come to the annual Baisákh

(1) A very similar relief from Yusafzai is figured on page 130 of Dr. Burgess' *Buddhist Art in India*, 1901.

(2) The Brahmanical story (contained in a Sanskrit *Máhátmya* of the Tirtha) relates that Shiva was so inconsolable for the death of his wife Sati, that the tears rained from his eyes, and formed the two sacred pools at Pushkára in Ajmir, and Kitás or Kutákeha, "raining eyes." Cunningham has articles on Kitás in *Archæological Reports*, Vol. II, pp. 188-192; Vol. V., pp. 90-93, and *Ancient Geography of India* pp. 124-128. The temples were also described by Abbott in *Journal, Asiatic Society of Bengal*, 1849, p. 131.

CHAP. I. B. fair in the middle of April, and by whose offerings they live; with some exceptions these priests are ignorant and quarrelsome, and are by no means popular in the neighbourhood.

Kitás and Gandhāla.

Cunningham gives the following account of the remains at

Kitás :—

"The pool is partly artificial, the rock having been cut away to enlarge the natural basin in the bed of the Ganiya Nala. Just above the pool there is a strong masonry wall $2\frac{1}{2}$ feet thick and 19 feet high, which once dammed up the stream so as to form a large lake; but only the land portions are now standing, and the water disappears entirely amongst the broken rocks and ruins of the embankment. The Brahmans say that the dam was built by Rāja Patak, the Dewán or minister of some King of Delhi, for the purpose of turning the water away from the holy pool of Kitáksh. There certainly is a channel cut through the rock, for 122 feet in the length, which would have carried off the waters to a point below the tank, but as there are springs in the pool itself, it seems more probable that the dam was made to retain water for irrigation. This channel was originally a tunnel, but the roof has fallen in, and the rock still overhangs on both sides in rough unchiselled masses.

"About 800 feet below the pool, the Ganiya Nala passes between two flat-topped hills, about 200 feet in height, on which the ancient town is said to have stood. On the west hill, named Kotera, I traced several walls and towers of the old fortifications, and the remains of a brick building which the people call Sádú-ka-Makán or Sádú's house. The bricks are $14\frac{1}{2}$ by $9\frac{1}{2}$ by $2\frac{1}{2}$ inches. In the middle of the north side of the hill I traced the walls of a gateway leading down to a lower enclosure, at the east end of which stand the Sat-Ghara or 'seven temples.' These are the only ancient remains of any interest that now exist at Kitás. The upper fort is 1,200 feet long by 300 feet and the lower fort 800 feet by 450 feet, the whole circuit being about 3,500 feet, or less than three quarters of a mile. But the whole circuit of Kitás, including the ruins of the town on both banks of the stream above and below the fort, is about two miles.

"The Sat-Ghara or 'seven temples' are attributed to the Pándus, who are said to have lived at Kitás during a portion of their twelve years' wanderings. On examining the place carefully I found the remains of no less than twelve temples, which are clustered together in the north-east corner of the old fort. Their general style is similar to that of the Kashmir temples, of which the chief characteristics are dentils, trefoil arches, fluted pillars, and pointed roofs, all of which are found in the temples of Kitás and of other places in the Salt Range. Unfortunately these temples are so much ruined that it is impossible to make out their details with any accuracy; but enough is left to show that they belong to the later style of Kashmirian architecture which prevailed under the Karkota and Varmma dynasties, from A.D. 625 to 939; and as the Salt Range belonged to the kingdom of Kashmir during the greater part of this time, I believe that these temples must be assigned to the period of Kashmirian domination.

"The Sat-Ghara group of temples is formed of six smaller temples placed in pairs at regular distances about one large central fane, and this again is connected with the remains of a very large temple which is situated due east, 170 feet distant. The whole of the smaller temples have been so often restored and plastered that they have suffered more from the repairs of men than from the ravages of time. The body of the central fane is now altogether hidden by a thick coat of plaster, the unfortunate gift of Guláb Singh. The great ruined fane to the east consists of a mound of ruins resting on a basement $68\frac{1}{2}$ feet long by $56\frac{1}{2}$ feet broad, which is in rather better preservation

than the Sat-Ghara temples. Its design, too, is quite different, as it is divided into a number of small panels or recesses by broad pilasters after the style of the tope basement at Manikíála. There is nothing now remaining about the basement to show whether it belonged to a Buddhist tope or a Bráhmínical temple; but over the doorway of a modern temple to Ráma Chandra, which is close by on the north side, there is a three-headed and four-armed male figure that is said to have been found in the mass of ruins overlying the basement. The statue is of red sandstone three feet high. The three heads are different—in the middle a man, to the right a boar, and to the left a lion. This differs from every other three-headed statue that I have yet met with; but it is, I believe, a representation of Vishnu as the Supreme Being, the man's head being Vishnu Narayána, the creator, the boar's head Vishnu Varáha, the preserver of the universe, and the lion's head, Vishnu Narshinga, the destroyer. There is nothing else about the figure to show what it is intended for, as there are only lotus flowers in three of the hands, and the fourth rests on the hip."

As regards the "great ruined fane to the east" it may here be noted that Dr. Stein has no doubt that it is the base of a *stupa*.

Two miles almost due east of Kitás is the village of Choa Saidan Sháh, and from Choa the Gandhála valley extends in a south-westerly direction: the narrow bed of this valley is itself about 2,000 feet above sea-level, but the hills on the north, which divide it from Kitás, rise to a considerably greater height, in a succession of bold cliffs, while those to the south are lower and rise more gently. The whole forms, perhaps, the best example of hill scenery that the district contains. Through the valley runs the Kitás stream, and on its bank is a mound from which, and from the level ground adjacent, an immense amount of sculptured stone has been obtained, as will be stated more particularly further on. The valley is now a Government Reserved Forest, and is one of the most productive, both of wood and grass in the district.

The interest of these two places centres round their identification with the city of Singhapura and the adjoining Jaina temples described by Hsuen Tsiang, the Chinese pilgrim of the 7th Century. His own account of what he saw will first be given ⁽¹⁾ :—

The kingdom of Sang-ho-pu-lo is about 3,500 or 3,600 *li* in circuit. On the west it borders on the river Sin-tu (Indus). The capital is about 14 or 15 *li* in circuit; it borders on the mountains. The crags and precipices which surround it cause it to be naturally strong. The ground is not highly cultivated, but the produce is abundant. The climate is cold, the people are fierce, and value highly the quality of courage; moreover, they are much given to deceit. The country has no king or rulers, but is in dependence on Kashmir. Not far to the south of the capital is a *stupa* built by Asoka-rajá. The decorations are much injured: spiritual wonders are continually connected with it. By its side is a *sangharáma*, which is deserted and without priests.

To the south-east of the city 40 or 50 *li* is a stone *stupa*, which was built by Asoka-rajá; it is 200 feet or so in height. There are ten tanks, which are secretly connected together, and on the right and left are covered stones (balustrades) in different shapes and of strange character. The water of the

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(1) Beal's Si-yu-ki, from the Chinese of Hsuen Tsiang, A. D. 624, Vol. I, pp. 143—145.

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By the side there is a *sangharāma*, which for a long time has been without priests. By the side of the *stupa*, and not far off, is the spot where the original teacher⁽¹⁾ of the white-robed heretics⁽²⁾ arrived at the knowledge of the principles which he sought, and first preached the law. There is an inscription placed there to that effect. By the side of this spot is a temple of the Devas. The persons who frequent it subject themselves to austerities; day and night they use constant diligence without relaxation. The laws of their founder are mostly filched from the principles of the books of Buddha. These men are of different classes, and select their rules and frame their precepts accordingly. The great ones are called Bhikshus; the younger are called Sramaneras. In their ceremonies and mode of life they greatly resemble the priests (of Buddha), only they have a little twist of hair on their heads and they go naked. Moreover what clothes they chance to wear are white; such are the slight differences which distinguish them from others. The figures of their sacred master they stealthily class with that of Tathagata; it differs only in point of clothing; the points of beauty are absolutely the same.

Cunningham was the first to suggest the identification of Kitás with the Singhapura of Hiuen Tsiang; but he found it difficult to decide between Kitás and Malot, and his final opinion was in favour of the latter, though he admitted that it did not agree in all particulars with the description. In none of his accounts was there any mention of Jaina ruins; this led Dr. Stein to visit the Salt Range at the end of 1889 in order to clear the matter up; the following account of his operations is abridged from his letters to Prof. Bühler, published by the latter in the Vienna Oriental Journal, Vol. IV, 1890, pp. 80—85 and 260-261:—

Immediately on his arrival Dr. Stein heard from the villagers that there was a place called Múrti in the Gamdhāla valley, which yielded stone images and beautifully carved blocks, such as had been taken a few years before to build a new bridge at Choa Saidan Sháh; he satisfied himself that the materials of this bridge, which are partly adorned with relievos, must have been taken from an old temple. He therefore went on to visit Múrti. "I followed the stream," he proceeds, "which flows from Ketás down the Gamdhāla valley, and was not a little surprised when my guide, after a march of about two miles, showed me the place where all the sculptures had been found in a spot which seems to agree most remarkably with Hiuen Tsiang's description. The bed of the Ketás brook forms with the narrow and very picturesque Gamdhāla valley a number of small pools, and at a bend where there are two larger basins, stands the hill of Múrti; it rises on a base of solid sandstone to about 100 feet above the level of the water, and at the top expands into a small plateau, about 2.5 feet long and 190 feet broad. On this plateau lies a small mound about 40 feet high, and on its west side an enormous mass of rubbish, marking the site of an ancient temple. Two trenches, about 70 feet long, which run north and west, show where the walls stood, the foundations of which were excavated eight years ago (i. e., 1881), by order of the Assistant Commissioner, to furnish material

(1) Mahāvīra.

(2) This refers to the Svetāmbara Jains.

for the bridge at Choa. Small fragments of richly ornamented capitals and friezes can be picked up without trouble from the heap of ruins. From the top of the hill I heard the murmuring of the brook, which, on leaving the principal pool, forces its way through boulders. Dense groups of trees, such as Hünen Tsiang describes, are reflected in the limpid water of the pools, which still swarm with fish." * * * * *

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Excavations of the Múrti mound made then and subsequently brought to light rough mortar-covered walls of white sandstone, two feet thick, showing that this is not a natural mound but a true *stupa*; and over 30 camel-loads of sculptures and architectural ornaments were obtained and removed to Lahore from this site: the sculptures included two clothed female figures, resembling those in the Jaina caves at Elura, but of far better execution; and two male figures—one, two feet high, representing apparently some attendant or minor deity engaged in worship, and the other, 1½ feet high, being possibly a representation of Indra; similar figures of Indra occur in the Jaina temples at Elura and Ankai. A small figure of a Jina, seated in the conventional squatting position, was also found. Of the architectural ornaments, the most important was a column five feet high, remarkable for its elegance of style and workmanship; the hundreds of smaller pieces and fragments found all show the same finish and neatness of execution. The hoped for inscription was not found.

Dr. Stein records that the Múrti temple is locally ascribed to a "Rája Phatak, who reigned before the time of Rája Mán," and that the fact of its having belonged to the Jainas is still known.

The distance between Múrti and Kitás (by way of the stream, it is presumed; it is much less across the hills) was found by actual chaining to be 4¾ miles; the distance given by Hünen Tsiang is 40 or 50 *li*, equal to 6 or 7 miles; but as the ancient city of Singhapura is supposed to have been, not where modern Kitás is, but on the plain to the north of it, the discrepancy is not great. Dr. Stein's observations on Kitás in the letters above referred to are as follows:—

I was soon convinced that there is at Ketás no group of tanks such as that described by Hünen Tsiang; for the brook, after leaving the one large pool, flows downwards in a narrow stony bed. The five tolerably well preserved temples of the Sat-Ghara show the Kashmirian style, but no trace of Jaina architecture. On further enquiry regarding ancient sculptures I was taken to a modern temple, built by one of the Purohitas of Ketás during the Sikh period, with stones brought from Múrti; it showed, in fact, the same square blocks and delicately chiselled ornaments which I had found in Múrti. To my still greater joy, I was shown in the courtyard of the temple of Mahant Sarjú Dás two richly ornamented stone pillars, which were said to have come from the same place. They are cut from the same red sandstone, which furnished all the sculpture in the latter place and they have on two sides deep holes, which look as if they were intended for fitting in wooden railings. The sculptures on their capitals differ, but are decidedly in the Jaina style, showing seated naked male figures with garlands in their hands; you will understand that they forcibly reminded me of Hünen Tsiang's "balustrades of different shapes and of strange character." In the large *stupa*, situated before the east front of the Sat-Ghara temples, I believe I recognise the *stupa* of Asoka, which, Hünen Tsiang says, lay to the south of the town of Singhapura.....I consider Ketás, or rather the field of ruins lying one or two miles further north, to be the site of the ancient town, which according to the Chinese pilgrim stood 40—50 *li*, perhaps 6-7 miles,

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north-west of the Jaina temples. That Ketás possessed greater importance than that derived from its "Nágá" (sacred tank) is proved by the remains of ancient forts on the surrounding hills, which would not be necessary for a mere place of pilgrimage.

Dr. Stein's identifications of Singhapura with the Kitás locality and the Jaina temple with Múrti, were accepted without hesitation by such an eminent authority as Professor Bühler. There is very little to be seen now at either place; the main temple at Kitás has been restored out of all recognition, the smaller ones are in a ruinous condition, and the *stupa* is a shapeless mound, though its base is clearly traceable: there are, however, the pieces of sculpture described by Dr. Stein, and there are some more at various places in Choa Saidan Sháh, four being in a *dharm-sála* there, and some fragments are to be found in the Assistant Commissioner's compound and elsewhere; the sculptures obtained by Dr. Stein are in the Museum at Lahore. At Múrti, all that is to be seen is a heap of earth and shapeless stones, with a trench through it cut by a district official some years ago, to no useful purpose. It is to be hoped that further exploration will be left to experts.⁽¹⁾

Nandana.

About fourteen miles due east of Choa Saidan Sháh, between the villages of Bághánwálá below and Ara above, the outer Salt Range makes a remarkable dip; the road over the hills winds up the face of a steep rocky hill, with perpendicular precipices at the sides; so that in former days the holder of this hill had the absolute command of what is one of the most obvious routes across the range. At such a place it is not surprising to find extensive remains. There seems to have been once a temple, a fort, and a large village, of which, however, little now remains; the temple is in ruins, but enough still stands to show that it was two-storeyed, with a flight of stairs leading to the upper storey; and that round the second storey there was a passage, also in the walls, leading into the upper room. The large restored temple at Kitás, by the way, has the same internal structure, and in this respect probably retains its original form. The Nandana temple is, like others in the Range, in the Kashmirian style, and stands on a platform apparently of very great age, much older probably than the temple itself.⁽²⁾ Of the fort, two semi-circular bastions are still standing on the south face of the hill, with steeply sloping walls, made of large well-cut blocks of sandstone. The village was built as villages are now, the houses were of stone and mud, mortar being used in exceptional

(1) Dr. Stein writes (1905) that on a visit paid in 1901 he ascertained that many ancient coins are found every year in the fields of Durmiál, particularly on and near the low ridge known as Pind, $\frac{1}{2}$ mile east of the village. His observations left little doubt that the open valley north of Ketás and south of the Nakha ridge was once occupied by a large town, as supposed by local tradition. He adds that he does not think there is much left at Múrti that is not visible; the remains of the temple were completely cleared by him, and all that remains of the *stupa* is the small shapeless mound referred to. The slopes of the natural hillock may conceal debris from the temple and *stupa* which had rolled down, but he does not believe that structural remains *in situ* still await excavation.

(2) This temple differs from all others in the district in facing to the west instead of the east: in this it resembles the large temple at Amb near Sukkar.

cases only. In later times a mosque was added close to the temple, and this too is now in a ruinous state: in its courtyard is a fragment of an inscription of the same period, now too far gone to be legible. This fort of Nandana is mentioned in the histories of the invasions of Sultán Mahmúd of Ghazní, a fact which, somewhat strangely, seems to have hitherto escaped notice: Ferishta tells us that in 404 H. (about 1008 A. D.) Mahmúd came against Nandána in the mountains of Bálnáth, when Jaipál, son of Anandapál, was ruler of Lahore: the fort was surrendered to him, and leaving a man of his own in charge, Mahmúd went off to Kashmir, in pursuit of Jaipál, who had fled there. In the *Tabaqát-i-Akbarí* there is the same story, the place being called Nannana or Nandana, and it is stated that again in 410 H. Mahmúd came against Rája Nanda and Rája Jaipál and defeated them at this place. The identity of name, combined with the agreement of the site amongst the mountains described in the histories, leaves no doubt that the fort above Bághánwálá is the one referred to.

The fort of Nandana appears several times in later history: early in the 13th Century it was held by Kamr-ud-dín Karmáni who was dispossessed by a general of Jalál-ud-dín Khwárizmí; but after the defeat of the latter on the Indus by Changlez Khán, an officer of the latter, Turti the Mughal, took the place and put its inhabitants to the sword. ⁽¹⁾ It appears again in the list of places conquered by Altamsh. ⁽²⁾

The country to the north of the Salt Range contains but few remains of archæological interest: there is an old Buddhist well at Maira, a village at the foot of the range ten miles west of Kallar Kahár, which has been described by Cunningham at pp. 93-4, Vol. V, *Archæological Survey Reports*. The well is square-mouthed for the topmost 10 feet, and contained Kharoshthi inscriptions on three sides, of which the report gave several versions in plate XXVIII accompanying it. Cunningham thought he made out, almost certainly, the date, Samvat 58, but that nothing more could be made out, until the inscriptions were removed from the well and cleaned: two of them were so removed by Mr. J. P. Rawlins of the Punjab Police, and are now in the Lahore Museum: they are dealt with by Dr. Führer in the Progress Report of the Archæological Section, North-West Provinces and Oudh, for 1897-98; but unfortunately the only portion readable with certainty proved to be the word *Sramanera*, or "Buddhist lay brother." The third inscription, it is presumed, remains in the well.

Maira.

There is another small square-topped well, about 8 miles south-east of this, close to the village of Qádirpur, in the Tallagang Tahsíl, which is also probably very old: the people there say that it was not constructed in their time, or the time of their immediate

(1) Duff's *Chronology of India*, Vol. I, p. 536.

(2) Raverty's *Tabaqát-i-Nasirí*, p. 539. The name Nandana appears to mean 'Indra's garden': see Stein's *Raja Tarangini*, Vol. IV, p. 222 and Vol. VII, 933.

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History.

Kálar.

Some twelve miles east of the junction of the Sawán with the Indus, between Makhad and Kálábágh, and about three miles due south of the village of Shāh Muhammad Wálí in the north-west corner of the district, is an old temple called Kálar or Sassi dá Kallara, which has hitherto escaped notice. ⁽¹⁾ It is situated at a height of about 1,100 feet above sea-level, on the edge of a hillock rising steeply from the bank of the Kas Letí, one of the torrents, tributary to the Sawán stream, which descend from the northern face of the Salt Range; it here passes through a rough tract of hillocks and ravines. The temple is in a ruinous condition, due largely to the gradual wearing away of the soft sandstone hillside on the edge of which it stands, and its further decay will probably be rapid.

A few of the principal measurements are as follows:— exterior: extreme length, including portico, $22\frac{1}{4}$ feet; extreme breadth, 16 feet; height $23\frac{1}{2}$ feet, excluding the pile of bricks on one corner. Interior: the temple is a square of $7\frac{1}{4}$ feet, and the portico had apparently almost the same floor measurements. Height from floor of temple to top of dome, $14\frac{1}{4}$ feet; to top of upper chamber, including the thickness of the beams above it, $18\frac{1}{4}$ feet.

The temple is built of large bricks, 2 inches thick, varying in length from $15\frac{1}{2}$ to 17 inches or more, and in breadth from 10 to $10\frac{1}{2}$ inches. On the outer walls these bricks are elaborately carved in decorative designs of a simple character.

Within the temple (which was reached through a portico divided from it by a short passage), at a height of 7 feet from the floor, is a band of ornamentation, 8 inches deep, repeating part of that on the outer walls. The interior of temple and portico is otherwise plain; it shows signs of having been once plastered.

Ten feet from the floor the corners are filled with six courses of overlapping bricks, which gradually reduce the opening to a circle. Above come thirteen courses, nine laid flat and the last four on their edges; these form a dome ending in a small hole, of which the covering is no longer in place, the dome being otherwise intact.

Above the dome is the roughly laid brick flooring of a small upper chamber, only $3\frac{1}{2}$ feet high, of the roof of which a few weather-worn beams still remain in place. Everything, practically, above this has disappeared. On one corner stands a rough pile of bricks, about 5 feet high, but this was evidently no part of the original building.

(1) The temple has been described in J. R. A. S., 1903, p. 335 (4 plates).

The temple faces due east, commanding a wide view in that direction as well as to the north. Immediately in front is the steep slope of the hill, which has evidently lost much by erosion since the temple was built. One side of the portico has been completely undermined, and has fallen, carrying with it the roof of the porch; the slope below is covered with their débris.

In the graveyard of Sháh Muhammad Wálí stands a block of *kaniat* (tufa) stone, 12 by 8 inches in section; part is buried in the ground, but its length seems to be about 5 feet, and it is only part of the original block. This stone is said to have stood erect in the centre of the portico entrance of the Kálar temple; when the portico collapsed the stone went with it down the hill, and this, one of the pieces into which it was broken, was eventually carried off by a man of Sháh Muhammad Wálí for use in building a house. He fell ill and died soon afterwards, and the villagers, ascribing his fate to the anger of the spirits guarding the temple, disposed of the stone by using it as his gravestone. The block is merely a rough-hewn slab, and can hardly have been used as a pillar as is stated; it was more probably the sill across the entrance of the portico.

There is now no sign of image or pedestal of any kind in the temple; but the floor is choked with a mass of rubbish, which has not been cleared out. Partial excavation, to ascertain the level of the floor, yielded nothing of interest.

Close to the walls of the building was found a coin of Venka Deva, whose reign is placed by Cunningham⁽¹⁾ in the last part of the 8th Century A. D.

The whole of the flat top of the hill on which the temple stands, about an acre in extent, is covered with the ruins of houses, built apparently as village houses are now, of rough blocks of sandstone in mud, without mortar. The nearest existing village is that of Sháh Muhammad Wálí, three miles away; adjoining it is a low mound of some size, covered with broken pottery. This site, called Kalrí, is certainly a very old one, and may have had some connection with the Kálar temple, but nothing has been found to show its date.

Of the origin of these places nothing is known locally. In the popular mind the Kálar temple, otherwise Sassí dá Kallara or Sassí dí Dhaular, is connected with the well-known folk-tale of Sassí, the king's daughter, and Punnún, the camel-driver of Mekrán; but it may safely be said that the building has nothing to do with this popular story, and that the connection was suggested merely by its name.

Photographs of the temple were sent to Dr. M. A. Stein, who writes as follows: "In style the temple closely resembles two

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(1) "Coins of Mediæval India," pp. 56-65.

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small shrines standing amidst the ruins of Amb, Sháhpur District, but these are of a kind of tuffo stone. I do not think the details visible in the photographs permit a close dating, but seventh to ninth century of our era would probably be an approximate date. The large size of the bricks points to the earlier limit. . . . It is evident from the general look of the structure that it was a Hindu temple. Closer examination of the cella might show whether it was dedicated to Shiva or Vishnu."

On the materials available no more definite conclusion as to the date of the temple appears to be possible. Dr. Stein refers to the small shrines at Amb. In style of ornamentation, as well as in general arrangement, their resemblance to the Kálar temple is striking, and it can hardly be doubted that their date is approximately the same. Of these Amb temples, which lie about fifty miles due south from Kálar, Cunningham writes that they "are all of the Kashmirian style, but almost certainly of late date, as all the arches have cinquefoil instead of trefoil heads, which is the only form in Kashmír. I think, therefore, that their most probable date is from 800 to 950 A. D."⁽¹⁾ (At Kálar there is no arch remaining.)

Minor anti-
quities.

The temple also much resembles the five small temples at Káfir Kot (about sixty miles south-east of Kálar), described in *Archæological Reports*, xiv, 26—28.

Forts.

In addition to those which have already been mentioned, there are scattered about the district many old mounds and sites of former villages, most of them, as shown by the coins found, being of great age: thus there is one near Sanghoí, another near Kallar Kahár, another near Lilla, and so on. There are also a number of small fortresses, now ruined or turned to other uses; but these are usually of comparatively recent date, and of no special interest: Dillúr, Karangal, Kusak, Samarqand are instances. The most remarkable of these is Kusak, mainly on account of its striking situation on a precipitous minor peak of the Salt Range, overlooking the Pind Dádan Khán plain: it also enjoys the distinction of having been besieged by Máharája Ranjít Singh in person, the Janjúa chief (whose descendants still hold the village), holding out until his water-supply failed. At the foot of the hills, not far from Kusak, is the village of Jutána: here two curiously shaped earthenware bottles, finely glazed and coloured, were dug up a few years ago, and are now in the Lahore Museum: they are supposed to have been carried by pilgrims probably bound for Kitás; but where they came from or to what age they belonged is not apparently known: the bottles are, however, certainly very old.

(1) *Archæological Reports*, xiv, 24.

COINS.

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History.

Ancient
coins.

The following note on the ancient coins found in the district is from information kindly furnished by Mr. J. P. Rawlins, Punjab Police, who made many important finds of new coins during a long residence in the district.

Coins of all the Græco-Bactrian and Indo-Scythic Kings, with the exception of Andragoras, Sophytes, and Diodotus, are found in the Jhelum District: the commonest of all are those of Apollodotus, Menander, Hermæus, Azes, "Soter Megas," Kadphises I, Kadphises II, Kanishka, Huvishka, and Vasu Deva.

Less common, but still fairly plentiful, are those of Eukratides, Antialkidas, Antimachus, Philoxenus, Maues, Azilises, Gondopharres, and Kadaphes.

Seldom met with are the coins of Euthydemus I, Demetrius, Diomedes, Nikias, Vonones, Spalahores, Spalirises, Zeionises.

In addition to the foregoing classes of coins, punch-marked pieces or "Paranas," various Taxila coins, silver Parthian, coins of the Kedara Kushans, of the Scythic-Sassanians, and the Ephthalites, or White Huns, are all found in large or small numbers. Also in large numbers the silver and copper coins of Samanta Deva, and others of the Brahman Kings of Kabul, and of the earlier Kashmir Kings.

A number of *unique* coins obtained by Mr. Rawlins in this district have been published in the Journal Asiatic Society, Bengal for 1897.

Coins are the most portable of antiquities, and their evidence is therefore seldom conclusive: many of those found in Jhelum may have been brought there from very distant places, at one time or another, by the pilgrims who every year come to Katás. Coins found in mounds and disused sites show, however, the currency of the place at the time when the site was occupied: and when those of a particular ruler are found in one tract only, it is a pretty sure sign that he reigned there; the coins of Nikias are an instance of this, being found, it is believed, in Jhelum, and there alone: amongst the 64,000 coins collected by Masson in Afghánistán, there was not one of this king. From the large number of their coins found in the district, it is fairly certain that it was included in the dominions of the Græco-Bactrian and Indo-Scythian Kings whose names are given in the first part of the note above.

After the Indo-Scythians came the Ephthalites or White Huns, Torámána and others, whose rule over the extreme north-west of India has now been fixed as extending from about the middle of the 5th century to about 540 A. D. Now, some years ago, there was found in the Kathwai gorge of the Salt Range (in the Shahpur District, but only a few miles from the Jhelum border) a stone, bearing an inscription of Torámána Sháhi Jaúvla, recording the erection of a *vihára* or Buddhist monastery: so we have here evidence that this king, whose coins with those of his son, Mihirakula, are found in the

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district, ruled over this part of the country: this Mihirakula has come down to fame as a great iconoclast; owing to a fancied slight, he turned against the Buddhists, and issued an edict to destroy all the priests, to overthrow the law of Buddha, and leave nothing remaining. Having been vanquished but pardoned by Báláditya, king of Magadha, a Buddhist and patron of Buddhism, he finally reached and conquered Kashmír; then "obtaining possession of Gandhára, he exterminated the royal family, overthrew the *stupas*, and destroyed the *sangharámas*, altogether one thousand six hundred foundations."⁽¹⁾

An interesting series of coins found at Diláwar and some other places in the same neighbourhood shows that this part of the district was the scene of much military activity in the early part of the 13th century, and that Diláwar was perhaps for a time the seat of government of some of the alien contemporaries of Shams-ud-dín Altamsh.

The coins found in numbers at Dárápur and Diláwar, and to some extent at other places not far off, such as Sanghoi and Jalápur, include those of Muhammad bin Sám (Muhammad Ghaurí) and of his general Yaldúz: of Shams-ud-dín Altamsh (Sultán of Delhi, A.D. 1210 to 1235), (Delhi, Lahore, and Multán mints), of Alá-ud-dín of Khwárizm, and of his son, Jalál-ud-dín Manakbarin, who, defeated by Changez Khán on the Indus in 1221, attempted to establish himself in India: of Qubácha, Governor of Sind, who aspired to independence, but was defeated first by Yaldúz in 1216, and subsequently by Yuzbaq Pai, general of Jalál-ud-dín. Coins struck by Yuzbaq Pai at Multán are also found here, and must probably be referred to his expedition against Qubácha. In addition the series includes coins of Hassan Qarlagh, another general of Jalál-ud-dín, and of his son, Muhammad Qarlagh, both of them afterwards independent rulers; and finally coins of Kirmán (in Kurram) with which place Jalál-ud-dín was connected.

We have here in one place the coins of a group of persons all connected with one another, and in such numbers that this could hardly be the result of mere accident in the collecting and depositing of the coins.

With the above exceptions, the coins of the Sultáns of Delhi are rarely found in the district, nor are those of the Mughal Emperors very common: their authority in this part of the country was undoubtedly more nominal than real, though the road to the north-west through Rohtás must have been kept open. There was not much change in this respect under the Sikhs, until the time of Ranjit Singh.

Pind Dádan Khán in the period preceding annexation was, under the name of *vimak* or salt, a Sikh mint town: Dr. Fleming gives a full description of the methods employed in the mint, which he visited in 1848, in the Journal of the Asiatic Society for the following year

(1) From Beal's Buddhist Records of the Western World, Vol. I, pp. 167-172. This account of Mihirakula rests onwh at Hien Tsiang distinctly calls a popular tradition merely.

TRIBAL HISTORY AND TRADITIONS.

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History.

Tribal traditions.

Little is known of the origin and early history of the tribes inhabiting the district, of which the most important are the Gakkhars, Janjúas, Máirs, Kassars, Kahúts, Awáns, Gujars and Jats; and opinions as to the conclusions to be drawn from what we do know are conflicting: thus with respect to the Awáns, one authority says that they are the descendants of Rájputés who settled in the district before the time of Alexander; another, that they may be of Greek origin, but have not been in the district more than 250 years; while the Awáns themselves say that they came from Arabia with Mahmúd of Ghazní, 900 years ago. There are tribal genealogies again, some of them going very far back; but our confidence in these is somewhat shaken when we find that in one of the best-kept versions of the Janjúá tree Rája Prithví Ráj, who was defeated by Muhammad-bin-Sám in 1193 A.D., is 27th in the list, while Rája Mal, who is supposed to have been a contemporary of Mahmúd, about 1000 A. D., is 64th. Again it is stated that Rája Mal was the first Janjúá to embrace Muhammadanism, but at least seven individuals after him have the Hindu "Deva" attached to their names. The first Mussalmán name in the tree is the 71st, and the present generation is the 84th, which, at thirty years for each generation, gives 450 years only. (That this is not far wrong may be seen from the fact that Sangar Khán and Rai Purána, the 73rd generation, were contemporaries of Humáyún, A. D. 1554.)⁽¹⁾

The accounts of their origin given at the present time by the various tribes are noticed in a subsequent section: meanwhile it is best to ignore all the guesses that have been made on the subject, and proceed at once to what we know of the district from authenticated documents.

HISTORICAL RECORDS.

The earliest historical event specially connected with the district is the battle of Alexander the Great with Porus, which was fought on the bank of the Jhelum river in the summer of B. C. 326. The scene of this struggle has been variously identified by different writers: Capt. Abbott (Journal, Asiatic Society, Bengal, Vol. XVII, 1848, p. 619, and Vol. XXI, 1852, p. 214) was the principal exponent of the early theory that the battle took place near Jhelum, which has recently been revived by Mr. Vincent Smith, as noticed below. The identification hitherto generally accepted is that of Sir Alexander Cunningham (Archæological Survey Reports, Vol. II, 1862—5, pp. 173—87, and his Ancient Geography of India, pp. 159—179); the following is, somewhat abridged, the reasoning by which he sought to identify Bukephala with the small modern town of Jalálpur, at the extreme east of the Pind Dádan Khán plain, and to fix the

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and Porus.

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"We have now to examine how the river and the country about Jalálpur will agree with the recorded accounts of Alexander's operations in his passage of the Hydaspes and subsequent battle with Porus. According to Arrian 'there was a high wooded promontory on the bank of the river, 150 stadia, or just 17½ miles above the camp, and immediately opposite to it there was a thickly wooded island.' Curtius also mentions the wooded island as 'well fitted for masking his operations.' 'There was also,' he adds, 'not far from the spot where he was encamped, a very deep ravine (*fossa præalta*) which not only screened the infantry, but the cavalry too.' We learn from Arrian that this ravine was not near the river, because 'Alexander marched at some distance from the bank, lest the enemy should discern that he was hastening towards the promontory and island.' Now, there is a ravine to the north of Jalálpur which exactly suits the descriptions of both historians. This ravine is the bed of the Kandár nála, which has a course of six miles from its source down to Jalálpur, where it is lost in a waste of sand. Up this ravine there has always been a passable but difficult road towards Jhelum. From the head of the Kandár, which is 1,080 feet above the sea, and 345 above the river, this road proceeds for three miles in a northerly direction down another ravine, called the Kasi, which then turns suddenly to the east for 6½ miles, and then again 1½ miles to the south, where it joins the Jhelum immediately below Diláwar; the whole distance from Jalálpur being exactly 17 miles. I marched along this ravine road myself, for the purpose of testing the possibility of Alexander's march, and I satisfied myself that there was no difficulty in it, except the fatigue of making many little ascents and descents in the first half, and of wading through much heavy sand in the latter half. The ravine lies 'at some distance from the bank,' as described by Arrian, as the bend in the *kasi* is seven miles from the Jhelum. It is also 'a very deep ravine,' as described by Curtius, as the hills on each hand rise from 100 to 250 and 300 feet in height. Therefore in the three leading particulars which are recorded of it, this ravine accords most precisely with the accounts of the ancient historians.

"Amongst the minor particulars there is one which seems to me to be applicable only to that part of the river immediately above Jalálpur. Arrian records that Alexander placed running sentries along the bank of the river, at such distances that they could see each other, and communicate his orders. Now, I believe that this operation could not be carried out in the face of an observant enemy along any part of the river bank, excepting only that one part which lies between Jalálpur and Diláwar. In all other parts the west bank is open and exposed, but in this part alone the wooded and rocky hills slope down to the river, and offer sufficient cover for the concealment of single sentries. As the distance along the river bank is less than ten miles, and was probably not more than seven miles from the east end of the camp, it is easy to understand why Alexander placed them along this line instead of leaving them on the much longer route, which he was to march himself. Another minor particular is the presence of a rock in the channel of the river, on which, according to Curtius, one of the boats was dashed by the stream. Now rocks are still to be found in the river only at Kotéra, Mariála, Malikpur, and Sháh Kamir, all of which places are between Diláwar and Jalálpur.

(1) Archaeological Report, 1862-64, p. 180. In this report General Cunningham inclines to believe the town of Diláwar on the opposite bank of the Jhelum to mark the site of Bukaphala, but he definitely accepts the Jalálpur site in his "Indian Geography," published several years later.—*Ancient Geography, India*, p. 177.

The village of Kotéra is situated at the end of a long wooded spur, which juts out upon the river just one mile below Diláwar. This wooded jutting spur, with its adjacent rock, I would indentify with the *akra* or promontory of Arrian, and the *petra* of Curtius. Beyond the rock there was a large wooded island which screened the foot of the promontory from the observation of the opposite bank. There are many islands in this part of the Jhelum, but when a single year is sufficient to destroy any one of these rapidly formed sandbanks, we cannot, after the lapse of more than 2,000 years, reasonably expect to find the island of Alexander. But in 1849, opposite Kotéra, there was such an island, $2\frac{1}{2}$ miles in length and half a mile in breadth, which still exists as a large sandbank. As the passage was made in the height of the rainy season, the island or large sandbank would naturally have been covered with tamarisk bushes, which might have been sufficiently high to screen the movements of infantry and dismounted cavalry.

"The position of the two camps I believe to have been as follows: Alexander, with about 50,000 men, including 5,000 Indian auxiliaries under Mophis of Taxila, had his headquarters at Jalálpur, and his camp probably extended for about six miles along the bank of the river, from Sháh Kamir, two miles to the north-east of Jalálpur, down to Syadpur, four miles to the W.-S.-W. The headquarters of Porus must have been about Muhabatpur, four miles to the W.-S.-W. of Mong, and three miles to the south-east of Jalálpur. His army of nearly 50,000 men, including elephants, archers, and chariots, must have occupied about the same extent as the Macedonian army, and would, therefore, have extended about two miles above, and four miles below Muhabatpur. In these positions, the left flank of Alexander's camp would have been only six miles from the wooded promontory of Kotéra, where he intended to steal his passage across the river, and the right flank of the Indian camp would have been two miles from Mong, and six miles from the point opposite Kotéra.

"As my present object is to identify the scene of Alexander's battle with Porus, and not to describe the fluctuations of the conflict, it will be sufficient to quote the concise account of the operation which is given by Plutarch from Alexander's own letters. 'He took advantage of a dark and stormy night, with part of his infantry and a select body of cavalry, to gain a little island in the river at some distance from the Indians; when he was there, he and his troops were attacked with a most violent wind and rain, accompanied with dreadful thunder and lighting.' But in spite of the storm and rain they pushed on, and, wading through the water breast-high, reached the opposite bank of the river in safety. 'When they were lauded,' says Plutarch, who is still quoting Alexander's letters, 'he advanced with the horse 20 stadia before the foot, concluding that, if the enemy attacked him with their cavalry, he should be greatly their superior, and that if they made a movement with their infantry his own would come up in time enough to receive them.' From Arrian we learn that as soon as the army had begun fording the channel between the island and the main land, they were seen by the Indian scouts, who at once dashed off to inform Porus. When the ford was passed with some difficulty, Alexander halted to form his little army of 6,000 infantry and about 10,000 cavalry. He then 'marched swiftly forward with 5,000 horse, leaving the infantry to follow him leisurely and in order.' While this was going on Porus had detached his son with two or three thousand horse and one hundred and twenty chariots to oppose Alexander. The two forces met at 20 stadia, or $2\frac{1}{2}$ miles from the place of crossing, or about two miles to the north-east of Mong. Here the chariots proved useless on the wet and slippery clay, and were nearly all captured. The conflict, however, must

CHAP. I, B. have been a sharp one, as Alexander's favourite charger, Bucephalus, was mortally wounded by the young prince, who was himself slain together with 400 of his men. When Porus heard of the death of his son, he marched at once against Alexander with the greater part of his army; but when he came to a plain, where the ground was not difficult and slippery, but firm and sandy, and fitted for the evolutions of his chariots, he halted and arrayed his troops ready for battle. His 200 elephants were drawn up in front of the infantry about one plethron, or 100 feet apart, and the chariots and cavalry were placed on the flanks. By this arrangement, the front of the army, facing north-east, must have occupied an extent of about four miles from the bank of the river to near Lakhnawáli, the centre of the line being, as nearly as possible, on the site of the present town of Mong. Around this place the soil is 'firm and sound,' but towards the north-east, where Alexander encountered the young Indian prince, the surface is covered with a hard red clay, which becomes both heavy and slippery after rain.

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"When Alexander saw the Indian army drawn up in battle array, he halted to wait for his infantry, and to reconnoitre the enemy's position. As he was much superior to Porus in cavalry, he resolved not to attack the centre where the formidable line of elephants was supported by masses of infantry, but to fall upon both flanks and throw the Indians into disorder. The right wing, led by Alexander himself, drove back the enemy's horse upon the line of elephants, which then advanced and kept the Macedonians in check for some time. Wherever Porus saw cavalry advancing, he opposed elephants, but these slow and unwieldy animals could not keep pace with the rapid evolutions of the horse.' At length the elephants, wounded and frightened, rushed madly about, trampling down friends as well as foes. Then the small body of Indian horse being surrounded was overpowered by the Macedonians, and nearly all slain; and the large mass of Indian infantry, which still held out, being vigorously attacked on all sides by the victorious horse, broke their ranks and fled. 'Then,' says Arrian, 'Kraterus and the captains who were with him on the other side of the river, no sooner perceived the victory to incline to the Macedonians, than they passed over and made a dreadful slaughter of the Indians in pursuit.'

"From the last statement which I have quoted, it is clear that the battlefield was within sight of Alexander's camp. Now this is especially true of the plain about Mong, which is within easy ken of the east of Alexander's camp at Sháh Kamir, the nearest point being only two miles distant. With this last strong evidence in favour of Jalápur as the site of Alexander's camp, I close my discussion of this interesting question."

Recently Major W. W. Norman, 2nd Punjab Cavalry, has come forward after a careful study of the locality and of all the authorities on the subject, with quite a different identification: the arguments with which he supports his view that Bukephala was at Ahmadábád, about 12 miles below Pind Dádan Khan, are briefly as follows:—

Arrian tells us that on his return journey in November B. C. 326 Alexander took eight days to journey by boat from Bukephala to the junction of the Jhelum and Chenáb rivers; he had a huge and unwieldy fleet, and it is practically certain that, as Cunningham supposes, he was accompanied all the way by land armies marching on either side of the river; numerous halts were made on the way to receive the homage of the neighbouring tribes, or to coerce those unwilling to submit. There was no special need

for haste; so it is fairly safe to assume that the daily marches of a large force moving in this way, partly by river and partly by land, would be of very moderate length. Even if we take the junction of the two rivers to have been in Alexander's time at what seems to be the highest possible point, near Kot Mábla, some 40 miles above the present junction, the distance still remaining from Jalálpur is 113 miles, giving an average daily march of over 14 miles, which is longer than the army seems likely to have made; to Ahmadábád, the distance is 77 miles, giving an average march of about $9\frac{1}{2}$ miles.

According to Strabo the direction of the forward march was to the south from Taxila to the Jhelum, where it turned off to the east; taking Taxila to have been the present Sháh Dherí, the route to the Chenáb from that place *viâ* Jalálpur would have been almost straight, while Ahmadábád is almost due south of Sháh Dherí, and the crossing of the Chenáb about Wazirábád almost due east of Ahmadábád.

The accepted view is that Alexander crossed the Indus at Attock, but this involves the supposition that he took the trouble to build a fleet of boats in order to transport his troops down 50 miles of unnavigable river, when he might have marched them across an open country in a tithe of the time; also that he saw crocodiles in a part of the river which they never reach now, and which is quite unsuited to their habits. Pliny, quoting Megasthenes, distinctly states that Taxila was on the right bank of the Indus, and the passage of Arrian describing the meeting of Taxiles with Alexander seems to show that he was a trans-Indus prince: Major Norman suggests (though on this point convincing evidence is certainly not forthcoming) that the capital of Taxiles, though no doubt subsequently at Sháh Dherí, may have been at the time of the invasion on the other side of the Indus; and finds in extensive remains, at present unidentified, at Akra in the Banna District, a possible site of the city. If it was in that neighbourhood, the natural crossing point of the Indus would have been near Kundían, whence there is a clear route over the plain country at the foot of the Salt Range right away to Ahmadábád; this would not only remove the discrepancies noticed above, but would make more intelligible the statement that Alexander was accompanied, or rather followed, in his march to the Jhelum, by carts carrying large boats in sections, a performance scarcely possible in the rugged tract further east. From Akra to the nearest point on the Jhelum the distance is almost to a mile that given by the historians as separating Taxila from the Hydaspes; and the bearings of the route also agree. These conjectures, however, had better be set aside, for if there is anything certain in the ancient topography of the Indus region, it is the identity of the Sháh Dherí site with Taxila. Supposing Sháh Dherí to be the original Taxila, the distance from it to Ahmadábád agrees closely with that given by Pliny, namely, 110 miles, and this by more than one route: Alexander might have come by Choa Saidan Sháh, or he might have marched by Kallar Kahár and Lilla, as we know that Bábar and his army did some 18 centuries later. The boats would have been a serious difficulty on any of these passes, but scarcely more so than on any of the routes leading to Jalálpur.

The details that we have of the battle itself can hardly be reconciled with Cunningham's theory that the camp of the Greeks was at Jalálpur and that they crossed near Kotéra: the direct distance between these two places is barely 9 miles, and Alexander could not have been confident of crossing the river unobserved at this distance up-stream from the centre of his camp: Cunningham supposes the camp of the Greeks to have extended two miles up-stream from Jalálpur; the Indians were more numerous, and were acting on

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the defensive, so their line must have stretched still further in that direction; and the drift of clumsy boats and still clumsier rafts in crossing a great river in heavy flood would materially lessen still further the distance between the landing place and the Indian position: when Alexander met the first Indian troops, they had advanced in his direction, yet $2\frac{1}{2}$ miles still separated him and his cavalry from the infantry which were still crossing. It is difficult to allow for all these factors within a space of 8 or 9 miles.

The ravine, again, which the Greeks are supposed to have followed in their long night march, is for the most part heavy sand, with some difficult places, and a rise of 345 feet above the river; on a night like that in question it would have been filled from side to side with a rushing torrent: even if the passage of heavy carts with huge boats over such a route is not absolutely impossible, the troops would at any rate have arrived at the river bank utterly exhausted.

Cunningham assumes that the bluff where the river was crossed was above the camp, and there is certainly a statement by Curtius to that effect, but the passage is incorrect in regard to another particular, and may be so about this also. If Alexander had crossed above the Indians, the left flank of the latter, as they turned to meet him, would have rested on the river; we know from Arrian, Plutarch, and Curtius, that Alexander with his cavalry (on which he placed much reliance) enveloped Porus' left wing; it is very improbable that he would have done this on the side next the river (where, especially after the heavy rain of the previous night, it must have been difficult for cavalry to move), rather than on the other side, where not only would he have had better ground for the movement, but would also if successful completely hem in the opposing force, and ensure a decisive result, while on the river side he would gain comparatively little, not cutting off the retreat of Porus' army. At a later stage of the battle Arrian describes the Indian Army as a dense mass, "pent up in a narrow space," and, finally, "all turned to flight wherever a gap could be found in the cordon of Alexander's cavalry."

Major Norman thinks that the camp of the Greeks must have been in the neighbourhood of Pind Dádan Khán, the crossing point at the Ahmadábád bluff, and the town of Nikaia at Sabz Pind, where there are extensive remains, about midway between the two, on the other side of the river. The Ahmadábád hillocks, known as Burári, extend for several miles, generally rising about 100 feet above the river; and behind them, at a considerable distance from the stream, is plenty of level country where any amount of troops could move without being seen from the other side; they would only screen the later stage of the movement, when the crossing was neared, but on a dark stormy night that would not matter much.⁽¹⁾ If, as is probable, the river in Alexander's time ran at the foot of these hillocks, there would have been at this point the sharp bend in its course of which we are told; and on the bluff itself are extensive traces of ancient habitations, where numerous coins, including those of Græco-Bactrian and Indo-Scythic kings are found: these hillocks, therefore, are taken to be the site of the town of Bukephala. At Jalápur, on the other hand, ancient coins are seldom found, and there is no trace of anything Greek, or indeed of any remains of great antiquity.

Mr. M. L. Dames, I. C. S. (retired), comments as follows on the above:—

"Major Norman brings up two points to importance: (1) the original position of Taxila; (2) the position of Bukephala.

(1) We are nowhere told that the whole movement was covered by the hills; on the contrary it is stated that Alexander marched at a considerable distance from the river to escape notice which would not have been necessary if there had been hills between.

"(1). *The position of Taxila.*—It seems impossible to accept the identification of Taxila with Akra: the passage of Pliny, in which he refers to the "Taxillæ with a famous City," is very confused, and it is by no means certain that it can be interpreted as meaning that Taxila was on the right bank. All other authorities are opposed to this view, and Arrian, certainly the most trustworthy, makes Alexander cross the Indus by a bridge (evidently at a narrow point) soon after his Aornos expedition, and then take possession of Taxila "the greatest town between the Indus and the Hydaspes." This is repeated more than once, and Arrian certainly drew on original authorities. Taxila was a famous town, and figures largely in Buddhist lore, and Indian coins (pre-Greek) are found abundantly in the neighbourhood indicated. At Akra, as far as my experience goes, there is nothing earlier than the coins of Eucratides, and a great quantity of coins of the Saka kings. I think, therefore, that although Akra must have been an important place under the Greeks, and perhaps earlier, there is no good ground for supposing that Taxila was situated there at any time.

"(2). As to the point where Alexander crossed the Hydaspes, I think that Major Norman makes out a very good case for believing that it was considerably lower down the river than Jalápur, and this point (Ahmadábád) seems to meet most of the conditions. It may be noted that Q. Curtius speaks of rocks in the bed of the river, and, if this is true, the Jhelum must then have been flowing immediately under the hills. Arrian, however, does not mention them and Curtius' authority is not great.

"One point in favour of the Ahmadábád crossing is, in my opinion, that it would have led Alexander to a more southerly route across the Punjab than that he is usually assumed to have followed. It is taken for granted by most writers that he crossed the Chenáb near Wazirábád, and the reason for this northerly line being adopted seems to be that Alexander's route must be made to reach the bank of the Biás. Although it is well known that the Satlaj flowed in a separate bed through Rájpurána and that the Biás followed a course parallel to the present stream of the Biás and Satlaj until its junction with the Chenáb, still modern maps are taken as a guide, and it is assumed that Alexander must have arrived at the bank of the Biás, *above* its present confluence with the Satlaj. This assumption, I think, vitiates the whole argument. Because the Greeks must have arrived far north on the Biás, therefore the crossings of the Acesines and Hydraotes are also made as far up-stream as possible. It seems to me that Alexander would naturally go as far down the Hydaspes as possible, as he was building a fleet intended ultimately to sail down to the sea, and that, when he started again after a considerable halt, he would naturally make for the point where the Acesines could be most easily crossed. As to this point we have some exact information, as Arrian quotes Ptolemy, son of Lagos, one of Alexander's companions, afterwards King of Egypt. He says that at this place the current was swift and the channel beset with rocks. There is only one place on the Chenáb (after it has left the hills) which answers to this description, *viz.*, Chinot. I have myself seen the river in the flood season racing between the rocks at this place and the description is exact. The town of Chinot is one of great antiquity and may possibly be one of Alexander's foundations.

"If this line was followed it gives probability to the suppositions of Cunningham and others that Sangalalay west and not east of the Rávi. . . . I myself am inclined to identify it with the extensive remains on the rocky hills at Sháhkot (16 miles from Sánsla). . . . The correspondence with the place described by Arrian is very close. . . .

"My idea as to Alexander's route therefore corresponds very well with Major Norman's theory as to the crossing of the Jhelum, but I cannot agree

CHAP. I, B. to his proposal to bring Alexander direct from the Bannu valley *viâ*
History. . . . Kundián, south of the Salt Range, to the Jhelum somewhere about Bhera
 or Khusháb. If indeed Alexander had once gone to Bannu, this would have
 been his natural route, but how would he have got there? I am afraid there
Alexander is no kind of authority for the long and dangerous march from the Pesháwar
and Porus. valley through the Kohát pass."

The latest authority who has dealt with the subject is Mr. Vincent Smith,⁽¹⁾ who reverts to the early theory of Abbott, Burnes and Court, condemning Cunningham's arguments as "a desperate attempt to reconcile the irreconcilable, and to bolster up a preconceived theory based on false premises". He points out that for anyone making for the Jhelum from Taxila, the route *viâ* Jhelum is the obvious one to take, being the nearest, and leading to a much easier and more convenient ferry: whatever route was adopted the road would be difficult, but the obstacles are greater in the case of Jalálpur. The supporters of the Jalálpur theory forget Strabo's statement that Alexander's route throughout lay nearer to the foot of the hills than to the plains. The "remarkable bend" in the course of the river at the point of the crossing is wholly wanting at Jalálpur, while the stream turns at a right-angle some miles above Jhelum, and the sunken rocks and islands described by the historians are present at the latter locality and not at Jalálpur. The recorded width of the stream at Alexander's crossing is 4 stadia or 809 yards, and this agrees closely with the width above Jhelum, while at Jalálpur the river is much wider. Mr. Smith, therefore, "has not the slightest doubt that Alexander marched to the Hydaspes by the shortest and easiest route open to him; that he struck the river at or near Jhelum, where he pitched his camp; that he crossed the stream where it was rocky and narrow, a little below the point where it emerges from the hills; and that the battle with Porus was fought in the Karri plain."

Between these conflicting opinions it is difficult to decide; Mr. Vincent Smith must probably be taken as a greater authority in a matter of this kind than even Cunningham (who, as proved in several other instances, was apt to be led astray by preconceived ideas); but Mr. Smith writes, it is believed, without the advantage of local knowledge, and his arguments cannot all be accepted without demur. Thus it is by no means clear to anyone with an intimate knowledge of the country that the Jalálpur route is more difficult than that to Jhelum, and the statement that there are neither rocks nor islands at Jalálpur is not correct. A further difficulty is that the country around Jhelum and to the north of that town is a practically level plain: there is nothing even remotely suggesting Curtius' *fossa præalta*, nor is there any satisfactory representative of the wooded bluff at the crossing. Again, Major Norman's objection to the Jalálpur identification on the ground

(1) *Early History of India*, Clarendon Press, 1904, pp. 71 to 78.

that it is too far from the junction of the Jhelum and Chenáb applies with much greater force to the Jhelum theory: and his argument from the description of the battle that the crossing must have been below the camp is also applicable for what it is worth.

Major Norman has made an extremely careful and painstaking examination of the materials available and has a thorough knowledge of the locality: the main difficulty in accepting his theory is that an invader marching from Shahdheri on the Punjab would not naturally make for the Pind Dádan Khán plain: if he came there *viâ* Jalálpur the distance from Taxila becomes too great (but Pliny's figures as to distances are notoriously unreliable): and, if he crossed the hills of the Salt Range, the histories would scarcely pass over without comment the steep descent of 1,500 feet or more on the south side of the Range: though otherwise this route would be easier than either of the others which have been suggested. The Ahmadábád theory is also inconsistent with Strabo's statement that the route lay throughout near the foot of the hills: and the great width of the river at Ahmadábád is an even greater difficulty.

The fact is that none of the theories that have been suggested agree exactly with the facts recorded: the Jalálpur theory is difficult to reconcile with the recorded facts, the Jhelum identification is the most natural; and the Ahmadábád theory, if the not inconsiderable difficulties indicated above can be surmounted, agrees best with the accounts of the historians.

The question, however, requires exhaustive study on the spot by qualified students of ancient topography, trained in critical methods. Until this is done no satisfactory identification is possible.

In conclusion it may be noted as a curious coincidence, though doubtless nothing more, that one of the few sites of ancient towns or villages on the right bank of the Jhelum in this part of its course is named *Purana Bugga*: it lies close to the modern village of Bugga, about 12 miles below Ahmadábád; but similarity of names proves little or nothing.

Regarding the internal condition of the country nothing very definite is learnt from the historians of Alexander's achievements, nor does his invasion seem to have left much trace behind; the Greeks came, went on, returned, and finally disappeared down the river, their influence not long surviving their departure. It was not until two centuries later that the Indo-Greek kings worked their way into the Punjab, and of these two centuries there are no records; but no foreign invader is loved, and it is nearly certain that by that time anything that had been left to mark Alexander's path had disappeared. At any rate there are no Greek monuments in the district now, and except where a sort of spurious tradition has arisen from the enquiries of Europeans, the people

After
Alexander's
retreat.

CHAP. I. B. of the tract have heard from their forefathers nothing about the great conqueror: even if they know the name of "Sultān Sikandar" it is only vaguely as that of a great king of bygone ages; as regards his march through the district, and the battle fought on its borders, local tradition is a blank.

History.

After
Alexander's
retreat.

Asoka.

Of the period between Alexander's invasion in B.C. 326 and Mahmūd's incursions more than 1,300 years later, our knowledge is very scanty, and names or events specially connected with this part of the country are extremely rare. The district must have formed part of the Empire of the great Buddhist King Asoka (B. C. 272—231),⁽¹⁾ and it has been noticed above that there is reason to assign to him the building of the ruined stupa at Kitās.

**Indo-Greek
kings.**

Eucratides the Greek not long after Asoka's reign extended his power over the Western Punjab, and the Indo-Greek kings held the country for about 200 years after him, being at last ousted by the nomad hordes of Indo-Scythians. An account of the following centuries would be merely a catalogue of little known dynasties and kings, not specially connected with this district by any historical records, though their coins—the only trace left by the vast majority of these kings—show that they ruled this part of the country. Mihirakula, the great iconoclast and anti-Buddhist, who ruled about 530 A. D., should perhaps be excepted, as noticed above.

**Medieval
rulers.**

Then comes a period of darkness, until about 631 A. D. when the country was visited by the Chinese pilgrim, Hiuen Tsiang; it was then already under the dominion of the Hindu kings of Kashmīr, and probably so remained until the end of the 9th century: after this the District formed part of the kingdom of the Brahman rulers of Kābul, Samanta Deva and his successors (more accurately designated as the "Hindu Shāhis of Kābul"),⁽²⁾ who remained in possession until the times of Mahmūd Ghaznavī. Anand Pāl and Jai Pāl, of whom the histories of Mahmūd's invasions make mention as kings of Lahore, were Shāhi kings, and held the fort of Nandana in the Salt Range.

**Mahmūd
Ghaznavī.**

Ferishta says that in 404 H.⁽³⁾ Mahmūd laid siege to the fort of Nandana in the mountain of Bālnāth, when the son of Anand Pāl was ruler of Lahore: this ruler fled to Kashmīr, whither Mahmūd followed after reducing the fort, and placing it in charge of a man of his own. He was again in this neighbourhood a few years later. On his return from the sack of Somnāth in 1026 A. D., his army "almost perished in the waterless

(1) This is the dating adopted by Mr. Vincent Smith. (*Anc. Hist., India*, p.p. 173-4).
(2) Their unbroken succession from the first Hindu Shāhi to Jai Pāl and Anand Pāl is established beyond all doubt.

(3) A.D. 1013. Authorities differ as to the number and order of Mahmūd's campaigns: according to Sir H. M. Elliot's arrangement the Nandana expedition was the 9th, the Somnāth campaign (A. D. 1025-6), the 16th; and that against the Jais, the 17th and last.

desert, from which it escaped only to fall into the hands of the predatory Jats of the Salt Range, who harassed the exhausted troops as they toiled homewards laden with spoils. It was to punish their temerity that before the year was over Mahmūd led his army for the last time into India."⁽¹⁾ The route from Somnāth to Ghaznī, however, can hardly have led through the Salt Range; and the latest opinion identifies the predatory Jats here referred to with the tribes of the lower Indus. It is probable that Islām in the Salt Range dates from this time: knowing what we do of Mahmūd, it is certain that Islām would be imposed on all as the only way of obtaining peace: though these unwilling converts may have reverted to Hindūism as soon as his back was turned, and there are indications that the general conversion of the people took place some centuries later.

CHAP. I, B.

History.

Mahmūd's
invasions.

During the reigns of the succeeding Sultāns of Ghaznī there were many incursions into India, but, if we except the renunciation of wine by Mas'ūd (Mahmūd's son) on his march from Kābul to Lahore in A. D. 1034, when he threw all the liquor he had into the Jhelum,⁽²⁾ there is no special event on record connecting them with this district.

Though the Punjab remained a Muslim province, and in 1148 A. D. became the last refuge of Mahmūd's descendants, Muhammad Ghaurī was the first Musalmān king to establish himself (1193 A. D.) permanently in India: the Gakkhars gave him and his generals, Kutb-ud-dīn Aibak and Yaldūz, an immense amount of trouble, beginning from the time when in 1184 A. D. they assisted the last of Mahmūd's dynasty in his fruitless opposition to the new power: at length the Gakkhar chief accepted Muhammadanism, and used all his influence to convert his people. "His influence, however, did not extend to outlying districts, and the inhabitants of those parts still remained in darkness." In 1205 A. D. Muhammad Ghaurī was slain by Gakkhars at Dhamiak in this district, as noticed above. The Tabaqāt-i-Nāsirī says that he defeated the rebels of the hills of Jūd, and made their blood flow in streams, so they naturally did not wish him well.

Muhammad
Ghaurī.

In the *Jahān-Kushā* it is stated that Sultān Jakāl-ud-dīn of Khwārizm (the modern Khiva) about 1215 sent one of his generals to the mountains of Jūd, who plundered that tract and obtained much booty: the Sultān also obtained the daughter of Rai Kokar Saknin in marriage: this Rai Kokar was a local chief, but his identity is uncertain.

Other in-
cursions.

In the reign of Nāsir-ud-dīn Mahmūd (1246—65), that Sultān sent Ulugh Khān, one of his generals, who afterwards succeeded

(1) Lane Poole's *Medieval India under Muhammadan Rule*, 1903, pp. 27-28.

(2) *Ibid.*, p. 43.

CHAP. I. B. him under the title of Balban, to ravage the hills of Júd and Jhelum, because the Rána of the hills had assisted the infidel Mughals whose incursions caused much trouble in those days. Balban himself had to send another similar expedition, probably for the same reason. "The country was plundered, and a large number of horses fell into the hands of the soldiers, so that the price of a horse in the army came to be forty tankas."⁽¹⁾ The north part of the Jhelum District was until recently famous for its breed of horses.

History.

Other incursions.

Jalál-ud-dín Fíroz Sháh Khiljí (1290—5) also had occasion to chastise this part of the country, for he says: "I made the blood to flow in Janjúa so that a boat might have glided within the hills of Júd"⁽¹⁾ His coins and those of Balban are numerous in the district.

Taimúr.

When Taimúr invaded India (1398-9) he came and returned through this tract: "the Rais and the chiefs of the Júd mountain came respectfully to pay homage, and to make presents." They were therefore well treated.⁽²⁾

Bábar's invasion.

After the invasion of Taimúr India was all confusion, and it is easy to imagine that Jhelum with its many tribes became a scene of anarchy and turmoil. The mountains of Júd and the district adjoining them next appear in Bábar's account⁽³⁾ of his invasions about 125 years later.

"Marching at dawn from Sangdaki, and crossing the river Sohán about noon-day prayers, we encamped: our stragglers continued to come in until midnight. It was an uncommonly long and severe march, and, as it was made when our horses were lean and weak, it was peculiarly hard on them, so that many horses were worn out and fell down by the way.

"Seven *kos* from Bahrah to the north there is a hill. The hill, in the Zafar-Náma and other books, is called the hill of Júd. At first I was ignorant of its name, but afterwards discovered that in this hill there are two races of men descended from the same father: one tribe is called Júd, and the other Janjúa.⁽⁴⁾ From old times they have been the rulers and inhabitants of this hill, and of the *ils* and *uluses* which are between Niláb and Bahrah; but their power is exerted in a friendly and brotherly way. They cannot take from them whatever they please. They take as their share a portion that has been fixed from very remote times: the one never takes, and the other never gives, a single grain more or less. Their agreement is as follows: They give a *sháhrukhi* for each head of cattle: seven *sháhrukhis* are paid by each master of a family; and they serve in their armies. The Júd are divided into several families, as well as the Janjúa. This hill, which lies within 7 *kos* of

(1) Elliot, Vol. III, p. 537.

(2) *Ibid* III, 482 and p. 410.

(3) *Tuzak-i-Babari*, Dr. Leyden's translation, p. 253.

(4) Jodh and Wir were two of the sons of Rája Mal and heads of two branches of the Janjúas: there are still a few villages of Jodhs in the Chakwál Tahsil, and they claim Janjúa descent.

Bahrah, branching off from the hill country of Kashmír, takes a south-westerly direction, and terminates below Dinkot, on the river Sind. On the one-half of this hill are the Júd and on the other the Janjúa. The hill got the name of Júd from a supposed resemblance to the celebrated hill of Jád.⁽¹⁾ The chief man amongst them gets the name of Rai: his younger brothers and sons are called Maliks.⁽²⁾

After referring to the submission of Malik Hast Janjúa, "the Hákim of the *ils* and *uluses* in the neighbourhood of the river Sohán," Bábar continues:—

"Many flocks of sheep and herds of brood-mares were feeding on all sides of the camp. As I always had the conquest of Hindustán at heart, and as the countries of Bahrah, Chenáb, Khusháb and Chiniót, among which I now was, had long been in possession of the Turks, I regarded them as my own domains, and was resolved to acquire them either by war or peace. It was therefore right and necessary that the people of the hill should be well treated. Marching next day rather late, about noon-day prayers we reached Kaldah-Kahár, where we halted. On every side were many corn-fields, where the grain was still green. This Kaldah-Kahár is a considerable place: ten *kos* from Bahrah, in the middle of the hill of Jád, there is a level plot of ground, in the centre of which there is a large reservoir or lake, which receives the water from the surrounding hills, as well as the rain water, by which it is swelled to a circumference of three *kos*. On the north is the valley of Chumbí; on the west, on the skirts of the hill, is a spring of water, which rises in the high grounds that overhang the lake. As the place suggested itself as suitable for such a purpose, I formed a garden in it, called the Bágh-i-Safá,⁽³⁾ (Garden of Purity). It has an extremely agreeable climate, is a very beautiful place, and will be mentioned hereafter.

At dawn we set out from Kaldah-Kahár. On the very top of the pass of Humbátú⁽⁴⁾ we met, in different places, men who were coming bringing in *peshkashes* of small value, and tendering their submission..... About luncheon time we reached the bottom of the pass. Having cleared the pass, and emerged from the wooded ground,⁽⁵⁾ I formed the army in regular array, with right and left wing and centre, and marched towards Bahrah..... When we had nearly reached that place,.....the headmen of Bahrah met us, bringing each a camel and a horse as *peshkash*, and tendered their submission and service. Noon-day prayers were over when we halted to the east of Bahrah, on the banks of the river Behut⁽⁶⁾ on a green field of grass, without having done the people of Bahrah the least injury or damage.

"On Wednesday, the 22nd, I sent for the headmen and *chaudhris* of Bahrah and agreed with them for the sum of 400,000 *shahrúkhis* as the ransom of their property, and collectors were appointed to receive the amount. Having learned that the troops had exercised some severities towards the inhabitants of Bahrah and were using them ill, I sent out a party, who having seized a few of the soldiers who had been guilty of excesses, I put some of them to death, and slit the noses of others, and

(1) Ararat.

(2) The title Rai is not now used: that of Malik is used by prominent men amongst the Awáns, but in only one family of the Janjúas.

(3) The Gadhioks of Bhon have a *sanad* of Humáyún, directing their ancestor, Kálik Dás, to look after the Bágh-i-Safá at Kallar Kahár.

(4) This name is not known now.

(5) The "wooded country" at the foot of the hills is now bare.

(6) The name Vohat is still a common name of the river Jhelum in some parts of its course.

CHAP. I. B. made them to be led about the camp in that condition. As I reckoned that the countries that had belonged to the Turks as my own territories, History. I therefore admitted of no plundering or pillage.

Bábar's invasion.

"On Monday, the 5th March, I gave the country of Bahrah to Hindú Beg.

"In the hill country, between Niláb and Bahrah, but apart from the tribes of Júd and Janjúá, and adjoining the hill country of Kashmir, are the Jats and Gujars, and many other men of similar tribes, who build villages, and settle on every hillock and in every valley. Their ruler was of the Gakkhar race, and their Government resembles that of the Júds and Janjúás. The Government of these tribes, which stretch along the foot of the hills, was at that time held by Tatár Gakkhar and Hátí Gakkhar, sons of the same family: they were cousins. Their places of strength were situated on ravines and steep precipices. The name of Tatár's stronghold was Parhála⁽¹⁾; it was considerably lower than the snowy mountains: Hátí's country is closely adjoining the hills. At the very time that we were in Bahrah, Hátí had advanced on Tatár by a stratagem, had surprised and slain him, and taken his country, his women, and all his property.

"Having arranged the affairs of the country in such a way as to give a prospect of its being kept quiet, on Sunday, the 13th March, I marched from Bahrah on my return to Kábul. We halted at Kaldah-Kahár. That day there was a most uncommon fall of rain.

"Some persons who were acquainted with the country, and with the political situation of the neighbouring territories, and particularly the Janjúá, who were the old enemies of the Gakkhars, represented to me that Hátí the Gakkhar had been guilty of many acts of violence, had infested the highways by his robberies, and harassed the inhabitants; that therefore it was necessary either to effect his expulsion from this quarter, or at least to inflict on him exemplary punishment."

Bábar therefore proceeded against Hátí at Parhála, and the narrative leaves the Jhelum District.

These events took place in the year 1519 A.D.: Bábar was often in the district again: his governor, Hindú Beg, was turned out of Bhera by the Afgháns and Hindustánís, assisted by the local *zamíndárs*, not long after his departure, and he visited the town again in the course of his 3rd expedition, about 1522 A.D., to punish those who had revolted against him. When on his 4th invasion (1524) he passed through the country of the Gakkhars, whom he reduced to obedience. Again in December 1525 he was in the Gakkhar country⁽²⁾, marching along the foot of the hills from the Haro to Siálkot, and notices the scarcity of grain due to drought, and the coldness of the climate, pools being frozen over.

Sher Sháh Súrî.

The history of the son of Bábar, the blundering Humáyún, is well known: successful at first, he was soon worsted by Sher Sháh Súrî, and fled to Qandahár. It was then that Sher Sháh, to suppress the Gakkhars and guard against Humáyún's return, determined to build a fort, and marched with all his forces to the hills of Garjhák to choose its site (this place is called Garjhák

(1) In the Ráwalpindi District.

(2) *Tozak-i-Bábári*, Elliot IV, 240.

Nandūna⁽¹⁾, reminding us of Mahmūd's conquests in these parts). On this occasion Sher Shāh chastised Sultān Sārang, Gakkhar; he not only seized Sārang's daughter, whom he bestowed on his general Khwās Khān,⁽²⁾ but, subduing the whole country, plundered the hill of Bālnāth, which was then the residence of the Darogha of this tract, captured Sārang, and ordered him to be flayed alive, and his skin to be filled with straw.⁽³⁾ Rohtās was the site selected for the fort, as already described. Sher Shāh kept an army of 30,000 horsemen in its neighbourhood.⁽⁴⁾ He never saw the fort when completed, but his successor, Islām Shāh, who spent two years of his short reign in fighting the Gakkhars,⁽⁵⁾ must often have done so.

CHAP. I. B

History.

Sher Shāh
Sārf.

Shortly afterwards Humāyūn returned to India: "we marched and entered the territory of Pirāneh Janūah: the aforesaid Pirāneh came and paid his respects to the king, but Sultān Ādam (Gakkhar), having requested that the country might be given to him, it was so: his majesty then entered the country of Rāja Sunker, plundered about 50 villages, and took a number of captives, but these were released upon paying a certain ransom, by which the army gained considerable wealth⁽⁶⁾." Rai Purāna and his brother Sangar Khān are given in the Janjua tree as the 73rd generation, the present being the 84th.

Humāyūn.

After this, Humāyūn, hearing that Islām Shāh was advancing, returned to Kābul: he came to India finally by the same route in 962 H.

The governor of the fort of Rohtās, though the place had been strengthened, made no resistance and fled.

In the reign of Akbar the district does not appear; but in the Afn-i-Akbarī are mentioned several places which can be identified:—

The Afn-i
Akbarī.

Pargana.	Assessment in dams.	Holders.
Awān (Awānkārī, chiefly the Tallagang Tahsil) ...	4,15,370	Awān.
Balūli Dhan (The Dhanūi, otherwise Mullū kī Dhan)	13,16,801	Gakkhar.
Dā'e Tharchak (Thirchak in S. W. Chakwāl) ...	2,50,575	Gakkhar.
Haveli Rohtās (Rohtās)	69,49,140	Gakkhar Bugiāl.
Dhrāb (Dhrābī in West Chakwāl)	96,000	Janūha.
? Shamsābād (old name of Pind Dādan Khān) ...	70,34,503	Khokhar.
Kahār Darwāza (old name of Kallar Kahār) ⁽⁷⁾ ...	24,540	Janūha.
Makhiāla (Makhiāla)	3,84,000	Janūha.
Kirkhāk (Girjāk should obviously be read: old Jalālpur)	9,61,655	Janūha.
Malot (Malot)	1,33,233	Janūha.

(1) Elliot V, 114.

(2) Elliot IV, 390.

(3) The Tārīkh-i-Dāūdī credits Islām Shāh, not Sher Shāh, with this act; Elliot IV, 493. Raverty (unpublished notes, page 353) says that the story of Sārang's capture by Islām Shāh is doubtless correct: he adds that Sārang's son, Kamāl, was also taken and confined in the fortress of Gwalior; when the State prison there was blown up by Islām Shāh, to rid himself of his State prisoners, Kamāl escaped unhurt, and was subsequently taken into favour. He was assisted by Akbar, in the 8th year of his reign, to oust his uncle Sultān Ādam, and retained possession of his native district as a feudatory of the Mughal State: his brother Said Khān was a commander of 1,500 in the Imperial service: and Said Khān's daughter was in Jahāngīr's harem, before his accession.

(4) Elliot IV, 415.

(5) Ferishta, Nawal Kishore's lithographed edition, p. 231.

(6) Jaubar, Major Stewart's translation, page 107.

(7) Not Khander as supposed in the former Gazetteer.

HAP. I. B.

History.

The Ain-i-
bari.

The forts of Rohtás, Makhiála and Malot are noticed, and the Makhiála Mahál is further credited with a salt mine, doubtless that of Khewra or its neighbourhood. Another place where there is said to be a salt mine is Dhankot which was identified in the former Gazetteer with (?) Dandot; but if this was so it should come between Malot and Makhiála; and it is said to be peopled by Awáns, which could not have been the case with Dandot: probably it is Dinkot on the Indus mentioned by Bábar as the western extremity of the Salt Range, and would be somewhere near Kálábágh. The whole district was included in the Sind-Ságar Sarkar, comprising apparently the present districts of Ráwalpindi, Jhelum and part of Sháhpur.

Jahāngīr.

Jahāngīr in the second year of his reign marched through the district, and gives an interesting account⁽¹⁾ of his journey by way of Rohtás, Tilla, Bhakra (Bakrála), and Hatiya. Of the Bakrála *kas* he remarks: "I marched the whole day through the bed of a river, in which water was then flowing, and the oleander bushes (*ghaníri*) were in full blossom of exquisite colours, like peach blossoms..... I ordered my personal attendants, both horse and foot, to bind branches of the flowers in their turbans, and I directed that the turbans of those who would not decorate themselves in this fashion should be taken off their heads. I thus got up a beautiful garden." His diary mentions the Gakkhars as holding the country from Rohtás to Márgalla, where they were wont to loot passing caravans: he says they were a savage race, continually fighting. After several more visits,⁽²⁾ he was in the 21st year of his reign again on the way to Kábul: he had arrived at the Jhelum, and a bridge of boats had been constructed for the crossing, when Mahabbat Khán, general of Sháh Jahán, then in revolt against his father, arrived with four or five thousand Rájpúts from Bengal, seized Jahāngīr and his consort Núr Jahán, and, accompanying them to Kábul, remained for some time master of the situation. It was at Rohtás, on the return journey, that the tables were turned: Núr Jahán obtained troops from Lahore, and when the party was one day's march from Rohtás the emperor held a review of his army: Mahabbat Khán, with his troops, being kept out of the way, Jahāngīr went on at once to Rohtás, where he found a Court awaiting him; but it was a Court shorn of much of its glory. Rohtás was thus for a time the seat of Jahāngīr's Government.⁽³⁾

Jahāngīr and
Mahabbat

The following account of these events is taken from Lane Poole's *Medieval India under the Muhammadans*, page 323:—

"The imperious queen next sought to gain the control of the army. The general Mahabbat Khán, however, was not to be won over, and.....took the bold course of seizing the person of the emperor whilst he was separated from his guard, when on the point of crossing the Hydaspes, on his way to subdue

(1) Elliot, VI, 308.

(2) He gives an account of the sport he obtained on these visits *Toxak-i-Jahāngīri*, Ali-garh edition, pages 288 and 317.

(3) Elliot, VI, 420—431.

a rising at Kábul (1626). The empress, far from daunted by this unexpected stratagem, lost not a whit of her splendid courage. She secretly escaped to the imperial guard, and marshalled her husband's troops against the division of his captors, riding at the head of the army on her tall elephant, armed with bow and arrows. Mahabbat's Rájputs had burned the bridge, but the empress was among the first to cross the ford and engage the enemy on the other side. A scene of universal tumult and confusion ensued; the ford was choked with horses and elephants. Some fell and were trampled under foot; others sank in the pools and were unable to regain the shore; and numbers plunged into the river and ran the chance of making good their passage or being swept away by the stream. The most furious assault was directed on Núr Jahán; her elephant was surrounded by a crowd of Rájputs; her guards were overpowered and cut down at its feet; balls and arrows fell thick round her *howdah*, and one of the latter wounded the infant daughter of Shahriyár, who was seated in her lap. At length her driver was killed, and her elephant, having received a cut on the proboscis, dashed into the river, and soon sank in deep water and was carried down-stream. After several plunges he swam out and reached the shore, where Nur Jahán was surrounded by her women, who came shrieking and lamenting, and found her *howdah* stained with blood, and herself busy in extracting the arrow and binding up the wound of the infant.

"Open war had failed, and the brave woman resorted to other methods. She boldly entered the camp, and for months shared her husband's captivity. By degrees her arts lulled to rest the watchful suspicions of the general. She won over some of the leading officers to her side; and finally one day the emperor found himself at liberty, with his faithful queen beside him, and the army at his command.

"The victory came too late, however, for Jahángír had scarcely restored order at Kábul, and paid a visit to the happy vale of Kashmir, his favourite summer resort, when he was seized by his mortal sickness."

During the rule of the remaining Mughal sovereigns the Punjab played an important part, but it was chiefly as being the road by which the invading armies of Nádir Sháh, Ahmad Sháh Durrání, Taimúr Sháh Durrání, and Zamán Sháh,⁽¹⁾ advanced towards Delhi. The Court of Delhi was far too much engrossed in its luxuries and pleasures to attend to any enemy until that enemy was at its gates: and the invaders were met, not in this part of the country, but near Lahore or Delhi: nor do the local people appear to have resisted their advance. The Durránís knew the value of Rohtás, and maintained a Governor and a garrison there.

In the decay of the Empire the local tribes waxed more and more independent, in the absence of any settled government: none of the Sikh Misls had their home in the country north of the Jhelum, and the district long remained more or less nominally under the rule of the Durránís; but meanwhile the power of the Sikhs was steadily advancing: in 1765 they utterly defeated the Gakkhars at Gujrát, and shortly afterwards were invited across the Jhelum by the Gujar Chaudhrís of Kálá; and in 1768, as soon as

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Jahángír and
Mahabbat
Khán.

Later Mughal
rule.

The Durránís.

The Sikhs.

(1) Zamán Sháh lost 12 of his cannons in the Jhelum. Ranjít Singh extracted eight which he forwarded to Kábul, being rewarded with the Governorship of Lahore. The other four remained in the river until 1823 when they were recovered and placed in the arsenal at Lahore. (Muhammad Latif, History of the Punjab, page 306).

CHAP. I. B. Ahmad Sháh's back was turned on the Punjab, they blockaded and took the fort of Rohtás, and overran the country as far as the Indus; Taimúr Sháh succeeded to the throne of Kábul in 1793, and his mind seems to have been always filled with idle hopes of an Indian Empire; but his three invasions in 1795, 1797 and 1798 had no permanent result, and led to no event of importance in this district.

Ranjít Singh.

In 1801 Ranjít Singh visited the Dhanní, which had long been in a very disturbed state, subdued it without resistance, and, having made some arrangements for its administration, returned to Lahore with 400 fine horses, the result of the excursion: in 1805 he "entered into treaties with the Muhammadan chiefs and families about the Chenáb and Jhelum. The Court of Kábul was no longer regarded as the royal and highest tribunal of India." He made many other incursions: it must have been in one of these, about 1809, that his general, Attar Singh, slew the Janjúa chief of Dárápur, whose family was left without *jágír* or means of subsistence. In the following year he besieged the hill fort of Kusak, which was bravely defended by its Janjúa Rája, Sultán Fattah Muhammad, whose descendants still hold the place: at length want of water compelled the Sultán to surrender. He was the owner of the neighbouring salt mines, which on his defeat passed to the Máharája, whence a claim many years later by Dalíp Singh, that the Khewra mines were his private property. The more or less complete subjugation of the district by the Sikhs may be held to date from this year, 1810. The extinction of tribal independence is little to be regretted. The Sikhs were not pattern rulers, but they introduced a rude and imperfect order. Previous to their advent, if we may trust uncontradicted tradition, the whole district was the scene of one perpetual but petty warfare. Tribe fought with tribe, chief with chief, and village with village; society lived in a sort of trustless truce broken from time to time by treacherous murders and thievish forays: in some villages the high places are still shown, where watchers were always stationed to beat the alarm drum on the approach of an enemy. The Sikhs did not, and probably could not, put a complete end to these disorders; but they cut short their boundaries and lessened their violence. They were themselves careless of everything that touched not their authority or their revenue, but they kept society together, and prevented anarchy. It would be tedious, were it possible, to give an account of the Kárdárs and Sardárs who succeeded one another with great rapidity in various parts of the district. Those best remembered are Guláb Singh of Jammú and afterwards of Kashmír who ruled the Gakkhars, and farmed the salt mines at Khewra; Chatter Singh, who was strong in the Jhelum Pabbí and in the Lundí Pattí of Chakwál; Uttam Singh, well known in the Baráli hills and near Duhman; and the Chháchhi Sirdár and Dhanna Singh, who grew great in the west. In 1849 almost the whole district joined the standard of

Principal
Sikh gover-
nors.

Chattar Singh in the second Sikh war. They fought bravely at Chilianwála and Gujrát, and afterwards experienced the punishment of rebellion at the hands of Major Nicholson and the other officers who made the first Summary Settlement.

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SINCE ANNEXATION.

The District of Jhelum was constituted on 23rd March 1849, Pind Dádan Khán being selected as the headquarters, no fixed boundaries having then been determined for the district. The Tahsils then in existence were Pind Dádan Khán, Chakwál, Tallagang, and Jabbí; but in 1849 Rohtás, then a Tahsil, was transferred to this district from Ráwalpindi, with Jhelum itself, then an ordinary village. In 1850 the Tahsil at Jabbí was abolished, the *iláqa* of Makhad and Pindigheb going to Ráwalpindi, the rest of the Tahsil being added to Tallagang: Jhelum was at the same time constituted a Tahsil instead of Rohtás. In the same year the headquarters of the district were transferred from Pind Dádan Khán to Jhelum. *Iláqa* Pabbi was added to Jhelum Tahsil from Ráwalpindi in 1851; and three villages, Koháli, Tháthi and Nathot, were transferred from Pind Dádan Khán to Jhelum. The next alteration was in 1857 when 65 villages from the Pind Dádan Khán and Tallagang Tahsils were made over to the Sháhpur District, 20 of them being given back again in 1863. During the recent settlement the villages of Kot Khilán and Chak Nagri with its two small adjoining *rakhs* were taken from Tallagang, the first going to Chakwál and the others to Pind Dádan Khán.

Changes of
jurisdiction.

Further important changes are about to take place owing to the removal of the Tallagang Tahsil to the new Attock District, which is about to be formed.⁽¹⁾

The following account of the events of 1857 is taken from the Punjab Mutiny Report: Mr. Thornton, Commissioner of the Jhelum Division, had to contend with the difficulties created by the proximity of the independent kingdom of Kashmír, by the number of restless tribes whose home is in our own territory, and by the mountainous nature of the country. The division was not so strategically important as the cis-Satlaj States, nor was it politically so valuable as the Pesháwar or Lahore Division; but to preserve peace in it and contentment among its inhabitants was imperative, owing to the large number of warlike tribes who find their dwelling in its valleys, hills, and plains. The object was happily accomplished by the entertainment in British service of many of their martial spirits, who chafed at inaction, and would probably have fretted us had not a legitimate object been given them whereon to spend their strength; upwards of 1,000 horse were raised from one tribe alone, the Tiwánás, in the Sháhpur District. Mr. Ouseley, the Deputy Commissioner, describes his relief at their departure as great.

The Mutiny.

(1) This change has been effected since the above was written.

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History.

The Mutiny.

The alarm at Jhelum was considerable, as there was no European force to restrain the native battery of artillery and the two regiments (14th and 39th Native Infantry). The 39th were ordered to march, without their magazines, towards Shahpur for orders. Their destination was Dera Ismáíl Khán, but it was an object to avoid any resistance which might have broken out at Jhelum by keeping them ignorant of their future station. They were sent down the left bank of the Jhelum, and reached Dera Ismáíl Khán without giving trouble. The native artillery was ordered to Lahore, and there afterwards disarmed. The only regiment which remained was the 14th Native Infantry. The Chief Commissioner resolved to disarm it notwithstanding the Commanding Officer's assurances of its loyalty. Two companies were ordered to Ráwalpindí on pretence of forming a treasure party, but in truth to weaken the regiment. This move left but 500 men at Jhelum. Early on the morning of the 7th July a force of Europeans and guns which had been sent rapidly down from Ráwalpindí moved towards the parade ground of the 14th. It was joined on its way by the Sikhs of the 14th. The sepoys, seeing the advancing column at a distance, began firing on their officers, broke, fled to their lines, and there defended themselves against our force till 1 p.m. By that time they were dislodged, and fled to a neighbouring village. This battle had, however, cost the lives of many of our Europeans. Colonel Ellice, commanding the detachment of Her Majesty's 24th, was dangerously wounded, and Captain Spring was killed. The heat of the July sun told terribly upon the English troops. The three guns (6-pounders) proved useless against mud walls and the fortified guard-room of the 14th, and when, after desperate fighting, the lines were cleared of mutineers, the troops were too exhausted from heat, toil and want of food to follow up their advantage. At 4 p.m. Colonel Gerrard, who had assumed command after Colonel Ellice's fall, ordered an attack on the village to which the sepoys had retreated. The street fighting proved disastrous to our men; the guns were brought up too close to the houses, the gunners and horses were mowed down by the fire of the mutineers, ammunition on our side ran short, and a retreat was sounded. Two guns were brought off the field; the third, after a most gallant defence of it by Lieutenant Battye, Assistant Commissioner, in command of 30 police horse, and two or three other ineffectual attempts to rescue it, was captured by the mutineers and used against us. Both sides bivouacked on the field. Early in the morning it was found that the enemy had fled. The forethought displayed by Major Browne, Deputy Commissioner, in removing the magazine of the 14th from their lines before the second action, probably contributed much to their speedy flight, as it deprived them of any further supply of ball cartridge. The main body of the fugitives crossed into the Kashmír territory, and were subsequently surrendered by the authorities to our Government. Many stragglers were seized by the police, some were drowned, and 144 were killed.

in the fight. Only about 40 men of the whole 500 who opposed us remained at large. The usual precautions were taken in this district to guard against any ill-feeling amongst the people. Ferries were closed, letters opened, vagrants examined, doubtful or unemployed Hindustánis expelled, &c., &c. A plot, which was laid by a Hindustání underling, to murder the Tahsildár at Chakwál and to seize the treasure, was found out and disconcerted. When a part of the 9th Irregular Cavalry mutinied at Miánwálí, the Police of Jhelum were aroused to try and cut them off. One man was seized and executed; the rest were disposed of elsewhere. A levy, which was raised at Jhelum, continued to keep the country quiet by giving employment to the spare hands. A telegraph-office was set up, and a line of direct postal communication organised with the Deputy Commissioners of all adjoining districts, and with Mr. Harding, Assistant Commissioner, who had charge of the sub-division of Pind Dádan Khán. In the Regular Settlement of Mr. Brandreth the leading men received certain rewards for their loyalty.

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History.

The Mutiny.

The subsequent history of the district is more social than political; the quiet routine of ordinary administration has never been interrupted.

Subsequent history.

The following is a list of the Deputy Commissioners who have held charge of the district since annexation, excluding those who have not been in charge for more than three months :—

List of District Officers.

Name.	From	To	Period.	
			Years.	Months.
Mr. H. Cox	23rd March 1849	5th July 1849 ...	0	3½
Mr. L. Bowring	10th Oct. 1849 ...	27th Nov. 1851 ...	1	1½
Major G. Brown	28th Nov. 1851 ...	22nd Feb. 1855 ...	below.	
Major J. H. Prinsep	23rd Feb. 1855 ...	30th Sept. 1855 ...	0	7
Colonel Taylor	1st Oct. 1855 ...	30th August 1856 ...	0	11
Mr. B. Harding	1st Sept. 1856 ...	30th April 1857 ...	0	8
Major G. Brown	1st May 1857 ...	30th Sept. 1857 ...	3	8
Major Macnabb	1st Oct. 1857 ...	14th Sept. 1858 ...	0	11½
Major Reed	15th Sept. 1858 ...	30th April 1859 ...	0	6½
Colonel J. W. Bristow	1st May 1859 ...	19th April 1870 ...	10	11½
Captain W. G. H. Johnstone	24th May 1870 ...	22nd Feb. 1871 ...	0	10
Mr. W. E. Blyth	23rd Feb. 1871 ...	4th March 1873 ...	2	0½
Colonel J. B. Smyly	5th March 1873 ...	3rd March 1876 ...	3	0
Colonel T. W. Mercer	4th March 1876 ...	30th March 1877 ...	1	1
Major E. G. Wace	1st April 1877 ...	11th June 1877 ...	below.	
Captain J. B. Hutchinson	12th June 1877 ...	10th Sept. 1877 ...	Do.	
Major E. G. Wace	11th Sept. 1877 ...	19th May 1878 ...	Do.	
Captain J. B. Hutchinson	20th May 1878 ...	10th July 1878 ...	Do.	
Major E. G. Wace	11th July 1878 ...	30th Sept. 1878 ...	1	1
Captain J. B. Hutchinson	1st Oct. 1878 ...	21st Dec. 1878 ...	below.	
Mr. F. P. Beachcroft	10th May 1879 ...	30th Sept. 1879 ...	0	4½
Captain J. B. Hutchinson	1st Oct. 1879 ...	2nd Dec. 1879 ...	below.	
Colonel J. B. Parsons	2nd Dec. 1879 ...	8th Sept. 1882 ...	Do.	
Captain J. B. Hutchinson	9th Sept. 1882 ...	8th Dec. 1882 ...	1	1
Colonel Parsons	9th Dec. 1882 ...	13th June 1885 ...	below.	
Ditto	3rd Sept. 1885 ...	9th Nov. 1885 ...	5	5½
Mr. J. G. Silcock	2nd Jan. 1886 ...	27th Feb. 1886 ...	below.	
Mr. J. A. Anderson	28th Feb. 1886 ...	12th Mar. 1886 ...	Do.	
Colonel McNeile	13th Mar. 1886 ...	24th Oct. 1887 ...	Do.	

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List of District Officers.

Name.	From	To	Period.	
			Years.	Months.
Mr. J. G. Silcock	25th Oct. 1887 ...	24th Nov. 1887	below.	
Colonel C. McNeile	25th Nov. 1887 ...	9th Mar. 1888	1	10
Mr. H. C. Cookson	10th Mar. 1888 ...	3rd Jan. 1889	0	10
Mr. J. G. Silcock	4th Jan. 1889 ...	12th May 1890	below.	
Mr. J. A. Anderson	27th May 1890 ...	11th Nov. 1890	0	6
Colonel B. Bartholomew ...	12th Nov. 1890 ...	26th July 1891	below.	
Mr. B. Sykes	27th July 1891 ...	26th Oct. 1891	Do.	
Colonel Bartholomew	27th Oct. 1891 ...	10th Nov. 1891	0	
Mr. B. Sykes	11th Nov. 1891 ...	22nd Nov. 1891	0	31
Mr. J. G. Silcock	27th Jan. 1892 ...	21st April 1893	below.	
Ditto	19th May 1893 ...	30th April 1894	Do.	
Mr. W. S. Talbot	1st May 1894 ...	14th Nov. 1894	0	6½
Mr. J. G. Silcock	15th Nov. 1894 ...	12th June 1895	below.	
Ditto	13th July 1895 ...	23rd June 1896	Do.	
Ditto	24th July 1896 ...	30th Mar. 1897	6	0½
Mr. H. A. Casson	1st April 1897 ...	1st July 1898	below.	
Ditto	13th Aug. 1898 ...	15th Oct. 1899	Do.	
Mr. E. A. Estcourt	16th Oct. 1899 ...	6th Nov. 1899	Do.	
Mr. H. A. Casson	7th Nov. 1899 ...	14th Feb. 1900	2	8½
Mr. E. A. Estcourt	15th Feb. 1900 ...	25th May 1900	below.	
Ditto	23rd June 1900 ...	23rd Oct. 1900	0	8
Mr. P. D. Agnew	24th Oct. 1900 ...			

Of the earlier Deputy Commissioners Colonel J. M. Bristow is the best remembered, as might be expected, seeing that he held charge continuously for nearly eleven years; but the most familiar name of all is that of Mr. Arthur Brandreth, who carried out the first Regular Settlement of the district between 1855 and 1861. Of the numerous officers who have held charge of the Pind Dádan Khán Sub-division, Mr. G. M. Ogilvie, who was Sub-divisional Officer in the seventies, impressed himself most strongly on the people; Mr. W. B. DeCourcy, who held charge in the eighties, is also well remembered.

Section C.—Population.

Character
and disposition
of the
people.

The character and disposition of the people is thus described by Mr. Thomson, formerly Settlement Officer of Jhelum.

"The people, as a whole, are a fine population. They are physically strong, and well-developed, with a high spirit and frank manners. They are generally very well-behaved. Crimes for the sake of plunder are comparatively rare. Crimes of violence are, however, unfortunately too common. They generally arise from quarrels connected with women or land, or ancient feuds. Chakwál and Tallagang are the worst places in this respect, and there can be no doubt that the people there are more wayward and passionate than elsewhere. I do not think, however, that they are difficult to manage. I have found it the best plan to listen patiently to everything they had to say, whether relevant or not, but when once an order was issued to insist upon its being carried out immediately and without demur. The worst qualities of the people are envy, vindictiveness, and want of truth. The second of these vices leads to a strong pertinacity in prosecuting quarrels, whether by litigation or other-

wise. Sometimes it takes the odious form of cattle-poisoning. Lying is so common that it brings no shame; when a man is discovered in a manifest falsehood, he considers it enough to say that he forgot himself. In law-suits the only oath upon which much reliance can be placed is the oath of divorce. And I have known even that to fail. It should be remembered, however, that magistrates are always liable to overrate the amount of falsehood. On the other hand, the better races among the people are brave, self-respecting, honourable according to their own ideas, and loyal. They are not afraid to tell you a good deal of what they really think, which makes talking to them not only more pleasant but much more interesting."

Jhelum with 148·7 persons to the square mile stands 19th among the 27 districts of the Province in the density of total population on total area. It is, however, 23rd in respect of density on the cultivated area, with 368·5 to the square mile. The pressure of the rural population on the cultivated and cultivable areas is 343·3 and 280·5, respectively.

The population and density of each Tahsil are given in the

Tahsil.	Population 1901.	Density per square mile.
Pind Dádan Khan	170,130	194
Jhelum	170,978	189
Chakwál	160,316	160
Tallagang	92,594	77

margin, the density being that of the total population on total area. It will be seen that congestion is nowhere acute, though the riverain Tahsils of Pind Dádan Khan and Jhelum appear to have as large a population as they can support. In Chakwál and Tallagang the

character of the soil does not permit of dense population, but there is certainly room for expansion.

The district contains 4 towns and 974 villages. The population of the former is given on the margin.

Jhelum	14,951
Pind Dádan Khán	13,770
Chakwál	6,520
Bhaun	5,340

The first two are municipalities, but the other two have urban characteristics. At the Census of 1901 Jhelum town showed an

increase of close on 2,000 inhabitants, or 20 per cent. As regards Pind Dádan Khan, which has fallen from 15,055 to 13,770, or by over 8 per cent., Mr. W. S. Talbot, the Settlement Collector, wrote in the District Census Report:—

"Pind Dádan Khán is well known to be in a decadent condition; in this town indeed I looked for a larger loss of population than has actually occurred. The causes are three-fold; first is the loss of the through trade of the salt from the Khewra mines hard by, which formerly all passed through Pind Dádan Khan on its way to Miani, or down country by the river route, and now passes out by railway direct without affecting the town; in the second place, grain markets have been established at the stations of Lilla to the west and Haranpur to the east, and as they have no octroi dues to pay, they compete at a great advantage with the older centre; thirdly, the ravages of *kallar shor* have put out of cultivation a large area of land in the neighbourhood of the town, though it may be hoped that by canal improvements some of the ground thus lost may be eventually recovered."

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Population.

Character and disposition of the people.

Density.

Density by Tahsils.

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Population.

Villages and hamlets.

Chakwál and Bhaun showed normal increases. Only 7 per cent. of the population live in the towns.

The villages of the district are somewhat peculiar: towards the east and centre they are not usually very large, but most of them are divided into numerous separate hamlets, called *dhoks*, sometimes consisting of a single house, but often of five or six houses together, and sometimes really complete villages. The causes of this arrangement are probably two-fold: in the first place the surface of the district is extremely variable in quality, the best areas for farming being often small in extent and at a great distance from each other: naturally each man settled down beside his own particular plot, and this tendency was strengthened by the old political circumstances of the district; the fighting tribes did not as a rule cultivate themselves, but settled small bodies of tenants on all the best parts of their properties, and lived upon the rentals received. These tenants were often a miscellaneous body with few common interests: their landlords protected them from external violence, and they were therefore as safe in small hamlets as in large villages: thus it became usual for the main body of the landlord class to live in one large central *ábádí* surrounded by a string of *dhoks* inhabited by rent paying tenants. The number of *dhoks* in a village is sometimes very large: Lehrí and Padhrí have each about 40; 15 or 20 are not uncommon, and Thoa Mahram Khán in Tallagang has over a hundred. In process of time many *dhoks* have waxed mightily, and many of the old tenants have become owners; in such cases the want of communal feeling at once becomes apparent, each *dhok* wishing to set up for itself, and to become independent of its neighbours. At the First Regular Settlement independence was at first rather freely granted, and resulted in a number of petty and feeble villages, mostly in the Jhelum Tahsíl. Afterwards Mr. Brandreth refused to allow separation except in special cases, and in the majority of instances this is undoubtedly the wiser policy.

Villages in the west.

As we go westward this system of *dhoks* to some extent dies away: among the Awáns of Tallagang it was not long ago uncommon: a homogeneous farming population, with a large share of democratical equality, not overridden by *jágírdárs* or dominant landlords, but torn asunder by petty feuds and village wars, had no doubt given occasion for this state of affairs; but here, too, the number of small *dhoks* is now getting large, as the insecurity of isolated houses is no longer a deterrent: and the largest estates must always have had *dhoks*, of the kind that are small villages in themselves, the more distant lands being out of reach from the main *ábádí*. The size of some of these villages is enormous: Láwa has an area of 135 square miles, Thoa Mahram Khán of 86, Tráp is almost as large, beside them Kandwál in the Pind Dádan Khan Thal (also an Awán estate) is comparatively small with 27 square miles.

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Population.

Growth of population.

The marginal figures show the population of the district as it stood at the last four enumerations. In the period 1868—1881 the population rose by over 17 per cent. In the decade 1881—1891, when the district suffered greatly both from drought and locusts, the increase was only 3 per cent., but in the following decade, owing to the severe scarcity of 1899-1900, the population fell to the figure of 1881. The facts that while males have decreased by 17,410, females have increased by 2,372, and that 17,000 more males than females have emigrated, indicate that the decrease was not permanent. The favourable harvests since the census have probably brought back most of those who left their homes during the scarcity in search of labour or pasture.

The marginal table shows the fluctuations of population by

Tahsils.	TOTAL POPULATION.			PERCENTAGE OF INCREASE (+) OR DECREASE (-).	
	1881.	1891.	1901.	1891 on 1881.	1901 on 1891.
Total District ...	589,373	609,056	594,018	+3.3	-2.5
Jhelum ...	174,169	177,046	170,978	+1.6	-3.4
Pind Dádan Khán ...	166,186	173,071	170,130	+4.1	-1.7
Chakwál ...	154,164	164,912	160,316	+7.0	-2.8
Tallagang ...	94,874	94,027	92,594	-9	-1.5

Tahsils. It will be seen that the increase of the 1881—1891 decade, in every Tahsil except Tallagang, which was nearly stationary, was followed by a general decrease

in 1891—1901. The following remarks are excerpted from the Census Report of 1901:—

Tahsil Jhelum.—The total population has decreased by 6,068, being now 170,978 as against 177,046 in 1891, and the urban having increased by 2,073, the decrease in the rural areas amounts to 8,141, or nearly 5 per cent., but females have increased by nearly 500. The Revenue Assistant notes that the Pabbi and Khuddar Circles show decreases owing to two successive bad harvests in the three years preceding the census, which caused emigration to better grazing country. The River and Maidán Circles show increases, but not sufficient to make up the deficiency in the two former. The riverain villages are not affected by malaria and those near Jhelum itself support numerous milch cattle.

Tahsil Tallagang.—The population, now 92,594, has decreased by 2,372, or 2.5 per cent. since 1891, and the females have decreased by 810, though only half as much as the males. Most of the villages in the north and west of the Tahsil show increases, those in the south and east decreases. The bad harvests of the past three years have caused emigration to the Chenáb Colony and to the Púncb territory in Kashmír.

Tahsil Chakwál.—The population now stands as 160,316, or 3,745 less than in 1891, but females have increased by 703. The same causes are assigned as in the other Tahsils. There is some temporary emigration in the cold weather, with camels for the carrying trade, or work in the indigo factories in Multán.

Tahsil Pind Dádan Khán.—The Tahsil population, now 170,130, has fallen by 2,853, but the town of Pind Dádan Khán accounts for 1,285

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Population.

Growth of
population.

or nearly half the decrease. In the rural circles there is an increase of 1,107 females and a decrease of 2,675 males, giving a net decrease of 1,568. The Jálap *iláqa* has a generally increased population owing to its vicinity to the river and the abundance of wells. The Vunhár, Thal and Phaphra Circles show decreases, due to the emigration caused by scarcity among the poorer classes, towards the Chenáb Colony. The railway line that was opened in 1866 drew away the traders to other centres of trade. The boatmen have gone off to other work, as boat traffic along the river has fallen off a good deal. Poverty has been the main cause of decrease of population.⁽¹⁾ There were very few marriages during the last decade. There have been a great number of marriages within the last few months after the good rabi of 1901 and there were very few during the few years preceding this last rabi."

Migration.

The following table shows the effect of migration on the population of the district according to the Census of 1901 :—

	Persons.	Males.	Females.
IMMIGRANTS.			
1. From within the Punjab and North-West Frontier Province.	28,631	12,480	16,151
2. From the rest of India	5,276	2,620	2,656
3. From the rest of Asia	246	209	37
4. From the other countries	61	33	28
Total immigrants	34,214	15,342	18,872
EMIGRANTS.			
1. To within the Punjab and North-West Frontier Province.	77,900	47,622	30,278
2. To the rest of India	6,502	4,659	1,843
Total emigrants	84,402	52,281	32,121
Excess of emigrants over immigrants	50,188	36,939	13,249

The bulk of the immigration is from the Districts, States and Provinces in India given in the table below :—

District, State or Province.	Total immigrants.	Number of males in 1,000 immigrants.	District, State or Province.	Total immigrants.	Number of males in 1,000 immigrants.
Siálkot	1,079	587	Ráwalpindi, excluding Attock.	9,183	337
Gujrát	7,289	452	United Provinces of Agra and Oudh.	670	684
Sháhpur	5,478	368	Kashmír	4,161	450

Of the immigration from the countries outside India, 203 persons from Yághistán and Afghánistán, and

43 from the United Kingdom only are worth mention.

(1) This statement requires qualification, though in the main correct; temporary poverty due to bad harvests is the principal reason leading to emigration as noted above, and also tending to decrease marriages as stated here.

The emigration is mainly to the Districts, States and Provinces noted in the table below :—

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Population.

Migration.

District, State or Province.	Males.	Females.	District, State or Province.	Males.	Females.
Lahore	1,179	442	Muzaffargarh	911	512
Siālkot	858	285	Dera Ghāzi Khan	981	511
Gujrānwāla	630	491	Hazāra	1,460	748
Gujrāt	2,669	3,083	Peshāwar	5,350	2,174
Shāhpur	6,364	7,298	Kohāt	2,497	546
Rāwalpindi, including Attock	10,857	8,329	Bannu	1,703	422
Miānwāli	1,605	1,508	Dera Ismail Khan	1,101	292
Chenāb Colony	2,786	1,456	Kashmīr	2,129	1,186
Jhang	633	374	Bilochistān	1,337	235
Multān	2,051	1,065	Bombay	473	286

Net gain from (+) or loss to (—)	Net gain from (+) or loss to (—)
Lahore	—1,180
Gujrāt	+1,537
Shāhpur	—8,184
Rāwalpindi, exclud- ing Attock.	—8,067
Chenāb Colony	—4,237
Jhang	—907
Multān	—3,000
Muzaffargarh	—1,331
Dera Ghāzi Khan (old).	—1,371
Hazāra (including Attock).	—3,937
Peshāwar	—7,316
Kohāt	—2,984
Bannu (old)	—3,878
Dera Ismail Khan (old).	—1,939
British Bilochistān	—1,569
Kashmīr	—846

The district thus loses 50,188 souls by migration and its net interchanges of population with the Districts, States and Provinces in India, which mainly affect its population, are noted in the margin.

Gain or loss by intra-Provincial migration.			1901.	1891.
Net			—49,269	—13,642
Chenāb Colony			—4,242	...
Kohāt			—2,984	—1,262
Multān			—3,000	—826
Bannu (old)			—3,878	—2,065
Hazāra, including Attock			—3,937	—845
Peshāwar			—7,316	—2,896
Rāwalpindi			—8,067	—2,432

Comparison with the figures of 1891 shows that the district lost, by intra-Provincial migration alone, 49,269 souls in 1901, or 35,627 more than in 1891.

Loss by intra-Imperial migration.			1901.
Total			50,495

Taking the figures for intra-Imperial migration, i.e., those for migration in India, both within the Punjab and to or from other Provinces in India, we have the marginal data.

The figures for age, sex and civil condition by religions are given in great detail in Table 7 of the Census Report.

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Population.

The following statement shows the age distribution of 10,000 persons of both sexes:—

Age.	Age-period.	Males.	Females.	Total.	Age-period.	Males.	Females.	Total.
Infants under 1	...	154	147	301	25 and under 30	373	429	802
1 and under 2	...	79	74	153	30 " " 35	392	426	818
2 " " 3	...	144	136	280	35 " " 40	296	308	604
3 " " 4	...	142	130	272	40 " " 45	273	300	573
4 " " 5	...	155	148	303	45 " " 50	207	209	416
5 " " 10	...	755	666	1,421	50 " " 55	225	213	438
10 " " 15	...	623	503	1,126	55 " " 60	112	103	215
15 " " 20	...	404	404	808	60 and over	385	341	726
20 " " 25	...	335	405	744				

It will be seen that the proportion of persons of over 60 years of age in this district is remarkable, this being one of the four districts containing upwards of 700 persons of these ages in every 10,000 of the population.

Vital
statistics.
Average
birth-rate.

Both the birth and death-rate of the district are normal, though low in comparison with the central and eastern districts of the Province.

The quinquennial average of births is 21,637, or 36·6 per *mille* of population. The highest number recorded was in 1902, *viz.*, 25,187, and the lowest in 1901, *viz.*, 18,777. The following table shows the figures by religion and sex:—

YEAR.	HINDUS.		MUHAMMADANS.		RATE PER <i>mille</i> (ALL RELIGIONS).		Both sexes.
	Males.	Females.	Males.	Females.	Males.	Females.	
1898	17·3	15·7	17·8	15·9	17·8	15·8	33·6
1899	21·5	18·7	22·2	19·7	22·1	19·7	41·8
1900	17·4	14·9	16·1	14·4	16·2	14·4	30·6
1901	21·0	17·4	16·3	14·6	16·8	15·0	31·8
1902	20·5	18·0	22·9	20·3	22·6	20·0	42·6
Quinquennial average	19·5	16·9	19·4	17·3	19·4	17·2	36·6

Average
death-rates.

The quinquennial average of deaths for the past five years 1898—

Year.	Hindús.	Muhammadans.	All religions.		
			Males.	Females.	Total.
1898	31·3	29·8	29·5	30·4	29·9
1899	24·3	27·4	27·0	27·0	27·0
1900	32·5	33·8	33·1	34·3	33·7
1901	31·6	23·4	25·1	23·5	24·3
1902	50·4	32·9	35·6	34·0	34·8
Quinquennial average	34·0	30·0	31·1	29·7	30·4

1902 was 17,957, or 30·4 per *mille* of population,—the average rates being 34 for Hindús and 30 for Muhammadans. The death-rates for the past five years are given in the margin. In years of scarcity Muhammadans were greater losers than Hindús, though in ordinary years the rate of Hindu mortality is higher than the Muhammadan.

But a remarkable feature of the district is that the rate of female mortality is lower than the male. CHAP. I, C.

*Average of death-rates by ages in the
5-year period, 1898-1902.*

Ages.				Males.	Females.
0-1	...	...	...	7.7	7.4
1-5	...	...	...	5.2	5.2
5-10	...	...	...	1.9	1.9
All ages				31.1	29.7

This is confirmed by the figures given in the margin, which indicate that even in the earlier years of life the female mortality is a little lower than the male.

*Average
death-rates.*

The commonest disease is fever; small-pox, which has considerably decreased since the introduction of vaccination, visited the district in 1902, causing about 600 deaths. The district remained nearly free from plague till March 1903, when it spread through the district, except the western Tahsil of Tallagang.

Diseases.

On the birth of a child in a Musalmán family the Mullah is sent for, and utters the call to prayer in the child's ear, receiving a small present. After a week the child's head is shaved by the Nái or barber; the child is named by the head of the household; food and sweets are distributed, and the barber and other menials are given small presents. The usages are the same on the birth of both boys and girls, but the rejoicings are much greater on the birth of the former. Boys are circumcised (*sunnat*) by the Nái, usually after four years.

*Customs:
Birth.*

Amongst those Hindús who call themselves Sikhs, and wear the hair long (*kesadhári*), the naming ceremony is as follows: a month after birth the child is taken to the *dharmsál*, the *granth sáhib*, or sacred book, is opened at random by the Bhái in charge, or some respectable person: and the first letter of the first verse on the page is the first letter of the child's name: the custom with other Hindús who cut the hair (*mona*) is similar; or the child is named by some member of the family. After 4, 6, or 9 months, or even any time up to 5 years, according to the custom of the family, the head is shaved, and some on this occasion put on the sacred thread (*janeú*): this ceremony is a time of rejoicing, and the relations, &c., are fed by the parents.

The number of males in every 10,000 of both sexes is shown below.

Sex

These figures show that the number of females is increasing relatively to the number of males, the sudden fall in the proportion of males in the decade 1891-1901 being due to excess of male emigration, as already noted.

Census.		In villages.	In towns.	Total.
1868	...	...	...	5,283
1881	...	5,253	6,041	5,318
1891	...	5,190	5,570	5,214
1901	...	5,030	5,373	5,053
Census of 1901	Hindús	4,970	5,355	5,061
	Sikhs	5,067	6,184	5,321
	Muhammadians	5,033	5,278	5,045

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Population.

Sex.

Year of life.	All religions.	Hindús.	Sikhs.	Muham- madans.
Under 1 year	955	920	864	961
1 and under 2	925	1,003	715	1,25
2 " " 3	941	964	849	941
3 " " 4	920	910	841	923
4 " " 5	959	1,036	1,062	951
Total under 5	942	959	870	942

The marginal table shows the number of females to every 1,000 males under five years of age as returned in the Census of 1901. It will be seen that the proportion of girl children is satisfactory among Hindús and Muhammadans, but low among Sikhs.

Marriage :
Restrictions
on marriage.

Although the Musalmán tribes of the district are all or nearly all of Hindu origin, Muhammadan Law has had such a strong effect as regards intermarriage, that it has entirely abrogated the rule forbidding marriages between relations: in fact, all the Muhammadans of the district endeavour if possible to arrange their marriages within the circle of their near relations, and marriages between first cousins are common: if they have to go further afield, they will at any rate try to marry within the tribe: failing even that, they will take women from tribes of equal or lower degree, but will give their daughters to outsiders, if at all, only to tribes of equal or higher status. Such intermarriages are fairly common between Máns and Kassars, and occur also between Gakkhars and Janjúas. All tribes, except perhaps Gakkhars, will give their daughters to Sayyads (to whom they look up from religious motives), but they do so with increasing unwillingness. Marriages with low caste women by men of the agricultural tribes occur sometimes, though they are looked upon with disfavour. But the only general and absolute rule is that in every marriage the husband's family must be at least equal in social estimation to that of the wife, although not at all necessarily equal in wealth.

Betrothal.

Marriage is nearly always preceded by formal betrothal (*náta* or *kurmái*), which usually takes place amongst Musalmáns between the ages of 10 and 15; and amongst Hindús before the age of ten.

After some preliminary negotiations, conducted by the Náí or Mirásí, or a kinsman, a day is fixed on which the boy's parents go with others of the brotherhood, the barber, &c., to the girl's home: the Mullah invokes a blessing (*khair duá*), sugar is distributed to those present, and the boy's father makes some presents of clothes and money to the other party, receiving some in return, and presents are made to the Mullah, Mirásís, and barbers; one rupee, called *nishání*, or the token, being always placed in the hand of the girl. On the next 'Id following the boy's parents send a present of clothes, ornaments, and some eatables, according to their status, for the girl. The actual marriage takes place at puberty, the date being fixed (*ukad*) at another meeting arranged at the instance of the boy's father: preparations for the wedding then begin. A

Marriage.

week before the date fixed the bridegroom is anointed with oil, a red and white thread, called *gāna*, is fastened on his right arm, and he keeps constantly with him two or three friends, called *sabāla*, who get their food in his house: a procession follows, in which he is promenaded round the village, attended by *Mirásís* with pipes and drums, and women with loud singing. At this time the boy wears dirty clothes and carries a sword or knife to protect himself, as it is said, against the *Jins*. Meanwhile the girl is dressed in red *sālú* cloth, her hands are stained with henna, and the braids in which she has hitherto bound up her hair are loosened: after this, until the marriage, she is carefully watched and guarded, for fear the *Jins* may do her a mischief. From the time of these ceremonies until the time for the *barāt* or *janj* (marriage procession), the women in both houses keep up a nightly chanting and drumming.

A few days before the *barāt* starts the more intimate friends of the bridegroom arrive, the other invited guests dropping in later when all are assembled, the boy's father gives a great feast, generally including rice and meat, and costing from Rs. 50 to Rs. 500: water is brought from the well by the women of the family with pomp and singing (*gharaulī*), and the bridegroom being seated on a basket or stool, is bathed and rubbed with a mixture of flour and *ghī*, and milk is poured on his head: then getting up, he breaks with his foot an earthenware saucer. The bridegroom is clad in new garments (the barber takes the old ones), and takes his place at the receipt of custom, the guests then making the customary presents of money, called *tambol* or *nendra*.

When this is finished the boy is crowned with a chaplet (*sikra*), and the *barāt* starts off for the bride's house with the groom mounted on horseback, and protected by a gaudy paper umbrella called *chatta* or *sir*, always carried by a *dhobī*. As the procession starts the women sing a *khair duā*. Arrived at the village of the bride the *barāt* is met in the gateway by the sweeper, who demands his fee to allow the procession to proceed; this is called *dhora*, and is usually about eight annas. As the *barāt* advances along the village lanes it is abused by all the village women and beaten with *bājra* stalks and the like. Arrived at or near the bride's house everyone sits down, and the barber of the girl's party puts sugar and milk into the bridegroom's mouth, for which he receives a fee of from Re. 1 to Rs. 5 (*lāg*). Then the bride's father gives a feast, which costs from Rs. 50 to Rs. 800. This is followed by the *berī ghorī*, a ceremony performed by the barber's wife, which practically consists of making images in flour of the boy's relatives, and then extorting a fee by threatening to abuse them. Next succeeds a promenade of the bridegroom round the village attended by pipes and drums, and women and *Mirásís* singing in antiphonal measures, which goes on till the *sargī* or four o'clock in the morning. Then the *barāt*, who have been sleeping, are waked up, and five or six of the best of

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Population.

Marriage.

them, with the bridegroom and his father, enter the bride's house carrying trays of presents—clothes and jewellery. This completed, the father of the bride directs the Mullah to read the *nikāh*: upon this two witnesses are first sent to the girl, who is kept apart in *parda*, to enquire to whom she will give authority to consent to her marriage on her behalf. This is a mere pretence, as the girl holds her tongue, and her relations answer for her that she gives the *wāk*, or power-of-attorney, to so-and-so. The man in question is called, accepts his attorneyship, and proceeds to settle the dower with the bridegroom. This is first put at an extravagant rate and eventually beaten down to a reasonable one.

The rate varies from Rs. 20 to Rs. 100, or even more, generally with the addition of a gold mohar, but is usually Rs. 32, supposed to represent the 500 copper coins and gold mohar allowed by Muhammadan Law. The *nikāh* ceremony is then performed by the Mullah according to Muhammadan Law, the consent of the bridegroom and the bride's agent being asked. The father of the bride then exhibits to those present the articles given by him to his daughter as dowry (*jahez* or *dāi*), the Mirāsī meanwhile announcing them (*hukāi*). The bride's clothes are then formally changed, this being the public sign that the marriage ceremony has been completed, and the *barāt* party, now taking the bride with them, return to the bridegroom's house: on the 7th day, the *gāna* thread on the husband's arm is untied, and the bride is taken home by her parents, the bridegroom in the Dhamī and Tallagang following her after a few days, and remaining in his father-in-law's house for a week. He then goes home, and after some days more the bride is brought away by some of his relations, and takes up her abode finally with her husband.

The people with the *barāt* are generally fed twice by the bride's father, always on the evening of arrival, and usually on the morning of the marriage also: on return they are fed again by the bridegroom's family, this last meal being called *chhok*, and then disperse.

If the parties are not of age, the *barāt* is sometimes deferred until they grow up, but this is very rarely done.

The Hindu marriage ceremonies are in a general way very similar to those of the Musalmāns, though of course differing in many details, as well as in the fact that the essential and binding part of the marriage ceremony (which, in the case of the Muhammadans, is the *nikāh*), is with them the *kaniādan*, or transfer of the girl to the boy's family: the girl's father puts her hand into the boy's, their clothes are tied together, and they walk seven times round the sacred fire (*hom*), the Brahman reciting certain verses meanwhile. The whole ceremony, the circumambulation of the sacred fire,—is called *lāwan-phaera*. The *barāt* stays longer than is usual with Musalmāns, generally 2½ days, being fed by the girl's

family five times. The *jahez* or dowry also is usually more elaborate, consisting of clothes, cash, or ornaments, metal vessels, according to means; a lacquered bedstead and a lacquered chair: and the well-to-do sometimes give cattle or horses as well.

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Marriage.

An attempt was made some years ago to reduce the heavy marriage expenses amongst the agriculturists; it is doubtful whether it has had much effect.

There is no special time or season for marriages, but Muhammadans do not marry in the month of Muharram, on the 'Ids, during the first 13 days of Safar, or on the 3rd, 13th, 23rd, 8th, 18th or 28th days of other months. Hindús do not marry in the months of Cheth, Kátak, and Poh, nor during the *sangat*, or inauspicious period of about a year which recurs every 12 years or so.

Miscellaneous
matters relating to marriage.

There is no fixed age for marriage: amongst the Muhammadans it is nearly always adult, and in that case the woman takes up her life with her husband at once: otherwise she remains with her parents until of fit age. With the Hindús marriage used generally to take place at the age of from 7 to 10 years: now it is later as a rule, about 12 for the girl and 16 for the boy: the girl remains with her parents until the *mukláwa* ceremony.

Among the Hindús, the wife leaves her former *gót*; her caste and *gót* are thenceforward those of her husband, which she enters on her marriage. The Musalmáns generally say that a woman cannot change her tribe by marriage: she must always belong to that in which she was born.

Muhammadan widows, at any rate amongst the common *zamíndárs*, nearly always remarry, if not too old: but certain tribes, such as the Gakkhars, Janjúas, Máirs, and others, discountenance the remarriage of widows; or it would be more correct to say that the principal families in nearly all the tribes of good standing will not allow it: a prominent Máir before the days of British rule killed his daughter, because she intended to marry again, after the death of her husband. Remarriages of widows amongst the Hindús of the district have hardly ever occurred as yet, but it seems doubtful whether this state of things will continue.

Perjury and fraud regarding marriages is very common in the Law Courts: for example if a woman has eloped with the man of her choice, having previously in all probability been betrothed by her family to another man, both the families whose wishes she has disregarded will often combine to prove, contrary to fact, that she had been married to the man she was betrothed to, and that her lover has abducted her from his custody. To reduce the opportunities for such proceedings, there are now recognised Kázís who perform the *nikáh* ceremony in each set of villages, and enter each marriage in a register, which is at once put on record in the District Office. Those who do not like the system can go to other Kázís of their own, but hardly any do so: this arrangement has

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now had a good many years' trial, and seems likely to do much good. It applies of course only to Muhammadans: the Hindús hardly ever bring a matter of the kind into Court, partly because in their case even adult women have no power to dispose of themselves in marriage.

Language.

The universal mother-tongue of the tract is Panjábí, the exceptions being in no case important: it belongs to the group of dialects which has been termed Western Panjábí, of which a Grammar and Dictionary have been published by the Rev. Mr. Bomford and the Rev. Dr. Juke, respectively. A "Grammar and Dictionary of Western Panjábí, as spoken in the Sháhpur District," was published in 1898 by Mr. J. Wilson, I.C.S., formerly Settlement Officer and Deputy Commissioner of that district, and this deals fully with the language of an adjoining district, whose dialects are naturally almost the same as those spoken in Jhelum.

It should not be supposed, however, that the same dialect is in use all over the district: that of the hills differs from that of the plains: that of most of Tallagang differs from both, and from the language of Western Chakwál, which itself differs even more from the Potwári dialect of Lundí Pattí: in the Jhelum Tahsíl again we have a large settlement of Gujars, who have to a great extent retained their distinctive dialect, which seems to be more Hindí than Panjábí: but they can speak the ordinary Panjábí too. These various dialects, however, shade off almost imperceptibly into one another, and every resident of the district is easily intelligible to every other.

Officials and their servants, soldiers, and some traders, account for the 2,813 persons speaking other languages than Panjábí. Urdú is now spoken, or at least understood, by many of the ordinary lam-bardárs, as well as by officials, and almost all the leading Chaudhrís.

Distribution
of land-own-
ing tribes.

The general distribution of the land-owning tribes is as follows:—

Gujars hold the east of the Jhelum Tahsíl, Janjúas the south-west; Gakkhars the greater part of what remains. In Pind Dídan Khán, Janjúas hold most of the eastern half of the hills, and some of the eastern plain: the rest of the plain is held by Jálaps, Phaphras, Khokhars, etc., except in the extreme west where Awáns are most numerous, this tribe holding also most of the western hills, and practically the whole of Tallagang: in Chakwál many different tribes people the east, and nearly all the rest of the Tahsíl is shared by the Márs, Kassars and Kahúts.

Caste and
tribe.

The following account, with a few verbal alterations, has been taken from Mr. Wilson's description of the Tribal organization in Sháhpur: it applies equally to this district:—

Classifica-
tion of popu-
lation accord-
ing to reli-
gion.

"The population of the district may be first divided into two great classes, the Musalmáns and the non-Musalmáns, and this classification according to religion is clearly marked. The Musalmán reveres the Kurán and the Prophet Muhammad, and all his ideas and to a certain

extent his customs are coloured by the teaching of the Muhammadan religion; and as compared with the Hindú he is given to the use of Persian and Arabic words and phrases. The non-Musalmán being generally a Hindú or Sikh preserves to a greater extent the ancient customs of his race, and his language and ideas are more subject to influences of Sanskrit and Hindú origin. Of the whole population 89 per cent. are Musalmán, and to this religion belong almost the whole of the original landowning, agricultural and pastoral tribes, as well as most of the menial classes. The 11 per cent. who are not Musalmáns are mostly Hindús or Sikhs, and comprise mainly the Khatrís and Arorás, whose hereditary occupations are trade and money-lending, or the service of Government. Sikhism, as practised in this district, is merely a sect of Hindúism, and for present purposes the Sikhs may be included in the Hindús.

Among the Hindús, ideas of caste, though they do exist to a certain extent, are not nearly so prominent and have not nearly so great an influence on their daily life as they have among the Hindús of the east of the Province; (1) while among the Musalmáns, although strong social feelings and prejudice exist, they are not of a religious character, and have not to do with semi-religious ideas of purity and impurity, all Musalmáns being considered equal before God; so that it may be said that caste, as a religious institution, does not exist among the Musalmáns, though a large proportion of the population being descended from Hindú ancestors, still retain many traces of their original caste prejudices.

The population generally is, however, clearly sub-divided into tribes (*qaum* or *zát*), having a common name and generally supposed to be descended from a traditional common ancestor by agnatic descent, i.e., through males only. Some of these tribes are very homogeneous, as for instance the Awáns, who number 16 per cent. of the total population. Others again, such as the Jats, who are returned as numbering 12 per cent. of the population, are rather a loose congeries of clans than a compact tribe. The tribal division is of some importance in questions of marriage and alienation of property, for although among Musalmáns any marriage which is legal according to Muhammadan Law is held valid, it is customary to marry only within the tribe, or with certain other tribes who are considered to be closely allied; and alienation to a non-agnate is more readily allowed if he be a member of the tribe than if he belongs to another tribe.

Almost every tribe is again sub-divided into clans (*múhi*), or smaller groups of agnates, distinctly recognised as descended through males only from a somewhat remote common ancestor and usually bearing a common name, exactly similar to the clan name of a Scottish clan and used very much in the same way. The clan is almost more important than the tribe, as the mutual agnatic relationship of men of the same clan is more fully recognised.

Within the clan comes a still narrower group of agnates which may be called the family (*kabila*, *korma* or *tabbar*), also consisting of agnates descended from a common male ancestor, not very remote, and much resembling the family group among European nations, except that the agnatic family group is much more clearly marked off from the relations through females only, in the ideas of a Jhelum peasant, than is the case in Europe; for instance, a sister's son, though recognised as a near relation, holds a very different position from a brother's son, who is one of

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Classification of population according to religion.

Caste.

Tribe.

Clan.

Family.

(1) Where water is scarce, as in the Thal, even Brahmáns take it from the hands of Musalmáns, if brought in their own vessels. Hindu meat-eaters again will take meat from Musalmán butchers' shops, merely washing it before cooking.

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Population.

Family.

the nearest agnates. Indeed all through the system of relationship, relations through females are described by entirely different names from relations through males, and are classed entirely apart from them. The basis of the whole family and tribal system is agnatic relationship, the agnatic family having developed in the course of time into the agnatic clan, and that again into what is, in theory at least, the agnatic tribe.

The following is a list of the principal tribes inhabiting the district, placed as far as that is possible in the order in which they come as regards social rank.

Principal tribes in order of standing.

Amongst the Musalmáns, Sayyads are looked up to by all from religious motives: it would hardly be correct to say that they stand highest in the general estimation, but in most ways that is so: thus few tribes would object to giving their daughters in marriage to Sayyads of good standing. The Qureshis also are somewhat similarly situated, but rank much lower.

Of the other tribes, Gakkhars certainly take the first place, followed very closely by the Janjúas: then come the Panwárs, Sohlañs, Chibhs, and some of the Khokhars, all standing very much on one level. Almost all of them, of whatever degree, are addressed as "Rájá," a title also used by some of the Jálaps, who come next. The Mughals are such a mixed lot that it is difficult to say where their place would be: some of them rank fairly high, others not so; the title they use is "Mirza." Here, or perhaps above the Jálaps, come the great Awán tribe, and the Máirs, Kassars and Kahúts, in the order named, all considered tribes of good social standing. The Awán title for leading men is "Mallik," while the three Chakwál tribes use the term "Chaudhrí," or sometimes "Rája."

The many varieties of Jats come next, prominent men being called Mehr or Chaudhrí; and practically on an equality with them the Gujars, who use similar titles, except in one case. In their particular tract (and in case of some families outside it), the Gujars rank higher than the place here assigned to them.

The Malliárs complete the list of agricultural Muhammadans. After them come the *kamíns* (the menial and artisan classes), in the order in which they are noticed further on.

The Hindús are principally Brahmans, Múhiáls, Khatris with Gadhioks, and Aroras, ranking in the order in which they are given: they are seldom agriculturists.

Description of these tribes.

Some description of these various tribes, their history, as far as known, and particularly as stated by themselves, here follows, with other information regarding them and their character. Regarding the origin and history of the tribes very little is known; authentic records are wanting, and the stories told by the people can very seldom be accepted as even approximately correct; they may, however, contain some traces of the truth, and are, therefore, here placed on record, before the process of adulteration which is going on continually deprives them of what little value they have.

The Gakkhars, though not numerically important, are in other respects one of the most prominent tribes in the district, and in social position amongst the Musalmáns of the tract share with the Janjúas the honour of the first place: in popular estimation indeed they seem to rank a little higher than even the Janjúas. They are almost entirely confined in this district to the Jhelum Tahsil, where they hold the bulk of the Khuddar Circle, with a good many villages in the Maidán: elsewhere they are found in any numbers only in the Ráwalpindi and Hazára Districts.

Of the history and origin of this tribe much has been written: the earliest suggestion, that of General Court, that the name of the Gakkhars points to their descent from the Greeks, has not found later supporters; though it has now been adopted and improved upon by some of the present representatives of the tribe, who claim descent from Alexander himself. Mr. Brandreth (Settlement Report, paragraph 48) adopted the local tradition that the Gakkhars "came from Persia through Cashmere," which is still the claim of the majority of the Gakkhars themselves. The views of General Cunningham are set forth at length in his *Archæological Survey Report*, Volume II, pages 22 to 33, to which the curious must be referred for the detailed reasons on which he bases his conclusion that the Gakkhars represent the "savage Gargaridæ" of Dionysius the Geographer (who wrote probably in the 4th Century A. D.), and are descendants of the great Yuechi Scythians, who entered India from the north-west in the early centuries of the Christian era. Mr. Ibbetson (paragraph 463 of his *Census Report*) notices with approval Mr. Thomson's comment (paragraph 57, *Jhelum Settlement Report*) on Cunningham's theory: "though the Turanian origin of the Gakkhars is highly probable, yet the rest of the theory is merely a plausible surmise. On the whole there seems to be little use in going beyond the sober narrative of Ferishta, who represents the Gakkhars as a brave and savage race, living mostly in the hills, with little or no religion, and much given to polyandry and infanticide."

As already indicated, the story of most of the Gakkhars is that they are descended from Kaigohar, or Kaigwar Sháh, of the Kaiání family, once reigning in Ispahán; that they conquered Kashmír and Tibet and ruled those countries for many generations, but were eventually driven back to Kábul whence they entered the Punjab in company with Mahmúd Ghaznaví early in the 11th century: this story is rejected by Ibbetson, because on Ferishta's showing a Gakkhar army resisted Mahmúd, and because it is at any rate certain that they held their present possessions long before the Muhammadan invasion of India: on the other side it will be of interest to notice briefly below the contentions of the most prominent member of the tribe at the present time, Khán Bahadar Rája Jahádad Khán, Extra Assistant Commissioner, who has made a most painstaking study of the original authorities: it must be noted, however, that

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The Gakkhars.

particularly in the exactness of the references to the authorities cited by him, there is something wanting, owing to his omission to supply further information asked for : his views are as follows : —

All the historians before the time of Ferishta agree that the Khokhars, not the Gakkhars, killed Shaháb-ud-dín, Ghauri: Ferishta certainly confused these two tribes in other cases: thus he frequently refers to Shekha and Jasrat as Gakkhar chiefs; there are no such names in the Gakkhar tree, whereas Shekha and Jasrat appear as father and son in the genealogy of the Khokhars; see tree given in the vernacular Settlement Report of the Gujrát District, by Mirza Azim Beg, 1865. (Tabaqát-i-Akbari, pages 18, 19, 127, 147 and 600: Rauzat-ut-Táhirín, Elliot, Vol. I, page 301: Muntakhib-ut Tawárikh, page 18. Ibn Athír, Elliot, Vol. II, page 433; Tabaqát-i-Násirí, pages 23-4, &c.)

Ferishta's account of the Gakkhars as a tribe of wild barbarians, without either religion or morality, practising polyandry and infanticide, is a literal translation from the Arabic of Ibn Athír, an earlier historian, who was there, however, writing of the wild tribes in the hills to the west of Pesháwar, and not of the Gakkhars: the chapter in Ibn Athír immediately following deals with the murder of Shaháb-ud-dín by the Gakkhars, hence perhaps a mistake; or Ferishta may have borne a grudge against the Gakkhars, who are said by him to have maltreated an ancestor of his own, named Hindú Sháh (Ibn Athír, page 82; Ferishta, page 159).

Gakkhar Sháh *alias* Kaigwar Sháh, is mentioned as one of the principal followers of Mahmúd of Ghazni. (Iqbál Náma-i-Jahángirí, page 109: Akbar Náma, page 242.)

The use of the Bindu title of "Rája" has been taken as evidence that the Gakkhar story of their origin is incorrect; but up to comparatively recent times the Gakkhar chiefs used the title of Sultán. (Produces some *sanads* of the Mughal Emperors, and other evidence: references need not be given, as it is certain that the title of Sultán was formerly used by this tribe).

In a recent History of the Persís,⁽¹⁾ it is said that a migration of Persians to China, under a son of Yazdezhad, took place in the 7th Century: it is suggested that this was the occasion when the ancestors of the tribe settled in Tibet: an old manuscript pedigree table produced shows a Sultán Yazdajar some 45 generations back.

An officer who knew the Gakkhars well wrote of them: "Some of their principal men are very gentlemanly in their bearing, and show unmistakably their high origin and breeding": another says: "They are essentially the gentlemen and aristocracy of the (Ráwalpindi) District;..... the Gakkhars still bear many traces of their high descent in their bearing, and in the estimation in which they are held throughout the district." Mr. Thomson wrote of them: "Physically the Gakkhars are not a large limbed race, but they are compact, sinewy, and vigorous. They make capital soldiers, and it has been stated on good authority that they are the best light cavalry in Upper India. They are often proud and

(1) History of the Persís, Karaka, 1884, Vol. I, page 27 f. n. "Anquetil du Perron (Zend Avesta, I, cccxxvi), speaks of Persians going to China in the 7th Century with a son of Yazdezhad."

self-respecting, and sometimes exceedingly well mannered." All this does them no more than justice; and to anyone who knows them well, the statement, that as late as the 13th Century they were wild barbarians, without religion or morality, is in itself almost incredible: Rájá Jahándád Khán seems to have succeeded in tracing the libel to its origin; he shows also that they have sometimes been confused with the Khokhars;⁽¹⁾ but it cannot be said that his arguments in favour of their Persian origin are very convincing: in the matter of the assassination of Shaháb-ud-dín Ghaurí, the historians who state that he was killed by the Gakkhars at Dhamiak in this district are supported by a strong local tradition; the actual spot is shown,⁽²⁾ and this is at a place in the heart of the Gakkhar country, never held, as far as we know, by the Khokhars.

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Population.

The Gak-
khars.

The first settlement of the tribe in this district is generally admitted to be Abriám in Sultánpur, under the Lehrí hills: thence they spread over the Khuddar, southwards towards the river, and as far as Lúndi Pattí to the west, being constantly opposed by the Janjúas, who were almost invariably defeated and ejected: in his first invasion of India Bábar took the part of the Janjúas, and with them defeated Hátí Khán, the great Gakkhar, chief of Pharwála, but in a subsequent invasion made friends with the Gakkhars and procured from them an auxiliary force. When Bábar's son, Humáyún, was in A.D. 1542 ousted by Sher Sháh, the principal Gakkhar chiefs took the side of the exile: to bridle their pride Sher Sháh built the huge fort of Rohtás, about ten miles from Jhelum, and in the constant warfare that followed the Gakkhar country was terribly harried; but the tribe was never subdued, and on Humáyún's return to power began to grow powerful. Their subsequent history, until the rise of "Sultán" Muqarrab Khán, about 1740 A.D., chiefly concerns other districts: he was an Admál chief of the Ráwalpindí District, and claimed to rule the whole of the tract from Attock to the Chenáb: the Domeli Bugiáls, however, did not acknowledge his pretensions, and on his defeat by the Sikhs at Gujrát, they at once rebelled, captured Muqarrab Khán and murdered him. The usual

(1) Raverty (unpublished notes, pages 361 to 367) has noticed the invariable confusion between the Gakkhars and the Khokhars, and says that it is a great error to ascribe to the former the attack on Mahmúd's camp (which has been relied on by some as proof that the Gakkhars' own account of themselves is false): he points out that the Gakkhars are mentioned by none of the available native historians up to the time of Bábar. The Janjúas, Khokhars, and others are known to have been settled in the Salt Range tract three centuries before Bábar's time, for these tribes are mentioned by the author of the *Tabaqát-i-Násirí* as dwelling in the Koh-i-Júd, in his time; but there is no mention whatever of the Gakkhars. Raverty, whose authority is great, is satisfied that the assassination of Sultán Muizz-ud-dín (*alias* Shaháb-ud-dín Ghaurí or Muhammad-bin-Sám) at Dhamiak, was the work of Khokhars not Gakkhars. He comments also on the absurdity of the Gakkhar tale of their having ruled Kashmir (which has a history of its own showing that its rulers were Hindús at the time in question): as to this, however, it may be pointed out that the account now usually given by the tribe is not that they ruled Kashmir proper, but that their ancestors were for some time settled in Tibet.

(2) These local traditions are not always genuine, however: if one or two officials of travellers interested in such matters chanced to enquire for the site of the assassination, it would in time be forthcoming, with or without foundation in fact. The spot shown does not agree with the account we have that Muhammad Ghaurí was killed in his tent.

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Population.

The Gakkhars.

internecine feuds then arose, and the different clans fell in turn an easy prey to the Sikhs, though the eastern hill Mandís were never thoroughly subdued, and were in constant rebellion until the beginning of the British rule : in 1849 the Gakkhars nearly all took the losing side, and therefore forfeited much of their possessions and dignities, falling on evil days, from which they have only extricated themselves by the readiness with which they have since taken employment under the Government.

Further information will be found in Mr. Brandreth's Jhelum Settlement Report, 1865, paras. 55 to 58; Mr. Thomson's Settlement Report, 1883, para. 57; and in Punjab Government Selections, New Series, No. XXIII, 1887.

The Gakkhars have split into many branches, of which the most important in this district are the Admál, the Iskandrál and the Bugiál, who occupy most of the Khuddar Circle : a smaller clan, named Firozál (not the great Firozál clan, and not highly thought of by other Gakkhars), hold a few villages close to Jhelum; and a still smaller branch, the Tuliál (which is little esteemed, and with which the other clans do not intermarry), has four or five estates on the river near Dína. The clan-names are in all cases derived from those of the common ancestors: the principal seats or mother villages of each branch are called Mandís, of which there are six generally recognised in the Jhelum District, Sultānpur (Admál), Lehri and Bakrála (Iskandrál), Domeli, Padhrí and Baragowáh (Bugiál), Bheth and Salihál, formerly flourishing Mandís of the Bugiál, are now decayed.

Regarding the character of the Gakkhars there is not much to add to what has already been said: pride of race is very strong in them, and though they make good soldiers, they are bad farmers; and where they have not fallen back on Government service, they are almost always in a most unprosperous condition, being much wanting in industry and thrift: their most unpleasing characteristic is their intense jealousy of one another, which leads to bitter feuds and sometimes to murder.

The following are some of the principal Gakkhars in this district: Atá Muhammad of Pandorí; Resáldár Mumára Khán of Domeli,⁽¹⁾ (Honorary Magistrate); Adálat Zar Khán of Domeli; Fattah Khán of Domeli and Belí Budhár; Muhammad Khán of Lehri and his uncle Farmán Ali; Muhammad Khán and Wáris Khán of Bakrála; Fattah Muhammad of Adrána; Shádímán Khán of Bheth; Muhammad Khán of Sanghoi Malhú; Muhammad Khán of Sanghoi Khás; Muhammad Zamán of Baral; Resáldár Nawáb Khán of Badágrán (son of the late Khán Bahádur Resáldár-Major Bahádur Khán). A family of formerly good standing is that of Padhrí, whose late head, Fattah Mehndí, was much respected, but his son, Duhman Khán, has not proved a worthy successor. All the above are from

(1) Punjab Chiefs, latest edition, Volume II page 27, and Appendix page 119.

the Jhelum Tahsil; the only Gakkhar deserving of mention outside that Tahsil is Sher Khán of Kot Rája in Chakwál.

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The Janjúas are a small tribe, and they at present hold only 60 villages with an area of about 150 square miles, out of a total of nearly 4,000; but they are important as forming with the Gakkhars the aristocracy of the landed classes of the district, of the greater part of which they were at one time the rulers. Moreover, their influence still extends far beyond the limits of the country that they own, the leading yeomen of the central and eastern Salt Range, the east of the Pind Dádan Khán plain, and the south-west of Tahsil Jhelum, being almost all Janjúas. They are nowhere so numerous as in this district, though there are fairly large settlements in Kashmír and in the Kahúta Tahsil of Ráwal-pindí, and they are found in small numbers in many other districts.

There seems no reason to doubt that the Janjúas are Rájputés of the Lunar Race, as they claim to be, a claim which no one locally thinks of questioning. General Cunningham thought that they had been settled in the district for nearly three thousand years, and derived them from Anú, the son of Yádú, a theory of which there is little real proof; and it led him to class the Awáns ("Anúwáns") as Rájputés and connections of the Janjúas, of equally long standing in the district, a view which is almost certainly erroneous; it has found but few to support it; but Mr. Wilson (Shahpur Gazetteer) thinks the Janjúas are not Rájputés, but "more probably the descendants of the aristocracy among the Awáns just as the Rájputés are the aristocracy of the Jats." It is difficult for anyone who has seen much of both tribes to credit this, and in local tradition there is absolutely nothing to support the theory.

Ibbetson ⁽¹⁾ inclines to the view that they are Rathor; and says of them and other tribes of the western hills that "if they are really descendants of the original Jádúbansí Rájputés who fled to the Salt Range after the death of Krishna, they are probably among the Aryan inhabitants of the Punjab proper, those who have retained their original territory for the longest period, unless we except the Rájputés of the Kángra hills."

We have, however, no certain information as to their migration to the Salt Range; but there seems reason to believe that Jaipál, who opposed Mahmúd at Nandana 900 years ago, was a Janjúa, ⁽²⁾ and we know from Bábar's Memoirs, of which full extracts have already been given, that at the beginning of the 16th century the Janjúas held much of the country between the Jhelum and the Indus, except in the east, where the Gakkhars were in possession; at least the Janjúas held all this district, except the east. Malik Hast, Janjúa, is called "the Hákim of the Ils and

(1) Para. 452, Census Report, 1881.

(2) He appears on their pedigree table.

CHAP. I. C. Uluses in the neighbourhood of the Sohán," and the tribes called
Population. Jūd and Janjūa are said to have been "from old time rulers and
 lords" of the Salt Range hills and of the tract between Niláb and
 The Janjūas. Bhera. The Jūd and Janjūa are said by Bábar to have been of
 common origin, and it seems clear that the former were merely a
 branch of the latter. Cunningham connects them with the Awáns,
 but the Awáns are known to have conquered the western Salt
 Range at a much later date. At a later date Jahángír mentions a
 large predatory band of "Janúwáns" as far north as the Chach
 plain near Attock.

Mr. Thomson's account of the tribe, which follows, is not contradicted on any material point by the present day Janjūas:—

"At some uncertain period, then, some clans of Rahtor Rájput, emigrating from Jodhpur, occupied the uplands of the Salt Range. The leader of this movement, according to the common account, was Rája Mal; but this chieftain is a little mythical, and any large action of doubtful origin is apt to be fathered upon him. The Rájputs first seated themselves at Malot in the west Salt Range. This place, although picturesque, is so inaccessible and unfruitful, that it must have been chosen for safety more than convenience. From here the Rájputs extended their supremacy over the uplands of Jhangar and Kahún and the plain country near Girjakh and Dárápur. In these regions they were rather settlers than conquerors. They not only ruled, but to a great extent occupied also. It seems very doubtful whether their real territories ever extended much further, but their traditions certainly point to a former lordship over the western upland of Vunhár, and over much of the present Tahsils of Tallagang and Chakwál. If Bábar's account be read with attention, it will be seen that he represents the Janjūas as confined to the hills, and ruling over various subject tribes who cultivated the plains. This account serves to explain the utter extirpation that has befallen the Janjūas in the Vunhár and elsewhere. If we conceive them as holding detached forts in the midst of a foreign population which gradually grew hostile, then this extirpation can easily be understood. This also serves to explain how one or two villages of peasant Janjūas have escaped, while all the Chiefs and Rájás round about have perished. The vague accounts of the people seem to point to some such history as this, and not to any great racial or tribal war.

The Janjūas were long the predominant race in the centre and west of the district. Rája Mal is said to have reigned in the days of Mahmúd of Ghazní, and his authority was probably more or less recognised from Ráwalpindi to the Jhelum. When Mahmúd invaded India the Janjūas opposed him, were defeated, and fled to the jungles. Mahmúd followed them up, and succeeded in capturing Rája Mal himself. The Rája was released on condition that he and his tribe should embrace Islám. When this conversion took place, the *janjú* or caste-thread was broken, and the neophytes have been called Janjūas ever since.⁽¹⁾

Rája Mal is said to have left five sons. Three of these settled in Ráwalpindi or Hazára. Two, Wir and Jodh, remained in Jhelum. They

(1) The Janjūas themselves now reject this story, which is not in itself very plausible: they say the name of the tribe is derived from that of one of their forefathers, Janjúba, who in most of the genealogies comes eight or nine generations before Rája Mal. It is, moreover, improbable that the general conversion of the Janjūas took place 900 years ago; it is likely enough that Mahmúd made converts, and that these reverted as soon as his back was turned; but the Janjú village pedigree tables nearly all agree in introducing Muhammadan names only about 15 generations back, which would point to their general conversion about the middle of the 16th Century.

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The Janjūas.

speedily divided their possessions. Wīr took the west, and Jodh the eastern share. Choya Saidan Shāh was the boundary between them. Wīr's descendants are now represented by the Janjūas of Malot and the Kahūn *ilāka*. Their chief seat is at Dilwāl. Jodh's descendants have split into many branches. A general supremacy was long exercised by the Sultāns of Makhiāla in Jhangar.⁽¹⁾ But the chiefs of Kusak and Bāghānwāla soon became practically independent, as did also those of Dilūr, Karanglī, and Girjākh, whose descendants are now either extinct or much decayed. The plain *ilāka* of Dārāpur and Chakrī seems to have broken off from the main stock even earlier than the others. This passion for separatism is fatal to any large authority. The feuds to which it gave rise, joined with an endless Ghakar war, and the establishment of new and strenuous races beyond the mountains, brought the Janjūa dominion to destruction. The Dhanī country, called Malūki Dhan after the great Rāja, and the forts in Tallagang and the Vunhār seem to have been all lost not long after the time of Bābar; but in the centre and east Salt Range and round Dārāpur the Janjūa supremacy remained undisputed until the advent of the Sikhs, and the rich Salt Mines at Khewra and Makrách must have always made this territory important. The Sikhs conquered the whole country piecemeal. Ranjīt Singh himself besieged and captured Makhiāla and Kusak. Most of the influential chiefs received *jāgirs*, but were ousted from their old properties.⁽²⁾

The Janjūas are physically a well-looking race. Their hands and feet in particular are often much smaller and more finely shaped than those of their neighbours. They largely engage in military service, where they prefer the cavalry to the infantry. They are poor farmers and bad men of business. They are careless of details and apt to be passionate when opposed. Too often they fix their hopes on impossible objects. As landlords they are not exacting with submissive tenants. They are willing to sacrifice something to retain even the poor parodies of feudal respect which time has not destroyed. Their manners are often good. They have a large share of vanity, which is generally rather amusing than offensive. They are at the same time self-respecting and not without a certain kind of pride, and are eminently a people with whom slight interludes of emotional Government are likely to be useful. The even routine of our administration chafes them more than others.

The concluding remark is now scarcely correct: probably they have by now found time to adapt themselves better to the altered condition of things, and it is likely too that greater numbers of them now find scope for their energies in military service, for which they are so well fitted.

The Janjūa genealogical tree has been referred to in Chapter I, Section B: it is a comprehensive document, including such celebrities as Adam, Noah, Arjan, Rāja Prithvī Rāj, Dalīp (founder of Delhi),

(1) The formalities at the accession of a new "Sultān" of Makhiāla are curious: seven, nine, eleven or thirteen days after the death of his predecessor, the principal people of the tract around collect, and are feasted: in the afternoon they proceed to a certain rock behind the Sultān's house, and the family Brahman puts the *tika* mark on his forehead: those present then congratulate him, and present small offerings as *prahkash*, being given *pagrī* in return; the Sultān then appoints a Wazīr and four Diwāns, who swear fidelity, and are supposed to be bound to assist him when required: at evening another feast is given, and then all disperse: representatives of practically all the villages of the eastern Salt Range attend on these occasions. The Malik Hast, mentioned frequently by Bābar, was an ancestor of the Makhiāla and Vatli Sultāns.

(2) For an account of the decay of the Janjūa power, see Mr. Brandreth's *Settlements Report*, paragraphs 51-58.

CHAP. I. C. and so on : one name is that of Rái Púr, said by educated Janjúas to
Population. be Porus : it would not be profitable to enter into further details.

The Janjúas.

Leading Janjúas are : *Tahsíl Jhelum* : Mallik Tálib Mehndí Khán⁽¹⁾ of Dárápur, Extra Assistant Commissioner, and his uncle Páyanda Khán ; Sakhí Muhammad of Chakrí,⁽¹⁾ a Deputy Inspector of Police ; and Muhammad Ashraf of Nára. *Tahsíl P. D. Khán* : Fíroz Alí of Makhíála, Abdulla Khán of Dalwál, Súba Khán of Malot, Fatteh Alí of Kusak, Kásim Alí of Pindí Saidpur, Lál Khán of Sherpur, Mehr Khán of Dhariála Káhún, and Resáldár-Major Jalál Khán of Saloí. There are few Janjúas in the other Tahsils : in Chakwál the lambardárs of Dhrábí are of fair standing, while in Tallagang the representatives of the once powerful Rájás of Kot Sárang are fast falling into insignificance.

Miscellaneous Rájputa.

A small number of Panwárs, Chibhs, and Sohlans are found in the Jhelum Tahsíl : the former live at Sahsrál and Jandot in the Pabbí, their principal men being Najábat Alí and his nephew Muhammad Khán ; the Chibhs and Sohlans hold a few of the river villages above Jhelum, but include no one of special note. All three claim to be Rájputa, and are so regarded by their neighbours : the claim is probably correct.

There are a fair number of Bhattís scattered about the district, who are probably of Rájput extraction ; but they are here unpretentious hard-working cultivators, and little esteemed socially. The Gondals along the river are a more doubtful case ; they do not always say they are Rájputa, and seem more like the ordinary Jats ; they are fond of cattle-lifting. There are a few Siáls in the south-west corner of the district, who are generally admitted to be Punwár Rájputa. A few others, such as the Khíwas, have some pretensions to Rájput origin, and locally rank rather above the Jats : their origin is doubtful.

Sayyads.

Sayyads are revered as being the descendants of the Prophet ; but many so-called Sayyads in these parts are not so in reality, but are descended from some member of an agricultural tribe who has transmitted to his successors a reputation for sanctity, resulting at last in their claiming Sayyad origin, and in course of time such claims are generally allowed. The development of such "Sayyads" from indigenous stock may be seen in progress now in more than one place. The common Sayyad who has to cultivate his land is usually a most worthless individual, lazy, querulous, quarrelsome, and a very inefficient cultivator : villages held by men of this class are to be found all over the district, but fortunately only in small numbers ; they are almost always deep in debt, and have alienated most of their land. This is not the case with the better class of Sayyad, who is in vogue as a Pír. Prominent Sayyads are Nádir Alí Sháh, Sub-Registrar, and Niáz Alí Sháh, both of Chohán in

⁽¹⁾ Punjab Chiefs, latest edition, Vol. II, p. 269, and Appendix, p. 115.

Chakwál, and Wiláyat Sháh, and his brother Ináyat Sháh of Danda Sháh Biláwal in Tallagang, all useful men of good standing. Pír Haidar Sháh of Jalálpur is also well known.

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The Qureshís are very similar to the Sayyads, but rank much below them: it is doubtful whether in most cases their claim to Arab origin is justified by the facts: Qureshís grow out of other material, just as Sayyads do. The most prominent Qureshís are Pír Ináyat Sháh of Chak Misrí in the Vunhár, a man of good character and influence, and his relation Manawwár Sháh of Karúlí, a young man of whom the same cannot be said. Biláwal Khán of Karúlí, a retired Inspector of Police, and Lál Isan Sháh of Pír Khára are also well known Qureshís.

Qureshís.

The Khokhars in the district are not numerous, and have for the most part become merged with the "Jat" cultivators; the only Khokhars of note are those of the Pind Dádan Khán plain, descendants of Dádan Khán, who, some nine or ten generations ago, settled in this tract driving out the Janjúas who then held it, and practically creating the present town of Pind Dádan Khán, to which he gave his name, on the site⁽¹⁾ of the old Shamsábád. The Aín-i-Akbarí published in 1597 A.D. shows that the Pind Dádan Khán tract was then occupied by Khokhars. Dádan Khán's descendants say that he was a Hádá Rájput from "Garh Chitor," who before conversion bore the name of Fatteh Chand, and left his home on account of a quarrel with his relations. Of his three sons one took Ahmadábád, and the other two, dividing the villages near Pind Dádan Khán, founded the Kot Sultán and Kot Sábib Khán branches of the family, of which the former is now extinct. The family tradition is that their ancestors ruled "from Rájar to Saidpur," but this is an exaggeration. Mr. Brandreth says:—"their power was at one time considerable; but the Mattá Sardárs and other Sikhs were early attracted to these fertile tracts along the river. . . . The Ahmadábád Rája was allowed to exercise his rights in Ahmadábád and Vand, and in his rent-free village of Churán; he took our side in 1849, and consequently still retains them. The two Pind Dádan Khán Rájas were eventually ejected from Pind Dádan Khán, and allowed three large villages rent-free instead; but they took the wrong side in 1849, and lost these also. They have now recovered certain proprietary rights in Pind Dádan Khán in this settlement."

The Kho-
khars.

The late Rája Sardár Khán of Ahmadábád was well thought of, and left a considerable estate. His son, Muhammad Hayát, is a foolish young man, whose future is very doubtful. His uncle, Sher Khán, deserves notice. To the Pind Dádan Khán family comparatively little property is left, but Rája Saif Alí, who, in position, though not by birth, is the head of the family, is endeavouring to improve his position; he has a small son, who alone

(1) Or on a new site to replace the old town, which is said to have been situated about a mile east of Khewrah, where there is a mound called Purána Pind.

CHAP. I, C. remains to carry on the line after its present representatives, his cousin Sáhíb Khán being childless. The two are perpetually bickering, and altogether the reputation of these Khokhars does not stand very high. Their claims to Rájput origin are locally admitted, and they are connected by marriage with some of the best Janjúa families.

The Kho-
khars.

The family is described at Vol. II, page 255, of Massy's Punjab Chiefs: the Ahmadábád branch has a considerable revenue-free grant, while the Pind Dádan Khán men have a pension of about Rs. 1,000 per annum: Saif Alí also holds the post of Sub-Registrar.

The late Sardár Khán was a Darbári, so are Saif Alí and Sáhíb Khán. The Khokhars say they used to keep up certain Hindu customs, and had *parohits*, who were Datts, until recent times; but that this is no longer the case. They do not know whether they are connected with other Khokhars of the Punjab.

The Jálaps.

The Jálaps are briefly described by Mr. Thomson with the Lillas and Phaphras as a "semi-Jat tribe," while Mr. Brandreth refers to them in paragraph 64 of his Settlement Report as being, like the Khokhars, a "quasi-Rájput tribe," who helped to oust the Janjúas from the Pind Dádan Khán plain. They have not been elsewhere specially noticed. They are the predominant tribe in the "*Jálap iláka*," the rich well tract between the river and the hills east of Pind Dádan Khán, and in position and influence are one of the principal tribes of that Tahsíl, though their numbers are small and they actually own little more than 25 square miles of land: this is their only seat in Jhelum, and they are not known to hold land in any other district, except to some small extent on the opposite side of the river.

They give the following account of themselves:—

They state that they were originally Khokhar Rájputs, who took the name of Jálap from an ancestor so called, who became a famous Pír, and was buried at Rámdíání in the Shabpur District, where they then dwelt, and where they still go to do reverence at his tomb: they moved to their present location in the time of Siddháran, several generations after the time of Jálap.

Another account states that in the time of the Emperor Sháh Jahán they were established on the banks of the Chenáb, when one of their chiefs was asked by Sháh Jahán to give him a daughter in marriage, as other Rájputs had done: the Jálap agreed, but the brotherhood disapproved of his action, and when he came home to fetch his daughter, set upon him and killed him. Sháh Jahán sent an army to punish them, and being driven from their homes they came across the Jhelum, and after many fights with the Janjúas established themselves where they are now found.

A third version given by the detractors of the tribe is that in the time of the Janjúa Rájás of Nandana, a fisherman was casting his net in the river, which was then close under the hills, and drew out a box containing a small boy, the child was taken to the Rájá, who called him Jálap, because he was found in a net (*jál*) and made over to him as his inherit-

ance the lands along the river: according to this account the Jálaps are really Máchhis.

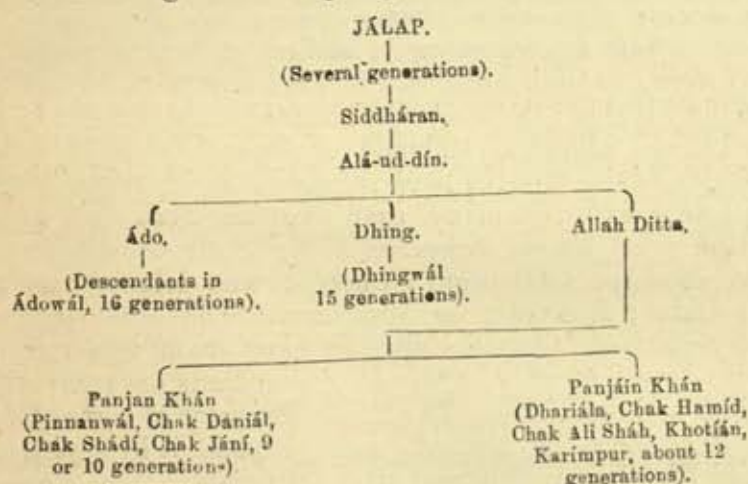
CHAP. I, C.

Population.

The Jálaps.

These fables throw little light on the subject; and the real origin of the tribe is involved in obscurity: their neighbours do not admit their claim to be considered Rájpúts; and in social standing the Jálaps come much below the tribes locally supposed to be of Rájpút descent, though, on the other hand, they rank considerably above the Jats. They are entitled to be classed with the "minor dominant tribes," but more it would be difficult to say. There is no striking difference between them and the surrounding tribes, either in physique, appearance, or manners: as agriculturists they are fair: of martial spirit they have shown but little in recent times, and very few of them are in the army, which may be, as they say, because they mostly have large holdings, and can well afford to live at home; it is certain that without fighting qualities they could not have established and maintained themselves in the most valuable tract in the district, against the Janjúas and others: there is no bar to their enlistment, and there are some signs that they may in future betake themselves to military service more freely than in the past. Their customs are those of the tract generally, but they maintain relations with Brahmans as *parohits*; and various common Hindu customs are observed by them at marriages. Their marriages are mostly *inter se*; but they take girls from the Khíwa, Kallas, and Bharat, to whom they do not, however, give their daughters: in marriages with the Janjúas and Khokbars on the contrary they give daughters but do not receive them. Widow remarriage is very rare amongst them.

The following is a brief pedigree table of the tribe:—



Amongst the Jálap headmen the following may be mentioned: Gulmawáz Khán of Chak Shádí; Bahádar Khán and Sher Khán of Chak Jání; Fazldád Khán and Jahán Khán of Pinnanwál; and there are several others of about the same standing.

CHAP. I, C.

Population.

The *Awáns*.

The *Awáns* hold in this district practically the whole of the Tallagang Tahsíl, the western Salt Range, and the Thal at its foot, with scattered villages in other parts of the district. They are also very numerous in the country adjoining Tallagang in the Ráwalpindi, Bannú and Sháhpur Districts, and in those further north. The Tallagang Tahsíl, with some of the tracts adjoining, is so essentially *Awán* as to be commonly known as "*Awánkári*."

Cunningham (Archæological Reports, II, 17 ff) is inclined to identify them with the *Júd* mentioned by Bábar as sharing with the *Janjúas* the possession of the Salt Range tract; would make both *Awáns* and *Janjúas* "*Anúwán*" or descendants of *Anú*; and thinks it probable that they held the plateaus which lie north of the Salt Range at the time of the Indo-Scythian invasion, which drove them southwards to take refuge in the mountains; but their present location hardly bears this out, and the first part of his theory is contradicted by the known facts that in Bábar's time the *Janjúas* ruled not only the Salt Range but the country to the north of it, and that the western Salt Range was conquered by the *Awáns* under leaders whose names are still well remembered.⁽¹⁾ It is difficult again to credit that the *Janjúas* and *Awáns* were within historical times one race. Another theory is that of Mr. Brandreth, that the *Awáns* are descended from the Bactrian Greeks, and entered the Punjab not more than 250 (now 300) years ago: he gives no reasons, and his views are almost certainly erroneous as regards the date of their settlement; it is sufficient to say that 300 years back takes us to the end of Akbar's reign, and that in the *Ain-i-Akbarí* the *Awáns* are shown as giving their name to a tract, which may without hesitation be identified with the present *Awánkári*.

The *Awáns* themselves always state that they have been *Musalmán*s "from the beginning"; and are of Arabian origin and descended from one Qutb Sháh, and through him from *Alí*, the son-in-law of the Prophet: and that Qutb Sháh ruled in Herát, but joined, with his followers, Mahmúd of Ghazní in his invasion of India, receiving from him the name of *Awán* or "helper." With Qutb Sháh were six of his many sons: Gauhar Sháh or Gorrara, who settled near Mount Sakesar; Kalán Sháh or Kalgán, who settled at Dhankot (*Kálábágh*); Chohán, who colonized the hills near the Indus; Khokhar, or Muhammad Sháh, who went on to the country about the Chenáb; and Torí and Jhajh, who remained in the trans-border country, where his descendants are said still to live in Tirah and elsewhere. The Hindu character of some of these names will at once be noticed; some explain it by saying that Chohán and Khokhar were named after the tribes of their mothers; others that the *Awáns* were converted to Hinduism, but after some

(1) Mallik Sháhzáda is famous as having ejected the *Janjúas* from the western Salt Range; he was the ancestor of the Shíál *Awáns* of Núrpur and Láfi; and lived only seven generations ago, say 200 years.

time were brought back to Islám, when 1 maund 25 seers of sacred thread was collected from their persons: these explanations fail to satisfy, and there can be little doubt that the *Áwáns* were originally Hindús.

They say that they found the *Janjúas* in possession and ejected them: this is certainly true.

In his Jhelum Settlement Report Mr. Thomson wrote as follows:—

"In such a conflict of authorities it is difficult to decide. The tribal tradition is probably a fable slightly connected with fact. Arabian ancestry is a favourite fiction, and Mahmúd of Ghazni is the common *deus ex machina* to save the confession of a primitive idolatry. On the other hand General Cunningham's theory seems incredible. It is supported by little or no evidence. It is almost unheard of for undoubted Lunar Rájputs of high pedigree to deny their origin, and to be joined in the denial by all their neighbours. Similarly the fancies about Bactrian Greeks are a mere surmise, and a very recent arrival of the *Áwáns* is contradicted by historical evidence. The most probable account seems to be that the *Áwáns* are a Jat race who came through the passes west of Dera Ismáíl Khán, and spread northward to the country round Sakesar. Here they were found by Mahmúd of Ghazni, and by him converted to Islám. This version is apparently in accordance with the less adulterated traditions of Dera Ismáíl Khán. It also agrees with those traditions recorded by Mr. Griffin, which point to a former Hinduism. It is moreover in agreement with the common speech of the country which always classes the *Áwáns* as *Zamindár* or low born men⁽¹⁾ in contradistinction to the *Sáhú* or gentle tribes of *Janjúas* and *Gakkhars*. Out of their own peculiar territory the *Áwáns* are frequently set down as *Jats* of the *Áwán gót* in the records of the first Regular Settlement. This is good evidence of the popular opinion. In Pesháwar they are always reckoned as *Hindkis*."

These views are noticed with approval by Ibbetson, para. 465. Mr. Wilson again, in the *Sháhpur Gazetteer*, writes that the *Áwáns* are, "so far as language, customs and physique go, an indigenous Punjab tribe." This will be the opinion generally accepted.

The *Áwáns* are divided into numerous clans (called *múhí*) which take their names from the common ancestor, thus the *Mumnáls* are the descendants of Moman, the *Saghráls* descend from Saghar, the *Shífáls* from Shihán, and so on. As regards the *Gangs* and *Munds*, who are generally reckoned as *Áwáns*, there is some reason to doubt whether they really belong to the tribe: the leaders amongst those who are admittedly *Áwáns* do not usually admit it, and it is quite possible that, surrounded as they are by *Áwáns* on all sides, they would gradually come to be regarded as members of the tribe even if they were not so in reality; but it is of course also possible that they may be *Áwáns*, though not descended from the latest common ancestor of the other clans.

Áwáns give their daughters in marriage to *Áwáns* only as a rule, though there seem to be some instances of marriages with

(1) This goes too far: the *Áwáns* here rank high in the social scale, below the *Gakkhars* and *Janjúas*, no doubt, but almost equal to the *Máirs* and other leading tribes of *Chakwál*.

CHAP. I. C. leading men of the Chakwál tribes : it is said, however, that the
Population. Kálábágh Mallik refused to betroth his daughter to Sardár Muham-
 mad Ali, chief of the Ráwalpindi Ghebas. In some families at
 least prominent Áwáns not infrequently take to wife women of low
 tribes (usually having an Áwán wife also), and this practice does not
 seem to meet with as much disapproval as in most other tribes of
 equal social standing ; but ordinarily Áwán wives alone are taken.
 Certain families marry with certain other families only ; and in all
 cases marriage is generally, but not necessarily, within the *múhí*.

The *Áwáns*.

The Áwáns are in their way good hard-working cultivators, their genius lying in the direction of elaborate embankments, to make the most of the scanty rainfall (as in the Thal), rather than in attention to small details : indeed in Tallagang their fields have often a very slovenly appearance, but this is more apparent than real. They are generally fine well-grown men, with plenty of spirit, and should make excellent soldiers, but they dislike more than any of the tribes of the district going to a distance from their homes, and there are comparatively few of them in the army. They are, however, very vindictive, and prone to keep alive old feuds ; in Tallagang these characteristics have led to an undefined but well understood factious organization, centering round the Malliks of Láwa ; the greater part of the Tahsíl is split into two parties, to one or other of which almost every headman belongs ; the bands of connection are not very tightly drawn, but everywhere each member of a party can look for general support and countenance from the other members. In many a village it amounts to little more than this, that a member of one party who has occasion to lodge there, will be entertained by the headmen belonging to the same faction ; but elsewhere the rivalry is very bitter. In the old time every son naturally belonged to the party of his father, but latterly some of the younger men have chosen for themselves, and have gone over to the enemy : this has given rise to great animosity : the cause is generally marriage connections with families on the other side (the two parties in Láwa itself freely intermarry), but this is not held to excuse the deserter. In Tallagang these feuds generally lead to intrigues, false cases, and occasional murders, but very seldom to open rioting. In the hills and the Thal the feuds are more personal than in Tallagang, and the people are more headstrong : riots on a large scale are therefore not infrequent : love of fighting has much to do with this, for cases have been known of inter-village riots being pre-arranged : the weapons used are large stones and long heavy sticks. These remarks apply principally to the Vunhar, which has long been notorious for its proneness to violent crime. The Áwáns are not addicted to thieving, and with all their faults they are a very fine peasantry.

The principal Malliks are Tahsíl : Tallagang, Ujjal Khán, Sultán Mubáriz, Azíz Khán, Muhammad Khán, Sher Muhammad, Ahmad

Khán, &c., all of Láwa; Sháhnawáz and Abbás Khán of Tamman, Sarfaráz Khán of Tráp, Ghulam Muhammad of Pátwáli, Núr Khán of Dhermund; Fazl Khán, Fazl Iláhi and Fatteh Khán of Tallagang; Muhammad Ashraf and Subedár-Major Mahr Khán of Pihra Fattál, Allahyár Khán, &c., of Thohá, Khán Bhára of Dhaular, Jahán Khán of Pachnand and Alladá of Mogla. Tahsíl Pind Dádan Khán, Lál Khán of Núrpur;⁽¹⁾ the Kandwál family, of which the late Ahmad Khán was head, is also a good one. Tahsíl Chakwál, Ahmad Khán of Kallar Kahár. Tahsíl Jhelum, Sardár Khán of Surgdhan.

CHAP. I. C.

Population.

The Awáns.

The Máirs are one of the three chief tribes in the Chakwál Tahsíl, of which they, together with the Kassars and Kahúts, hold the greater part: their share is most of the centre of the Tahsíl, with outliers to the west, south-west, and south: and with unimportant exceptions they hold no land in the other Tahsils or in other districts. Mr. Ibbetson, paragraph 454 of his Report, refers to their statement that they came from the Jammu hills, joined Bábar's army, and were located by him in Chakwál; and says that "they most probably belong to the group of Rájpút or *quasi*-Rájpút tribes, who hold the hills on either bank of the Jhelum." The following is the account they now give of themselves:—

The Máirs.

The name Máir, they say, is that of one of their ancestors in remote times: they are really Minhás Rájpúts (Minhás being a word denoting agricultural pursuits, applied to Rájpúts who took to agriculture), and that they are Dogras of the same stock as the Mahárájas of Jammú⁽²⁾. In proof of their relationship to the reigning family in Kashmir, they assert that when their misconduct in 1848 led to the confiscation of their *jágirs*, they sent a large deputation to Guláb Singh to ask him to intercede for them: and that admitting their hereditary connection with his family, he offered to give them villages in his own state, if they wished to settle there. Their ancestors originally lived at a place called Parayág, or Parguwál,⁽³⁾ about eight miles west of Jammú in the hill country, and are descended from Pargú Rája who gave his name to that place. The Dhanní country was then part of the kingdom of the Dogras, and was given to their forefather, Bhagiár Dev, as his share of the ancestral estates: he went there with his following, some time before the advent of Bábar, to found new colonies. The country was then occupied by wandering Gujar graziers, who were ejected by the Máirs, but not before their leader Bhagiár Dev had fallen in love with a Gujar woman, and through her influence had become a convert to Muhammadanism. (The pedigree table does not bear this out). With them from Jammú came their priests, the Brahmans now called Haule, of whom there are about a hundred families in Chakwál: they get small fees from the Chaudhriál of Chakwál at marriages, &c., and the weighmen's business of the town is in their hands: it is said that they are recognised by other Brahmans as being of that caste. The name Haule is ascribed to the fact that they formerly lived in constant dread (*haul*) of forcible conversion to Islám.

(1) Head of the Shíáls, or descendants of the great Mallik, Shíhán, of the later part of 18th century. An interesting account of this family is given in a letter of Mr. Arthur Brandreth, dated 21st March 1866, in the Deputy Commissioner's Office.

(2) This is confirmed by the Rájpúts of the country round Jammú, who say that an offshoot of the Súrjábansí Rájpúts was a clan now called Minhás, who degraded themselves by taking to agriculture and are therefore cut off from the privileges of Rájpúts.

(3) Pargwál, a large village in the Akhnúr Tahsíl, some 26 miles west of Jammú, is one of the principal Minhás centres in those parts.

CHAP. I. C.

Population.

The Máirs.

The first settlement of the Máirs in the Dhannf was at a spot in Mauza Chak Bárid near Chakwál, which was not far from the great lake which then covered all the eastern part of the Tahsil, up to the ridge followed by the Bhon-Dhudhiál road. When Bábar came he cut through the Ghorí Gala, by which the Bunhá torrent now escapes through the hills of the Salt Range, and drained the country, which the Máirs proceeded to take up.

The Máirs deny that the Chakwál Tahsil ever formed part of the dominions of the Janjúas, except the tract known as "Mahál," including Thir Chak, Kot Khilán, &c., which was taken by Jahán Khán, ancestor of the Chakwál and Kot Khilán families from Sáhib Khán, Janjua: and they assert that, so far from having ever been in subjection to the Janjúas, they themselves once held a great part of the Janjúá territory, as far as the Pind Dádan Khán plains.

The tribe is not divided into clans, though sometimes the descendants of a particular man are known by his name. In religion they are Sunnis, with a small proportion of Shías: in places of reverence, customs, &c., they have no peculiarity, unless it be that amongst some of the most prominent Máirs marriages are performed with a show of secrecy at night; but this is said to be merely in order to avoid the exactions of the crowd of Mirásis, which at one time became intolerable. The Kot Khilán Chaudhrís cannot give their daughters in marriage without obtaining the nominal permission of certain Jo Jats, residents in their village, to whom they also pay marriage fees; this is said to be a privilege granted to the ancestor of these Jats by a Chaudhrí long ago for murdering a rival chief.

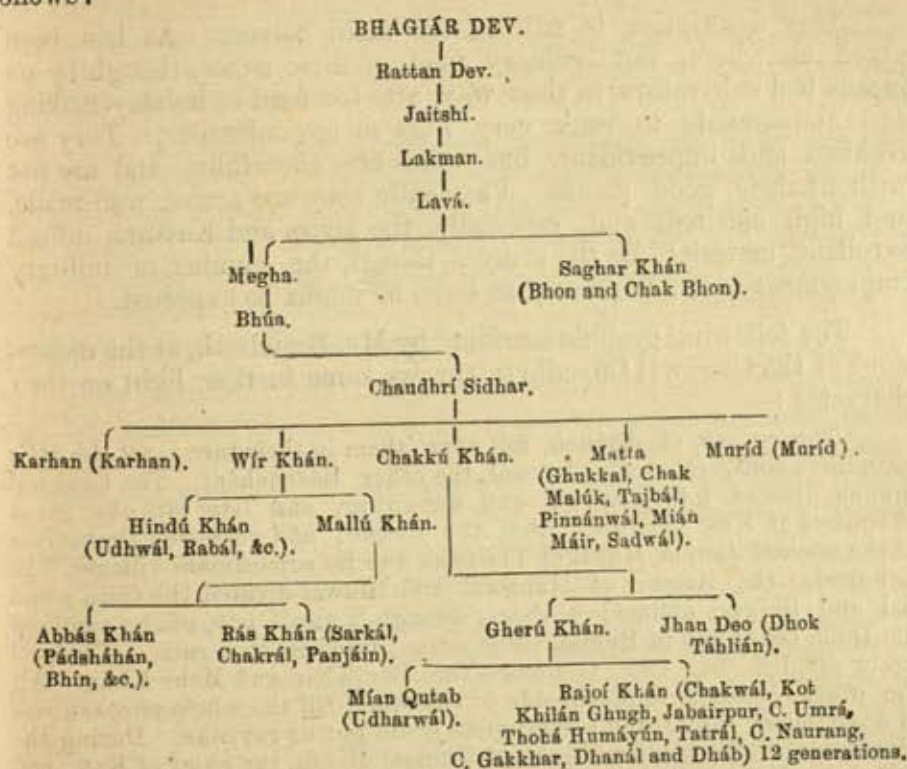
The Máirs intermarry with the Kassars, and to a less extent with the Kahúts: some of them deny that daughters are given to Kahúts, or if of pure descent, even to Kassars, but there are instances to the contrary. They also intermarry to some extent with Áwáns, and with the Johdras of Pindí Gheb. They do not give daughters in marriage to Sayyads, and of course cannot marry Sayyad girls themselves: they take girls from certain Gondal villages in the Sháhpar District. Usually, however, marriages are within the tribe. In good families the remarriage of widows is not permitted; a generation ago a widow in one of the principal families was killed by her father on the suspicion that she contemplated remarriage: amongst ordinary Máirs, however, widows are allowed to remarry; but they are under no obligation to marry their deceased husband's brother; and generally marry elsewhere.

The claims of the Máirs to Rájput descent seem to rest on a more reasonable foundation than is generally the case; but as usual no certain conclusion can be arrived at. A short pedigree-table follows:—

CHAP. I. C.

Population.

The Máirs.



This gives about 22 generations back to Bhagiár Dev.

The Máirs are a passionate and revengeful race, and zealously assisted by their neighbours, the Kassars and Kahúts, have made the Dhanní notorious for its bitter feuds, though these affect in general only the prominent families and their immediate followers. But the ordinary cultivator is by no means reluctant to enter heartily into smaller feuds and quarrels with his neighbours of like degree. Mr. Thomson says of them and of the Kassars and Kahúts:—

“Murders are very common among them, not for plunder, but from motives connected with women or land. They are good cultivators, but somewhat exacting landlords. Altogether they are far more materially minded than either the Gakkhars or the Janjúas. Envy is their most odious quality. Every family is distracted with mean jealousies, which are sometimes prosecuted with astonishing rancour. The grant of a chair or some slight honorary distinction to one member of a family throws all the rest into commotion. Not unfrequently this failing degenerates into criminal greed. One of the Kasar Chaudhris himself told me that he went in fear of his life till the birth of two sons secured the inheritance for his own family. From similar motives one of the Máir Chaudhris abandoned his own village and took refuge in another. This is not a pleasing description. It is fair to add that these vices seem to be gradually losing strength. At any rate they are awake to the necessity

CHAP. I, C. of working through legal channels. Many of the chaudhris are personally very engaging. Good horsemen, keen sportsmen with frank manners, and a good presence, it is sometimes difficult to understand how they should have such a mean side to their character."

The Máirs.

This description is still in the main correct. As has been noted elsewhere, the ordinary men of these tribes, though by no means bad cultivators in their way, are too fond of holiday-making and amusements to rank very high as agriculturists. They are reckless and improvident, but take life cheerfully, and are not without their good points. Physically they are active, well made, and high spirited, and, especially the Máirs and Kassars, afford excellent material for the army: though the number in military employment is not at present so large as might be expected.

The following graphic account by Mr. Brandreth, of the dissensions of the Chakwál Chaudhris, throws some further light on their character:—

"The course of division fell upon them in their turn. Of the Máir chaudhri's sons, one took Chakwál, the other Bádsháhání. The Chakwál branch divided into Chakwál and Jabairpur, and later still the great chaudhris of Kot separated from the former, and possessed themselves of the ancient Janjua Mahál of Thirchak and its subordinate villages. In Chaupeda, the Kassars of Mangwál and Minwál divided the *iláka*; and Bal and Bhikári claimed a share, though a small one, of the rights of the Dulla chaudhris in Bubiál. But worse divisions soon came. Chakwál again divided into two factions—Tora Báz Khán and Mehr Khán. All the other chaudhris took one side or the other, till the whole *pargana* was in a ceaseless fight, and Government could get no revenue. During the dissolution of the empire, Chaudhri Ghulám Mehdi, the chief of Kot, had called in Mahá Singh to protect them from the Awáns, the Janjúas, the Gakkhars; and Mahá Singh had agreed in return to give the old *talúkdárs* 200 *asámis* ⁽¹⁾ rent-free, and to uphold their contract for the rest of the *pargana*. But Ranjít Singh could get nothing from them. He first sent General Ventura, who made some severe examples, and appointed new chaudhris. But the old *talúkdárs* or chaudhriál soon regained possession, and held the country off and on alternately, till at last they invited the new chaudhris to a banquet; and, at a signal to clear the table, had them slaughtered in the Sikh Kárdár's presence. One, Sultán of Cháoli, escaped; not liking the invitation, he had stayed at home and collected his retainers, and thus saved himself from the party who set off to kill him also. On this the Máharája came in person, dispossessed the *talúkdárs* and settled each village either with the old proprietary body, or with the new cultivators. Chaudhri Ghulám Mehdi alone escaped this confiscation, and was allowed to retain the Rúpwal *iláka*. The Maharaja probably considered it desirable to have at least one of these powerful chiefs on his side. The others were carried off to prison, but soon bought their release, and obtained 110 *asámis* rent-free in lieu of all claims for the future. In these villages they recovered their proprietary rights, though many of them were changed or confiscated some years later by Maharaja Goláb Singh. But in 1848 they joined the Sikhs, and further disgraced themselves by making over a lady (Mrs. George Lawrence) to them. For this all their *jágirs* were confiscated, and all their proprietary rights, wherever

(1) "Asámi" was a technical term of the old Chakwál Revenue Administration. It meant a plot of 180 acres of cultivated ground.

they held any. Some escaped a portion of this latter penalty, such as the **CHAP. I. C.**
 chandhríal of Kot and Dulla, though the former were ejected on this order **Population.**
 a year or two later. In the late mutiny they distinguished themselves by **The Máirs.**
 some services and by general good conduct, and thus obtained a reversal
 of their attainder. Permission was granted them to sue for all ownership
 rights they had held up to our rule, and few cases in the Settlement have
 been more complicated than these. Small *jágirs* were also restored to a
 few of the heads of the families."

The principal Máir headmen are Khán Bahádar Chaudhrí
 Aurangzeb Khán, retired Extra Assistant Commissioner, of Chak-
 wál, and his brother Abbás Khán; Bázi Khán and Nawáb Khán of
 Kot Rúp wál; Mehr Khán of Ghugh; Allahyár Khán of Bádsháhán;
 Fattah Khán of Chakrál; Abbás Khán of Jabairpur; Abdulla Khán
 of Sarkál; Ghulám Haidar of Chak Naurang; Bahádar Khán of
 Dhakkú; Ghulám Muhammad of Mían Máir.

The Kassars hold the greater part of the north-west quarter **The Kassars.**
 of the Chakwál Tahsil, and, as far as is known, are not found in any
 numbers in any other part of the province: Ibbetson (Census
 Report, paragraph 508) remarks that until 1881 they seem to have
 enjoyed the rare distinction of being one of the few Salt Range
 tribes which claimed neither Rájput, Awán, nor Mughal descent,⁽¹⁾
 asserting that their original home was in Jammú, and that they
 obtained their present territories by joining the armies of Bábar;
 most of them, however, recorded themselves as Mughals at the
 Census of 1881, a claim "evidently suggested by their association
 with the Mughal power." This claim has now developed into a
 genealogical tree in which the Kassars are shown as being of
 common origin with the Mughal Emperors. Their present account
 of their origin is as follows:—

They were originally located in the country of Kinán in Asia Minor,
 whence they migrated to Ghazni, at some time unknown, with the ancestors
 of the Mughal dynasty, and subsequently accompanied Bábar in his invasion
 of India in A.D. 1526, their ancestors at that time being Gharka and Bhín (or
 Bhol), according to some; or Jhajha, Látí and Kaulshíh according to others:
 all agree, however, in stating that Gharka is buried on a mound in Mauza
 Határ, not many miles from Dhok Piplí in Bal Kassar, which is said to
 be the original settlement of the tribe in these parts. The Dhanní was
 then in the hands of wandering Gujars, while Changas Khán Janjúa held
 the hills to the south, living at Fort Samargand near Mauza Maira. Bábar
 made over to them the western part of the Dhanní, on condition that they
 would drain off the water with which the eastern part was then covered, a
 work which they proceeded to carry out: and Gharka obtained some
 additional country to the south-west as a reward for restoring to Changas
 Khán a favourite mare, which the Janjúa Rája had lost. They claim that
 the name, Balúki Dhan, under which the tract figures in the *Ain-i-Akbari*,
 is derived from that of their ancestor Bal, who also gave his name to the
 important village of Bal Kassar; and in this they are supported by the
 spelling of the lithographed edition of the *Ain-i-Akbari*, against the
 assertion of the Janjúas, that the name is Malúki Dhan, from the

(1) This is incorrect. Mr. Bowring in an account of the district in J. A. S. B., 1850,
 pp. 43—64, says, that they (and the Kahúts also) claimed Rájput descent.

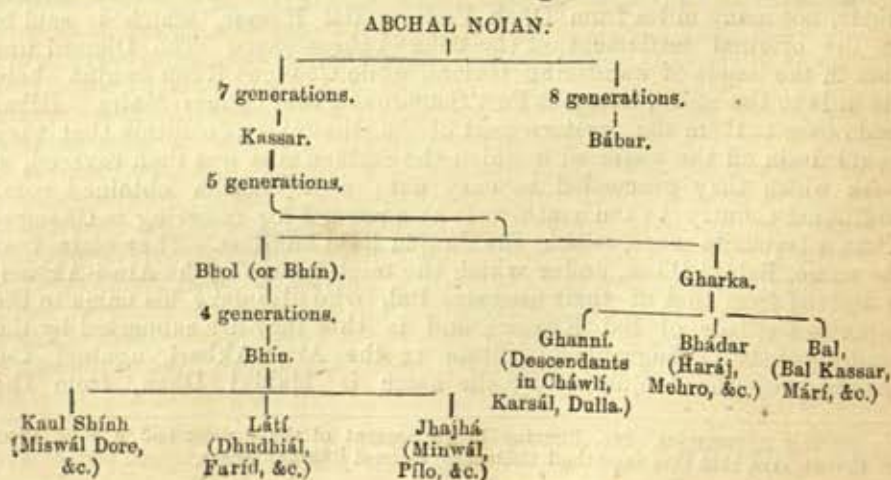
CHAP. I, C. Janjúa chief Mal of Malot. They explain the presence now of the Máirs and Kahúts in the Dhanéi by stating that, as relations of the reigning dynasty, they were themselves able to keep out all intruders in the time of the Mughals; but in Sikh rule the Máirs, being of the same stock as the powerful Jammú Rája, were able to obtain a footing in the tract: they generally admit that the Kahúts came with them in Bábar's train and settled here at the same time as themselves, but say that they were of small account until the time of the Sikhs. They state that the original profession of the tribe was '*hákúmat*' or government; and that it is now agriculture or Government employment. They use the title of Chaudhri. They have no special Pírs or places of worship, and their customs do not differ in any respect from those of the tribes surrounding them, except that the graves of women are distinguished by stones at the head and foot parallel to the breadth of the grave, while those of men's graves are parallel to the length; this is just the opposite of the custom in the Jhelum Pabbi.

Whatever may be thought of the claim of the Kassars to rank as Mughals, they certainly have a good position amongst the tribes of the district, ranking in the popular estimation with the Máirs and Kahúts. They intermarry freely with the former, both giving and taking daughters; but a Kassar of good family, who married his daughter to a Kahút of fair standing, incurred the displeasure of the brotherhood: they do not intermarry with any other tribe, though, as is usually the case in this district, low caste wives are occasionally taken by them. Máirs, Kassars and Kahúts eat together, but do not eat with *kamíns*.

The doggerel rhymes of the tribal Mirásís contain little of interest, either setting forth in extravagant terms the power of individual chiefs of bygone generations, or recording the incidents of the comparatively recent internecine feuds of the tribe: the following is well known, and another version is given by the Máirs also:—

Charhiá Bábar Bádsháh; Kahár tambú tandé:
Bhín te Gharká Kassar doen nāl áe.

An abbreviated tree of the tribe is given below:—



The first part of the tree connecting the tribe with the Bábar is obviously fanciful; and the last part is not, of course, altogether reliable: it is worth noting that such names as Tilochar, Nand, Pres, &c., are in the former mixed up with Muhammadan names: while a Jhan Deo occurs much lower down on the tree: these names may perhaps be indications of Hindú origin, though the representatives of the tribe say that they were Musalmáns long before they came to these parts. There are about 25 generations on the average intervening between Kassar and members of the tribe now living.

As regards the character of this tribe see remarks on the Máirs above.

The principal Kassars are: Muhammad Ashraf, Sher Khán and Ghulam Muhammad, all of Dulla; Habíb Khán of Cháwli; Muhammad Firoz, minor ilákadár of Balkassar, and his uncle Muhammad Khán.

This tribe is located almost entirely in the Chakwál Tahsíl, though it has scattered villages in the other Tahsíls, and in the adjoining districts of Sháhpur, Gujrát, Ráwalpindi, and Hazára: in Chakwál the Kahúts are found mostly to the south, in the Kahútání *iláka* to which they have given their name. Mr. Ibbetson, paragraph 454 of his Census Report, says of them, as of the Máirs, that they claim to have come from the Jammú Hills and to have been located in Chakwál by Bábar: he classed them with the Rájpúts, though there is nothing to show that they claimed Rájpút origin, and they make no such claim now, as will be seen from the following account now given by them, of their migration to this tract:—

They were originally located in Arabia, and are Qureshís, the present tribal name being merely that of their common ancestor: 24 generations ago, about the year A. D. 1359, their ancestor, Said Nawáb Ali, migrated to Delhi, in the reign of "Firoz Shah, Ghauri:" (Firoz Tughlaq, son of Muhammad Tughlaq, is no doubt meant; he reigned from 1351 to 1388 A. D.): on the way to Delhi they fought and conquered a pagan king of Siálkot, named Sáiín Pál, who was, they say, probably a Dogra prince. On reaching Delhi they paid their respects to the king, who ordered them to hold the Dhanní and the Salt Range on his behalf: under the leadership of Kahút, the son of Nawáb Ali, they accordingly retraced their steps to this district, and settled first at Gagnelpur, of which the ruined site is shown in Mauza Wariamál near the foot of the Salt Range: here they remained for some time, realising the revenue from the Janjúas of the hills and the Gujar graziers of the Dhanní, and remitting it to Delhi. The Máirs and Kassars had not then arrived in these parts, but came six or seven generations afterwards. The eastern Dhanní was then a lake, which on the coming of Bábar was drained at his command, the Kahúts taking part in the work, and colonising the land reclaimed. Chaudhrí Sahnsár, 8th in descent from Kahút, was their ancestor of the time of Bábar.

They have no peculiar customs, except that the males of the tribe never wear blue clothes, or, if they do, fall ill: this is ascribed to the vow of a sick ancestor. The tribe is not divided into clans.

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Population.

The Kassars.

The Kahúts.

CHAP. I. C.**Population.****The Kahúts.**

They intermarry to some extent with Máirs and Kassars, and now and then with Awáns, both giving and taking daughters; but usually marry within the tribe. The re-marriage of widows is permitted, but is not customary in good families: where it is allowed, it is not necessary that the widow should marry her deceased husband's brother.

The Mirásís of the tribe give some of the usual rhymes: one relates to the passage of Bábar through Kallar Kahár, the first two lines being as given by the Kassar Mirásís, with the addition of a third, *Kahút potre Abú Táláb de awwal ae*; but the latter does not hang well together with what precedes it: Abu Táláb referred to was the uncle of the Prophet. Another runs: *Kahút charhiá Dihlion sat már naqáre: chár hazár bhirá aur kammi sáre: Kahút Dhoná surkhrú hoiá: sunnia chandal sáre*. Dhoná is the name of a Kahút leader they say. A third is a war song, relating to fights of the Kahúts with the Janjúas.

It seems unlikely that if the Kahúts were of Rájpút origin, as supposed by Ibbetson, they would profess themselves Qureshís: in standing they rank with the Máirs and Kassars, but not quite on an equality with them: thus the Kahúts claim to intermarry with these tribes, which are not disposed to admit that they do so, though there are certainly instances of the kind. Their Qureshí origin is not acknowledged by others, nor do they intermarry with the families, which, no doubt rather by circumstance than by descent, locally rank as Qureshís; but this might well be due to the fact that those families are revered as Pírs, while the Kahúts have never done that kind of business, their profession now being agriculture or Government service, as they say it always has been. In the account that they give of themselves there seem to be some indications of Hindu origin; in character and appearance they differ little from the other two foremost tribes of the Chakwál Tahsíl, but whether they are of the same stock is very doubtful.

The character of this tribe has been described above in the remarks on the Máirs.

Prominent Kahúts are Ghulám Muhammad and Ghulám Hussain of Kariála and Budhá Khán of Langáh.

The Jats.

The Jats bulk largely in the census returns; but in this district there is no Jat tribe of common descent and with common traditions: the word is applied to any cultivator who does not claim foreign or Rájpút origin, and does not belong to any of the other great agricultural tribes of the tract. Probably the bulk of the people so classed are the descendants of Hindu forefathers, and were amongst the earliest settlers here, though nothing definite is known about them; but no doubt they include also many families from other tribes in the district, who in the course of generations have lost touch with their original connections, and have become merged in the great body of the cultivators: indeed, according to one view very commonly accepted, this might be said of the Jat tribe in general; for by that theory the Rájpúts and Jats are of

common origin, the former being the descendants of the ruling classes and the latter of the ruled.

CHAP. I. C.

Population.

The Jats.

The first time we hear of anything definite about the Jats, about 400 years ago, they are cultivating their lands under subjection to the Janjúas or the Gakkhars; and this remained their condition: they therefore never took any prominent part in the stormy politics of the district: and even now, when their position has been so much improved by their becoming independent proprietors in many estates, there are very few men of note amongst them. There are some men of standing amongst the Phaphras and Lillas, who may probably be classed with the Jats, but they have been separately noticed: elsewhere the only prominent men amongst them are the Chaudhrís of Maira in the plain above Jhelum, whose influence is practically confined to three or four villages.

The Jats are amongst the best cultivators of the district, generally well behaved, though some sections near the river are given to thieving, usually of good or fair physique, and not wanting in spirit: apparently they make good soldiers.

This is a small tribe, occupying a compact area of about 25 square miles at the foot of the Salt Range, east of Pind Dádan Khán: and to this small block of ten or eleven villages they are almost entirely confined. They do not seem to have been specially noticed in any previous publication, except by Mr. Thomson, who briefly refers to them in para. 76 of his Settlement Report as a "semi-Jat tribe." They have long claimed to be of Mughal descent, and of course have no difficulty in producing a pedigree showing their descent from Taimúr: the only other evidence brought forward is a *sanad* of a Kárdár of Mughal times, conferring an assignment on the headmen of Mauza Dhudhí, still one of their principal villages, in which the grantees are referred to as "Mughal zamíndár"; but examination shows the word Mughal to be a clumsy interpolation, and the interpolator has also thought fit to alter the date from 1133 to 1033, overlooking the fact that the document bears a seal with the date 1133 H. The *sanad* thus proves no more than that the tribe was well established in its present location in the year 1133 H., or 1720 A.D., and tends to prove that in Mughal times they were considered to be "zamíndárs" not Mughals. For the rest, their Mughal origin is not admitted by the surrounding tribes; and they intermarry with such tribes as the Lillas, Gondals, Wahráichs, &c., who are for the most part almost certainly Jats. Their claims must therefore be rejected, and they must themselves be regarded as probably of Jat origin, though it should be added that in popular estimation they rank somewhat above those who are admittedly Jats.

The
Phaphras.

They state that they came to this district from the direction of Farídkot, and settled here as agriculturists: the name of their leader at that time is said by some to be Phaphra (from whom

CHAP. I. C. the tribe is stated to have derived its name), and by others to be
Population. Nittháran, some fifteen generations back according to the pedigree tables, while Phaphra is shown nine generations earlier.

The Phaphras.

In character, customs and physique they do not seem to differ from the other minor agricultural tribes of the district: they are good farmers.

The earlier part of the pedigree table now produced by them is worthless: in those forming part of the earliest settlement records the first fourteen generations are as follows: Har Bamh or Sháh Biráham, Tilochar, Sháh, Mal, Phaphra, Pherú, Vatrí, Jatrí, Hársh or Áraf, Tulla, Nádo, Har Deo, Máh Pal, Nittháran: they all trace their descent from Nittháran, who had five sons: Gharírb, (descendants in Gharírbwál), Samman (Sammanwál), Ichhrán (son's name Sáú, descendants in Sáúwál), Ráú (Rawál), and Dhudhí (Dhudhí, Qádarpur, &c.). Some of the earlier names are clearly Hindu: the common descent from Nittháran, whose date according to the tree would be about the middle of the 15th century, is in favour of the account which makes him the first settler in these parts. The principal Phaphra Chaudhrís are Sháhbáz Khán of Dhudhí, Fazldád Khán of Gharírbwál, Ala Dín of Sáúwál, and his uncle Chaudhrí Allah Bakhsh, Extra Assistant Commissioner.

The Lillas.

The Lillas are a small tribe holding the four large villages of Lilla Bhera (also known as Mainowána), Lilla Bharwána, Lilla Hindwána, and Lilla Guj, which are said to be named after their founders, Maino, Bharo, Hindo, and Guj, who appear on the pedigree table below: they consist of a block of about 40 square miles at the foot of the hills, in the Thal, west of Pind Dádan Khan. The tribe is not mentioned in the Census Reports: Mr. Thomson merely names them as a "semi-Jat tribe."

They and their Mírásís give the following account of their origin and settlement in this district:—

They were originally located in Arabia, being relations of the Prophet on his mother's side, and therefore if they had their rights, Qureshís: in the time of Sultán Mahmúd of Ghazni a member of the tribe named Hárás migrated to India, with a band of 160 men as well as dependants, and settled at a place called Masnad in Hindustán, which they say still exists as a small town or village, though its exact situation is not known. (Hárás is 27 generations back in the pedigree table, which agrees fairly well with the statement that he was a contemporary of Mahmúd). The story then becomes confused, but apparently after about seven generations their forefathers went to Multán, where the well-known Pír of that place gave them one Ghauns Sháh as a spiritual guide, and warning them that they would prosper as long as they remained united, but that dissension would lead to their ruin, sent them away: taking Ghauns Sháh with them, the tribe then proceeded to a place called Shahidgarh, or Shahídánwáli, also known as Lilgarh (said to exist still on the Chenáb, in the Gujránwála District), and there encamped. After they had been settled there some time the natives of the place began to get tired of the trouble they caused, and made complaint to the

CHAP. I. C.

Population.

The Lillas.

Emperor at Delhi, who ordered that they should be moved on: the local governor, not liking the business, entered on intrigues in which Ghauns Sháh played a principal part, and at last succeeded in dividing the tribe into two factions, which fought a pitched battle, one party being defeated and dispersed (having scattered descendants now in the country near the Chenáb), while the other part, weakened by the struggle, migrated to the present location of the tribe, headed by Lilla Buzurg, who comes 20 generations ago by the pedigree table. The tract they now hold was then occupied by a tribe of Jats (Hál, said by them to be found nowhere else), while the local governor was an Anand of Bhera. The Háls were defeated and exterminated, but a pregnant woman escaped, and from her son the four or five families of Háls, who now hold land as *qabza máliks* in Lilla, are said to be descended. The extensive mounds to the west of the present Lilla are said to mark the site of the Hál village. The Áwáns, they say, had not then invaded the Thal, though probably established earlier in the Tallagang Tahsíl.

They are Sunni Musalmáns, and say that they were so long before their migration to India: they deny that they have ever had any connection with Brahmans as parohits, &c., and they certainly have none now. They have no special Pír peculiar to the tribe, asserting that their real spiritual leader is the Pír of Multán, the successor of the man who gave them Ghauns Sháh before their journey to Lilgarh, though the connection has lapsed with time; but they still go occasionally to do reverence at the shrine of Baháwal Haq at Multán. Their birth, marriage and death customs are those of the district generally, though in burying the dead, they distinguish between the graves of males and females by placing the "headstone" at the head of the grave for the former and at the feet in the case of females. For some reason unknown, the Lillas never wear blue *pagris*. Agriculture is said to have been their original occupation as now.

They say they intermarry only with people of their own tribe, or with Phaphras, Gondals, and Jethals; but in fact are believed to marry with any tribe that is considered *zamíndár*, or Jat, the two words meaning much the same here. They both give daughters to, and take daughters from, the tribes referred to. Widow remarriage is permitted and a widow usually marries her deceased husband's brother: she cannot now be forced to do so, but they say that this was the practice before British rule.

By common repute the Lillas are Jats, as are the tribes with which they intermarry: they eat and drink with Mirásís, but draw the line at Musallís: they are proverbially turbulent and factious, and produce a rather large number of bad characters. A local saying charges them with selling their daughters in marriage, and then getting them back again to sell once more. Physically they are well developed, and seem to resemble their Awán neighbours; but they have not taken much to service in the army. They are industrious cultivators.

The first 23 names on the pedigree table produced are: Tamím-un-Nasárí, Tai, Harba, Músa, Muharram, Nofal, Moharra, Asmat, Same, Kullia, Rahmán; HARAS, Nazra, Abdulla, Ratba, Umra, Tai, Zulm, LILLA BUZURG, Waghra, Muhammad Mukím, Jhajha, Shíhán, the last named had two sons, Kála and Guj, and

Population

Kála had three, MAINO, HINDO, and BHARO. From these four all the present Lillas claim descent.

The principal Lillas are Ahmad Khán, *ilákadár*, Lutf Khán and Bahádar Khán.

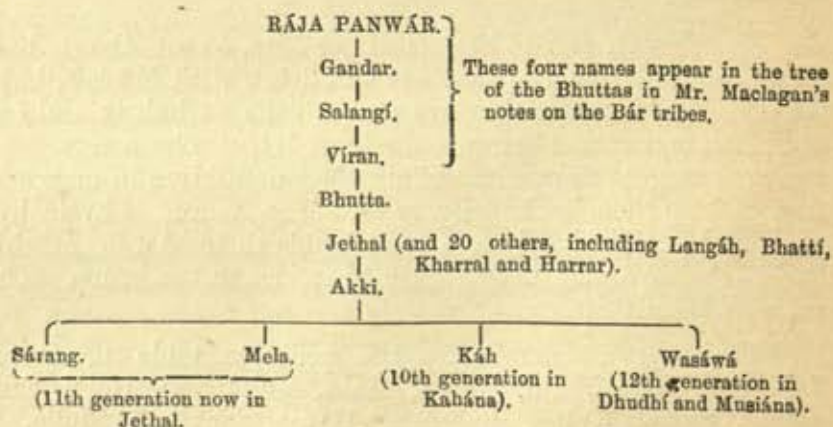
As far as is known this tribe is found only in the Jhelum District, and there holds only four villages of moderate size in the Thal, between the river and the Lilla estates. By their own account the Jethals are Bhattís and therefore Rájputís; but other people say they are Bhuttas, and in this they are supported by the pedigree table, and by the account below, that commonly accepted, of the migration of the tribe to the Jhelum Thal:—

Bhutta, the common ancestor 12 or 14 generations ago, was married to a woman whose sister was the wife of one of the Ghaurí kings: the two met, but for some reason the meeting was not an agreeable one, and Bhutta soon found himself attacked by the king's army, to which after a long struggle he had to surrender, and migrated with his 21 sons to the Bár country: one of his sons, Jethal, came on across the Jhelum, and settled at Ratta Pind, a mound near Kandwál: after him his sons founded the four villages now held by the tribe.

They state that they were originally settled at Uchh Sháh Jalál "in the south," which would seem to be the Uchh in Baháwalpur mentioned by Ibbetson in his remarks on the Bhuttas of Multán in para. 429 of his Census Report.

The Jethals seem to have no distinguishing customs or characteristics: they keep, however, a good deal to themselves, generally marrying within the tribe, though they intermarry also with the Lillas. The Bhuttas of Multán are classed by Mr. Ibbetson as Jats, and there seems to be little doubt that the Jethals are of the same stock.

Omitting the earlier part, a mixture of Hindu and Musalmán names which appears to be worthless, the pedigree table is as follows :—



There are no prominent men amongst the Jethals.

The Gujars are an important tribe in the east of the district, where they hold about 80 villages, with as many square miles of land, including many of the most fertile estates in the district: they are chiefly found in the plain north of Jhelum; there are a few scattered about in other parts of the Jhelum Tahsil and in the Pind Dádan Khán Tahsil, none in Tallagang, and only a small block of villages in the north-east is held by them in Chakwál.

As in other cases, so with the Gujars: little or nothing is really known of their origin. Cunningham (Archæological Reports, Vol. II, 61 to 82) comes to the conclusion that they are descended from the Yuechi Scythians, who invaded north-west India in the first centuries before and after Christ. Ibbetson, para. 481, says of the Gujar "the theory of aboriginal descent, which has sometimes been propounded, is to my mind conclusively negatived by his cast of countenance," and in para. 480: "Throughout the Salt Range tract, and probably under the eastern hills also, they are the oldest inhabitants among the tribes now settled there." It is not possible to go much further than this with any certainty, but this may be added that, whatever the country from which they originally migrated, the first settlers in this district are an offshoot from the Gujars of the neighbouring district of Gujrát, and that before they came to Gujrát their ancestors inhabited the country in the south-east Punjab and Rájputána: not only is there a strong tradition to the effect amongst the Gujars themselves, but they have retained to a surprising extent their distinctive speech, apparently a dialect of Hindí, which points to a southern origin.⁽¹⁾ As regards the view that they are the oldest settlers of the tribes at present inhabiting the tract, it is of interest to note that several of the dominant tribes, especially in the Dhaní, say that when their own ancestors settled here, they found the country peopled by wandering Gujar graziers.

The Gujars generally say that they are by origin Rájputés of Hindustán, and that in some distant age their ancestors migrated from that country and settled in Gujrát, finding it a good place for grazing their cattle: the rulers of the time were Wahráich Jats, to whom they paid revenue. Some of them claim descent from Jai Pál and Anand Pál, who resisted Mahmúd of Ghazní at Nandana, and were probably Janjúa chiefs. The Bharras, again, both here and in Gujrát, say they are really Janjúas, those of Jhelum claiming descent from Shekh Nátha (16 generations back by the pedigree table), said to have been a member of the Makbiála family, who fled from his home after killing a relation, became a *fáqír*, and died in the odour of sanctity. This claim is seriously urged; as much cannot perhaps be said of the assertion of other Gujars that they are Rájputés.

(1) Called by themselves Gojri, and by others "*Thdro-mávro*," from the two words meaning "thine and mine": this peculiar dialect survives, it is believed, to a much greater extent in the Jhelum Tahsil than even in the Gujrát District, the Gujars here having kept more to themselves than elsewhere: in the scattered Gujar villages in other parts of this district, Gojri is seldom heard.

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Population.

Gujars.

It is perhaps founded on the fact that the "*Bad Gujars*" appear in the *Ain-i-Akbari* in an enumeration of the *Rájpút* tribes: and that some of the Gujar sub-sections have names similar to those used by *Rájpúts*; *Gorsí*, *Chechí*, and *Paur* (*Panwár*), are given as instances.

The later history of the Gujars is easily told: yielding successively to the *Janjúas* and the *Gakkhars*, they for many generations cultivated such land as they were able to retain in subjection to those tribes, playing an inconspicuous part in the politics of the district, never able to rise to much importance, and looked upon by their more powerful neighbours with something akin to contempt. Nevertheless the *Kálá Chaudhri* must have had considerable influence to be entrusted by the emperor *Bahádar Sháh* at the beginning of the 18th Century with the Governorship of the Gujar *Chaurási*; and some of the other Gujar *Chaudhrís* retained at any rate a local importance up to the time of annexation.

The name Gujar is said to be merely *gau char*, or cattle grazier, a derivation which is possibly correct, as it is well known that the Gujars were originally graziers rather than cultivators, and are so still in many districts. Even here, after so many generations of settled cultivation, they retain traces of their former occupation, keeping milch-kine and buffaloes for profit to a far greater extent than any other tribe; their women may often be seen weeping with veiled faces over the death of a milch buffalo, and the mourning on such an occasion is second only to that when a member of the household dies.

Representatives of almost all the sub-divisions of the Gujars given on page 264 of Ibbetson's Report are to be found in this district, and of a number of others: in fact there are 37 sub-sections here altogether, the *Khatáns* being by far the most numerous; after them come the *Chechís*, and then the *Paswál*, *Chuhán*, and *Kálas* clans. The *Paswál Chaudhrís* of *Kálá*, the *Khojkí* family, and the *Kálas "Rája"* of *Kálas* in *Chakwál*, represent the three great Gujar families of former times, and two of them are still much looked up to by their fellow-tribesmen: the third, *Nathe Khán*, the *Khojkí Chaudhri*, has been reduced by extravagance and poverty to insignificance: the *Kálá Chaudhri*, too, *Fatteh Muhammad*, the heir to the greatest name of all among the *Jhelum Gujars*, is a young man of no great ability and in very reduced circumstances; his near connection, *Muhammad Khán*, the *Paswál Chaudhri* of *Jakkar*, is among the most deserving men of his class in the district, and possesses much influence: *Ahmad Khán* of *Kálas* is another good specimen of the Gujar headman, capable and self-respecting: "*Háfiz*" *Ghulám Muhammad* of *Dína* also deserves favourable mention; he enjoys the distinction of having been the only man in the district recommended for a new *ináma* at the settlement of 1880; he is now rather old; he is one of the *Bharras*

referred to above, and as the head here of this "saintly" clan enjoys considerable influence. Umr Bakhsh of Muftian is another Gujar of good standing.

The Gujars of Jhelum differ entirely in character from that idle, thievish and cowardly race, their fellow-Gujars of the southern districts: here they are undoubtedly the best all-round cultivators of which the district can boast, though in well-cultivation they are excelled by the Malliárs: their physique is very fair, equal at any rate to that of the Jats, whom in many ways they much resemble. It is a great grievance with them that they are not admitted to the army: there are many good men amongst them, but it must be admitted that as a class they are inclined to be intriguing and quarrelsome, and rather addicted to thieving where the circumstances are favourable; while there would be objections to their serving in the same regiments with Gakkhars and Janjúas, who still look down on them as an inferior tribe.

These are two very miscellaneous classes: it is impossible to say to what extent those who claim to be Mughals really are so; but it would be easy to point to instances where so called Mughals are nothing of the kind. The reputation of the Mughals as a whole suffers from the fashion amongst men of low origin who have risen in the world, of selecting the name of this race to cover their real extraction. The Mughals have no very notable men: among the Káks of the eastern Salt Range, Sher Báaz Khán of Lahr-Sultánpur is the most prominent, while in the cluster of Mughal villages around Chautála there is no one of much mark. Those who are called Shekhs in these parts are usually comparatively recent converts from Hindúism; they naturally therefore include very varying elements: the only Shekhs of any mark are those of Khokhar, who are separately noticed in the description of the Gadhioks below; and they are inclined to object to their inclusion in the dubious class of Shekhs.

Mr. Thomson says that the Malliárs are "Araiens": this is hardly correct; no doubt any Araiens who may have settled here are classed as Malliárs, but the word Malliár is the name of an occupation, not of a tribe, and means simply a market-gardener, and the men classed under this head are a very mixed assortment gathered from many different tribes. They are excellent cultivators on well-lands, and have not that feeling that it is shameful to sell vegetables, etc., that is so strong amongst ordinary *zamíndárs*; on rain lands their farming is not so successful. There are no prominent men amongst them; they are distinguished for success in market-gardening and for nothing else. The large agricultural tribes look down on them as decidedly their inferiors.

The Hindús of the district—Brahmans, Khatrís, and Aroras—the Khatrís being by far the most numerous, are important as providing almost every merchant, tradesman, and money-lender that it supports: the exceptions are a few "Shekhs" (usually

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Population.
Gujars.

Mughals,
Shekhs.

The Malliárs.

The Hindús.

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The Hindús.

converted Hindús) and Khojas, who are looked on with much contempt by their fellow Musalmáns. Amongst the Hindu population, however, are some large classes separately described below, the Muhiáls and Gadhioks, who abstain from all kinds of trade: otherwise, with the exceptions of a few *jágírdárs*, *faqírs*, and the considerable body of men in the service of Government, practically the whole Hindu population is engaged in trade. They reside for the most part in the towns and large villages, though in most of the smaller villages, too, a few petty shopkeepers are to be found: a thrifty body of men, much more patient and far-seeing than the Musalmán peasants, the Hindús have by sales or mortgages, often the result of accumulated intervest on small original debts, succeeded in getting possession of a large proportion of the land. They are generally known as exacting and unsympathetic landlords. Moreover, having been much more ready than the agriculturists to avail themselves of the opportunities now offered for the education of their children, they have obtained a very large share in the appointments under Government in most Departments. No class has benefited to such an extent from British rule.

About half a dozen villages scattered about the district are held and cultivated in whole or part by Hindús, who usually contrast very favourably with their Muhammadan neighbours in the matter of thrift and management; but in general the Hindús take no personal part in cultivation.

The Khatrís have plenty of spirit, and many of them have risen to high distinction in the army; while in civil appointments they provide some of the best public servants that we have.

The Aroras are below the others in the social scale, and it is the common opinion that as money-lenders they are more grasping and unscrupulous than the Khatrís.

Of genuine Sikhs there are few in the district: many call themselves Sikhs, but only a small proportion keep the hair long, and fulfil the other requirements of the Sikh religion.

The following is a brief notice of some of the principal Hindu families in topographical order:—

The Missars of Sanghoi⁽¹⁾ are the descendants of Missar Amír Chand, and were well known in Sikh times for the high positions they held and for their wealth: the head of the family (excluding the branch living in Dehra Dún) is Missar Sukhrám Dás. They are well to do, but have now no local influence.

The Chautála Sardárs are a very old military family, and the late Sardár Jawáhir Singh⁽²⁾ was held in much honour. The family has now no worthy representative. They are Bunjáhlí Khatrís.

In Domeli there are many Khatri and Brahman soldiers who have attained much distinction in the army: they are all self-made men. Sardár Bahádar Subadar-Major Jai Singh, late of the Guides, deserves mention.

(1) Punjab Chiefs, latest edition, Vol. II, p. 268, and Appendix, p. 118

(2) Punjab Chiefs, Vol. II, p. 278, Appendix, p. 120.

Good agricultural families are the Datts of Bajwála, and some other villages along the river: and the Sabarwál Khatrís of Khálsa Andán, whose head, Bhái Hansráj, is much esteemed: some of this family have now taken to money-lending.

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Population.
The Hindús.

In Bhon there are many good Hindu families, enterprising people who go far afield to obtain service under Government: the Munshiál family of Talwár Khatrís is an old one. Their present head is Sardár Ganpat Rai, a retired Deputy Collector of the N.-W. P. The Bakhshiáls are Wahora Khatrís with a tradition of military service: the late Sardár Bahádar Resaldár-Major and Hon. Captain Sampuran Singh, and the late Bakhshi Fatteh Chand, Baháwalpur Motamid, were distinguished members of this family. The Mehtíáls are Gadhioks (see below): their present head is Sardár Bahádar Resaldar Major Dúni Chand, late of the Guides. The Báhrís, Kapúr Khatrís, were originally in Multán, but before British rule settled in Bhon, Makhad, and more recently in Jhelum, and have contracted relationships with other good families of the district: they go in chiefly for civil service. The head of this family is Lála Sainditta Mal, well known and respected at Jhelum.

A well-known and respected family of Mubíáls, which has for many generations held land in this district, is that of which Bhái Gurdit Singh of Kariála in Chakwál (a *darbári*) is the head. He is an *ilákadár* and *jágirdár*.

In the Tallagang Tahsíl there are plenty of Hindús, but none of much standing, except the Chháchhi Sardárs, Mehr Singh, etc., whose ancestors held the tract under the Sikhs: they are large *jágirdárs*, but reside almost always in the Gujrát District, and have really little to do with Tallagang. The only other prominent family is that of the Johars of Tallagang, of whom Lála Amír Chand and Mangal Sen, Extra Assistant Commissioners, are the present heads. The family is not an old one, at least not in its present rank, which it owes to the high offices to which its members have attained.

The Brahman family of Missars in Dalwál, now falling into decay, had great wealth and influence in the time of the Sikhs; its present representatives are Missar Gobind Rám and Lachman Dás.

The Díwán family of Gadhioks in Dalwál, headed by Díwán Kirpa Rám of Díwánpura, was also prominent under the Sikhs, Mulráj, Governor of Hazára, having belonged to it.

The Khatri Sardárs of Vaháli in the eastern Salt Range are a family which has come to the front in the last generation or two, and is now one of the most prominent, as well as one of the wealthiest, in the district. Their present representative is Sardár Hari Singh who is a Viceregal *Darbári*.

The Khatri Sodhís of Haranpur are, as the lineal descendants of one of the earlier Sikh Gurus, regarded by Sikhs with reverence, but they have hardly any influence locally, Sikhs being so few. They have been consistent supporters of the British from the first, and for their good services retain a considerable *jágir*. The Sodhís and the *zamíndárs* of Haranpur (with many of whom they have had business transactions) dislike each other cordially, and their relations are always more or less strained. The principal members of the family are Sodhís Sher Singh, Sampúran Singh, and Hari Singh, who are *Darbáris*. An account of the family is given in the Punjab Chiefs, Vol. II, page 251.

In Pind Dádan Khán, the Sahgal Khatrís, of whom Lála Pindí Dás, Settlement Officer, Kashmir, is the head, are a good "service" family. His father, Lala Mangal Sain, was made a Viceregal *Darbári* for services rendered in the early years of British rule.

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Population.

The Hindús.

Bháí Lorind Chand of this town founded one of the largest banking and commercial firms in the district: he had the name of dealing fairly with the *zamíndárs*, which did not prevent his acquiring much land: he left much property: his successors, who hold two Government treasuries, are not specially distinguished.

The Sikh Báwas of Jalálpur (Narinjan Singh) have much influence with their co-religionists: they take service in the army, and quarrel with the Musalmán Pir of Jalálpur.

The Brahman Kákras of Ará, of whom Lakhmí Chand is the head, are a good old military family with considerable local influence, and of good repute.

There are two classes amongst the Hindús here, the Muhiáls and the Gadhioks, which deserve more detailed notice, as they are both of them peculiar to this part of the Province, and one of them seems to be confined to this district.

The Muhiáls.

The Muhiáls do not number more than some eleven thousand souls in the Province, and they are rather widely distributed, though their principal habitat is the Jhelum District: they live in scattered villages in all four Tahsils, notably in Tehí, Kariála, Pind Dadan Khán, Kálá, Bajwála Dattán, Sanghoí, etc., and not in any well-defined tract.⁽¹⁾ Though numerically unimportant, they are a stirring and enterprising race, and frequently rise to prominence in the service of Government, which they enter in large numbers: they make excellent soldiers, but it is chiefly in civil appointments that they have earned distinction. They are remarkable amongst the Hindu population in being hereditary agriculturists, seldom, if ever, practising trade or usury, and especially despising the life of indolence led by the ordinary Brahman, who lives by charity, and with whom the Muhiál, though admitting a common origin, strongly objects to be classed. The leading Muhiáls are now endeavouring to develop a spirit of unity between their various sections; they have a tribal organ, published at Kálá for the last five years, the *Muhiál Gazette*: the editor thereof, Mehta Shám Dás of Kálá, himself a Chhibbar of good family (his grandfather Mehta Sukha Nand was a governor and *jagírdár* under the Sikhs), has supplied most of the information that follows, with much more in the shape of *kabits*, etc., of which space does not permit the use.

Of the name Muhiál half a dozen different explanations have been given: the most obvious, and that most generally accepted, derives it from the seven *múhins* or clans into which the Muhiáls are divided; these are Datt, Chhibbar, Báli, Mohan, Waid, Bhimwál and Lau, all of whom are represented in this district.

The Muhiáls admit that they are by origin Brahmins of the Sarsút section, but are unable to state at what time their ancestors, renouncing the priestly office, devoted themselves to administration and military service; they put it, however, as far back as the mythical times of the *Máhabhárata*, and claim descent from the seven rishís, Valmíkí, etc.

(1) According to Ibbetson, paragraph 282, they are almost confined to the Salt Range, but this is hardly correct. In the actual hill country there are hardly any in this district. There are nearly 5,000 in Jammu territory.

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Population

The Muháls.

They claim to have exercised at various times and places sovereignty over wide areas; thus the Datts believe that their ancestors at one time established a dynasty in Arabia and later at Kábul (where we know that a Brahman dynasty ruled, according to Sir A. Cunningham, from about A. D. 860 to A. D. 950⁽¹⁾). The Chhibhars again claim to have ruled at Bhera, which is still the abode of many Muháls, and is said to be known as "Chhibbarán di Rájdání." These instances are sufficient. The traditional rhymes or *kabits*, for which great age is claimed, are the main evidence produced.

A wider claim, that all the Brahman dynasties found by the Chinese pilgrims of the 7th century were Muhál, rests merely on the assumption that all other Brahmans, in "arrogating the priestly function, gave up all claims to the royal office," and could not therefore have reigned.⁽²⁾

The Bális are referred to in the Ruqa'at Alamgíri, as having long followed the profession of arms in the Súba of Gujrát.

The *kabits* deal at length with certain great battles said to have been fought by the Muháls, and these will now be briefly referred to, though they cannot be said to throw much light on the history of the tribe. At the first battle of Paniár (Gurdáspur District), the Datts are said to have defeated the local Rájpút ruler, Rája Min, and to have established themselves there: in the time of Bábar they refused to give up to him a girl under their protection, so the Emperor came against them, and by treachery massacred all the males, the women burning themselves: two boys, however, escaped, and Bábar, repenting, owing to the illness of his son, gave them large estates in Kanjúr (Gurdáspur) and Zaffarwál (Siálkot), where the Datts are now numerous. Again, the Mohans are said to have been exterminated at Mamdot by the Emperor Muhammad Sháh, whom they had offended by demanding the return of one Jai Rám whom he had converted to Islám, one man escaping to continue the line.

At what period the Muháls established themselves in the different places at which they are now found in the district we have no means of saying; the tales and traditions referred to above do not help us much but some of their settlements are undoubtedly very ancient.

They have various peculiar customs; thus the Bális, in theory at any rate, must not work on Tuesdays, or the Datts on Thursdays, the anniversary of the legendary battle of Paniár (at Paniár itself they will not even drink water): the Datts again will not cultivate cotton because it is said that an ancestor of theirs was once killed in a cotton field. All Muháls refrain from killing snakes, which they worship under the name of Gugga. The *jand* tree or "Sáin Jand" is worshipped before the marriage ceremony, and is especially revered by the Datts, who perform the *munan* under it. Chibbars and Datts wear a woollen thread round the neck, changing it twice a year: the reason is not known.

The Muháls differ from Brahmans in eating meat, also in sacrificing goats at the *munan* ceremony, as the Gadbioks also do; and in common with them the Muháls ordinarily use the appellation of Mehta. They have, as their *parohits*, their own special Brahmans, called Panj Bandu.

Muháls marry other Muháls, except that the Lau and Bhimwál sections are said to take to wife sometimes the daughters of Brahmans; with these two sections the others do not as a rule intermarry, only taking daughters from them if not suited elsewhere, and not giving them girls

(1) Cunningham, Coins of Mediæval India, page 62.

(2) Imperial Gazetteer of India, VII, page 94.

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Population.

The Mubials.

in return; there are, however, instances in which Lau and Bhimwál Mubials have taken wives from other sections; and these ideas are dis-
countenanced by the more intelligent Mubials, who wish to promote unity
and good feeling between all the sections of their tribe. At present it is
often difficult to arrange a suitable marriage, and many girls remained
unmarried. No doubt it was for this reason that the Mubials, especially
the Chhibbars, at one time had a reputation for female infanticide.
Mubials may marry in their mother's *gôt*, but not in their father's.

It is a fact worth noticing, as illustrating the ready adaptability of
the Mubials, that in the days of Muhammadan rule they sometimes adopted
Muhammadan names, such as Izzat Khán, Nawáb Khán, while retaining
their own religion.

The Gadhioks.

The Gadhioks are not numerous, living only in a few villages of
the central Salt Range, and in the parts of the Chakwál plain
adjoining; but in spite of their small numbers, they are not an
unimportant factor in the district, being intelligent and enterpris-
ing, while the proportion of their men who enter Government em-
ployment is unusually large: generally they take civil appointments,
but a considerable number are in the army also, and some of them
have there earned great distinction. They are not found apparently
in any other district. Their caste entry seems to have puzzled the
compilers of the earlier settlement records, and we find such entries
as "Khatrí, *gôt* Qánúngo"; "Khatrí, *gôt* Gadhiok"; "Shekh
Gadhiok"; "Gadhiok Qánúngo"; generally they have been considered
to be Khatris, but they have recently made a claim to rank as
Rájpúts: they give the following account of their origin:—

Their early forefathers, of whom they know very little, resided at
Mathra in Hindustán; at the time of the invasion of Bábar in A. H. 925
their ancestor, Mehta Chandú Rai, came thence to Delhi, and took service
under Bábar, coming with him four years later to the Salt Range.
(Note.—Bábar's first invasion of India was in A. H. 926=1519 A. D., but
on that occasion he did not go further south than the Chenáb: he did not
enter Delhi until his 5th campaign six years later). Mehta Chandú Rai
was with Bábar at Kallar Kahár, and was appointed with Rája Mal,
ancestor of the Janjúas, to carry out the drainage of the eastern Dhanui,
by cutting the Ghorí Gala, a task which they successfully accomplished;
Gharka, ancestor of the Kassars, and Sidbar, "the descendant of Rattan
Deo, Michás," afterwards joined them in the colonization of the tract.
They do not know who then held the country, except that the Janjúas
occupied the Salt Range. Chandú Rai was rewarded by Bábar with a
cash grant, an allowance of 1 per cent. on the revenue of 13 *talúks*
of the hills and the Dhanui, together with certain grazing rights: of
this no documentary evidence is produced. They have, however, a *sanad*
of Humáyún addressed to Káli Dás, or Kálik Dás, son of Chandú Rai,
dated 962 H., corresponding with A. D. 1554, conferring on him a grant
of 30,000 *tánkás* for the management and improvement of the Kabún
iláqa; this *sanad* refers also to the Bágh-i-safá established by Bábar at
Kallar Kahár, as related in his Memoirs: it is undoubtedly genuine.
There have been some 12 generations since Káli Dás, according to their
pedigree table. A second *sanad* of the time of Akbar (970 H. or A. D. 1562)
entrusts to Kálik Dás the "*khidmât i Bhera wa Niláb*," by which would
be meant some indefinite tract between the Jhelum and the Indus. A
third *sanad* of two years later shows that Naráin Dás, his son, received

from Akbar a somewhat tardy grant-in-aid of 15,000 *dāms* in consideration of the losses caused during Sher Shāh's rebellion, which had ended twenty years before. A fourth *sanad* of the 40th year of Aurangzeb's reign (A.D. 1695), with the seal of Mirza Diānat Beg, Khān-i-Khānān, grants certain dues, amounting in all to Rs. 700 in "Dhan, Kahūn, Kahār, and Mahāl Malot," to Muhammad Sharif, son of Bhagwatī Dās, Rām Chand, Asā Rām, Nand Rām, Gadhioks: this document marks the time of the conversion of the Muhammadan branch of the Gadhioks now resident in Khokhar.

The name Gadhiok is said to be a nickname given to one of their ancestors (the correct spelling being Gaddī Hok, as in some old documents produced); and to be due to his having presented 31 *gaddīs* of clothes at a marriage, "*hukāi*" is the announcement of the presents brought.

The marriages of Musalmān Gadhioks are nearly always *inter se*: the Hindūs marry with the superior divisions of the Khatris, such as Kapūr and Malbotre, but not with the Bunjāhis. The remarriage of widows is not permitted in either case.

The customs of the Gadhioks do not differ from those of other tribes of the same creed in these parts, except as follows: (Hindūs) at the *munan* ceremony of a boy, the father or head of the house with his own hands kills a goat with a *talwār*, and the head, feet and hide are made over to the Naule Brahmans who are the *parohits* of the tribes, though they do not eat meat, and other Brahmans would not touch such things: they sell the hide, &c., to those who can make use of them. The same thing is done at the putting on of the sacred thread. Meat is used by the Gadhioks at marriages, which is not done by other Hindūs here.

At the *munan* ceremony of the first born son, the mother retires to the house of neighbours, who take the part of her parents, and the father goes through a pretended remarriage with her, called *dukāja*, nearly all the ceremonies of an ordinary marriage being observed, the expenditure being about half as much as at a real marriage. The origin or meaning of this custom (which has been given up by the Muhammadan Gadhioks) they are unable to explain.

It is said of the Gadhioks that they will not touch a pair of scales: this is not literally true, and means merely that they are never shopkeepers, nor do any of them practise money-lending, except one or two families in Chakwāl, who are not descended from Kālī Dās, and are not admitted by his descendants to be Gadhioks.

On Thursdays the Gadhioks do not wash or undertake a journey or any new business unless compelled to do so, because, they say, their ancestor left his original home on a Thursday.

The Hindūs eat and drink with Khatris: the Muhammadans eat with, or from the hands of any Musalmāns, except Mochis or Musalīs.

The Muhammadan Gadhioks call themselves Sheikh, as is usual with converts of recent or comparatively recent time: the Hindūs in general use the title of Mehta, which, in the case of the Dalwāl family, has been superseded by the appellation of Dīwān since the days of Dīwān Mūlraj, a member of this family, who was Governor of Hazāra under the Sikhs.

In the account which they give of themselves, the Gadhioks show that in certain habits and customs they differ from the admitted Khatris of the district: they show also that their ancestor, Kālī Dās, and his successors were established here under the earlier Mughal emperors, and had some share in the administration of the

CHAP. I. C. Salt Range and the country north of it: the *samādh* of Kālī Dās is a conspicuous object at Kallar Kahār, and that no doubt was their headquarters, though their principal villages are now elsewhere, at Dalwāl, Bhon and Khokhar; but they produce nothing that can be called evidence in support of their claim to be called Rājput, and indeed positive proof of such a claim would in any case be impossible. Their *kabits*, &c., afford no help: these are in what seems to be a down-country dialect, and relate the glories of Chandū Rai and Kālī Dās, the esteem in which they were held by the Emperors, and their authority over the Kahūn and Dhannī: they are too long for reproduction. Against their claim to Rājput origin must be set the fact that they are locally considered to be Khatrīs; that as the settlement records show, they have long been so considered: and another point against them is their intermarriage with certain sections of Khatrīs. Their explanation of the name Gadhiok is fanciful: and it may be noted that names with similar terminations are not unknown amongst admitted Khatrīs, as, for example, the Chandioks of Peshāwar, who are said to be Khatrīs from Afghanistān, while it is understood that there are sections of the Bunjāhi Khatrīs, called Sāmī Hok, Pugga Hok, and Phaiya Hok. They are, by the way, more often referred to by others as "Qánúngo" than as Gadhiok: this is due to their having from very early times held the office of hereditary Qánúngos of the Kahūn and Dhannī, in which capacity they until quite recently took a small percentage of the revenue of the tract, and held two hereditary posts on the Qánúngo establishment: they have large numbers of old memoranda relating to the revenue payable by the Dhannī villages, most of them undated, the earliest with date being of the year 1166 H.

On the whole it seems safe to conclude that the Gadhioks are Khatrīs; but they are clearly marked off from other Khatrīs of these parts, by having been for centuries established here as hereditary landowners, and by their abstaining from trade and money-lending. They are useful members of the community, usually showing good qualities in both military and civil employment.

Artisans
and Menials.

In general estimation the artisan and menial classes, who are nearly all Muhammadans, take rank according to the nature of their employment, workers in metal and wood ranking higher than workers in clay, and they again higher than workers in leather. Lower down the distinction is partly made according to the nature of the food eaten, Mīrásīs ranking low because they eat almost anyone's leavings: lowest of all are the Musallīs or scavengers. The condition of these classes as a whole has greatly improved under British rule: nearly all the agricultural menials receive in payment a share of the produce, and this alters but little, though it tends to rise if it changes at all; but even if the same, its money value has greatly increased, and in some parts of the district the substitution of cash payments for services rendered is being slowly

introduced. There is a steady demand for labour on State works, such as railways, quarries and mines, which has led to a marked rise in cash wages, and on the whole the lowest class of labourer has profited more in this way than he has suffered from the rise in the price of commodities. A much larger proportion of the lower classes are now able to make some small savings, and in some localities they have invested them in land: naturally they have acquired a feeling of independence at the same time and are no longer as submissive to their former masters, the proprietary body of their village, as they were formerly; hence frequent refusal on their part to pay without pressure the dues to which the owners are entitled; and the consequence is sometimes bitter ill-feeling between the two classes.

The Sunáras or Zargars are the workers in gold and silver, chiefly found in the towns and larger villages: they are mostly Hindús, and many of them advance money at interest on the security of ornaments.

Sunáras.

The Tarkháns do all the carpentry work, making agricultural implements, the woodwork of wells, etc, generally receiving a customary payment in kind at each harvest. They are also the brick-layers of wells, and of buildings of burnt brick. These, and all the others described below are, unless the contrary is stated, found chiefly in the villages, and are practically all Musalmáns.

Tarkháns.

The Lohárs are the blacksmiths and workers in iron, and, like the Tarkháns, are regular agricultural menials receiving customary payments in kind.

Lohárs.

The Kumbárs or Kubhárs are the potters, makers of bricks and of clay vessels, receiving customary payment in kind for furnishing the pots for well-wheels and the earthenware for domestic use.

Kumbárs.

The Juláhas, generally called Páwalí in these parts, are found in both towns and villages: their principal occupation is weaving, taking payment by the piece: their occupation has suffered owing to the growing fashion for foreign piece-goods. They are rather a turbulent class.

Juláhas.

The Náís are the barbers, and also act as leeches, perform circumcision, and are the recognised messengers on all occasions of domestic ceremonies, carrying notices of births, deaths, and marriages. In the villages they receive payment in kind.

Náís.

The Telís are oil-pressers: they are closely connected with the Qasáís or butchers, who are rather a trade guild than a tribe, and are most numerous in the towns.

Telís.

The chief occupation of the Máchhís or Jhínwars is that of bakers, the men collecting the fuel, and the women baking at the ovens the dough-cakes brought by the village housewives, and taking payment in kind at the time. In the Chakwál Tahsil and

Máchhís.

CHAP. I. C. the Jhelum, Pabbí and Khuddar, the people mostly do their own baking. Water-carrying is generally done by the people themselves.

Population. *Malláhs.* The Malláhs are the boatmen on the river, sometimes also fishermen.

Dhobís. The Dhobís or Dhabbas are the washermen: to this class generally belong the Líláris or dyers and the Darzís or tailors. The Dhobís rank low as handling dirty clothes.

Mírásís. The Mírásís are the bards, musicians and genealogists of the people, and their services are in request at all domestic functions, and particularly at marriages: they rank very low in the social scale, above the scavengers and Mochís only. A sub-section of the Mírásís is the Bhands of Chakwál and a few other Chakwál villages: their business is to amuse people at marriages, etc, with their farces and jokes, which are generally of no very refined character.

Mochís. The Mochís are the workers in leather, and rank low because they handle hides: their chief occupation is tanning skins and making shoes and other dressed-leather work. The skins of dead cattle are usually their perquisite.

Musallís. There are hardly any Chúhras in the district, not at least under that name: the Musallís are Chúhras converted to Islám: besides their traditional occupation as scavengers they are the chief hired field labourers, and get payment at customary rates in kind for their assistance, principally in reaping, winnowing, etc. They also do basket work and work in raw-hide. Though they are the lowest class of permanent residents of the district, their position is far better than that of the unconverted Chúhras in districts farther south; for instance most of the agriculturists have no objection to smoking with Musallís, or to taking water from them, provided they do not work as scavengers. They have given up eating carrion or things not allowed by the Muhammadan law. The Musallís include rather a large proportion of bad characters, and have a reputation for pugnacity and violence. It is only in the south of the district that they are at all numerous.

The following is a list of the tribes gazetted under the Land Alienation Act:—

<i>Tribes gazetted under the Land Alienation Act.</i>	Akra.	Gujar.	Khandoya	Panwár.
	Awán.	Jálap.	Khokhar.	Pathán.
	Bhattí.	Janjúa.	Kureshi.	Phaphra.
	Biloch.	Jat.	Lilla.	Rájpút.
	Chauhán.	Jodh.	Máir and Míhás.	Síál.
	Chib.	Kahút.	Mallíár.	Sohlan.
	Gakkhar.	Kassár.	Mughal and Kák.	Sayad.

Factions of the Dhanní. The following account of the factions in Chakwál and Talla-gang, though not originally intended for publication, is perhaps worth insertion:—

The most important distinction in the Chakwál Tahsíl, more important than tribal distinctions, is that between the two great

parties of Chaudhríál and Zamíndár (the latter also called Chaudhrí): broadly speaking the Chaudhríál are the representatives of old of the talúqdárs, and the zamíndárs or Chaudhrís are the representatives of the new men put in during Sikh rule; cf. paragraph 60 of Brandreth's Settlement Report.

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Population.

Factions of the Dhanní.

The Chaudhríál villages are as follows:—

Dulla Section.—Dulla, Mangwál, Latífál, Minwál, Munde, Mári, Bal Kassar and Bhikári Kalán. Also, though less intimately concerned in the faction feeling, Bhikári Khurd, Nárang, Narwál, Khanwál, Dhok Dabí, Begál, Máráth, Ballo Kassar (most of these are practically dependencies of Dulla), Sikariála and Sarkál Kassar.

Pádsháhán Section.—Pádsháhán, Chak Naurang and Sarkál Máir.

Chakwál Section.—Chakwál, Jabairpur, Jáwind, Ghugh, and Kot Khilán in the first rank; also (1) connected with the first four, Határ, Dhídwál, Baihkri and Chak Gakkhar, and (2) connected with Kot Khilán and to a great extent owned by the Kot Khilán family, Ránjha, Jamálwál, Rúpwál, Málwál, Nainsukh, Dherí Anwál, Kallú, Thirchak, Maira and Kálú Jo.

The Zamíndár villages are as follows:—

Chawli, Bhagwál, Karsál, Kariála, Chak Malúk, Chakrál, Dhudhiál, Mían Máir, Faríd Kassar, and Dhakkú.

Zamíndár villages of secondary importance in connection with the factions are: (1) connected with the first three above: Gáh and Siddhar; (2) connected with Kariála: Ramshíh, Wariamál, Bhalla, Mohra Lassú, Mohra Qází, Thirpál, Mohra Kor-Chashm, Kotha Dál, Sutwál, Sadwál, Mohra Thanil, Thathí Jámún, Janga, Thoa Humáyún; (3) connected with Chakrál and Chak Malúk: Chatál, Khiwál, Rubál, Ghukkal, Bhudhiál, Panjain, Amírpur Mangan, Kudlathí, Tajbál, Udhwál, Karhan, Dháb, Cuak Báqir Sháb, Dab, Núrwal, Pinnanwal, Chak Báízid; (4) connected with Dhudhiál, Mían Máir, and Faríd: Fim Kassar, Parhál, Sáing, Harar, Chak Umrá, Damál, Mona Mirwál, Jhálí, Maswál, Mohra Alhú and Dore: also Mengán.

As regards villages not on the list, though there are probably some omissions, it may generally be assumed that they are not specially attached to either of the factions. Of course the fact that a village belongs to one of the two parties does not prevent its having internal factions of its own; thus in Dulla, one of the principal Chaudhríál villages, party feeling between the several *pattís* is very bitter, though they would combine to spite a man belonging to the Zamíndár faction.

The Chaudhríál faction is far the most numerous and the most powerful; this is perhaps why the Zamíndár faction hang together so much more than the other party.

Marriages between members of the rival parties are much more rare than marriages between members of different tribes.

The factions of this Tahsil have their headquarters at Láwa, and are known by the names of Ujjal Khán and Khán Beg; the latter was the father of Muhammad Khán, Iláqádár, who is now a member of Ujjal Khán's faction; the rest of the family is still on

The factions
of Tahsil
Tallagang.

CHAP. I, C. the other side : each party has its adherents in every important
Population. village, as follows :—

The factions of Tahsil Tallagang.	Village.	Ujjal Khán's Party.	Khán Beg's Party.
Láwa	Ujjal Khán. Muhammad Khán. Sher Muhammad.	Sultán Mubáriz. Aziz Khán. Ahmad Khán. Yáran Khán. Ahmad Yár. Mulkhá, Pattidár.
Danda Sháh Biláwal	...	Budha Khán. Wiláyat Sháh.	
Dhurnál	Sháh Nawáz (doubtful) ... Muhammad Khán "Bbauká."	The other lambardárs.
Thoa Mahrám Khán	...	Lál Khán, dismissed lambardár.	Ahmad Yár. Allah Yár. Muhammad Khán, lambardár
Nilá	Jahán Khán	Muhammad Sháh.
Pachnánd	Jahán Khán	The other lambardárs.
Dhermund	Núr Khán, more or less (agrees with Abbás of Tamman).	
Tamman	Abbás Khán	Sháhnawáz.
Tráp	Aulia Khán	Budha Khán.
Multán	Fatteh Khán.	
Pátwálí	Dilásá Khán	Fatteh Khán.
Budhiál	Ghulám Hussain	Mango.
	...	Muhammad Khán	Haidar.
	...	Faiza.	
Dhauhar	Khán Bhára	Muhammad Khán.
	...	Muhammad Nawáb Kháo, his uncle.	Fatteh Khán.
Mogla	Allah Dad Khán, &c. (not much to do with the Láwa parties).	Aulia Khán.
Saghar	Allahyár Khán	Sultan Mahmúd.
Sangwála	Khán Beg	Muhammad Khán.
Pihra Pattíál	Muhammad Ashraf.	
Tallagang	Fazl	Fazl Iláhi.
	...	Fatteh Khán	Muhammad Khán.
Jhátla	Ghulám Muhammad	Fatteh Khán.
Chinjí	Nawáb Khán	Other lambardárs.

These factions have ramifications extending into the Pind Dádan Khán Tahsil, over the Shahpur Salt Range and down into the Shahpur plains ; it should be noted that in some cases, *e. g.*, in Tráp and Multán, the adherents of the rival parties are very good friends amongst themselves ; elsewhere the contrary is the case, as in Dhauhar and Saghar, where they quarrel vigorously with each other, but have really very little interest in the Láwa factions.

The party feeling shows not the slightest sign of dying out, as from the fact that the rival factions in Láwa intermarry freely it might have been expected to do ; Sultán Mubáriz, for instance, is a near relation by marriage of Ujjal Khán, and so with nearly all of them ; but in this matter of marriage they are perhaps driven by necessity, as amongst the Awáns marriage within the clan or Múhí is usual ; so they have not much choice. But in some villages mentioned above the partisanship is of a lukewarm character, and amounts to little more than this, that if a member of one

of the parties has occasion to go to the village, he will put up with the local adherent of the faction to which he belongs.

The population is mainly Muhammadan, including the original land-owning classes as a whole, and almost all the village menials, the Hindu and Sikh religions being confined almost entirely to the mercantile and official classes, and their priests, and to Government troops and servants.

Muhammadans amount to 88·7 per cent. of the population; only ·5 per cent. are returned as Shiás and 29 per cent. as Sunnis, but it is safe to conclude that practically the whole of those returned as Musalmán simply are Sunnis also. Hindús and Sikhs account for 8·7 per cent. and 2·5 per cent., respectively, while Christians are only ·05 per cent. of the whole, and other religions are practically unrepresented.

The great bulk of the population are Muhammadans, nearly all of the Sunni sect: they practise circumcision, repeat the *kalima*, or profession of faith, marry by *nikkah*, bury their dead, and regard Mecca and Madína as holy places of pilgrimage; the pious pray regularly in the mosques, keep the fast in the month of Ramazán, and give away part of their incomes in charity; but the ordinary agriculturist is very lax in these observances, and is ignorant of the tenets and principles of the religion that he professes. The people are, however, thoroughly convinced of the truth of their own creed, though they are by no means intolerant or fanatical.

The common Muhammadan believes in predestination; and thinks that every individual has two angels (*farishta*) seated on his shoulders, recording his good and bad deeds; he believes in an after-life, when at the resurrection the earth will become a level plain, and everyone will come forward to give an account of his deeds, which will be weighed in a balance, and, according to the result, he will be admitted to the Paradise of Houris, or will be consigned to a hell of everlasting fire.

Except the Khojas, the Musalmáns of this district are strict in the observance of the rule that interest must not be taken; only the very strict, however, object to taking the profits of mortgages.

Religion has little practical influence as a regulator of conduct, and the social sanction is in this respect far more powerful.

Falsehood and perjury are regarded as not very sinful, especially if the honour of the deponent is at stake; oaths are in a general way considered sinful, but the men who really have a conscientious objection to them if it makes the difference of winning or losing a case are very few indeed. Few are bold enough to perjure themselves in a statement solemnly made at holy shrines; but the most binding oath is the "oath of divorce;" by taking this, however, the witness sometimes incurs the displeasure of the brotherhood, and it should never, therefore, be imposed on those unwilling to submit to it; and it is not often volunteered,

CHAP. I. C.

Population.

Distribution
of population
by Religions.

M u h a m-
madans.

CHAP. I. C.

Population.

Muhammaw-
dans.

There are a few scattered Shías, chiefly Sayyads, the more important villages in which Shías are numerous or influential being Rohtás, Surgdhan, and Sultánpur in Jhelum; Jhámra, Dherí Sayyadán, Makhiála, and Gura in Pind Dádan Khán; Kot Khilán, Chohán, Bhon, Muríd, Bal Kassar, Mári, Dhídwál, and other villages in Chakwál; and Tallagang, Pátwálí, and Dhaular in Tallagang.

Their chief outward difference from the Sunnís is in their observance of the first ten days of the month of Muharram as a fast in commemoration of the martyrdom of Alí and his sons, Hassan and Hussain, and their processions with *tázias* representing the tombs of the latter, with loud lamentation and mourning.

There are also a number of Wahábis in Jhelum City.

Hindús.

The Hindús worship their God through his various incarnations (chiefly Ráma and Krishna), represented by the stone images and idols set up in their temples. The educated say that they do not reverence the idols as such, but merely as representations of the various gods, who act as intermediaries between them and the Great God, called variously Ishar or Brahma; but these fine distinctions are probably not present to the minds of ignorant worshippers. An essential observance is the *shráddh* or propitiation of the *manes* of departed ancestors for three generations by expiatory offerings and gifts to the Brahmans. The belief in a heaven and a hell is part of the creed of the ordinary Hindu, but ideas differ regarding the nature of these places, some holding that heaven is given to a man on earth in the shape of a virtuous after life; some again think of hell as a lower region, where sinful men are cast into a sea of fire or blood or filth according to the nature of their misdeeds, while others hold that hell is to be suffered on earth in inferior bodily forms. All alike acknowledge that good and evil deeds will in some shape bring their proper recompense. The feeling of veneration for cows is still very strong. The faith in the old doctrine that presents to Brahmans will ward off evils is gradually being weakened; thus people now often have recourse to medical treatment in cases where the recitation of sacred texts by the Brahmans would in former days have been considered more efficacious.

Sikhs.

The decline of the influence of the Brahmans is partly due to the progress of Sikhism, hardly to be distinguished from lax Hinduism, which is gaining ground in the district; for the Sikh the Bhái of the Dharmasál, who need not be a Brahman, now acts as priest, and receives offerings. The propaganda of the Singh Sábha in the direction of simplification of ceremonies, and against distinctions of caste and the wearing of the sacred thread, are making headway, in spite of the opposition of those interested in the old customs. The prominent feature in the ritual of the Sikhs is the worship of their sacred book, the Granth Sáhí, instead of the idols of the Hindús.

Mosques and
temples.

Every village has one or more mosques, distinguished by their two pinnacles, sometimes a mud building little better than the

houses of the peasants, but generally more pretentious with some carved wood on the front, a slightly raised platform covered with the scented *khavvi* grass, an arrangement for heating water for the ablution before prayers, and an encircling wall. In the more prosperous villages, the mosques are often masonry buildings, ornamented with painted scroll work, etc.

In those villages which have many Hindu residents, there may often be seen a small *thikurdwāra*, *shivāla*, or *dharmśāla*; but it is only in the larger places that these buildings are of any size or importance.

Each mosque has its Imām or Ulma, who keeps it in order, teaches the village boys to repeat the Qurān by rote, and conducts the services at marriages and funerals. Few of these men have much learning or much influence over the people. Greater reverence is shown to holy men and saints or their progeny. When a saint has by austerity or some miraculous power gained a reputation, it often descends not only to his shrine or tomb, but to his descendants, who are revered as Mīans or Pīrs, though their own character may be far from saintly. Some of these Pīrs have a large following, who deem it meritorious to make them presents and show them honour, and look upon them in much the same way that the orthodox Hindu looks upon his family Brahman. It is usual for a Pīr to make tours among his followers (*murīd*), receive their obeisance, enjoy their hospitality, and collect their offerings. Sayyads and Qureshīs generally enjoy this sort of reputation owing to their descent; and among Sikhs, similar offerings are made to Bedīs and Bhāīs, who come round periodically to collect them. The principal Pīrs of the district are Wilāyat Shāh, and other Sayyads of Danda Shāh Bilāwal in Tallagang; Ināyat Shāh of Chak Misrī; Lāl Isan Shāh of Pīr Khāra; and many others might also be mentioned.

Priest and
holy men.

The following are examples of the many superstitious beliefs common amongst the people. Every orthodox Musalmān believes in *jins* or spirits, and with the *zamīndār* the belief is a very real one: ignorant Hindūs believe in them too: the harvest-heap of grain ready for measuring and division is surrounded by elaborate precautions to keep off the *jins*; a paper bearing the name of God is placed in the heap, and some iron implement is kept near: a line is drawn round the grain, within which no one may come with shod feet, and women not at all (because they are considered unclean, according to some, but others say because they attract the *jins*). Iron is thought to keep off evil spirits, a belief which some Hindūs say is derived from their religious books; thus for some days before and after marriage both bride and bridegroom keep near them or carry about a knife or other iron implement: the Musalmāns have a similar custom at childbirth also. There are many tales of small children left alone in the house, or going out alone to the fields, dying owing to the influence of *jins*. Small whirlwinds or "dust devils" are thought to denote the presence of

Supersti-
tions.

CHAP. I. C.

Population.

Superstitions.

malignant spirits, and are therefore feared. No one will willingly pass by a graveyard or burning-ground alone at night. Those who have occasion to sleep in a graveyard, or in the enclosure of a *khāngāh* or shrine, must sleep on the ground; instances are given of sceptical persons sleeping in such places on beds, and finding them overturned by spirits in the night.

Tuesday is the best day for beginning to plough, because Adam began to plough on that day: Tuesdays and Saturdays are also the luckiest days for beginning legal proceedings of any kind.

The "evil eye" (*nazzar*) is universally believed in: if any harm is supposed to be due to this, earth, which has been trodden by the possessor of the evil eye, should be collected from cross-ways and burnt. If a famished man looks at any food with longing eyes, other people who eat it will get indigestion.

There are plenty of superstitions about lucky and unlucky times for the different agricultural operations, and some of them no doubt have a practical foundation: most of them have not; thus camel bones or a dead snake burnt at the side of a cotton field are supposed to preserve the plants from blight.

The Hindús have many beliefs founded on astrology, which it is not necessary to detail. The supposed unluckiness of children born at noon may perhaps have some connection with them. A child of one sex born after three children of the opposite sex (*trikhal*), portends misfortune to the parents, especially the parent of the opposite sex; but evil can be avoided by certain elaborate ceremonies: this is a Hindu belief. Amongst Hindús the maternal uncle and his sister's son are supposed to be inimical; they must not sit together during a thunderstorm, and there are various other usages due to the same idea.

There are some strange cures for different ills: one family in the Pabbí has a reputation for curing boils by spitting on them: another family of Gujar Chaudhrís has periodical receptions of those suffering from a disease of the hair, which they cure by plucking out a hair of the patient. The efficacy for all sorts of purposes of the small shrines (*khāngāh*) which dot the country, generally tombs of holy men, is firmly believed in. When a villager desires anything very strongly he makes a vow (*mannat*) to present something at one of these shrines, commonly a rag tied to a tree above the tomb; or the offering has some reference to the wish that has been granted: one shrine is specially good for curing the bites of mad dogs; another gives the suppliant success in litigation; another is good for tooth-ache, and so on through a long list, though in general the shrines have no speciality of this kind, but are supposed to help those who come to them in whatever their need may be. The shrines are great tree preservers, as no one dares to cut down a tree or even carry away fallen wood from a *faqir's* grave. Living *faqirs* drive a brisk trade in charms

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Population.

Superstitions.

Legend of
the shrine at
Kallar Kahár.

and amulets to serve all sorts of purposes. There is a spring in the Phaphra *ilāqa* where barren women can become fruitful and another near Shāh Muhammadwālī, which was miraculously revealed to a pious boy, who was too good to live long afterwards. Pilgrims visit this from as far away as Kohát. Miracles have not ceased here as yet, and can even be performed to order, as one *faqír* offered to perform one for the special benefit of an officer employed in the district. Legends about saints and *faqírs* are numerous, but generally of the most commonplace and uninteresting character. One connected with the shrine above Kallar Kahár is, however, rather striking. Long ago a *faqír* came from the south country, and, when he had reached the Thal, a black deer met him and followed him. So they two journeyed on together, and came to the hill which is above Kallar Kahár; and after many days the *faqír* died there, and the black deer, refusing to be comforted, lay down and died also; and ever afterwards, when the village cattle went browsing over the place of their burial, they fell sick and died, so the people avoided that place, for they said a *jin* is there; but by-and-bye the saint of Makhdum Jehánia came that way, and to him they told their tale, and he going to the place, when he had prayed, said to the people that there is no *jin*, but the body of a holy *faqír*: then they gathered themselves together, and built a fair shrine to which many folk still resort; and the cattle grew fat and flourished, as they have never done since. This legend does not seem to be Muhammadan, and the *faqír* is called Sakhi Aho Báho, which looks like a remnant of Buddhism.

The Rev. T. L. Scott, in charge of the Jhelum Mission, gives the following account of Mission work in the district up to the year 1904:—

Christ i a u
Missions.

"In the beginning of the year 1874 the Rev. E. P. Swift was sent into the Jhelum District by the American United Presbyterian Mission, whose headquarters are at Siálkot, to open up Mission work. A Mission house was erected by him and work commenced. Two years later he was succeeded by the Rev. T. L. Scott who in 1878 erected a Mission Church in the Naya Bazár, in which weekly services were held, and in which also an Anglo-Vernacular Middle School for boys was opened. This school was subsequently discontinued for lack of funds, as no Government grant-in-aid was given.

"This building was totally destroyed by the flood in 1893.

"A girls' school was also opened in 1878, which is still being successfully carried on, and is now under the superintendence of Miss E. M. Gordon. In 1904 the number of pupils was 74, 3 Christians, 7 Muhammadans and the rest Hindus.

"In 1895-96 a Zenána Hospital was erected in the city, which was long in charge of Mrs. S. E. Johnson, M. D., who died after twelve years faithful service in 1902, and was succeeded by Miss J. P. Simpson, M. D., who joined in December 1902.

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Population.

Christian
Missions.

"In this year also a new Mission Church was built on the road leading to the Kachahri: in this Church weekly services are held, two services on the Sabbath, and two during the week: these are all well attended by the Native Christian community and others. The number baptised, infant and adult, aggregates 209, and our Christian community numbers about 100: of the number baptised many have gone to other stations, where they are working in offices, and fill various posts.

"In 1892 an Anglo-Vernacular School for boys was opened in the village of Sangoi, which is about ten miles distant from the city: in this school 186 boys are now receiving instruction.

"In 1900 a school of the same grade was opened in Jhelum city, in which 212 boys are now under instruction.

"Evangelistic work is also carried on by native evangelists, and Bible readers, who work in the villages, and also preach in the Bazar. Zanana work is also carried on by the ladies of the Mission and their Bible women. Our colporteur also does good work in circulating good books, both in English and vernacular, in this and other districts.

"Although we cannot lay claim to great success, yet we feel that the work of the Mission has been fully established, and that it has been doing a good work.

"In the spring of 1900 the Theological Seminary for the training of young men for the Ministry was transferred to Jhelum, and has since been under the supervision of Mr. Scott as Principal: with him since November 1900 the Rev. R. Stewart, M. D., has been associated. It is not as yet certain whether this institution will be located here permanently or not. It has been doing good work in supplying teachers and preachers for the Native Christian community in all the Mission Districts, and also in supplying Bible teachers for our schools."

The Good Samaritan Dispensary, so long under the charge of the late Mrs. S. E. Johnson, M. D., is doing excellent work in Jhelum: in 1900 6,579 new cases were treated and 6,659 return visits were received, making a total of 13,238 cases: in the in-door department 118 women and 29 children were treated: in the surgical department 52 major and 115 minor operations were performed. Miss Simpson, M. D., is now in charge.

A few years ago, in October 1899, an Anglo-Vernacular Middle School was opened at Dalwal in the central Salt Range, the land for the buildings, which cost over Rs. 10,000, being given by the principal local landholders: it is in charge of two Roman Catholic Fathers and one Brother; their work is not evangelistic, but is confined to teaching and providing medical treatment, for which purpose a dispensary is maintained. The school appears to be meeting with great success, the number of boys on the rolls in 1904 being 230.

The Church of England Mission at Pind Dádan Khan, founded by the late Rev. W. Gordon, who fell in the Afghan War, has within recent years been given up. The town is now visited by the Jhelum Missionaries of the American Mission and the native workers in connection with it.

As regards occupations, in the sense of employment or means of livelihood, it is sufficient to note briefly here how the population is divided between the main heads adopted at the census of 1901:—

Occupations
(employment)

Agricultural	...	...	62	per cent of the population.
Industrial	...	...	21½	ditto.
Commercial and professional	...	...	3½	ditto.
Administration	...	...	2	ditto.
Independent	...	...	3½	ditto.
Personal service	...	...	3½	ditto.
Others (chiefly unskilled labour)	...	...	4	ditto.

The following paragraphs describe the daily routine of the agriculturist's life, and the occupations with which the time is taken up.

The men of the agricultural population are more or less employed in some one or other of the operations of husbandry all the year round, and this is specially the case where their land is irrigated from wells: there, in the hot season, the peasant's daily life is somewhat as follows: he gets up about 2 A.M., gives a feed to his bullocks, and goes to sleep again till just before dawn, when he gets up, has a smoke, says his prayers, if given that way, and goes off with his bullock to work his well or plough his fields. If it is his turn to get water from the well, he keeps his bullocks at work perhaps all day or all night, in relays, until his turn is at an end. If not he unyokes his bullocks about midday, and turns them loose to graze while he himself has a siesta. When it begins to get cooler in the afternoon, he does more light work in the fields, weeding, cleaning out his irrigation channels, etc. At sunset he goes home, ties up his bullocks, milks the cows, gets his supper, has a smoke, and a chat with his fellows at the village gathering place (*daira*), and goes to bed about 10 P.M. At harvest he labours at cutting and gathering the crops all day long. In the cold weather he gets up about 6-30 A.M. and the day's routine is much the same, except that he works all day, does not take a siesta, and goes earlier to bed, changing his hours of getting up and going to bed, as the day shortens or lengthens. The peasant, whose cultivation depends on river floods or rain, has a somewhat similar routine, except that his labour is not so constant, and varies greatly according to the abundance or scarcity of moisture. In such tracts, when rain falls, every available plough is taken out, and the fields are alive with men and oxen taking advantage of the welcome moisture; but when a lengthened drought occurs, the fields are deserted, and the peasant finds it difficult to employ his time. The above (from the Sháhpur Gazetteer with a few omissions), needs

Daily life.
Occupations
of men.

CHAP. I. C.

Population.

Occupations
of men.

qualification in one or two points: it is not very often, except in the riverain, that the peasant gets up as early as half-past six on the cold winter mornings: in the hills especially he will not leave his house, if he can help it, until he has comfortably disposed of his morning *roti*: the proportion of the people who have wells is in this district very small, and it is only in the riverain that they entail the unremitting labour described above. December and January are the slackest months and the owner of unirrigated land has then but little to occupy his time.

Occupations
of women.

The real occupations in life of a woman begin when she marries. When she finally goes to her husband's house, she is generally fed with fat things and excused from labour for the first year, but afterwards begins a round of drudgery, which ends only when there is no strength to endure it. The first thing done on rising in the morning is to grind the corn for the day's food of the family, then the milk has to be churned for butter: that done, water has to be fetched, always two *gharas*, and sometimes five; sometimes the well or watersource is close by, and sometimes far away. Back from the well, the morning meal has to be cooked and carried to the husband wherever he may be in the fields. Back from the field she may eat her own breakfast by herself, and afterwards spin the cotton, darn the clothes, and act as laundress. Then follows another round of grinding and the preparation of *dāl*, or vegetables for the evening meal: next water has to be fetched a second time, and dinner cooked and served to the husband. Her own dinner, and a turn at the spinning wheel, finishes the day. In addition to all this, women are burdened with the ordinary domestic cares of the family, and with several duties belonging to the farm. Most of the cotton picking (*chundī*) is done by them: they watch the ripening crops, glean the fields at harvest, and in the lower classes carry manure to the fields, weed the crops, and make themselves generally useful: most of them also repair the house walls when injured after rain. Of course this description does not apply to women who live in *parda*, but of such there are not many in the district, except in the houses of certain Chaudhris and Sayyads.

The higher the tribe comes in social precedence, the less the women help the men in outdoor work. Thus Gakkhar and Janjúa women take little or no part in such labours: the women in the less particular tribes do almost all kinds of agricultural work, except ploughing and clod-crushing.

Divisions of
time.

The twenty-four hours are divided into eight watches (*pahar*), of three hours each nominally, but of indefinite and varying length in practice. The most common of the names for the different times of day are the following:—

Sarghī vela, early morning, before dawn.

Namáz vela, the time of morning prayer, half an hour before sunrise.

Badda vela, dawn to sunrise.

Chhā vela, sunrise to 9 or 10 a.m.

Roti vela, breakfast time, about 10 to 11 a.m.
Dopahar, noon.
Dhalle hue din, early afternoon, about 1 p.m.
Peshi vela, about 2 to 3 p.m.
Niddhi peshi vela,⁽¹⁾ mid-afternoon, about 3 to 4 p.m.
Digar vela, late afternoon.
Din andar báhar, just before sunset.
Din latha, sunset.
Nimasha, twilight evening.
Roti vela, supper time, about 8 p.m.
Khau-pia, after supper.
Kuftá vela, bed time, about 9 p.m.
Addhi rát, midnight.

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Population.

Divisions of
time.

The following, from Mr. Wilson's Shahpur Gazetteer, is equally true of this district:—

Manners.

"The rules of etiquette are not very well defined, and differ greatly from those in vogue in European countries. Women are not treated with such deference, and are ignored as much as possible out of doors. When a husband and wife are walking together, she follows at a respectful distance behind. A woman should not mention the name of her husband or of his agnates older than her by generation. Words denoting connection by marriage have become so commonly used as terms of abuse that they are not often used in their proper sense; and a man generally speaks of his father-in-law (*sauhra*) as his uncle (*chacha*). It is shameful for a man to go to his married daughter's house, or to take anything from her or her relations: on the other hand a son-in-law is an honoured guest in his father-in-law's house. When a married woman goes to visit her mother, it is proper for the women of the family, both on her arrival and departure, to make a great lamentation, and lift up the voice and weep.

"When friends meet, they join but do not shake hands, or each puts out his hands towards the other's knee: or if they are very great friends they embrace each other breast to breast, first on one side and then on the other. If a man meets a holy person (*pir*), he touches the latter's feet by way of salutation. Should acquaintances pass one another, one says *Salám alaikum* (peace be on thee), and the other replies *Wa alaikum ussalám* (and on thee be peace). They then enquire after each other's health, the usual question being 'Is it well?' (*khair*), and the answer 'fairly' (*val*), or 'thanks (to God)' (*shukr*). When a visitor comes to the house he is saluted with a welcome (*ámi* or *jí áaa*), and answers 'blessings be on thee' (*khair hovi*). The use of chairs and tables is becoming more common, but it is usual for a peasant when resting either to sit on his heels (*athruha*), or to squat on the ground cross-legged (*patthalli*), or to sit on the ground with his arms round his knees, or with his *chadar* tied round his waist and knees (*goth*) to support his back.

"Some of their gestures are peculiar, although, as in Europe, a nod of the head means 'yes' or 'come,' and a shake of the head means 'denial.' Thus a backward nod means 'enquiry,' a click with a toss of the head means 'no,' jerking the fingers inward means 'I do not know,' holding the palm inwards and shaking the head is a sign of prohibition, holding up the thumb (*thutth*) means 'contemptuous refusal,' wagging the middle finger (*dhiri*) provokes a person to anger, and holding up the open palm is a great insult. In beckoning a person the hand is held up, palm outwards, and the fingers moved downwards and inwards."

Gestures.

(1) In Tallagang *pichán vela*, in the riverain and Thal *pichhla páhar*, in the Hills and Chakwál *nadda vela* or *pichhdán* are used, and in Jhelum *laudhe vela*.

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Population.

Food.

The main staple of the food of the people is wheat: this is supplemented by *bājra*, which is generally eaten instead of wheat during great part of the winter, and is rightly supposed to be very sustaining. These two grains alone are thought to be proper sustenance for grown men: maize, rice, *moth*, and barley are all pleasant now and then for a change, but are only fit to nourish women, children, and horses; but in the well-tracts maize is more commonly eaten. The *bājra* cakes are supplemented in the season with the *sāg* or green stuff furnished by the green leaves of gram or mustard. The regular meals are two, one in the morning about 10 A.M. and the other at sunset; but occasionally, in the hot weather generally, another light meal is taken quite early in the morning, consisting of the remnants of the last evening's food, with some butter-milk (*lassi*). The regular morning meal consists of cakes of wheat or *bājra* flour, *lassi*, and perhaps a little *ghí* and pepper to add a flavour: and the evening meal is much the same, with the addition of some kind of *dāl*, or any vegetables that can be procured. Meat is eaten by all that can afford it, and milk is largely consumed at all times: meat and sweetmeats (*halwa*) are essential on the occasion of the 'Ids, or when friends are gathered together to help in carrying out some heavy piece of embanking or other work: such gatherings are called *vangār*, and are rather common. Meals are cooked at home in the cold weather and at the village *tandúr* by the *Máchhí* in the hot months, though in parts of the district this is not the custom: the *Máchhí* receives a handful of corn per day per family, and his fuel consists of thorns, refuse, or *bājra* stalks, &c. The men of the household eat first, and after them the women. It is not unusual in addition to the meals above referred to, to take a little parched gram or other light sustenance about three o'clock in the afternoon: this is called shortly the *laudhe vela*: and the early morning meal, consisting of the leavings of the previous day, is called "*chhá vela*"; or rather these are the names of the times of day at which these meals are taken. The meals themselves are called *picháin* and *chhá*, respectively.

Number of <i>sérs</i> consumed annually by an average family of	Agricultural population.	Non-agricultural population.
Wheat	600	775
Barley	40	...
Gram	40	...
<i>Bājra</i>	240	175
Pulses	130	100
TOTAL	1,050	1,050

The figures given in the margin are from an estimate furnished by the District authorities for the Famine Report of 1879: the family is supposed to consist of two adults, two children, and one aged person.

Dress:
Clothing of
men.

The clothing of the men varies slightly in different parts of the district: everywhere a *pagrí* or *pag* is worn,⁽¹⁾ which generally grows

(1) Sometimes dispensed with, however, by the youth of the Pind Dádan Khán River Bank, who often go bareheaded, especially amongst the Gondals.

bigger with the social importance of the wearer : a sheet of cotton stuff, which is always of country make, is wrapped round the loins and reaches nearly to the ankle, and is called *tahmad*, *tangar* or *majhla*; but in many cases, specially among those who have much official business, the *tahmad* gives place to the *páijámas*. The upper part of the body is clothed in a tunic or *kurta* of country cloth, worn tight and short in the Jhelum Tahsil, but elsewhere loose, wide-sleeved and reaching nearly to the knees. By many of the younger men, however, especially in the Thal and in parts of Tallagang, the *kurta* is not worn at all, but everyone alike wraps himself in a cotton sheet or *chádar* arranged shawl-wise. This is the dress for the hot weather. In the cold weather the *anga*, a sort of loose coat, wadded with cotton, and reaching nearly to the knee, is put on by many over the *kurta*, and in addition to this, in the east and south of the district, the *chádar* is replaced by the *dohar* or stout doubled sheet of cotton stuff. Elsewhere a woollen blanket called *loí* is used instead of the *dohar* : this is generally of coarse stuff, and rich people eschew it in favour of the *dulái*⁽¹⁾ or light quilt. The shoes (*jutti*) are of the ordinary kind, but in the hills are often replaced by sandals called *kherí* or *chaplí*.

The taste for European cloth has spread largely amongst the well-to-do and the extravagant, especially for long coats and for waistcoats ; but it is still but little used by the common folk. Men of position often wear a long *chogha* or coat with roomy sleeves and a *dopata* or shawl worn plaid fashion across the shoulders.

Near the river the women wear a skirt called *majhlí*, but elsewhere the wide loose trousers called *sutthan* are in common use : in Chakwál especially these are made full of overlapping pleats, so that from 30 and 40 yards of stuff are often used for a single pair. They are almost invariably made of coloured country stuff. *Kurtas* are worn universally, hanging loose over the band of the *sutthan*. Over all the *chádar*⁽²⁾ is arranged shawl-wise, being also brought over the head like a hood. The same dress is worn throughout the year, but the thickness of the material varies.

The chief difference among the Hindús is that they tie their turbans in another way, and that the shop-keeping classes in some parts of the district use the *dhotí* or loin-cloth. The women also dress their hair differently. The ordinary Muhammadan, of both sexes, can be distinguished at a glance from the ordinary Hindú, but the difference is one of general appearance more than of dress : though in a number of little points that does differ too : for instance Muhammadan women largely use blue stuff, while Hindús avoid this on religious grounds, and adopt some other colour, commonly red.

(1) This differs from the *talai* or *lef* mentioned in another paragraph.

(2) Also called *bochan* or *salára*, but the latter is of peculiar make.

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Population.

Ornaments.

A ring, generally a silver seal ring, is the only ornament much used by the men, with much more commonly an amulet (*tāwiz*) of some kind on the arm or neck. Boys do, however, sometimes wear ornaments, which are discarded gradually with advancing years; anklets, wristlets, necklaces, and earrings are all sometimes to be seen; but the practice of loading boys with jewellery is in decay.

Ornaments
of women.

The ornaments worn by women are limited only by the want of money to buy more. It would be tedious to give a complete list of these often barbarous trinkets: amongst the most common are the *wālī* or earrings, *hār* or chain necklaces, *bhawatta* or armlets, *tikka* or frontlets, *gokarū* or heavy bangles, *hansli* or necklaces, *kari* or anklets, *kangan* or bangles, *challa* or rings, *nath*, *bulāk*, and *laūngh* nose-rings, all very ugly and all laid aside in widowhood, *ārsi* or huge finger rings set with looking glasses worn on the thumb and many more. Some of the ornaments used are of considerable weight; but it is said that no woman has ever been heard to complain that her ornaments are too heavy.

Houses.

The dwellings of the people throughout the district consist of one or more rooms called *kothās*, with a courtyard (*vehra*), often common to several houses, in front: it is generally walled in, but sometimes only set round with a loose thorn hedge. The rooms are ordinarily built of clay, gradually piled up in successive layers and then plastered. The roofs are invariably flat, and are used as sleeping places in the hot weather. In the courtyard is generally seen a manger (called *khurli*), also of clay, for the cattle, and a shed in which the cattle are sheltered from the cold in the winter months: sometimes, however, especially in the hills, and even in the houses of the well-to-do, cattle are kept in part of the dwelling-house, access to their part of it being through the main living rooms. Where stone is abundant, as it is in most parts of the district, the houses are built of small boulders cemented together with clay: as, however, walls built in this way have little or no power of resisting rain, the roof is always supported on strong posts driven into the ground, the walls acting merely as a defence against the weather. As a rule the houses of the peasants are built for them by the village carpenter or potter, who receive their food while the work is going on, and a present of clothes or money when it is finished: payment for work at a fixed rate is only made by the Khatrīs and other non-agriculturists. The timber used for roofing is usually *kikkar* or *ber* in the plains and *kāū* or *phulāh* in the hills and plateau, beams of *deodar* or *shisham* being seen only in the houses of the rich.

Many of the wealthy money-lenders and traders, and a few of the leading Chaudhrīs, have built themselves *havelīs* of squared and dressed stone, cemented with mortar, or of good burnt brick-work: and most of the newer mosques in the better villages are also generally so built.

Inside the houses are in general kept scrupulously clean, the walls *leaped* and polished, or sometimes whitewashed, with the pots and pans of the household arranged upon shelves or in recesses. In the matter of ventilation, however, the houses leave a good deal to be desired.

The furniture in the houses of the common people consists chiefly of necessaries: first there are the receptacles for storing grain, which have been already referred to: these are made by the women of the household of fine white clay mixed with chopped straw. The larger kind called *sakár*, *kothí* or *gáhi* is square and holds forty or fifty maunds: the smaller (*kalhoti*) are cylindrical and hold only a few maunds. Next are to be seen some spinning wheels, as many as there are women; apparatus for churning milk; a hand mill or two for grinding corn; an instrument for cleaning cotton; a number of large circular baskets with or without lids, made of reeds (*khárá*, *pítára*, etc.), in which are kept or carried articles of clothing and all kinds of odds and ends; trays of reeds for winnowing; a set of wooden measures for grain; a variety of cooking vessels, some of iron, and others of a sort of bell metal; a number of earthenware pots and pans in which are stored grain, condiments, and other articles of food (earthenware vessels are generally for every day use and metal ones for guests or *pírs*; a coarse iron sieve; a pestle and mortar, and a few other similar things. There is usually a quilt of cotton (*tuláí* or *lef*) for each person, and some common blankets, useful for carrying *bhúsá* and for other purposes. These, with a few stools and cots (*manjī*), and perhaps one or two better bedsteads (*palang*), for honoured guests, complete the list of the fittings of a peasant's cottage. Everything is neatly arranged in order: space has to be economised, and things not in use are disposed on shelves, etc.

The Dhanní houses require separate mention: there the people take great pride in their abodes, which are kept very neat and clean: and it is a point of honour with the Dhanní housewife, even the poorest, to cover the wall of her main room with skeins of cotton, vessels of brass and tin, cheap looking-glasses, tinsel ornaments and the like: while the corners are filled with piles of reed baskets, quilts, etc., all kept for show and never used.

On death, with the Musalmáns, the body is washed by the *mullah* or his wife, according to sex, and the grave having been dug, it is taken to the graveyard, and interred, the prayers appointed being read by the *mullah* (*janáza*), and money or grain being distributed to the *mullahs* and the poor: the alms so given are called *askát*. The corpse is buried, wrapped in a long winding sheet, face to the west, head to north: gravestones are set up in most parts of the district, and it is generally possible to distinguish between the graves of men and women by the manner in which this is done: in one part the male has the gravestone at one end, and the women at the other:

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Population.

Disposal of
the dead.

elsewhere, one sex has the stone placed parallel with the length of the grave, and the other has it parallel with the breadth; in other parts there is no such distinction. On return from the funeral the relations in some parts give a funeral feast: the Qurán is read at the grave until the first Thursday, when food is given to the relations, the priests, and the poor, this being called *chautha*: and well-to-do people give another feast on the 40th day also, and keep up the reading of the Qurán over the grave until then; but this is rare. The funeral feast is sometimes put off for very long periods by those who cannot afford to give it at once. The funeral expenses in families with a reputation to maintain are very heavy, second only to those incurred on the occasion of a wedding.

Among the Hindús no food is cooked on the day of the event in the house in which the death occurred, neighbours providing what is necessary: if the deceased was of advanced age, it was formerly the custom to make some show of rejoicing, sweets being given for 13 days to friends coming to condole, and the relations being summoned, from near and far, after that period to a succession of feasts lasting for three days: this custom is falling into disuse now. Ordinarily the house remains in mourning while the funeral ceremonies (*kirria karam*) are in progress for 13 days, or in some cases 11 days:⁽¹⁾ after that all clothes and metal vessels are purified and the old earthenware *gharas* and other utensils are replaced by new ones, the period of mourning being at an end. The body of the deceased person is cremated soon after death in the usual way, and on the fourth day from the day of death, a bone from each limb is collected and put in a bag covered with deerskin, and sent off to the Ganges, the same day if possible, in charge of a Brahman or relative: if this cannot be done, the bones are deposited in the walls of the *dharmśāl*, or buried, and eventually sent to the Ganges, nearly always within the year: on the return of the messenger from the Ganges the Brahmans are feasted in thanksgiving for his safe return.

Amusements
and festivals.
Games.

Though he leads in general a hard laborious life, the agriculturist of this district allows himself a certain amount of time for recreation: attendance at marriages and other domestic celebrations affords one means of breaking the monotony of his life: and a fair or two are probably visited in the course of the year. There are also games of various kinds, though the extent to which these are indulged in varies a good deal in different parts. The best known is that called *pírkaudí*, a sort of prisoner's base; one man runs out into the open and is pursued by two more; as they circle round each other the first man tries to hit or touch one of the other two, and get away before they can catch him; they try to seize and throw him, but must not do so until he

(1) The rule is 11 days for Brahmans, 13 for Khatris, 16 for Baniyas, and 30 for Jhiwars, etc. The first two make up almost the whole Hindu population of the district.

has touched them. The game seems a very dull one to watch, but those who are interested in the players do not think so, and the excitement is sometimes so great as to lead to rioting; there is generally a great *kaudi* match at the Choa Saidan Sháh fair in April, when a game between the champions of the Dhanní and those of the Thal, or some contest of the kind, is watched with absorbing interest by thousands of spectators.

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Population.

Games.

The following vivid description of the proceedings on these occasions is taken from an article in the *Civil and Military Gazette* :—

"A game which is peculiar to the Salt Range is called *kaudi* or *pirkaudi*, and causes great excitement and competition among the athletes of the villages in that neighbourhood. I have seen it played at Choa Saidan Sháh, a picturesque little village in the heart of the Range. Once a year a Muhammadan religious fair takes place there, and the championship for the year is then decided. The arena consists of a very stony ploughed field in the valley, and the audience, which sometimes amounts to 5,000 or 6,000 persons, finds seats principally on the slope of an adjoining ridge overlooking it, while those chiefly interested in the competitors squat and stand round the remaining three sides of the ground which is about 100 yards square. The scene is most striking when observed from the far side of the valley, with a glistening stream in the foreground, the greenest of woods on the flanks, and the rocky hillside for a background: the centre is occupied by the spectators, who are all dressed in their best, and the snow-white turbans and garments of some mingled with the brightest coloured robes of others make a *tout ensemble* which is well worth seeing. The most skilful players of the competing villages turn out devoid of clothing, with the exception of tight loin cloths in the shape of bathing garments, which are most gorgeously embroidered in gold or silver on a brightly coloured background; they form separate little groups at two sides of the square, where they are supported by their friends and backers. While awaiting their turn to play, the various groups interchange derisive remarks and call out challenges, which are not always so politely worded as might be wished. One man is selected from a group and advances to the centre of the arena, where he takes running leaps, slaps his thighs and arms and in various ways gives one to understand that he is a hero. This is the challenge to all-comers and considerable discussion at once ensues as to which village and which men of that village are to accept it. Two opponents are finally selected, and they advance towards the challenger slapping, leaping and looking remarkably bold. The hero does not always look upon his opponents as worthy for combat and perhaps refuses to meet them; this leads to further discussion, and frequently gives rise to violent quarrels, which would be likely to end in a general fight were it not for the presence of the police and civil officials who have been told off to keep order. If the challenger deems his opponents fit persons to meet, he prepares to do so by crouching and giving his muscles a few more slaps, then as they come up he dodges, leaping like a deer every time he avoids them, or pushes and slaps them off in none too gentle a manner; their object is to throw the challenger over and make his back and shoulders touch the ground, while he tries to tackle one at a time and do likewise. To keep the opponents off he is allowed to slap, push or throw them over, or to trip them up in any manner he can, so that when a strong man is in the field some of the blows dealt

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Population.

Games.

and falls received seem enough to kill any ordinary mortal; particularly when one of the competitors takes a double somersault backwards and lands with his head on a large stone. If the two manage to throw the challenger, their party have to send out a man, and so the game continues perhaps for several days until the champion has been determined."

In Tahsíl Jhelum another form of *kauḍí* is played, requiring a good deal less exertion than that above described. Two men stand facing each other bare-breasted, one hits the other with his open palm, the whole game consisting in his endeavour to do so without letting his opponent catch hold of his wrist. This is also called *saunchí*.

Kauḍí Kabaddí, the favourite game of young boys, is quite different from both the above; it is very similar to prisoners' base as played by English boys.

Wrestling matches also arouse great interest, but very seldom take place: in fact this is hardly a village game at all. Lifting heavy weights (*bugdar*), the use of Indian clubs (*munglī*), and throwing a heavy stone, are all popular amusements. Tent-pegging is practically confined to Tallagang and the Dhanní, and even there is less kept up than it used to be: in some villages, however, such as Láwa and Tamman, the Malliks are still very fond of it: they cannot be said to be very skilful at it, no doubt for want of sufficient practice; but whatever the skill shown, an interested crowd always gathers to watch and applaud. The Chaudhrís, in Chakwál and Tallagang particularly, go in a good deal for hawking, coursing, or more rarely shooting.

It is in the Dhanní that most time is given to amusements: the reckless improvident people of this tract are tolerable agriculturists, but they are ever ready to snatch at an excuse for taking a holiday, somewhat at the expense of their cultivation: they attend every fair within reach, and take great delight in bullock matches, quail fights, and similar diversions: dog fighting was recently added to their list of amusements, the dogs, called *bullís*, being partly of bull-dog blood; but the result of the dog fights was so often that the owners fought too, that this practice was prohibited.

The boys have a number of games, some of them resembling those played by English boys: it is scarcely necessary to describe them.

Fairs.

There are 33 known *melas* in the district. These are generally called fairs, but are really semi-religious gatherings. They are nearly all connected with shrines, and the principal features of the *mela* are the making of offerings to the shrine and the distribution of food from the shrine *langar*. Most *melas* are unim-

portant. Five of the principal are noted below :—

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Population.

Fairs.

Tahsil.	Name of the fair or <i>mela</i> .	Estimated attendance.	REMARKS.
Jhelum.	Miána Mohra ...	Rs. 4,000	In the Pabbi. On all the Thursdays of <i>Baisakh</i> , at the shrine of Sháh Sufaid, which is said to cure lepers. No traffic. <i>Kaudí</i> playing and quail-fighting.
	Garát ...	8,000	In the Government <i>rakh</i> . The people assemble during the months of <i>Asauj</i> , <i>Chet</i> and <i>Baisakh</i> to drink the waters of a small medicinal spring which is purgative, and said to have been blessed by Sháh Usmán Gházi. As the water is scanty there is often a fight, and there is therefore a police guard. People come here from great distances.
	Tilla ...	600	A <i>mela</i> held in honour of the Tilla Jogi on <i>Sheordrí</i> .
Pind Dádan Khán.	Katás ...	10,000	At Katás, on 1st <i>Baisakh</i> and for four days after.
	Choa Saidan Sháh	10,000	At Choa Saidan Sháh, from 25th <i>Chet</i> to 2nd <i>Baisakh</i> . Chiefly religious. No traffic. Katás is of course mainly for Hindús and Choa Saidan Sháh for Musalmáns. The two places are about two miles apart. The attendance is sometimes much greater than is here stated.

Of the remaining *melas* attached to shrines, those at Dharábi in Chakwál and Jabbi in Tallagang, are the most noticeable.

There appears to be nothing noteworthy or unusual in the personal names in common use in the districts; unless it be the use of such high-sounding appellations as Adálatzar, Abuzar, Gushtásaf Khán, Láhrásaf Khán, Arjásaf Khán, which some of the Gakkhars and others of Domeli and the tract adjoining, occasionally adopt; and which are probably unusual amongst Punjab agriculturists. The use of abbreviations is extremely common; Mamdú for Muhammad Khán, Maulú for Maula Bakhsh, Ditta for Allah Ditta, Fája for Faiza Khán are instances.

Names and
Titles.

As regards titles something has been said elsewhere: the commonest is that of "Rája" applied to any Gakkhar or Janjúa, and to the principal families of many other tribes, including most Ráj-púts, the Khokhars of Pind Dádan Khán, and others. The Awáns, or rather their headmen, use the title of "Mallik," Márs, Kassars, and Kahúts the name of "Chaudhrí"; which is also used by Jats and others. The Gújars use "Chaudhrí" or "Meh." Amongst Hindús the usual titles are in vogue; but Muhiáls and Gadhioks are mostly addressed as "Mehta." The curious use by the Jogís of Tilla of the Musalmán title of "Pír" has already been noticed; it has no doubt arisen from their residence for many centuries in a Muhammadan tract where this title is applied to Sayyads and Qureshís, the spiritual advisers of the Musalmáns.

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Population.

Poverty or
wealth of the
people.

It is impossible to form any satisfactory estimate of the wealth of the commercial and industrial classes. The income-tax collections for the nine years ending 1900 gave, on the average, 1,060 persons who paid about Rs. 24,000 every year. The amount is practically stationary. It may be said generally that a very large proportion of the artisans in the towns are extremely poor, while their fellows in the villages are scarcely less dependent upon the nature of the harvest than are the agriculturists themselves, their fees often taking the form of a fixed share of the produce, while even where this is not the case the demand for the products necessarily varies with the prosperity of their customers. Perhaps the leather-workers should be excepted, as they derive considerable gains from the hides of the cattle which die in a year of drought. The circumstances of the agricultural classes are discussed in Chapter II, Section A.

CHAPTER II.—ECONOMIC.

Section A.—Agriculture.

The area of the district is divided as follows :—

	Per cent.	CHP.II,A. Agriculture Area,
Cultivated	41	
Culturable waste	7	
Government forests... ..	12	
Other unculturable waste	40	

The last item consists chiefly of ravines, torrent-beds, hills and rivers.

The land under cultivation has, at the recent re-measurements, been classified as follows :—

- (i). *Cháhi*. } —Land irrigated from (i) wells, (ii) canals, (iii)
(ii). *Nahri*. } springs.
(iii). *Abi*. }
(iv). *Sailáb*. —Land affected by river floods.
(v). *Hail*. —Unirrigated land regularly manured.
(vi). *Baráni awval*. —Unirrigated land receiving drainage from higher ground and not wholly dependent on its own rainfall.
(vii). *Maira*. —Ordinary level unirrigated land.
(viii). *Rakkar*. —Sloping, stony, sour, or otherwise markedly inferior land.

For the purposes of the assessment calculations, however, such minuteness was unnecessary, and only four classes were adopted : (i) irrigated, (ii) *sailáb*, (iii) *hail* and *baráni I*, (iv) *maira* and *rakkar*.

The real distinction between classes of land in this district (apart from the obvious difference between irrigated and unirrigated, and between manured and unmanured), depends on *situation* rather than on geological or chemical conditions, though of course these have their influence too; thus the first class of unmanured unirrigated land receives drainage from other land; the second class, *maira*, the ordinary land of the district, is level and absorbs the rain that falls on it, but gets no drainage from other land, while the third class, *rakkar*, does not as a rule retain even the rain that falls on it.

As far as it goes, the above classification is the best that is possible, but it might have been better (as being more intelligible to the *zamíndárs*), to record the soils in the village papers according to their innumerable local names, classifying them afterwards, for assessment purposes, under the four heads given above; the colourless term *baráni I* used to describe the superior unmanured land is also somewhat unsatisfactory; *las* would have been better, as it would have been more readily understood, though not a term commonly used all over the district.

CHAP. II, A. The following table shows the proportion of land in each of Agriculture the principal classes :—

Classification of land.	TAHSIL.	PERCENTAGE ON TOTAL CULTIVATION OF			
		Irrigated.	Saildāb.	Hail and Barani I.	Maira and Rakkar.
	Jhelum	1	4	11	84
	Pind Dādan Khān	10	10	43	37
	Chakwāl	1	...	13	86
	Tallagang	1	...	9	90
	District	3	3	17	77

Recent harvests.

Crop failure has been a pronounced feature of recent harvests : out of 14 crops ending Rabi 1902 there have been only 4 that have not been bad, and some of them have been the worst on record.

Crop failures.

The following detail of the cropping in recent years well illustrates the vicissitudes of agriculture in this district :—

YEAR.		AREA IN THOUSANDS OF ACRES.		
		Sown.	Matured.	Failed.
1892-93	...	1,122	970	152
1893-94	...	1,074	945	129
1894-95	...	1,045	913	132
1895-96	...	965	707	258
1896-97	...	995	594	399
1897-98	...	1,082	831	201
1898-99	...	955	620	335
1899-1900	...	746	214	532
1900-01	...	1,145	940	205
Average of nine years		1,014	754	260

The amount of crops failed, as shown above, is not exaggerated; on the contrary the tendency is to record too little as *kharāba* or failed; but taking the figures as they stand, we see that on the average of the nine years 407 square miles of crops sown (or 26 per cent. of the sowings), fail to produce anything; even if the two "famine" years are excluded, the failures amount to 315 square miles or 15 per cent.; taking this figure as normal, a rough estimate shows that the actual cash value of the seed wasted is not less than Rs. 2,00,000 per annum, and that without taking account of interest charges, which are often very heavy: the loss falls on the tenants, if any; but the land is usually cultivated by its owners.

On the average (excluding famine years) about a quarter of the sowings fail in the *kharif* and about one-sixth in the *rabī*: in general the sown area varies less in the *kharif* than in the *rabī*, but once so the *rabī* crop is more secure, being capable in the

colder winter climate of enduring even prolonged drought if well started. The percentage of *kharāba* is naturally least in the River Bank Circles, being there about one-eighth of the sowings; and rises as high as two-fifths in the arid Pind Dádan Khán Thal.

CHAP. II A.
Agriculture
Crop failures.

Occasionally crop failure in the river bank villages is due to floods, or excessive rainfall, as in that (for the Jhelum valley) ever memorable year, 1893, when a flood of unprecedented volume in the river caused great loss of stock, besides doing immense damage to growing crops and harvested produce; few rabi harvests pass without some loss by hail, but though particular villages are very severely injured, the damage is generally local. It may be said therefore that the failures recorded are due almost entirely to want of timely rainfall, only 6 per cent. of the cultivation being protected by irrigation or river action.

The not very important irrigation from canals and springs is described in a later section. The well cultivation is more conveniently dealt with here and accounts for 3 per cent. of the total cultivation; it is of two kinds: in the River Bank Circle of Pind Dádan Khán, which alone contains over half the irrigation in the district, one-third of the cultivation is *cháhí*, and the irrigation is on a large scale, the average area per well being about 17 acres; in other parts of the district the *cháhí* land is from 2 to 2.8 per cent. only of the total cultivation; wells are comparatively numerous, but owing as a rule to the unevenness of the ground or the depth of the wells, the area irrigated is very small, on the average about 3 acres per well; it naturally follows that where these small areas are in good hands (by no means always the case), the cropping is much heavier, and the crops on the whole of a higher class, than on the larger areas of Pind Dádan Khán, 100 acres of land producing from 130 to 190 acres of matured crops, against 105 in Pind Dádan Khán; the Jhelum Maidán Circle is an exception to the general rule, for not only is the area per well much smaller than it might be, but even on the actual irrigated area the crop rate is only 107 acres matured per 100 acres *cháhí*; the only reason that can be given is that the rainfall is comparatively heavy and certain, and irrigation is indulged in to meet the owners' wants as regards vegetables and green-stuff, rather than for profit.

System of
cultivation.

Wells.

The wells of the second kind are situated chiefly on the banks of the ravines which drain the Jhelum, Chakwál and Tallagang Tahsils, where there are commonly found low-lying strips of alluvial land in which they can be sunk at little cost; similar wells are also sunk on the frontage of the Jhelum river above the Bunhá; and there are a few in the plain round Jhelum. Some of the best are at Domeli, and at Rohtás on the Kahán, in the Kutian Kas at and near Bádsháhán; round Nila Dulla (Tahsil Chakwál), and on the Ankar at Tamman (Tahsil Tallagang): the principal crops are wheat, barley, vegetables, and tobacco in the rabi; and *bája*,

CHAP. II. A. maize, cotton, and vegetables in the kharif. These lands are all well manured; and they are for the most part in the hands of **Agriculture** Malliárs, the most industrious agriculturists in the district. On the other hand, some of the wells—especially those in Tabsíl Tallagang—are poor, and those of later construction are not (like the old ones) always in the hands of Malliárs, but have in many instances been sunk by ordinary agriculturists, who are less able to make them profitable.

Wells.

Sailáb system of cultivation.

The *sailáb* lands are the alluvial lands on the immediate banks and in the bed of the Jhelum river, included in the River Bank Circles of Tabsils Jhelum and Pind Dádan Khán; there are also some 1,200 acres of such land belonging to the Thal villages. *Sailáb* lands are almost entirely cultivated with wheat year after year. A little barley is grown on the poorer lands; on those lands least exposed to the action of the autumn floods some *bájra* and *charí*; and on the best of the old established land two crops are taken year after year, maize in autumn and wheat in the spring; but on the real *sailáb* lands nothing but a rabi crop is possible, owing to the summer inundations. On half-formed ground coarse rice and *sawánk* is sown, but the area so treated is scarcely worth notice. Also on such lands, if barley and rice are sown together in October, the rice will not germinate till the river rises again the following summer; but this also is mere catch-cropping, and the rice so grown is coarse and poor. In short the system on these *sailáb* lands is to take one rabi crop each year—which crop is usually wheat. Some of the wheat crops thus grown are very fine; but others, especially in rainy seasons, are poor and short, and such land is often much choked with thistles and other weeds. *Sailáb* land is not usually manured, and owing to its situation between branches of the river and liability to floods, it cannot receive the frequent ploughings by which the condition of the *báráni* land is so much improved; nor indeed does it need such ploughings except to clear the land of weeds.

System of cultivation on unirrigated land.

It has been seen how large a proportion of the land depends on the local rainfall; on these unirrigated soils the system of cropping followed over about three-fourths of the whole district is what is usually called the two-year course; a spring crop is followed in the same year by an autumn crop, and then the land lies fallow for the next year; one advantage of this procedure is that the land is in a high state of tilth, and strengthened by a long fallow, when it is sown with the more valuable spring crop; and the system also provides in a simple way for the rotation of crops; it is, however, far from being strictly adhered to, being modified according to the seasons, with a tendency, naturally, to prefer the rabi to the less certain and less profitable kharif. The crops grown in the rabi, therefore, largely exceed those grown in the kharif. In about a quarter of the district,—practically the whole of Tallagang, and the tract at the foot of the hills in Pind Dádan

Khán,—the system is different, the kharif and rabi lands being separate; in Tallagang the country is undulating, and the heavier lower-lying terraced *maira* lands are used almost exclusively for the kharif, for which the very light and sandy higher ground is unsuitable, owing to the rapidity with which it dries under the summer sun. For different reasons the rabi and kharif lands in the submontane tract also are separate, but there it is the higher land on which the kharif crops are grown. In all parts of the district the best *bárání* I, embanked hollows or ravines receiving ample drainage from higher ground, is reserved almost entirely for the rabi, partly because of the greater value of the rabi staples, which the constant deposit of new soil enables the land to produce year after year, but partly also because such land is liable to injurious flooding in the summer rains.

Major Wace thus describes the system of cultivation on unirrigated land:—

"The two-year course on the *bárání* lands of Tahsils Jhelum, Chakwál and Pind Dádan Khán is as under. The *kharif* crop having been harvested at the beginning of November, the land lies over for two months until the *loi* holiday, 1st Mágh (equal to 12th January), shortly before which the land has usually received a good fall of rain. From this date the cultivator ploughs and reploughs the land, as often as he has leisure, inclination, and opportunity, for nearly nine months to the end of September. Land under this treatment is spoken of as *warihá*. In the Jhelum and Pind Dádan Khán Tahsils, and in the Lundi Patti of Tahsil Chakwál, land is usually ploughed over eight or ten times during this period; in Dhanni about four or five times. The process completely clears the land of weeds, and in the better cultivated tracts brings it to a fine condition of tilth. From the end of September *rabi* sowings commence. When the *rabi* crops have been cleared in May (the land is then termed *nárka*), the first opportunity is taken to plough the land over two or three times and then a *kharif* crop is sown. Under this course, if regularly carried out, an agriculturist will in each year take a *rabi* and *kharif* crop, from half his cultivated land, the other half being at rest under ploughing. That is to say, he gets one crop per annum per acre cultivated; but the course of cultivation is so arranged that each acre rests every other year. The system is extremely well suited both to the climate and to the circumstances of the people; and the nine months' rest and ploughing which each acre gets every other year must go very far towards supplying the place of manure; for the ploughing, besides completely clearing the land of weeds, by pulverising the soil and by exposing it freely to the action of damp and of the atmosphere, accelerates the decay of insoluble matter and its conversion into plant food; so that land treated in this way for nine months probably gains as much good as if it were left for twice the time in unploughed fallow.

"This is the system as it is followed by the best cultivators. But

Tahsils.	No. of acres. <i>kharif</i> for every 10 acres <i>rabi</i> .
Jhelum ...	9
Pind Dádan Khán ...	6
Chakwál ...	4½

if the statement of *bárání* crops above given is referred to, it will be seen that the area of the *kharif* crops does not equal that of the *rabi* crops, but that in the three tahsils concerned the crops are recorded in the proportions given in the margin.

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Agriculture

System of
cultivation on
unirrigated
land.

System of
bárání cultivation in tahsils Jhelum, Chakwál and Pind Dádan Khán hills.

Variation
from this
course.

CHAP. II. A.

Agriculture

Variation
from this
course.

"In a limited area in the Thal (Pind Dádan Khán) close under the Salt Range little else beside *kharif* crops (*bájra*) are grown. But in respect of all other *báráni* lands returned in these tahsils as under *kharif* crops it is safe to assume that a *rabi* crop preceded the *kharif*. So, speaking roughly, in Jhelum the full agricultural course is well carried out, but in the Pind Dádan Khán Tahsíl a third of the land cropped each year yields no *kharif* crop, and in Chakwál a half⁽¹⁾. The main reason of this is the shorter rainfall of these two tahsils. The shorter the rainfall the greater the difficulty in raising *kharif* crops on the lighter soils. In the Chakwál tahsíl especially there is a great deal of light soil. And zamíndárs contending annually with difficulties of this sort, learn to limit or expand the *kharif* sowings of each year according to the opening promise of the season. On the other hand, there is of course a certain amount of carelessness and bad cultivation; and occasionally attempts are made to grow the more valuable wheat crops, year after year, by omitting the *kharif* (as is commonly done on the *báráni* lands of the River Bank Circle of Tahsíl Pind Dádan Khán). But these are minor points. The main cause is that in proportion as the *kharif* rainfall is short, the lands suited for *kharif* crops will be limited by the exclusion of the lighter soils and by the selection of those of a more loamy character and those which receive drainage from lands lying above them. This is the same lesson as is indicated by the agricultural system of the Tallagang tahsíl which will now be described.

"The other system under which the *rabi* and *kharif* lands are separate, and usually each cropped once a year, prevails in Tahsíl Tallagang and in a few villages of the Babiál and Chach *ilákás* in the west of the Chakwál Tahsíl. In these tracts the higher sandy lands are reserved for the *rabi*, and the lower and more loamy land for the *kharif*. The country between Láwa, Taman, and Tallagang lies on broad gentle undulations, the crests of which are light sandy soil, and the hollows more or less loamy. In long course of time much of the clay in the higher lands has been washed down into the lower. On the sandier soil the autumn rains are not sufficient for the growth of *kharif* crops; but they are sufficient on the loamy soils which are richer in clay and therefore more retentive in moisture, and which also receive the drainage of the higher fields.⁽²⁾ The people, therefore, cultivate the latter with *kharif* crops, and succeed in getting very fair *rabi* crops off the higher and sandier soils by aid of the winter rains. The *rabi* lands are four or five times the extent of the *kharif* lands. Neither *rabi* nor *kharif* lands get more than three or four ploughings before being sown; sometimes less.

Budhí system
on *kharif*
lands in tahsíl
Tallagang.

"Where the holdings of the cultivators are large, as in the Babiál villages of Tahsíl Chakwál and in Láwa and other parts of Tallagang, it is common thing to find that a part of the *kharif* land has been thrown out of cultivation as *budhí* or old. In these places the *kharif* cultivation is rough, the land is not sufficiently ploughed, and so after three successive *kharif* crops becomes a good deal choked with weeds. The cultivator under such circumstances will keep only half his *kharif* lands under cultivation and the other half fallow; changing the two halves after every three years. The drainage of the half left fallow is carefully conducted by little surface channels on to the portion under cultivation. It is doubt-

(1) This of course refers to the proportions reported at Major Wace's Settlement; the difference is not actually so great.

(2) The catchment area for water which is attached to any field is looked upon as a matter of great importance throughout the west of the district. It is called the *rohr pani*, and when it is large the field below is nearly always highly classed.

ful how far this practice is really necessary ; it certainly has the advantage of giving to such crops as are grown a larger share of the rainfall than they would otherwise receive ; and it seems to be principally resorted to where the holdings are large and the cultivation rough. It is not practised in the better cultivated villages of the Tallagang Tahsil: though as regards soil and rainfall these are similarly circumstanced to those in which the *budhi* system prevails. The highest proportion of *budhi* lands is found in Babiál and Láwa. In the majority of the villages of the tahsil, where the custom exists, the *budhi* land does not exceed one-third of the *kharif* area.

CHAP. II, A.

Agriculture

Budhi system
on *kharif*
lands in Tahsil
Tallagang.

"Cotton cultivation, owing to the length of time during which this crop occupies the ground, necessarily where it occurs creates a diversion from the ordinary course of husbandry. It is sown in March, and the pickings last from October to the end of December, so that a *rabi* crop can neither immediately precede it nor immediately follow it. On the *baráni* lands of Tahsils Jhelum and Lundi Patti, the plants, after the first year's pickings, are cut off close to the ground, and they sprout again in the spring following, yielding a second crop generally better than that of the first year. In Dhanni, Tallagang, and the Pind Dádan Khán plain, the plants are similarly cut back a second time, and a third year's crop taken, but this is always poor. In the Pind Dádan Khán hills very little cotton is grown, as their more temperate climate does not suit this crop ; so much as is grown is ploughed up after the first year's pickings. Cotton cultivated on well lands stands for two years in Tahsils Jhelum and Pind Dádan Khán, but for only one year in the rest of the district. It is not usual to take any special care to sow cotton on superior lands.

Cotton cul-
tivation.

"In Tahsil Tallagang manure is not usually applied to the *baráni* lands. The people say manure burns up their crops. This experience agrees with that of other countries. Professor Wrightson in his "Hand-book of Agriculture," recently published, remarks (page 114) that there is "an objection to the use of dung upon light soils in dry seasons, the dung often doing harm by leaving the land hollow and liable to be injured by drought." If this is so in wet England, *a fortiori* must it be the case in the light soils of a dry country like Tallagang. In the Thal and Phapra Circles of Tahsil Pind Dádan Khán manure is little used in the *baráni* lands for similar reasons ; the climate is too hot and dry. In River Bank Circle of Pind Dádan Khán the manure is all used up on the well lands and there is none to spare for the *baráni*. In the Hill Circle of that tahsil, and throughout Tahsils Jhelum and Chakwál, the manure produced is applied to the best *baráni* lands. Some of the *baráni* lands thus manured are cropped twice annually.

Manuring
and double
crops on un-
irrigated land
(*baráni*).

"The marked features in the cultivation of Dhanni are the backs of earth on which the cultivation of this tahsil so entirely depends, that it is necessary to explain their nature in some detail. The high banks in the Pind Dádan Khán villages are all made in an open and even plain ; but in Chakwál, and between the two ranges of hills in the Jhelum Tahsil, indeed more or less in every part of the district, the ground slopes considerably. Consequently, if the fields were not banked up properly, not only would the water drain off at once and the field be left dry, but the very earth of the field would be carried off, as well as the seeds or manure therein, so that every field is carefully banked up, if the owners have men and cattle to do it. The work is heavy, and cannot be done with poor cattle who are unable to drag the heavy plank, or *sohága*, which is used to push the earth from the higher part to the lower. It is equally tiring to the men, and it is consequently only in villages held by well-to-do owners, or by some *chaudri* or other wealthy person, that the lands are really properly

Embanked
fields.

CHAP. II. A.

Agriculture

Embanked
fields.

The great
banks or
bands for cul-
tivation.

System of
improving
fields by
embanking
them.

banked up. In others, some fields are banked up where the owner has friends or means; some are left to their natural state. These latter fields are called *rakr*—the former *marā*—and in distributing their assessment the *zamindārs* generally assess the latter at double the former. This sort of bank is common perhaps all over the district. Few villages are so level that these banks are not needed; and, though the general rule is as stated above, viz., that the owner must be a man of some wealth to enable him to provide the cattle and men, yet there are some villages, where the number of persons who have to be fed and sustained from the land has driven them to bank up every available piece of land with the utmost care. These, however, are few. It requires a spirit of mutual aid to effect this; and owing to the fierce disputes about the ownership of land which marks this district, such a spirit is seldom to be met with.

“ Besides these banks there is a second and more important kind which is only suited to particular localities. Of course, as the rain water pours over the surface of the soil, it carries with it a large quantity of earthy sediment, which it sweeps down into the ravines which form its outlet. Where the owners are wealthy enough, they bank up the heads of these ravines, leaving an escape wherever possible. They then break down and smooth all the rough uneven ground, so as to make as large a field as they can at the bottom of the ravine. This bank then retains a great body of water, rich in earthy sediment, and, as it dries up, leaves the most fertile soil in the country. This soil is called *las*, and is generally assessed by the villages at three to four times the amount of the *rakr*. Some of these banks are very large, and many retain a considerable quantity of moisture all the year. They require, however, both wealth and energy. When one of these is decided upon, all the best cattle are summoned from all the villages around. Men come in their holiday clothes, and for perhaps a fortnight, sometimes for a month, the work is carried on by different relays. Some dig up the earth on both sides ready to be dragged off by the plank (*kurā* or *sohāgā*), the others form a continuous circle of cattle going and returning, though more generally they cross the space to the other side, returning with earth from that side, and thus the bank grows apace. They are paid well; food of the best for themselves and their bullocks, and often four annas an ox extra; so that these banks often cost two or three hundred rupees; some 500 and 1,000 rupees. But these larger ones belong to former days, when the whole tahsil was held by the great *talukdārs*, of whom more hereafter. Some of the more important ones retain enough water to produce rich crops: these are most profitable.

“ This system is practised in the Khuddar and Pabbi Circles of Tahsil Jhelum, throughout Tahsil Chakwāl, in parts of Tahsil Tallagang, and in the Pind Dādan Khān hills; in fact, wherever the cultivated fields lie on the sloping sides of plateaux or in ravine ground. The larger style of embankment described above is not much attempted; they are too expensive and frequently break during the heavier falls of rain. Occasionally *bands*, very much larger than those put round fields, are thrown across the head of a ravine. These are almost always of stone masonry, either wholly or partially, and they are intended to form tanks and not to promote cultivation. In one or two cases they are seen furnished with substitutes for a sluice, so as to prevent too great a stress on the *band*; but, instead of these large banks, there is an almost universal system of small banks at the lower edges of those fields of which the surface was originally sloping, or which have been made in ravine land. Though these little banks do not cost much money, constant attention and much labour is spent on them by the cultivators. They are made sufficiently high to enable the cultivator to level the surface of his field, with one or two

feet extra to retain the rainfall and drainage from higher land. By their aid a very great improvement in the character of the *bārāni* cultivation has taken place since annexation, and since the Regular Settlement—an improvement which is still progressing. Similarly, in the Thal and Phapra Circles of the Pind Dādan Khān plain, all the best fields are surrounded by small banks of about two feet high; but these banks are made not to level the field surface, but in order to retain, in sufficient quantity upon each field, the fertilising floods which come down from the Salt Range after any considerable rainfall. Without such banks the floods would run off. In making the small field *bands* the surface of the spot from which the earth of the *band* is to be taken is first thoroughly loosened. This is generally done by ploughing and cross-ploughing. The loose earth is then raked up into the *band* by an instrument called *karāh*, which is generally dragged by one or two bullocks, but sometimes by men. The *karāh* is simply a very large wooden pitchfork with spreading prongs connected together by an interlacement of wattle-work. When the earth has been brought together it is beaten and consolidated.

CHAP. II, A.

Agriculture

System of improving fields by embanking them:

“There is little to say on the subject of the crops cultivated on *bārāni* lands; they are almost identical all over the district; in the *rabi* principally wheat, with a little mustard, *tāramira* and gram; in the *khārif* principally *bājra*, with a little *moth*, *chari* and cotton. *Chari* is the term locally applied to *joār* sown thickly. The effect of sowing it thickly is that it grows a finer and more tender stalk, and therefore is better suited for cattle fodder, which is the sole purpose for which this crop is grown. In ordinary years a great deal of gram is grown on the sandy soils of Tahsil Tallagang and in the south-west corner of Tahsil Chakwāl; but, in a good year, the *zamīndārs* prefer to cultivate wheat, because gram is a delicate crop easily spoiled by plentiful rain in January and February. The year of the Settlement measurements in Tallagang happened to be one in which less than the usual area had for these reasons been sown with gram.

Crops principally cultivated on *bārāni* lands.

“Before leaving this part of the subject one other feature in the agriculture of the district deserves notice, viz., the custom of sowing mixed crops generally called *berarā*. All over the district it is a very general practice to sow a little mustard mixed up with the wheat. The mustard thus sown is cut green and given to the cattle mixed up with *bhūsa*. The result is to supply the cattle with a limited amount of green food of good quality in the later winter months, at a time when there is hardly any grass or other green food of any sort (the young wheat excepted). The presence of the mustard plant among the wheat does not interfere in any degree with the growth of the wheat crop. In the same way mixed crops of *bājra* and *moth* are very common. *Moth* is sown later than *bājra*, and if the cultivator thinks he will not get a good *bājra* crop he adds *moth* to fill up the field. As the season advances he commonly allows the crop which promises best to come to maturity and feeds his cattle with the other. In the same way *tāramira* and mustard are not unfrequently sown into a poor *bājra* crop when the young plants are ploughed over (*sāl*) in August. *Moth* is added to poor cotton fields for a like reason. An equally thrifty practice is the sowing of *tāramira* and mustard on the field banks, which prevails all over the district, especially in the Chakwāl Tahsil, thereby securing a crop return even from the land occupied by these banks.”

Mixed crops.

The most important agricultural implement is the plough (*hal*); the ploughshare (*kur*), is a strong flat piece of wood, broad at the back and centre, but gradually tapering to a point, shod with an iron tongue, called *phāla*: it is generally made of *kikka* or *phulah* wood. Into the middle of this fits the shaft (*hal*), from which the

Agricultural implements and operations.

CHAP. II, A.

Agriculture

Ploughing.

whole takes its name: this a strong naturally curved piece of timber, *phulāh* or wild-olive for choice, though *kikkar* will do, and *shisham* may also be used. The handle by which the plough is guided is fitted into the *kur* by another smaller piece. The yoke is called *panjāli*. Bullocks are almost invariably used for ploughing, but where cattle are scarce, cows are sometimes used, even cows in milk, while in Chakwāl and some other parts of the district in recent years donkeys might often be seen holding up one side of the yoke, while a single bullock on the other side did most of the work. A field is ploughed in narrowing circles beginning at the outside and ending in the middle: the furrow turns always from right to left (against the sun), so that the right-hand bullock should be the stronger of the two, as he has more turning to do. The depth of the furrow varies much on different kinds of soil, the heavier soils requiring deeper ploughing than the light soils; and they also require a heavier plough; the furrow is rarely over six inches deep. On ordinary soils a good farmer will plough his land as often as he can, sometimes as often as 10 or 12 times; but on the very light soils this is not necessary: on the very sandiest soils in Tallagang there is no ploughing previous to that with which the seed is sown, and though this extreme is very rare, there is plenty of land on which anything but very light ploughing does not seem to pay.

Sowing.

Sowing is generally done by drill (*nālī*), a hollow bamboo attached to the ploughshare by the handle, and fitted with a wide wooden mouth which is kept supplied with seed by the ploughman. Some crops however are sown broadcast. After sowing, the field is levelled by the *sohāgā*, a heavy flat beam drawn over it by bullocks, the driver standing on the log to increase its weight: the *sohāgā* in this district is more usually called *majh* or *maira*.

Embanking.

Embanking and levelling is done with the *karāh*, a large wooden shovel drawn by bullocks, and held by the driver: beginning at the top of the field the peasant drives his oxen towards the lower end, holding the *karāh* down so that it gets filled with earth: this the bullocks pull down to the lower part of the field where the driver lifts the *karāh* so that it deposits the earth on the embankments (*banna*), and then carries it back behind his bullocks to the higher part of the field. This process both levels the field and raises an embankment at its lower edge to retain the drainage water.

Other implements.

For light work of the same kind, such as the construction of the small dividing ridges on irrigated land, a large wooden rake, called *jandra*, is used: it is worked by two men, one pushing and the other pulling. Digging is usually done with the *kahī*, an iron mattock, set at an acute angle in its short wooden handle. Other implements are the *ramba*, a flat iron spud with sharp edge and short handle; *datri*, or sickle; *tranqal*, or pitchfork of wood; *chaj* or winnowing tray of basket work; and *kuhāri* or axe. These are the most important.

It is only a small exaggeration to say that the whole population of the villages and a large proportion of that of the towns is engaged in and dependent on agriculture. This population has been fully dealt with in Chapter I.

The demand for daily labourers, which is small except at harvest time, is met chiefly by men of the agricultural tribes, but is partly supplied by immigrants from the direction of Ghazni and from Kashmir. Patháns and Kashmírís enter the district in small numbers in time for the autumn harvest, and stay out the winter; but after the spring harvest they generally return for the summer to their homes. At harvest time especially the menial classes also provide much of the labour required. Reapers receive in lieu of pay one sheaf out of every 20 sheaves which they cut. This sometimes in a good harvest is equal to a rate of nearly 8 annas a day. When paid in cash, the rate of wages varies from two to four annas.

The following table gives the percentage of the area harvested of each of the principal crops on the total crops harvested:—

CHAP. II, A.

Agriculture

Population engaged in agriculture.

Agricultural labourers.

Principal crops.

	Jhelum.	Pind Dádan Khán.	Chakwál.	Tallagang.
KHARÍF—				
Bájra	22	18	17	13
Jowár	4	5	5	5
Pulses	13	4	9	6
Cotton	3	5	3	4
Others	2	4	1	1
RABI—				
Wheat	44	52	49	51
Barley	2	2	3	1
Gram	1	1	4	14
Oilseeds	6	5	7	4
Others	3	4	2	1
Total Kharif	44	36	35	29
Total Rabi	56	64	65	71

For the district as a whole, 35 per cent. of the crops are harvested in the kharif and 65 per cent. in the rabi; wheat is just 50 per cent. of the whole, *bájra* being next in importance with 18 per cent. Brief remarks on the principal staples follow: a comparison of the crops grown now with those grown at the preceding Settlement would be useless, as the system of record is now different; but there has been no great change: *kasumba* (safflower) has, however, disappeared owing to the use of aniline dyes, and the cultivation of the poppy is now prohibited.

Bájra (spiked millet) is by far the most important of the autumn crops: it is grown on all soils, but principally on the better unirrigated land. It is generally the second of two successive crops, with very light ploughing between, so the yield is not as heavy as it might be; but on manured land it is not infrequently the only crop taken during the year, and then yields heavily: on some of the land at the foot of the Salt Range

Kharif crops.
Bájra.

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Bājra.

too, in the Phapra and Thal circles, it is the only crop grown, and there in good years it yields once or twice after the first ears are plucked, on land getting flood water from the hills. *Bājra* is the food of the people for most of the winter, and its stalks are a coarse but valued fodder, being also used for burning when plentiful. The seed is about 2 seers per acre sown broadcast. Great trouble is taken to protect this and other kharif crops from birds, a platform (*manna*) of wood or dried mud being erected in the field, on which someone sits all day to guard the crops, partly with a view to possible human depredators. Sowings are usually after the first heavy rain of the monsoon, or more rarely after good showers in May-June. Reaping begins in October and goes on until December, but the ears (*silla*) are plucked and roasted as soon as the grain forms.

Jowār-charri.

Jowār is not important: it is chiefly grown thick on irrigated or moist lands for choice, being then called *charri*: it is used as fodder when grown in this way, but also yields some grain if left to ripen. It succumbs to drought more easily than *bājra*. In the country immediately south of the Salt Range, and to some extent elsewhere, *jowār* is grown as a grain crop, sown thinly: the succulent stalks provide an imperfect substitute for sugarcane for chewing.

Pulses.

Pulses account for 8 per cent of the total crops harvested. They consist of *mung*, *moth* and *māsh* (*Phaseolus mungo*, *aconitifolius*, and *radiatus*), the last very uncommon, and the other two generally taken as a mixed crop, by themselves, or together with *bājra*. *Mung* is commonest in the hills and *moth* elsewhere, especially on light soils: pulses are almost entirely confined to *maira* land.

Cotton.

Cotton cultivation is dealt with in Major Wace's remarks above on page 153: there is little to add: it is nearly all ordinary country cotton: foreign varieties have been tried, but seem after a time to assimilate to the indigenous variety: they have never been widely adopted. The pickings, lasting from October to the end of December, are usually done by women who get a part of their pickings in payment.

Other kharif crops.

Maize is common on the irrigated land, both *chāhi* and *ābī*, in most parts of the district, also on manured dry land in the hills, and on old established *sailāb*. Sugarcane is grown to some extent in the Pind Dādan Khān plain, on the better wells, on *ābī* land in the hills, and on well-lands around Jhelum: it is usually of inferior kind, and is practically all eaten raw, or sometimes fed to the well cattle to some extent. A coarse sort of rice is grown on unformed river lands, the seed it drops lying dormant until the year following, when it sprouts again. Oilseeds, hemp, vegetables and fruits are all grown to some extent, and complete the list of autumn crops.

Rabi crops:
Wheat.

Wheat occupies just half the harvested area of the district, and being a valuable crop is more important than all the others put together. It is grown on all kinds of land, and is nearly always the first of the two consecutive crops taken in the two years' cycle,

so that it is preceded by a year's fallow. Ploughing begins as early as the preceding January, and goes on more or less until the crop is sown: the best time for sowing is in October, but if there is no sufficient moisture then, and good rain comes later on, it may be sown with reasonable prospects of success as late as the beginning of January, though good rain will be needed to carry it on through the spring. In extreme cases wheat has been sown even in the latter half of February, but it then has very little chance of success. On unirrigated soils little is done to the crop after it is sown, but on irrigated land it is generally weeded to some extent: on such land, and also on the best dry lands, if the crop promises to be a very heavy one, it is cut over for fodder or grazed down when a fair height, and afterwards grows up and yields a normal crop. Of all the crops it is the most tolerant of drought, provided that there is plenty of moisture in the ground to give it a good start at the outset. Reaping begins in the last half of April in the plains, and a fortnight later in the hills, and lasts about a month, but may be much later if the sowings were late. The amount of seed used varies with the quality of the soil, but the average is about 30 seers per acre: a certain amount of barley is often mixed with the wheat, and in many parts of the district *sarson* (mustard) is grown with it, and is cut for fodder in the later winter months. Other mixtures with wheat are not common. It is the best, and indeed almost the only crop, to grow on the slightly bitter wells so numerous in the Pind Dádan Khán plain. The wheat grown is almost all the bearded red kind: the beardless white variety, called *dágar*, is sometimes seen, but although it yields rather better, and ripens earlier, it is more easily withered by drought, and the grain is not so valuable. Beardless red wheat (*rodi*) is equally uncommon.

This is not an important crop, and is grown chiefly on irrigated land, being mainly cut green for fodder; it can be cut over in this way three or four times in favourable circumstances.

Gram (*chhola*) is an important crop on the light sandy soils of Tallagang and the west of Chakwál. The growing plant is much used as an article of diet, the tender shoots for some two months every year being plucked and eaten as a vegetable: at this stage the crop is almost public property, outsiders being allowed to help themselves freely; it benefits by this pruning and also by being grazed over when young by sheep and goats. Gram yields very heavily when all goes well, and would be a very popular crop if it was less uncertain; but the cultivator may at any time see his crop destroyed by high winds or unfavourable atmospheric influences, and heavy rain may also damage it. Light *maira* is the only soil on which it is grown.

Nearly all the oilseeds, six per cent. of the total crops harvested, are *tárámira* (*Eruca sativa*), usually but inaccurately called rape. It is grown almost exclusively on the most inferior

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Wheat.

Barley.

Gram.

Oilseeds.

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Agriculture

Oilseeds.

kinds of unirrigated land, much of the poorest *rakkar* being able to produce nothing more than a light *tárámíra* crop, unless it is very poor cotton. It is a common practice, especially in the plateau, to grow it on the dividing field embankments, where it thrives very well: it is also often sown amongst the stubble of a thin kharif crop. From the character of the land in which it is grown the produce is generally very small, but it may be very heavy in favourable circumstances, and there is hardly any crop of which the yield varies so greatly. *Tárámíra* like gram is used as a vegetable when green, and a good deal is also consumed as fodder, but the bulk of the crop is ripened and the oil extracted: this has now been superseded by kerosine for lighting purposes, but it is considered very healthy and strengthening as an article of food, and in many ways takes the place of *ghi* for frying, &c. There is no sign of its cultivation decreasing. It is generally called *jamáh*.

Other rabi crops.

There are no other rabi crops of much importance: *sarson* has been mentioned already: it is used almost entirely as fodder: so are the carrots and turnips grown on the wells, especially in the Pind Dádan Khán plain. Melons are largely grown in the additional rabi crop in the early summer, and are sometimes very profitable in the neighbourhood of towns or large villages: melons of a particular kind grow very well in the Thal in good years. Vegetables, and more rarely fruits, are not uncommon on irrigated land.

Rates of yield.

The average yields per acre *harvested* of the principal crops on different soils all over the district were carefully worked out from various sources during the Settlement operations, and are shown in the published Final Report of the recent Settlement (1902).⁽¹⁾ They are believed to be fairly correct, but probably moderate, estimates of the average outturn; but are very largely exceeded, both in a good year on ordinary land and in an average year on land above the average of its class, while the contrary is also true.

The outturn finally obtained is much reduced by drought, by hail, by high winds, by locusts and other insect pests, by rats in the riverain, by birds and wild animals, by weeds, and by various plant-diseases, such as rust: white-ants also do harm in dry seasons. Even when the produce is brought home after suffering further loss on the threshing floor (which may be heavy if the weather is bad), the stored grain is liable to be attacked by weevils.

Arboriculture.

Arboriculture, as connected with the large areas of waste land held by the State as Government forests, will be dealt with in another chapter, and as practised in the rare gardens of the district has been noticed elsewhere.

Roadside tree-planting has received much intermittent attention from District Officers, from the earliest days after annexation,

(1) Paragraph 34, and Appendix A.

and in the alluvial plains to the south and east of the district has met with considerable success, there being some fine avenues of *shisham* and *kikkar* trees in those parts: in the hills, planting has been much less successful, no trees there growing to any height on dry lands without much more attention than can be given to them on the roads, some of which have, however, a thin edging of stunted trees, mostly *dhrek*, mulberry, or *ber*. In the great northern plateau there are a number of fine trees, *shishams* and others, about the Tahsil headquarter stations, and for some little distance from them on the principal roads, but in general very little has been done, and not very much is possible. In some cases roadside tree-planting has failed from being too ambitious, attempts being made to grow trees of a good class in soils and climates where they do not thrive, instead of the humbler kinds, such as the *ber*, which would have more chance of surviving. The *kikkar* is the most valuable of the common roadside trees from an agricultural point of view, the wood being very useful, and the leaves being a valued fodder in seasons of scarcity; and it also grows quickly: but it is hardly found outside the plain.

The present (1901) cultivated area is 13 per cent. more than that of last Settlement (about twenty years ago), which was an increase of 41 per cent. on the area of the first Regular Settlement; cultivation has lost ground to some extent during the last few years owing to unfavourable seasons, but the shrinkage on this account is small; the nominal decrease due to more accurate area calculations at the recent Settlement survey is also small; probably about the same as the decrease in the total area of the district, which has fallen from 4,039 square miles to 3,959, a difference of two per cent. On the other hand, the new cultivation is for the most part greatly inferior to the old, some of it so poor that it can hardly repay the cost of cultivation, and the increase in resources due to the breaking up of new land is therefore certainly not more than ten per cent., and is probably less. There is very little scope for extension in future; a vast amount of land has been brought under the plough which the ordinary person would not think worth cultivation, but in this respect the district has nearly reached the end of its tether: here and there waste that will make fair cultivation does still exist, but in the ordinary village this is not the case; and it is improbable that the increase during the next generation will be more than ten per cent.

Extension of
cultivation.

With regard to the method in which land apparently almost or altogether unculturable is brought under cultivation by the people, Major Wace makes the following remarks while discussing the increase of cultivation during the period of the 1st Regular Settlement:—

Extension
of cultivation
and reclama-
tion of waste
land.

"The method by which cultivation is now extending in the west half of tahsil Jhelum, in tahsil Chakwal and Tallagang, and in the hill circle

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Extension
of cultivation
and reclama-
tion of waste
land.

of tahsil Pind Dádan Khán, and in which it has been extending during the past fifteen years, is peculiar to this part of the Punjab. These portions of the district are elevated plateaux intersected by ravines. The ravines cut back in countless little branches into the plateaux and the lands reclaimed are largely those which form the beds and sides of the little ravines, or the sloping lands which lie at the foot of the low ranges of hills. These lands are correctly described as unculturable in their natural state. They are rendered culturable by a laborious process of levelling down and banking up. They were originally for the most part recorded as village common; but since the Regular Settlement was made, there have been continual partitions of them all over the country. And when partitioned, the owners reclaim them, not by an expenditure of capital but by steady industry. The upper banks are broken down, the lower ends of the slopes are banked up and the beds are dammed. Every means is adopted to level inequalities and to prevent the rains from washing away the soil that is broken down. Occasionally down comes heavy rain, and breaks the lower slopes and dams on which so much pains have been spent and washes away a great quantity of valuable soil: and the cultivators have to do almost half their work of reclaiming and levelling over again. And so they have worked on perseveringly and unweariedly for the last fifteen years; till, when the new measurements come, and we add up the total area cultivated, we are astonished at the gross amount of land that has been reclaimed, and wonder how the previous Settlement Officer can have so short estimated the prospects of extended cultivation. Well so far so good; only let us take care how we assess this new cultivation. A great portion of it is in a very unformed state; and if we put too much revenue on it, the people will lose heart and throw it up. Treat it lightly, and they will not feel its assessment; and will go on as before steadily reclaiming unculturable land, till very likely, thirty years hence, the Settlement Officer of the day will wonder how it came about that I repeated my predecessor's short estimate, and returned so much land as unculturable. In other districts the land returned as culturable is land which any one would be glad to have; but that reclaimed in this district is stuff which no ordinary outsider would think worth asking for: but the resident cultivators break it down, level it, and embank it, year by year, till in course of time the new lands are as fine as, and sometimes finer than, the old."

Land trans-
fers: Agricul-
tural indebt-
edness.

The main facts connected with transfers of land are set forth in the following statement, which shows the average annual alienations since Settlement by five yearly periods:—

1	2	3	4	5	6	7	8
District.	Years.	MORTGAGES WITH POSSESSION.		REDEMPTION.		SALES OR PERMANENT TRANSFERS FOR VALUE.	
		Number of trans- actions.	Cultivated area trans- ferred.	Number of trans- actions.	Cultivated area trans- ferred.	Number of trans- actions.	Cultivated area trans- ferred.
			Acres.		Acres.		Acres.
Jhelum.	Average of 1880 to 1885	519	3,274	70	427	513	2,020
	1885-86 to 1889-90 ...	2,400	9,273	564	2,707	1,973	5,472
	1890-91 to 1894-95 ...	2,518	8,831	1,137	5,783	2,530	6,212
	1895-96 to 1899-1900	4,817	13,329	2,663	9,358	4,431	8,835
	1900-1901 ...	3,230	7,473	1,422	4,047	3,712	6,598

Sale and mortgage prices rose very largely in the twenty years

Settlement, mortgage, Rs. 21 :	sale, Rs. 23
1880-85	38
1885-90	30
1890-95	36
1895-1900	45
1900-1901	50

ending with 1,901, the average prices at different periods being as shown in the margin.

The prices of the later

periods, at any rate, are exaggerated; mortgage money was swelled by accumulations of interest, and a substantial addition was always made to the real sale-price of land in order to keep off pre-emptors; but even allowing for this, the rise in the value of the land since the first revised settlement is sufficiently striking. At the time of the passing of the Land Alienation Act the purchase-money of land sold amounted, for the district as a whole, to nearly 100 times the land revenue assessed on it, varying from about 80 times in Tallagang to 110 times in Jhelum.

The total transferred since settlement was about 22 per cent. of the cultivation, mortgages slightly exceeding sales; about 11½ per cent. of the land having been acquired by money-lenders, 3½ per cent. permanently, and 8 per cent. by mortgage; there was not much variation between Tahsils, except that the percentage transferred was higher in Chakwāl than elsewhere. The total alienations at last settlement were under 4 per cent., so there has been a marked change for the worse since then, though as compared with others the district has held its own fairly well. The above statistics cover the period up to 8th June 1901, when the Land Alienation Act came into force.

There is no reason to suppose that in any part of the district transfers were due to severity of assessment, unless in the case of individuals in very exceptional circumstances, if the need of money to pay the land revenue had in some cases laid the foundations of indebtedness (as undoubtedly it had), this was due to the imprudence of the landowner; the moderation, or otherwise, of the Government demand had practically nothing whatever to do with it.

Transfers by agriculturists are due either to extravagance on occasions of domestic ceremonies, or to ruinous litigation; to the omission when times are good to provide a reserve for bad seasons; to unavoidable calamities, such as loss of cattle through drought or sickness; and, perhaps most commonly of all, to trifling debts due to usurious shopkeepers or money-lenders, which for a time remain unheeded, but by means of heavy compound interest and the other devices described below before long become a crushing burden.

Unsecured debt, as ascertained by enquiry when the Assessment Reports were submitted in 1897-99, amounted to nearly forty lakhs of rupees, or four rupees per acre of cultivation; no fresh enquiry has since been made, but indebtedness must have increased very greatly in the calamitous year 1899-1900.

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Land transfers, Agricultural indebtedness.

Transfers.

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Twenty years ago it was possible to write as follows of the economic condition of the people :—

Transfers.

"The Jhelum peasantry are said by those who know them best to be, on the whole, in a prosperous condition. The only poverty is such as results from excessive sub-division of the land. It is estimated that the average expenditure of an ordinary cultivator in fair circumstances upon the subsistence of himself and his family is about Rs. 8 per month, an expense that a holding of 15 acres will easily enable him to bear. The ordinary expenditure of a shopkeeper is somewhat more, and averages probably Rs. 12 per month. Some of the headmen, or *maliks*, of the Awáns in Talagang, and the families of the Chaudhries of Dhanni possess large estates. It is true they had no law of primogeniture, but they used to keep their land undivided by fighting among themselves, till only one was left. In Dhani and Talagang there are accordingly still some land-owners left with large estates paying a yearly revenue of Rs. 1,000, but these are the exception, and constant sub-division under the peaceful British rule will soon reduce them to a level with their neighbours.

Debt certainly is not so prevalent in Jhelum as elsewhere. The peasantry generally are free from debt. The assessment is very light, and it is only in cases of recklessness and gross extravagance that a cultivator falls hopelessly into the hands of his money-lender. In mortgages, it is not unfrequent to stipulate for payment in grain. In these cases, usually, the cultivator retains possession, making over one-third or one-fourth of the produce, as the case may be, in lieu of interest, and the profits of the money-lender on this system often amount to as much as 50 per cent. Loans are chiefly in the hands of the village shopkeepers."

It is not now possible to write in so happy a strain: yet the fact remains that in the Jhelum district there is no class whose condition is not superior to that of the poorest classes in European countries. In times of ordinary prosperity, one never, practically, either sees or hears of anyone who has to go hungry or cannot find shelter, though of course it is not asserted that there is universal abundance. If the crops fail there is distress, but even then employment of some kind is not difficult to get. In the worst of the recent bad years, the Dandot Colliery could not get all the labour it might have employed. Indebtedness is extremely common, but this does not alter the fact that the agriculturists, as a class, lead a life which is on the whole a comfortable one, if plain and laborious; while in the towns, though there is poverty, there is no lack at ordinary times of the means of subsistence, even amongst the poorest.

Land Alienation Act.

The effect of the Land Alienation Act, in the first 2½ years of its working, has been to put a stop to the sale of agricultural land to non-gazetted tribes and to Hindus generally. Sales are only allowed for the benefit of zamindars; for instance, a man, whose land is mortgaged, is allowed by advantageous sale of a part of it to redeem the rest. Mortgages, as now made, are usually with possession and for periods under twenty years. No means of evading the provisions of the Act has yet been found. It has led

to a considerable increase in the number of sale and mortgage transactions between agriculturists. CHAP. II. A.

Agriculture

The following accurate account of the book-keeping and methods of the traders and money-lenders is taken from the Shahpur Gazetteer:— Book-keep-
ing, &c.

The better class of Hindu and Sikh bankers, and shopkeepers, keep three account books (*vahi*), (1) the day-book (*súhr*, *parchún* or *bandi*), in which all transactions are recorded day by day as they occur; (2) the cash-book (*rokir*), in which only cash transactions are entered as they occur; and (3) the ledger (*kháta vahi* or simply *vahi*), in which each client's account (*lekha*) is written up from the day-book at the shop-keeper's leisure. The great majority of shop-keepers, however, keep up only the ledger, making entries in it from memory or from rough notes which are destroyed, so that there is no means of checking the entries. The ledger (*vahi*) is kept in the form of loose leaves fastened together lengthwise in such a way that a leaf can easily be extracted without detection. Each page (*panna*) has its number (*ang*), and it is usual, on opening a new ledger, to get a Brahman to imprint on the seventh page a coloured picture of Ganesh and his rat, adding the invocation "*Om Svasti Ganeshayanama*" with the date and a blessing. The account of each client shows on the left side the debits or out-goings, and on the right side the credits (*ágit*). Generally, once a year the balance (*baki*) is struck, interest (*veáj*) charged, and the net balance carried forward to a new account. As the peasant who has his dealings with the shopkeeper (*kirár*) is often utterly ignorant of accounts and very careless, he is often taken advantage of by the shopkeeper who will, as occasion offers,

System of
book-keep-
ing.

- (1) dole out old grain of sorts for food purposes in the cold season, and take repayment at harvest time, a few months later, in wheat or its money equivalent, plus from 25 to 50 per cent. interest;
- (2) exact full repayment on the threshing-floor, leaving the customer insufficient grain wherefrom to pay his land revenue and feed himself till next harvest;
- (3) a month or so later pay his debtor's land revenue, and, taking advantage of his necessity, charge him at least the highest average rate for money lent;
- (4) take one anna per rupee as discount (*katt* or *gadd chhera*) when making a loan, but charge interest on the discount;
- (5) cut six months' interest out of a loan, and record the gross sum as a loan free of interest for six months;
- (6) cause the debtor to go before the Sub-Registrar and state that he had received the whole loan in cash, whereas, in fact, the amount was chiefly made up of simple and compound interest;
- (7) misrepresent debts in the ledger by entering inferior grains as if wheat;
- (8) allow no interest on repayments in kind and either no or short interest on credits in cash, and cause the customer to believe, when he is making a payment to account, that a concession of grace has been made when a small remission is credited to him out of the interest due (*chhot* or *mor*);

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AgricultureSystem of
book-keeping.

- (9) generally keep accounts in a loose, unintelligible, way which make the separation of interest from principal impossible ;
- (10) keep only a ledger, plus sometimes a sort of day-book, in loose sheets or book form, and write up the former at any time ;
- (11) strike the balance in a casual way, naming as present one or two witnesses, either brother lenders or men of the class known as "four-anna witnesses" ;
- (12) charge a full year's interest on grain or money, lent a few months or even weeks before the striking of balance.

The usual rate of interest charged between bankers of good credit on bills of exchange (*hundi*), is one pice per day on Rs. 100 = $7\frac{1}{2}$ annas per cent. per mensem, nearly 6 per cent. per annum. On ordinary loans to shopkeepers of good credit the usual rate is one per cent. per mensem = 12 per cent. per annum. But a peasant rarely gets a loan at less than one pice per rupee per mensem, or Rs. $18\frac{1}{2}$ per cent. per annum; and often the rate charged is 24 or 36 per annum; and with the aid of the methods of calculation detailed above, the money-lender often so manages his accounts that a good solvent customer's money debt is doubled inside three years, and his grain debt inside two years; and if the lender be exceptionally dishonest, and the debtor exceptionally helpless and stupid, the debt doubles itself in an even shorter period.

Working of
Land Im-
provements
and Agriculturists Loans
Acts.

The amounts given under the Agriculturists Loans Act

			Rs.
1898-99	...	...	800
1899-1900	...	...	1,47,600
1900-1901	...	...	18,036

during the recent years of scarcity were as shown in the margin. These loans were mostly in petty grants and ostensibly for purchase of bul-

locks or seed. In nearly all cases they were misapplied, and recovery has been found to be very difficult.

The amounts given as Land Improvement loans during the last

			Rs.
1900-01	...	...	7,155
1901-02	...	...	10,969
1902-03	...	...	3,700

three years were as shown in the margin. These are chiefly for the construction of wells, mostly in the lowlying land on the banks of *kassis*.

There is no difficulty in recovering these loans, which do good and are popular.

Agricultural
Banks.

There are no agricultural banks in the district.

Live-stock.

The following account of the live-stock of the district is an abstract of a lengthy report for the year 1898-99, by Veterinary-Captain Gunn, C. V. D. In one or two minor points corrections have been made, but only, of course, in matters involving local and not technical knowledge of the subject:—

The climate of the district is very suitable for cattle. In the Jhelum valley it is especially suitable for buffaloes, while all along the Salt Range (and it may be added, in most other parts), sheep and goats are numerous, the latter being probably one of the best breeds in India. The district is noted for its good horses, but it no longer quite deserves its reputation in this respect, the famous Dhanni breed having certainly deteriorated

while except in the Chakwál and Tallagang Tahsils, there are hardly any respectable horses. CHAP. II. A.

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Live-stock.

In the hills and south of them the cattle are small, and have no special characteristics, but north of the hills in Chakwál and Tallagang they are much larger, the average height of the better class of bullocks in this part being 51 inches behind the hump, with splendid chest measurements (a sure sign of power), as much as 77 inches on the average. The corresponding measurements of four-year old siege train bullocks at Hissár are 47 and 58 inches. The breed is quite a distinctive one and it is not found further south, nor even in the adjoining parts of the Ráwal-pindi districts, where the cattle are of a very poor class.

The excellence of this breed seems to be the result more of good luck than management, for, as in the rest of the district, so here, breeding is not carried on according to recognised principles, but haphazard, the young males running with the herd until they are about 3 or 3½ years old, when they are emasculated. The people recognise that this is not a satisfactory arrangement, but are unwilling individually to do anything to improve matters. It is suggested that young males should not be allowed to run loose unless approved and branded, while the produce of suitable Hissár bulls might be turned loose with the herds. The few Hissár bulls hitherto tried in the district do not seem to have been a success, their progeny being tall, leggy, shallow-chested animals, requiring more feed than the local stock, and possessing less stamina. There are at present three Hissár bulls and two indigenous bulls on stand.

The zamindárs look after their cattle very well, and their good quality may be due to the care with which they have been tended in successive generations. In favourable seasons the grazing is sufficient and of good quality, especially in the hills: working cattle are home-fed more or less throughout the year, but at certain times all have to be kept off the fields, and for months at a time are practically all stall-fed, and only leave the home enclosure when driven to water. The ordinary feed in the spring is green *sarson* and *tárámíra*, mixed with dry chopped *bájra* or *jowár* stalks; *bhusa* is mostly used in May to July, mixed with green *charri* if the season permits: after that the feed is *bájra* and *charri*, green up to the end of September, and dry afterwards up to February, with wheat and pulse straw, as available. Favourite buffaloes and cows are given oil-cake and various grains, animals doing hard work on the wells, &c., also get a grain ration if possible.

Cows are treated with little consideration, being often made to drag the plough: they come into season at about 2½ years, and breed at 3½: they are poor milkers, giving only about one to two seers a day.

The characteristics of the breed are moderate size, flat foreheads, short horns, square bodies and fairly level backs, deep chests, and very long tails, with a big tuft of hair at the end of them.

When times are good there is a considerable trade in exporting surplus stock to Amritsar and other places: little stock is brought in from other districts. It is not the custom to sell cows; a fact which perhaps accounts for the fact that the breed has kept distinctive.

The grass in the moist Jhelum riverain is often the vehicle for disease germs, and the cattle in those parts are small and nondescript, probably related to the very poor breeds of surrounding districts. The damage done to hides by *meru* or gad-fly is great: it deposits eggs in the skins of bullocks, buffaloes, and goats during the rains, the maggot working out

CHAP. II. A. in the autumn and leaving a hole: about 30% of the skins are said to be thus spoilt: crude oil or a decoction of *bahakar* (*Adhatoda vasica*) leaves would prevent this. The belief of the people that the maggot enters when
Agriculture
Live-stock. the wet skin is struck by a *jowár* or *bájra* stalk is erroneous.

The report states that the *mochis* now have to pay for the hides of dead animals: but in fact they nearly always get them free, giving the owner a pair of shoes, if anything: if sold, buffalo hides realise from Rs. 6 to 8; those of bullocks, Rs. 3 to 6; goat-skins about Re. 1-4; sheep skins 4 to 8 annas.

The grasses of the district are described at pages 17 to 19 of the report; medicinal plants at pages 19 to 22; diseases and remedies at pages 35 to 40.

Camels.

Camels are common in some parts of the district, especially in the Thal and some parts of Chakwál and Tallagang: they are all pack animals, highly bred riding camels being quite unknown. Their numbers tend to decrease as the work for them decreases with the opening of new railways; for camel-owners the best times are those when trans-frontier expeditions are in progress; the Government pays high rates for its transport, and compensates for losses.

Horses.

The horses of this district—especially those of the Dhan—have long been held in good estimation. Abul Fazl remarks in the *Ain Akbari* that these “horses resemble Irákis and are very fine” (Gladwin’s Translation, II 109). In former days the greater part of the Sikh cavalry was horsed from the Dhanni plains north of the Salt Range, and even now large numbers of remounts are drawn thence by the British Army; but the fall of the rich Sikh chiefs has removed the incentive for breeding large and powerful horses such as the native gentleman delights in. Although the Dhan is best known for its horse-breeding, yet very good animals are to be found all over the north of the district. Some of them are fast, and nearly all are remarkably enduring and able to go over the stoniest ground without shoes. It is probably the case, as stated in Captain Gunn’s report, that the Dhanni and Tallagang breeds are deteriorating. Owing to the spread of cultivation and other causes the animals are allowed much less liberty than formerly; and the method of tethering them up is often very bad. But the main reason of any decay in quality is no doubt that some of the best brood mares are annually sold out of the district, and there is some reason to doubt whether the Government stallions have been of the kind most suited to the district. Mule-breeding, too, has made great progress at the expense of horse-breeding, as the profits are quicker and more certain. Horses are generally fed on gram or barley, but *moth*, *bájra* and *táramira* are also in use. In the spring they are often stuffed with green wheat and *gur* till they become loaded and unwieldy with fat. The usual feed for a brood mare is four seers of grain a day besides grass; but the quantity depends a good deal on the means of the owner.

The control of horse-breeding operations now rests with the Army Remount Department; for these purposes the district is in the Ráwalpindi Circle. CHAP. II, A.
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There are stallion and donkey stands at Jhelum, Pind Dádan Khán, Chakwál and Tallagang, and donkey stands at Domelí and Pihra Fattiál. Horse-breeding.

Most of the good brood mares have been drawn off to the Jhelum Canal Colony, owing to the conditions attached to a large class of the grants of land there.

There are few mares of the pure Dhanní breed left. The famine years, which ended with 1901, are responsible for a great diminution in the number of brood mares in general.

The principal horse-breeders of the district are the Dárápur Mallíks, the Ahmadábád Khokhars, the Awán headmen of Láwa, Ahmad Khán of Kálas in Chakwál, and the zamindars of Dab, Sutwál and other small villages of the same tahsil.

Mule-breeding has become constantly more popular, and is apparently very profitable; apart from mule-breeding there is a considerable trade in mules bred elsewhere. It is stated by men whose business it has been to attend all important fairs for many years, that the mule trade of the Western Punjab is almost monopolised by the Khatrís of Dhudhiál, a large village in the north of Chakwál. It is also a good deal practised in Domelí. Mules.

Donkeys are fairly common, especially where water has to be fetched from a distance, but are of very small size. Pack work is mostly done by the zamindars with their ordinary bullocks. Donkeys.

Sheep are by two breeds—the ordinary, and the *dumba* or fat-tailed species. The latter is reckoned the best, but neither is of very good quality. Sheep are shorn twice in the year, in or about October and March. The yield of wool on the average is probably not much more than one *sér* per sheep per annum. The milk of the ewes is drunk, and mutton is sometimes eaten. Sheep.

Dumbas are not very common, but a few villages make a regular business of buying them in poor condition and fattening them up for sale, and seem to make it very profitable.

Goats are of good quality. Their hair is cut only once a year in Baisákh. The yield is about half a *sér*, and is used for ropes and sacks. The milk is good and is largely consumed. She-goats and ewes give, on an average, one kid or lamb in the year, and continue producing for five or six years. Goats.

Live-stock in 1899 was already less than at last settlement, and the loss in the fodder famine of 1899-1900 amounted to 42 per cent. of the bulls and bullocks, the decrease under other heads being, on the whole, about the same. A few years earlier the district was probably somewhat over-stocked; in spite of some Cattle and profits from live-stock.

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Agriculture

Cattle and
profits from
live-stock.

recovery since the fodder famine, the contrary was in 1901 undoubtedly the case, a fact that must have its influence on the agriculture of the tract for some time to come; the number of plough cattle per effective plough in 1901 was 1.3 against 1.8 at settlement, though the number of ploughs had itself fallen by 20 per cent. Something can be done by using cows and donkeys instead of bullocks (and they are always used to some extent), but it is obvious that cultivation could not under these conditions be as thorough as it used to be.

The estimated profits from hire of camels, sale of surplus stock, *ghí*, milk, wool, &c., were before the recent scarcity as follows:—

	Rs.
Jhelum	1,05,000
Pind Dadan Khán	30,000
Chakwál	1,76,000
Tallagang	92,000
Total	4,03,000

These estimates, though highly speculative, were probably very moderate; in better times the fine cattle bred in Chakwál and Tallagang are sold in some numbers; elsewhere profits are made in other ways, as in the hills, where pack-bullocks employed on the Gilgit Road, &c., are numerous,—or were, for apart from the drought, the business seems to be declining.* But in the years following 1901 live-stock was so scarce that the profit, if any, must have been very small.

Cattle
diseases.

Cattle disease is at times very prevalent, and occasionally very destructive. The commonest complaints are rinderpest (*wádh*), foot and mouth disease (*mu-kkur*), and malignant throat (*galghótú*). These diseases are usually introduced by cattle travelling north along the Grand Trunk Road from the fairs at Amritsar and elsewhere. Camels are subject to various diseases, of which anthrax is one. The epidemic disease of which sheep and goats sometimes die off in large numbers (*pharakki*) seems to be also a form of anthrax. The treatment of diseased animals is primitive, sometimes barbarous, and if left to themselves the people are careless about the segregation of those infected.

Prices of
cattle, &c.

It is not very easy to state what is the average price of the different animals: the following is an attempt in that direction:—

Male buffaloes, from Rs. 20 to Rs. 45, average about	Rs. 30
Female do. " 30 to " 90 " "	45
Bullocks " 15 to " 50 " "	25
Cows " 12 to " 40 " "	18
Young stock " " " "	10
Sheep " 2 to " 7 " "	2½
Do., <i>dumbas</i> " 3 to " 12 " "	3½
Goats " 2 to " 9 " "	2½

* Bullock transport is not now used on the Gilgit Road.

For horses and mules no average price can well be stated; camels are worth about Rs. 50 or Rs. 60, and donkeys about Rs. 8 to Rs. 10. CHAP. II, A
Agriculture

Some details of horse-shows held in the district in recent years are given below, they cannot be said to have been very successful:— Cattle fairs,
&c.

Date on which fair was held.	ANIMALS ATTENDING THE FAIR.					AMOUNT AWARDED IN PRIZES.	
	Horses.	Mules.	Pony mares for male breeding.	Donkeys.	Total.	Imperial Funds.	Provincial Funds.
16th and 17th March 1893	590	260	125	17	992	Rs. ...	Rs. 454
23rd and 24th October 1895	268	58	117	29	472	490	254
Ditto 1896	214	30	110	22	376	455	151
15th and 16th October 1897	141	24	149	10	324	465	123
24th and 25th February 1899	121	31	134	18	304	466	160

No large cattle fair is held in the district, and until 1902 there had been no show for some time.

The Choa Saidan Sháh cattle fair was established in that year and is held at the Baisákhí fair at Choa and Katás in the middle of April; it is managed by the District Board, which gives from Rs. 150 to Rs. 200 in prizes, this amount being supplemented in 1902 and 1903 by a grant from Provincial revenues of Rs. 500 and two silver medals.

The object in view is the encouragement of the breeding to type of high class cattle, both for draught purposes and milking. The judging committee consist of the Deputy Commissioner, a Superintendent of the Civil Veterinary Department, and some native members appointed by the Deputy Commissioner. The show is well attended and is growing in popularity.

The 1903 fair was attended by 170 bulls, 316 bullocks, 104 cows and 81 mules, or 671 head in all; 194 changed hands (156 being bullocks), for Rs. 12,658; Rs. 1,901 was realised in fees, and Rs. 610 was distributed in prizes. The fine bulls brought to this fair are a striking feature of it.

Canal-irrigation in the district is now confined to the Pind Dádan Khán Plain, where there are two small inundation canals: one, taking off at Ahmadábád, is privately owned, and very badly managed, owing chiefly to the quarrels of the proprietors; it is a good year when as much as 200 acres is irrigated. It may eventually be found advisable to acquire the canal for Government, but

Canal-
irrigation.

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AgricultureCanal-
irrigation.

until then it has practically no value. The canal that takes off about 12 miles above Pind Dádan Khán was originally made by the Municipal Committee of that town, in whose management it continued until the late settlement, when its transfer to Government was proposed and sanctioned; before the transfer the area irrigated was insignificant, usually about 120 acres, and it was run at an average loss of Rs. 600 per annum; in 1900-01 the irrigated area was about 3,900 acres, and there was then every prospect of further extension. These hopes, however, have not been realized, the area irrigated in 1902-03 being only 1,208 acres (890 net). The canal is expected to play an important part in the reclamation of the sour *kallar* land, which disfigures so large a part of the Pind Dádan Khán Plain, but it cannot be said that at present any systematic attempt has been made in this direction, though a little *kallar* has been irrigated and has produced moderate crops.

This canal, however, is likely to be absorbed in a much more important project, that of an inundation canal taking off from the river at the extreme east of the Pind Dádan Khán Plain, above Jalápur, which has been under consideration for some years and has been sanctioned; this will command about 50,000 acres, of which about half will be irrigated annually; the total cost is estimated at Rs. 5,25,000, on which a small return is expected. As at present proposed the canal will not reach the western part of the plain, where the cropping is most precarious, and the need of irrigation is by far the greatest; but it may be hoped that an extension in that direction may at some future time be possible, though the cross-drainages from the hills certainly offer some difficulty.*

Enquiries were also made regarding a canal to irrigate the plain north of Jhelum; but the need is not so great there, and it will probably be long before this project is carried out.

The Upper Jhelum Canal project which is now (1904) under consideration will not directly affect this district; it would take off from the river about 20 miles above Jhelum, but on the other side, and is designed to supplement the Chenáb supply, and to irrigate parts of the Gujrát Bár.

Irrigation
from springs.

In a few places small areas of land are irrigated from perennial springs, such land being almost always highly cultivated and manured, and heavily cropped: the principal areas so irrigated are at Choa Saidan Sháh, Kallar Kabár, Chumbí, Salóí, Dherí Jába, Lehri Panj Girain, all in the Salt Range upland: and at Bághánwála, Ráwál, Kot Umr, and Jutána at the foot of the range. There is a little land of the kind outside the Salt Range, as for instance at Tamman in Tallagang; but its area is very trifling.

* This was written in 1901; since the estimate was sanctioned the project has made no progress; the Upper Jhelum Canal project was put forward and it became a question whether there would be enough water for the Jalápur Canal also. This question is still under consideration (1904).

The crops grown on this *abi* land, as it is termed, only differ from those on well-lands in being generally of better quality; but in the Salt Range they include a large proportion of fruit gardens, the unpicturesque rose-fields of Choa, and the famous sugarcane of Saloi. There is no land so profitable.

Rents in kind are fixed by custom and are uniform over large areas. No one has ever tried to enhance them, and it is probable that they do not admit of much enhancement. These rents are nearly always the same for all classes of tenants, and always take the form of a fixed share of the gross produce; but it is a share of that produce only after certain important deductions have been made. The largest are the customary dues paid from the "common heap" to the *kamíns* or agricultural village menials in return for the services rendered by them in connection with the cultivation. Details are given further on in another Section.

Another deduction must be made in the case of *cháhi* land, to cover the expenses in respect to the upkeep of the well and its gear.

The resulting deductions in percentages on the gross produce are shown below:—

CLASS OF LAND.	JHELM.				PIND DADAN KRAN.				CHAKWAL.		
	River bank.	Maidan.	Khuddar.	Pabbi.	Hilla.	Phaphra.	Thal.	River bank.	Lundi Patti.	Dhanni.	Tallagang.
Irrigated ..	14½	14½	14½	14½	10	12	12	12	9½	9½	10½
Sailáb ...	9½	...	...	...	...	...	7	7	...	...	...
Unirrigated ...	9	9	8½	8½	6	9	7½	8	6½	6	7

It should be noted that other deductions are in practice made from the common heap; but as these are not made in return for agricultural service, they are no part of the expenses of cultivation.

Further deductions have, however, to be made, in arriving at the landlord's share or net rent (for assessment purposes), on account of the crops used as fodder, and therefore disposed of to meet one of the principal expenses of cultivation; this may be done by omitting altogether from the calculation those crops which are used for fodder alone; and by omitting a share of other crops which are partly so used; thus all crops recorded as "fodder," half to a quarter of the *jowár-charí*, and different proportions of a few other crops are excluded; on the other hand a non-cultivating owner generally takes a share of the straw, but this has a saleable value only in the neighbourhood of the towns and a few of the largest villages.

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Agriculture.

Land Rents.
Rents in kind.

Deductions
therefrom.

Fodder
deductions.

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Agriculture

Landlord's
share of divi-
sible produce.

The deductions detailed above having been made from the value of the gross produce (less fodder), the balance represents the divisible produce: in the Tallagang Tahsil the landlord's share of this is usually one-third; in all other circles he almost invariably takes half, and that is the average rent assumed for assessment purposes.

This proportion of the value of the divisible produce represents then the estimated net profits of the landlord, the "net assets" of assessment phraseology.

Cash rents.

Tenants-at-will almost invariably pay rent in kind, as above: though $2\frac{1}{2}$ per cent. of the cultivation is nominally held by cash-paying tenants-at-will, these are seldom, if ever, true rents; for all practical purposes it may be said that there are no competitive cash rents: and at present there is no tendency to introduce them instead of rents in kind.

Wages.

Statistics as regards wages of labour taken from the Punjab Administration reports are given in the statistical part of the *Gazetteer*; according to these returns the average wages for skilled labour rose from 5 annas a day in 1870-71 to 8 annas in 1880-81 and 10 annas in 1890-91, but fell again in 1900-01 to 8 annas.

Similarly, the average daily wage for unskilled labour was annas 2 6; annas 3-3, annas 2-9, and 3 annas, respectively, in the years abovementioned.

These figures cannot be considered very trustworthy; all that can be safely said on this subject is that wages, both for skilled and unskilled labour, have long shown and still show a tendency to rise, in accordance with the general rise in prices, but not in the same proportion. The process, however, is very gradual, and is not influenced by temporary fluctuations from year to year in the price of food grains.

As will be noticed in another section, unskilled labour commands a high price in the local mines of the Salt Range, fully double the wages obtainable for ordinary labour being earned there; but the work is arduous and unpleasant, and the mines have practically no effect on the ordinary labour-market.

Village
menials.

The principal classes of village menials and the duties they perform have been described elsewhere. The customary dues which they receive for their services are rather complicated and vary a good deal from place to place; the following extract from the Chakwāl-Tallagang Assessment Report shows fully what these dues are in those two tahsils, and will serve as a specimen for the whole district. Further information is available in the other Assessment Reports, while the percentage of these deductions on the gross produce has been stated above on page 173.

Principal
kamins on
bārāni land:
payments to
lohār and
tarkhān.

In all circles the *lohār* (blacksmith) and *tarkhān* (carpenter) are on *bārāni* lands the most important of the agricultural *kamins*. In the Lúndi Patti they are paid so many *chohās* per plough, and setting aside the minor variations which are almost as numerous as the villages, there are two prevailing rates according as the *chohā* is *khām* ($1\frac{1}{2}$ sêrs) or *pakkā* (3 sêrs); in

either case the number of *chohás* per plough given to the *kamín* is the same—6 in the Kharif and 8 in the Rabi—equal to 26½ sérs in the one case and 42 sérs in the other; the miscellaneous dues taken in addition (and consisting of certain handfuls or baskets of *bájra* ears and a few sheaves of wheat) amount to 11½ sérs per *kamín* where the *chohá* is *khám*, and to only 5 sérs where it is *pakká*; the total takings of the *kamín* are thus 33 sérs per plough in the former case and 47 in the latter; and the total dues of *lohár* and *tarkhán* together amount, therefore, to 76 or 94 sérs, to which must be added one *chohá* (taken by the *tarkhán* alone) as *biára* at seed time, making altogether 78 sérs per plough (*khám*) and 97 sérs (*pakká*). The mean of these two prevailing rates, or about 87 sérs, may be taken as the average payments to the *lohár* and *tarkhán*, and this is about 4½ per cent. of the gross produce per plough assumed in the preceding paragraph for this circle.

In all save 21 of the villages of the Dhanni Circle the *lohár* and *tarkhán* take each 2 *chohás pakká*, or 6 sérs per *kharwár* of 400 sérs, their joint receipts being thus 12 sérs in 400, or 3 per cent. In addition they get miscellaneous perquisites equivalent to about 39 sérs per plough, equal to close on 2 per cent. of the gross produce per plough assumed in paragraph 35. Thus the total deductions for these two *kamíns* is 5 per cent. of the gross produce.

In Tallagang there are very few *lohárs*, the *tarkhán* being blacksmith as well as carpenter, but as in that case he takes double fees, the result is not affected: the almost universal rate is for each *kamín* 1½ sérs per local maund of 60 sérs, or 2½ per cent. of the gross produce; and in addition there are certain miscellaneous payments per plough (one or two sérs of cotton, a basket of *bájra* ears, and a few sheaves of wheat, and so on) amounting, on the whole, for *lohár* and *tarkhán* together (4 sérs *biára* included) to about 39 sérs per plough, or a little more than 1½ per cent. of the gross produce. The total, therefore, for these two *kamíns* is in this tahsil 6½ per cent.

Musallís are not kept as regular *kamíns* in Tallagang, and in Chakwál are found only in 26 villages of Lúndi Patti and 9 of the Dhanní. The payments made to them amount in Lúndi Patti to about 60 sérs per plough, or rather more than 3 per cent., and the percentage is about the same in the nine Dhanní villages also. Even where no *musallís* are kept it is fair to allow something on account of the work which they would do if employed, for the saving to the zamindár is largely discounted by the extra labour thrown on him at a very busy time of the year, and also by his having to pay in cash for various articles which it would be the *musallí's* duty to provide free of cost. I allow, therefore, 2 per cent. in the Lúndi Patti and 1 per cent. elsewhere for the *musallí's* dues.

On the well lands the *lohár* very rarely receives any payment, as he is not concerned in the upkeep of the well and its appurtenances; but his place is taken by the *kumhár* or potter, who provides the pots for the well wheel, and whose dues are almost always the same as those of the *tarkhán*.

In Chakwál the rate per *kamín* is on *cháhi* land almost invariably one *kiári* (or irrigation plot) per *kanál* of 20 *marlās*; taking the *kiári* to be half a *marla*, this would give each *kamín* 2½ per cent. of the gross produce, but I believe the average *kiári* is really somewhat larger, and I, therefore, assume 3 per cent. instead.

In Tallagang the *tarkhán* and *kumhár* each take 1½ sér per maund of 60 sérs, or 2½ per cent. gross produce, as on the *bárání* land, and in addition certain miscellaneous dues per well, for which an allowance of 1 per cent,

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Principal
kamíns on
bárání land:
payments to
lohár and
tarkhán.

Payments to
musallís.

Payments
to kamíns on
well lands.

CHAP. II. A. may be made; these are *bājra* ears equal to about 6 sérs grain, 4 sérs cotton, or two *kiáris* of tobacco and garden stuff, and wheat equal to about 6 sérs. **Agriculture** The total dues per *kamín* on *cháhi* land in Tallagang will thus be $3\frac{1}{2}$ per cent. gross produce.

Payments to *kamíns* on well lands.

As the *lohár* is sometimes paid on the *cháhi* land, it will be fair to make some allowance on this account: 1 per cent. gross produce in all circles will be ample.

There are several other *kamíns*, such as the shoemaker, barber, washerman and others; all of whom have to get their living from the produce of the land, and are almost as much a necessity to the zamíndárs as those for whom deductions have been allowed; and where the owners are weak, the customary dues of the *Imám* and *Paniára* of the village mosque are sometimes paid from the gross produce, but this is not at all common, and in any case a deduction on this account could not fairly be allowed.

There are indications—scarcely more than indications at present—of a tendency to substitute for the traditional payment in kind to menials cash wages for work done. This is a change which will probably come about in future generations, but no general abandonment of the present system need be looked for in our times.

Prices:

Information as to retail prices at headquarters for the last 43 years are given in the statistical volume, from which the following figures are extracted; the prices are stated in seers per rupee:—

		1861 to 1863 average.	1871 to 1875 average.	1880 to 1886	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Wheat	...	25	20	18	19	14	12	25	24	15	9	13	18	10	10	17	13
Bajra	...	31	26	25	23	16	18	29	27	17	9	16	22	10	19	22	18

(The prices given are those for the first fortnight of January in each year).

Wheat and *bājra* are the staple food-grains on which the people commonly subsist.

The causes of the variations shown above are those which might naturally be expected; they depend on the character of the harvests. (The export trade to Europe also has an important influence on the general trend of prices, but that trade is itself dependent on the nature of the harvests). Thus, in the good years, 1894, 1895, 1899, we find unusually low prices; and in the years of scarcity, 1896 1897, 1898, 1900, and 1901, the rates were very high. Though the fact is not brought out by the figures given above, it seems to be undoubtedly the case that after each period of scarcity and high prices, when prices fall again they do not fall quite to the normal of preceding years, but remain

somewhat higher than before ; apart from this the great improvement in communications due to the opening of railways and growth of a large export trade, have combined to cause a steady rise in the prices of food-grains which at the recent settlement of the district was estimated to amount to fully 30 per cent. in the twenty years ending with 1896. It has been said that the rise has been steady, and this is the case if the averages for long series of years are considered, though of course the fluctuations from year to year are often very great.

To those interested in the agricultural classes, what may be called "harvest prices" are of more importance than the retail rates of the Jhelum market. "Harvest prices" are those which the zamindár actually receives for his produce, and are usually fixed on one date to govern the transactions of the whole harvest ; they of course differ much from the *Gazette* prices recorded at Jhelum, being about 20 per cent. lower in Jhelum and Pind Dádan Khán and 33 per cent. lower in the more remote Tahsils.

The harvest prices from 1833 to 1876 are set forth in Colonel Wace's Assessment Report ; in the recent settlement an examination was made of the traders' books in thirty-eight of the towns and principal villages of the district, in order to bring the statistics up to date, and the result is given in the preliminary report submitted in June 1896.

The prices assumed for the purposes of the assessment estimates were based chiefly on the harvest prices of the ten years, 1886 to 1895, excluding years of scarcity ; but some allowance was made for the very low prices of 1894, which in similar conditions may at any time be repeated. It was not considered right to go back further than 1886, when the railways influencing prices in the district were first completed.

The more important of the commutation prices sanctioned by the Financial Commissioner are as follows :—

Crop	Jhelum and Pind Dádan Khán.	Chakwál and Tallagang.
Wheat	... 25	... 28 sérs per rupee.
Bájra	... 32	... 35 "

The rates are taken to represent the lowest prices that are likely to prevail for any considerable period during the currency of the new settlement and are no doubt very moderate, but the uncertainty of the subject is so great that a very cautious estimate was necessary.

Difficulty of communication is no doubt one cause of the little trade of the district. Another may perhaps be found in the great difference of the weights and measures in use in different *ilákas*. These differences are shown in the description contained below, but it is only approximately correct, for absolute correctness is impossible when differences between measures of capacity

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Agriculture

Weights and measures.

Harvest prices.

Weights and measures.

CHAP. II, A.

Agriculture

Weights and measures.

have to be expressed in terms of weight, as there is no invariable relation between the cubical contents and the weight of those things which are principally measured: nevertheless the description is sufficiently near the truth for all practical purposes.

Measures of capacity current in Jhelum district.

Tahsil.	Ilaks in which the measurement is the same.	Name of the lower measures which make the larger ones.	Weight of the lower measure in rupees.	No. of the lower measure equal to the large measure.	Name of the large measure.
JHELUM.	Pabbi Lehri	Paropi or Kuchchi ...	37½	4	Chohā.
		Serini ...	50	3	Do.
		Choha ...	150	4	Topā.
		Topā ...	600	4	Pāi.
		Pāi ...	2,400	10	Māni.
		Māni ...	24,000	...	
	Jhelum Askandāla Tuliāla Pakhwāl Kāla Sanghoi Chautāla Padhri Dārapur Nāra	Paropi ...	35	4	Topā.
		Topā ...	140	8	Pāi.
		Pāi ...	1,120	20	Māni.
		Māni or Kharidr ...	22,400		
PIND DĀDAN KHAN.	Kahār Kahun	Serini ...	73½	3	Topā.
		Paropi ...	36½	6	Do.
		Pāini ...	18½	12	Do.
		Topā ...	220	4	Pāi.
		Pāi ...	880	5	Man.
	Jhangar	Serini ...	53½	3	Topā.
		Topā ...	160	4	Pāi.
		Pāi ...	640	5	Man.
	Jālap Pind Dādin Khan	Serini ...	53½	3	Topā.
		Adseri ...	26½	6	Do.
		Pāini ...	13½	12	Do.
		Topā ...	160	4	Pāi.
		Pāi ...	640	4	Man.
		Man ...	2,560	10	Kharidr.
	Ahmadabad	Serini ...	73½	3	Topā.
		Paropi ...	36½	6	Do.
		Topā ...	220	4	Pāi.
		Pāi ...	880	5	Man.
	Jalsīpur	Paropi ...	40	4	Topā.
		Ser ...	53½	3	Do.
		Topā ...	160	4	Pāi.
		Pāi ...	640	4	Man or Maund.
		Man ...	2,560	10	Kharidr.

Measures of capacity current in Jhelam District—concl'd.

CHAP. II, A.

Agriculture

Weights and
measures.

TAHSIL.	Units in which the measurement is the same.	Name of the lower measures which make the larger ones.	Weight of the lower measure in rupees.	No. of the lower measure equal to the large measure.	Name of the large measure.
CHAKWAL.	Babial ...	Serini ...	66	3	Chohá.
	Rupwál (part) ...	Chohá ...	198	16	Pái.
	Saidpur ...	Pái ...	3,168	10	Kharwár.
	Chaupeda ...	Serini ... Chohá ... Pái ...	75	3	Chohá.
	Kahár ...		225	16	Pái.
	Chhunbi ...		3,600	10	Kharwár.
	Bhenkni ...				
	Chakora ...				
	Haweli ...	Serini ... Chohá ... Pái ...	80	3	Chohá.
	Kahútáni ...		240	16	Pái.
			3,840	10	Kharwár.
	Dushman ...	Chautai (viz.) Paropi ... Chohá ... Topa ... Pái ...	35	4	Chohá.
	Hasolá ...		140	4	Topa.
			560	4	Pái.
			2,240	10	Kharwár.
	Bádsháháni ...	Serini ... Do. ... Chohá ... o. ... Pái ... Do. ...	70	3	Chohá.
			66	3	Do.
			210	16	Pái.
			198	16	Do.
			3,360	10	Kharwár.
			3,168	10	Do.
TALLAGANG.	Pakhar ...	Paini ... Bunbi ... Chohá ...	65	2	Bunbi.
	Miál ...		130	2	Chohá.
	Jabbi ...		260	20	Man.
	Thoha, except—				
	Chaukhandi ...				
	Dhok Báza ...				
	Dhok Hammu ...				
	Núrpur ...	Paini ... Bunbi ... Chohá ...	55	2	Bunbi.
	Kot Sárang, except—		110	2	Chohá.
	Matbrála ...		220	20	Man.
	Daiwál ...				
	Tallagang, except—	Adseri ... Chohá ... Man ...	55	4	Chohá.
	Játla ...		220	20	Man.
	Pira Fatihál ...		4,400	4	Chhat
	Kufri ...				
	Villages excepted in Kot Sárang (supra)	Paini ... Bunbi ... Chohá ...	50	2	Bunbi.
			100	2	Chohá.
			200	20	Man.
	Villages excepted in Tallagang (supra.)	Adseri ... Chohá ... Man ...	60	4	Chohá.
			240	20	Man.
			4,800	4	Chohá.
	Villages excepted in Thoha (supra.)	Paini ... Bunbi ... Chohá ...	60	2	Bunbi.
			120	2	Chohá.
			240	20	Man.

CHAP. II.A.

Agriculture

Measures of capacity.

Grain in the villages is always trafficked in by measure and not by weight. The measures are sometimes round and sometimes four-sided, and are generally made of either *tāhli* or *ber* wood. There is no authoritative standard of size or shape; but the *tarkhāns* of each *ilāka* copy the models already existing there as well as they can. There are consequently nearly always slight variations. The measures are always used heaped. The table on pages 124 and 125 gives the approximate weight of each in rupees=(*tolas*). This is in accordance with village speech. The weight of course differs with the grain. The table shows the result for wheat, which is always chosen as the standard by the villages themselves. It will be observed that the measures generally grow larger as we go west. As a rule it will be found, where cultivation is rough, land plentiful, and population only fairly thick, that large measures of grain are always used in preference to small ones.

An attempt was made some years ago to introduce uniform measures, but it had not much effect, probably because the officer responsible for the attempt shortly afterwards left the district.

Other very rough measures for Agricultural produce used generally all over the district.

Muth=as much corn as can be cut in one sweep of the *dātri*.

20 *Muths* (or thereabout) = 1 *Satri* or *Kāh*.

4 *Satris* (or thereabout) = 1 *Kallāwa* or *Chāta*, which is as much as a man can lift up between his outspread arms. In some places he is allowed to stack up the grain on his shoulders and head, but this is not universal.

Gaddi or *Bhāri*=a sheaf of corn which is bound up together. It varies much in size.

FOR STRAW—

1 *Pand*=what can be tied up in a *bhurā*, which is generally a cloth about 4 *gaz* by $1\frac{3}{4}$. The *gaz* is now generally about the same as the English yard. This cloth, however, is differently tied. At harvesting, when loading the straw on pack animals, a *Pand* is made to be equal to about $1\frac{1}{2}$ maunds; but when a man carries it on his own head, it is about 27 seers.

2 *Pands*=1 *Chilli*, which is about three maunds, and = a pack load.

Measures of Weight.

CHAP. IIA.

Agriculture

Measures of weight.

MEASURES.	REMARKS.
3 <i>Sira</i> his=1 <i>Chittack</i> =5 <i>Tolas</i> ...	Grain is hardly ever sold by weight except in the large towns. Flour, <i>ghí</i> , <i>gur</i> , and the like are, however, all sold by weight. The table given is the ordinary one, and is in general use. In a good many places in Jhelum Tahsil and in most places in Tahsil Chakwál the <i>ser</i> in use is that of Bahádar Sháh=75 <i>tolas</i> , with all the other measures in proportion. But the tendency is to adopt the Government <i>ser</i> of 80 <i>tolas</i> everywhere.
10 <i>Tolas</i> =1 <i>Adhpao</i> ...	
2 <i>Adhpao</i> =1 <i>Pao</i> ...	
2 <i>Pao</i> =1 <i>Adhsar</i> ...	
2 <i>Adhsars</i> =1 <i>Ser</i> ...	
2 <i>Sers</i> =1 <i>Doseri</i> ...	
2½ <i>Sers</i> =1 <i>Dhaya</i> ...	
2 <i>Dhaya</i> =1 <i>Panjseri</i> ...	
8 <i>Panjseris</i> =1 <i>Man</i> ...	

Linear and Square Measures.

Measures.	Remarks.
<i>Linear Measure.</i>	
4 <i>Unglis</i> =1 <i>Chappa</i>	The only real linear measure for land is the <i>karam</i> . The <i>gira</i> and the <i>gaz</i> are used for carpentry and cloth-selling, &c. The other measures given are merely village reckonings without any standard and subject to all sorts of variation. An <i>ungli</i> is the width of a finger. A <i>chappa</i> is the width of the four fingers laid together. The other terms require no explanation. There is no measure between the <i>karam</i> and the <i>kos</i> , which is often stated to be 1,400 <i>karams</i> . 1,200 <i>karams</i> is about the length in practice. The <i>kos</i> in this district is generally about four-thirds of a mile. Most <i>lambardars</i> know the English word mile (<i>míl</i>), and can estimate its length with fair accuracy.
3 <i>Chappas</i> =1 <i>Gith</i> =4 <i>Giras</i> ...	
2 <i>Giths</i> =1 <i>Háth</i>	
2 <i>Háths</i> =1 <i>Gaz</i>	
3 <i>Háths</i> =1 <i>Karam</i>	
1 <i>Karam</i> =5½ feet English ..	
<i>Square Measure.</i>	
9 <i>Square Karams</i> =1 <i>Marla</i>	This is the ordinary village measure, and it has also been used throughout the present and past settlements. It will be seen that the <i>marla</i> is precisely equal to a square Pole English, that a <i>kandl</i> is half a <i>Rood</i> , a <i>bigha</i> two <i>Roods</i> , and a <i>ghumáo</i> a Statute Acre.
20 <i>Marlas</i> =1 <i>Kandl</i>	
4 <i>Kandls</i> =1 <i>Bigha</i>	
2 <i>Bighas</i> =1 <i>Ghumáo</i>	

Of the total area of the district 298,255 acres or 12 per cent. is the property of the State; out of this area 10,644 acres is leased for cultivation, 8,258 acres on long leases (29 in number), and 2,386 acres from year to year; these waste land leases have been dealt with in a detailed report submitted during the settlement, while the special cases of the leases to the Khewrah Salt miners and the riverain estate of Mahál Amírpur have been separately reported. The figures here given relate to 1900-1901; a few additional leases have been proposed since. They almost exhaust the possibilities of the district in this direction, and, with a few exceptions, no further leases are likely to be proposed.

State lands.

Of the whole area of 298,255 acres, the Deputy Commissioner directly manages 44,148 acres and the rest is under the control of the Forest Department.

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Agriculture

The average income of the five years ending 1901 is Rs. 21,318, of which Rs. 16,921 is derived from grazing leases and permits, Rs. 2,929 from leases for cultivation and 1,468 from other sources.

Descrip-
tion and his-
tory of the
forests.

The *rakhs* of the district fall into two main divisions: the hill *rakhs*, including practically the whole of all the principal hill ranges, except of course the cultivated uplands of the Salt Range, and the plains *rakhs*, situated chiefly in the plateau of Chakwāl and Tallagang, and consisting for the most part of blocks of broken waste ground, sometimes of insignificant size, cut off from villages which at the time of their formation were thought to have more waste than they required. The first and more important class consists mostly of reserved forests under the control of the Forest Department, while the second kind are usually unclassified *rakhs* under the Deputy Commissioner, but there are large exceptions in both cases.

Of both kinds, some few are fairly wooded with shrubs and stunted trees, but timber trees are almost always very rare indeed, while many of the *rakhs* produce practically nothing but grass and sometimes very little of that. The common trees have been noticed in Chapter I.

Objects and
management
of the forests.

The objects of the hill *rakhs* are, (1) by the preservation of the forest growth to protect the hillside from destructive drainage, so as to distribute the rainfall as gradually as possible on the plains below; at the same time it may be increasing to some extent the volume of that rainfall; and (2) to preserve grass and wood for the supply of the neighbouring villages. The great majority of the plains *rakhs* are grass and wood preserves pure and simple; most of them grass preserves only.

Our present *rakhs* had predecessors before British rule in the reservations, chiefly for sport, of the Janjua Chiefs, and the Sikh Kárdárs, whose example was followed in the unauthorised appropriations of waste with which the Customs officials accompanied their assumption of control over the Salt Mines in the early years after annexation. The earliest reservations on a large scale were not, however, effected until the first Regular Settlement, when, partly as a solution of a series of bitter quarrels regarding the ownership of the hills, but partly also for climatic reasons, and to provide a reserve of wood and fodder, a large area of hill waste was demarcated by the Settlement Officer and declared to be Government Forest; it was also notified that Government reserved the right of appropriating when and wherever it might be found necessary all uncultivated land in excess of three times the amount of cultivation. It was on this principle that the Deputy Commissioner acted in carrying out the instructions issued in 1864 for a general demarcation of excessive waste in this district, which resulted in large

additions to the old reserves, and the creation of a number of new ones: in the case of the more important hill *rakhs* the reservations, though sound on the whole, were faulty in detail, while in the plains the work was carried out with a great want of discrimination. Serious hardship resulted, and in 1875 the evils of the system in force attracting attention, Mr. Thomson was appointed to deal with the whole question as Forest Settlement Officer; his work resulted in the restoration of 28 of the minor *rakhs* with an area of nearly 20,000 acres to the estates from which they had been taken, with about 20,000 acres more cut off from the *rakhs* that were retained; special rights and privileges were carefully enquired into and recorded; and recommendations made in regard to grazing, fuel, access to water-sources and the like; it is largely because his recommendations were subsequently lost sight of, that it was found necessary to go into the matter of the management of the forests again at the recent settlement.

As a result of the recent enquiry the following orders were passed by the local Government:—

Management.—In regard to the Unclassed Forests in the plains, it has been decided that they will be managed by the Deputy Commissioner under the rules under the Punjab Laws Act, and not by the Forest Department; as the interests involved in the management of these *rakhs* are purely local, and they do not lend themselves to afforestation.

Grazing.—The following principles are to be observed, as far as possible, in the management of the grazing in the hill *rakhs*: those *rakhs* being set apart which can be wholly and strictly closed, two-thirds of the others should be open for nine months of the year and one-third should be closed to grazing throughout the year, but open to grass-cutting when necessary; camels and goats being excluded from half the open area; the grazing value of the *rakhs* to be assessed for five years, and the grazing to be leased to the villages of the neighbourhood, other villages being allowed to graze only on permit or payment of fees. The grazing assessment of a village may be distributed over the village as a whole, or the lease may be held on behalf of the estate by one or a few of the villages if that is preferred; in case of a breakdown of the system here sketched (and it is doubtful how far it is practical), if it becomes necessary to lease to individuals instead of to villages, the lessee should be carefully selected and should never be a mere speculator: and on no account should the old system of auction sales be reverted to.

The unclassified plains *rakhs* will be offered on five-years' grazing leases to the neighbouring villages: in case of breakdown, the remarks as the selection of lessees above will be applicable, but in these cases there should be no difficulty.

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The authorised scale of grazing fees is as follows:—

Agriculture.

Objects and
management
of the forests.

Detail.	Maximum rate chargeable by lessees of grazing contracts.	For permits issued departmentally when closed areas are temporarily opened.
	Per annum.	Per mensem.
Camels	16 annas.	...
Buffaloes	6 "	4 annas.
Horses and mules, cows and bullocks	4 "	3 "
Plough cattle	1 anna.	1 anna.
Donkeys	2 annas.	2 annas.
Goats	1 anna.	...
Sheep	$\frac{1}{2}$ "	...
Grass-cutter per sickle	8 annas.	16 annas.

NOTE.—Young stock charged half rates; cattle belonging to outsiders from a distance with no claim on the *rakh* pay double rates.

Fuel.

Firewood from the hill *rakhs* is to be obtained on permits, to be issued at or near the spot, at the following rates:—

Camel-load, 6 annas; bullock or mule-load, 4 annas; donkey load, 2 annas; head-load, $1\frac{1}{2}$ annas for thick wood and 1 anna for brushwood.

These rates are equivalent to about 1 anna per maund, *plus* of course the labour and cost of collection and carriage.

Sale of wood thus procured is prohibited; and no cutting instrument is allowed within a *rakh*.

The plains *rakhs* contain little wood; dry wood may be collected by persons using the *rakhs*, subject to the warning that in case of wilful damage to green wood, the system of leasing the grazing to the villages will be suspended.

Wood for ploughs.—Trees fit for ploughs will be marked by the Forest Officer, and persons wanting wood for ploughs can take out a permit and select one of the marked trees, to be cut in the presence of the Forest Guard. The rates of payment will be 4 annas for large ploughs and $2\frac{1}{2}$ annas for small ones.

The plan of cutting and storing wood for ploughs for sale at convenient centres will be tried at the same time.

Forest fires.—These are very rare; but when they do occur the area damaged will be strictly closed for five years, the dead wood being cut down at once and sold by auction to the highest bidder.

Bad Boundaries, &c.—A report regarding the amendment of bad boundaries, provision of access to springs was made; and, as far as possible, all reasonable grievances of this kind have been redressed.

A very full description of each *rakh* is contained in Mr. Thomson's Forest Settlement Reports.

In the case of the more important *rakhs* it is easier to lay down principles of management such as those sketched above, than to give effect to them in practice. Attempts have been made to get the villages surrounding such *rakhs* to combine to take the grazing leases, but these attempts have been almost invariably unsuccessful owing to the want of cohesion amongst the villagers. The system introduced at the recent settlement, by which many of the open *rakhs* are closed to grazing during the rainy months, is unpopular with the people and has caused a considerable diminution of the income derived from grazing leases. The principle is, however, sound, and ought in time to prove beneficial, both to the *rakhs* and to the people using them.

CHAP. II. B.

Mines and Minerals.

Fuel.

Section B. Mines and Mineral Resources.

The mineral wealth of the Salt Range is considerable. Paving and building stone has now for many years been quarried on a large scale at Tarakkí, near Soháwa, on the Grand Trunk Road, and more recently at Bághánwálá in the Pind Dádan Khán Tahsil; and has supplied most of the material for a number of large works, such as the Jhelum Canal. Marble is said to be found in places, and there is a large variety of stones that supply lime. There is also gypsum for plaster of Paris, and various red earths and ochres occur, which have value as colouring agents. Sulphur is found, and many metals, including copper, gold, lead and iron. This last occurs in the form of rich hematite, and is in some places so abundant that the rocks containing it disturb the indications of the magnetic compass. Finally the Range furnishes greater portion of the salt supply of the Punjab, and contains the only coal mines in the Province. These are the two important products, the others being worked, if at all, on a very insignificant scale, and being of no commercial importance, though the gypsum, to give one instance, might become so.

Mines and minerals.

The most important mineral production of the district is salt, which is found in great quantities in most of the gorges on the south side of the Salt Range as far eastward as Jutána, north-east of Pind Dádan Khán; and the geologists expected to meet with it even in Tillá, but a trial boring there was not successful. The salt was originally believed to belong to the Devonian or Old Red Sandstone series, but it has now been shown to be of the Silurian age or even older. No one has ever pretended to give a coherent account of the manner of its deposition, all the theories on the subject being merely confessions of ignorance. The salt occurs in broad seams, separated from each other by interposed layers of red marl composed chiefly of salt, clay and gypsum, with a small proportion of hematite,* these thick salt seams being built up of successive smaller layers of varying

Salt and salt mining.

*This salt marl is not the same as that referred to on page 187 below.

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Mines and Minerals.

Salt and salt mining.

thickness, perhaps representing "year-rings," or the formation in the great brine lake for one year.

A curious discovery, which is said to have perplexed the experts, may be mentioned here; this was the finding, a few years ago, of a large and heavy branch of a tree in enlarging the main tunnel of the mine: the timber is thoroughly impregnated with brine, and is surrounded on all sides with hundreds of feet of the solid rock-salt: how it reached its present position is a mystery, but to judge from its appearance it has been there for untold ages.

A description of the geological formation of the hills in which the Mayo Mine at Khewrah is situated is given in one of the reports of Dr. Warth, who for many years was the engineer in charge of the workings; it is as follows:—

STRATA.						THICKNESS AVERAGE.	
						Feet.	Feet.
Recent Formation	...	Debris of gypsum	...	...	...	100—200	150
Limestone Formation	...	Nummulitic limestone	...	...	...	...	200
Coal Formation	...	Coal, alum, shale and marl	...	...	...	...	20
Sandstone Formation	...	Green sandstone	...	...	...	...	600
		Blue marls	...	...	...	100—150	125
		Red sandstone	...	...	...	400—800	600
Salt Formation	...	Upper layer of white gypsum	...	...	...	...	5
		Brick red marl or gypsum	...	...	...	60—200	130
		Brown gypsum	...	...	...	80—200	140
		Lower layer of white gypsum	...	...	...	...	200
		Salt marl and salt	...	...	...	...	600
Volcanic	...	{ Trap piercing through the lower strata up to the boundary between the upper layer of white gypsum and red sandstone.					
Total thickness of sandstone formation						...	1,325
Ditto ditto salt						...	1,075
Total sandstone and salt formation						...	2,400

After thus describing the strata, Dr. Warth continues as follows:—

"The most characteristic strata of this formation are green sandstone and the brick-red gypsum. The former constitutes the crown of all the heights. The brick-red gypsum crops out on the base of the hills and in the gorges, and is the indicator of the salt formation all over the Salt Range. There are enormous quantities of brick-red gypsum at Khewra, not only low down in the gorges, but high up towards the summit of the hills, indicating the enormous riches of salt within them. The salt formation begins with the brick-red gypsum, if we omit the small layer of white gypsum which mostly but not invariably, occurs between the brick-red gypsum and the red sandstone. The brick-red gypsum crops out on the south side, on the slope

of the hills towards the plains, and again far up in the Khewra gorge below the sandstone formation. It surrounds the great raised centre of the salt formation, and for the most part covers it. The red gypsum is a most peculiar brick-red coloured mixture of clay and crystallized gypsum. One might as well call it brick-red marl, but I prefer the former expression because the gypsum is the principal constituent of the mixture. Below the brick-red gypsum the brown gypsum appears. This mixture is similar in composition to brick-red gypsum; there is only a difference in the colour, that is, it is brown instead of brick coloured."

It may be added with reference to the concluding remarks, that it is only on close examination that it is possible to identify the formations which give these hills their curious pink colour; they may be the brick-red gypsum, or they may be marl, or a mixture of the two*: both are in fact usually present. Again the debris formed from the disintegrated strata of salt marl and gypsum, mixed with clay, may at a distance be easily mistaken for the above; this stuff when dry is very hard, but after a shower of rain a stick can be pushed into it three or four feet without the exertion of any great force.

In Sikh times the salt was worked at each available spot, but after the annexation it was found advisable, in order to facilitate the collection of the revenue, to limit the number of mines. At present salt is only worked at three spots to the east of the Indus, at Khewra, Nila Váhan and Warcha, the two former places being within this district, the last in that of Sháhpur. The best known mine is that of Khewra, situated a few miles above and to the north-west of Pind Dádan Khán, and bearing, since 1870, the name of the "Mayo Mine." We have no accurate information as to the period at which salt was first dug from these mountains. Dr. Fleming, in the report referred to below, records assertions of the natives that the mines were first worked in the reign of Akbar, and mention is made of them in the *Ain-i-Akbari*, but this is all the information recorded upon the subject. The native tradition is that Akbar was informed of the existence of the salt by a certain Asp Khán, on condition of his receiving as reward, during his lifetime, a sum equal to the whole of the wages of the miners employed in digging it. Some of the miners, now living in Khewrah, however, claim descent from a family said to have come there from Háji Sháh (in the Ráwalpindi District) in the 6th Century *Hijri*, or about 800 years ago. Under British rule the working of the salt was at once taken up as a source of State revenue; it was at first sold at the depôt at the rate of Rs. 2 per maund, the Government bearing the cost of quarrying, which at Khewra amounted to Rs. 3-12 per 100 maunds. The income from the mines

* The red marl is composed of: Gypsum ... 35·34 per cent.

Quartz sand ...	14·24	" "
Dolomite ...	34·12	" "
Clay ...	14·26	" "
Hematite ...	2·04	" "

CHAP. II. B.

Mines and Minerals.

Salt and salt mining.

of the Salt Range, including the trans-Indus works, amounted in 1850 to Rs 15,37,760, but the demand rapidly increased, and the duty being raised in 1861 from Rs. 2 to Rs. 3 per maund, the income of the year 1862-63 rose to Rs. 30,31,568, and has since risen to Rs. 65,13,769 in 1902-03.

The earliest mention of the mines by a European writer seems to be the "account of the Salt Mines of the Punjab" by Lieutenant Burnes. (Journal, Asiatic Society of Bengal, 1832, Vol. 1, page 145). The annual outturn is there said to be about 800,000 maunds, the miners being paid Re. 1 for 20 maunds excavated: it is added that Mahārāja Ranjīt Singh hoped to derive a revenue of 16 lakhs from the monopoly and 2½ lakhs in addition from salt duties.

Dr. Andrew Fleming, Assistant Surgeon, 7th Native Infantry, made a tour through the Salt Range in March to May 1848 and again in 1851-52, his account being published in the Journal of the Asiatic Society of Bengal (1848, Part II, pages 500—526; and 1849, pages 661—693; and 1853, pages 229 and 444). He thus describes the village and mines of Khewrah at that time:—

"From the foot of the hills a narrow path, strewn with boulders and masses of rock which have fallen from the height above, leads through a deep ravine to the salt mine village, which is in terraces on its east side, and is inhabited by the miners and their families during the dry season. In the rains, on account of the heat and mosquitoes, they desert Khewra and take refuge in the small village of Toba, which is built on the opposite side of the ravine, but at a considerable height above the salt mines, where they enjoy a cool breeze and an immunity from their winged tormentors. The inhabitants of these villages amount to about 650, of whom 400 are employed in the salt mines.

"Round the village no fewer than ten shafts are sunk into the red marl for the purpose of extracting the salt. The mine is a little to the east of the village, and on a higher level, the path leading to it passing over red marl containing angular masses of gypsum. The entrance to the mine is by an opening out in the marl about 7 feet high and leading into a passage which preserves throughout a height of 6 feet and a width sufficient to allow individuals to pass. From the entrance to the end of the workings the distance is 640 feet, where a chamber has been excavated entirely out of the rock salt, 40 feet long by 30 feet broad, and about the same height, in which at the time we visited it, men, women and children were busily engaged quarrying the mineral, by light of small oil lamps formed of the salt and hung by iron hooks on its walls, the crystalline surface of which reflected the light on a deep pool, brine situated in one corner of the chamber, and which, is said to communicate with several of the neighbouring shafts. The appearance of the miners, as seen in the dim light which illuminated the mine, was highly striking, their faces and bodies being covered with a saline incrustation. Their dress is of the lightest description, the men wearing nothing but a bit of cloth round their loins, and a pad of *namdah*, or thick woollen cloth, tied over their shins to protect them from injuries from the sharp angles of the rock or the blows of their instruments."

He gives the following detailed account of the methods of mining then employed:—

"When a spot has been fixed on as a promising locality, a tunnel is cut in the marl about 5 feet high and 3½ feet broad, and carried on till salt is

reached, the proximity of which is generally indicated by the marl becoming moist and assuming more the character of a dark red clay. The mineral is then excavated as long as a supply is procurable, no attention being paid to leaving pillars at intervals, for the support of the workings, the consequence of which is that great annoyance is experienced from the falling in of the roof of the mines, and accidents to the unfortunate miners themselves are of frequent occurrence. Should the shaft have been sunk on, and reached only a mass of salt, after this is worked out the mine is either abandoned or a gallery driven to a greater depth into the marl, until another large mass is found or the real salt-bed reached. As this invariably has a strike and dip corresponding to the strata superior to the marl, the stratification of the rock guides the miners in their onward course. These mines are nothing more than huge caves entirely excavated in the salt, which is seldom or never worked through, either in the floor or roof, because as the salt approaches its matrix it becomes intimately mixed with marl, and is highly deliquescent from containing magnesia. In almost every mine in the Salt Range, the evil of having left no pillars to support the roof is experienced, and some of the largest and best mines have been in a great degree abandoned in consequence of their becoming filled up with huge masses of salt, gypsum and marl, that have fallen in from above.

"As the marl is the lowest rock of the range and dips under all the others in a northerly direction at an angle of from 25° to 40° , as might be expected, much trouble is occasioned by the filling of the mines with water when they reach to any great depth. During the rains, too, in July, August and September, the water rushes through passages in the marl into the mines, and by detaching large portions renders them quite unsafe. In these months the miners desert their work, partly on account of its dangers, and partly on account of the intense heat, and the numerous fleas and mosquitoes which infest their neighbourhood. In consequence of the irregular way of carrying on the workings, the passages into the various mines exhibited at present a succession of ascents and descents, which sometimes become so polished and slippery as to render walking over them a matter of some difficulty.

"In extracting the salt, the chief instrument used is a hammer, pick-shaped and hard-tempered at one end, and with round head at the other. A mass of salt being fixed upon as the scene of operation is lined off, about two feet thick, and along this a groove is cut with the sharp pointed hammer to the depth of some eight or ten inches. Larger sharp-pointed hammers as wedges are then introduced at intervals along this line, and on their broad heads a series of sharp blows are inflicted. This generally detaches a block of salt, which is then broken up into lumps of a convenient size for being carried out of the mines. The amount of waste resulting from such a method of working is immense, and as powdered salt is not saleable as long as lumps can be had, it is generally shovelled into the bottom of the workings, where there frequently is a brine-pool ready to receive it. On account of the dangerous state of the roof of nearly all the mines, gunpowder is seldom used, and all the work is done by the pick and hammer. From the want of circulation of air in most of the mines and the dampness of the atmosphere, the heat is most oppressive: and from the filthy habits of the miners, the stench in some of the mines is quite overpowering. In the month of December, when the temperature of the external air was 71° , the thermometer in the Baggi mine at Khewra, indicated a temperature of 81° . Men, women and

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children indiscriminately pursue the avocation of salt-miners. Families generally work together, the mother and children being chiefly occupied in carrying on their backs to the mouth of the mine the masses of salt which the father has quarried. They are a somewhat discontented set, and strikes are by no means uncommon.

"The general appearance of the miners varies greatly. At the end of the hot season they appear very sickly and sallow, but towards the close of the cold season, they do not appear to us to have a more unhealthy aspect than the inhabitants of towns in the Panjab generally have. They, however, suffer a good deal from sickness, but this is probably owing more to the position of their villages and their filthy habits than to their trade. Certain diseases, such as ophthalmia and pulmonary complaints, are very prevalent among them, and doubtless result from the injurious effect of the finely powdered salt acting as an irritant on the mucous membranes. Fever is very prevalent among the miners at Khewra, where (perhaps from the confined position of their mine) they look more sickly than at most of the other mines. Goitre is a frequent complaint.

The mode of excavation continued for many years to be very faulty, and the waste of salt was enormous, amounting to a tenth of the whole produce; and it was only in the seventies that efforts were made to introduce a scientific mode of working the mines. In 1869-70 they were made over to the care of the Imperial Customs Department, now the Northern India Salt Revenue Department, having previously been immediately under the control of the Punjab Government: and in the following year an experienced engineer was placed in special charge of the Khewra or Mayo Mine. About the same time another important change was introduced. The Government had hitherto borne the cost of excavation, defraying it out of the income derived from sales. Under the new system, a full duty of Rs. 3 per maund was levied on all salt sold, and the cost of production was thrown upon the purchaser. An annual saving of about Rs. 60,000 was thus effected.

The extent of the salt seams is not accurately known: the Salt Series is found throughout the salt range at various heights, from 427 feet above the sea near the Indus to 2,739 feet near Warchha; and though occurring chiefly on the south of the hills, is found also at one or two places on the north of the range: it is apparently continuous for 134 miles, with a breadth of 4 or 5 miles, but in places 12 or more: salt probably exists wherever there is marl, so the quantity of the whole must be enormous; for one square mile only 30 feet thick would yield 50 million tons (over 20 times the amount excavated in the last half century), and the actual thickness is supposed to be, not 30 feet, but from 30 to 250 or more. It is thus clear that even if only a small fraction of the salt should be in practice workable, the supply may nevertheless be considered inexhaustible. Mr. Bolster, the officer until recently in charge of the Mayo Mine, believes that at the present rate of sale, and if machinery is not resorted to for lifting the salt, this mine alone will last for another 150 years at least.

This mine, by far the largest in the Punjab, is situated in a hill on the south face of the Salt Range, opposite Pind Dádan Khán, and rising to a height of 700 feet above the level of the Khewra gorge at its side and 1,650 feet above sea level: roughly the mine is about half a mile in breadth and a quarter of a mile in length: regular excavation has now reached a height of 291 feet above and 49 feet below the level of the gorge at Thompson's bridge; a total height of 340 feet: but the hill has been explored, and the known salt seams have been found to exist to a height of 395 feet above, and 322 feet below, the gorge. The workings are reached by tunnels driven horizontally into the hillside, tramways, with a total length within the mine of nearly a mile and a half, being laid along the principal passages: these include the main tunnel, 3,570 feet long (passing through the Pharwála and Baggi seams), by which the bulk of the salt is removed from the mine; and the low level drift running north-east from the main entrance of the mine, through the Pharwála and Sújwál seams, and 2,310 feet long, from which takes off what is known as the chain-tunnel, with a double line of rails laid on an incline with a gradient of one in eight, 586 feet long, worked by an endless chain. From the head of the gradient is another drift, known as the 1,000-foot drift, which runs south 30° west and is 1,491 feet long. Along the 1,000-foot drift a tramway is laid in connection with the low level tramway, and along these lines the whole of the salt removed from the mine is carried.*

There are loading stations along both the upper and lower lines, and it is the duty of the women and children employed in the mine to bring the salt to those stations from the different chambers. The 1,000-foot drift runs parallel with the Baggi seam. From the 1,000-foot drift a drift known as the upper 1,000-foot drift has been run to a length of 641 feet to allow of the salt being reached at a higher level. There are numerous smaller drifts for connecting workings or for allowing for ventilation.

The three principal seams are known as Baggi, Pharwála and Sújwál; which all in different parts vary in thickness; but where the marl dividing them disappears there is a solid seam of excellent salt 280 feet thick.

In working, a series of chambers 40 feet wide is excavated, with pillars, or supporting walls, 30 feet thick, left between them; these pillars are never cut or pierced if it can be avoided: the first operation in making one of these chambers is to excavate horizontally to the width required (limited to 40 feet), and to a height of 7 feet, from the marl under foot on the rise side of the strata to the marl overhead on the dip side. The dip is about 45°. The roof is

* The description that follows is taken from the report on the Mayo Salt Mine, by James Grundy, Inspector of Mines in India, Calcutta, 1898, and from information kindly furnished in 1898 by Mr. Bolster, lately Assistant Commissioner, N. I. S. R., Khewra, now Deputy Commissioner, N. I. S. R., Agra, who has also revised and corrected the whole section dealing with the salt mining.

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then worked out to a height of 20 feet, and the floor of the "chamber" thus formed being divided into working spaces, generally 10 by 20 feet, is cut away down to the underlying marl, or as far as may be convenient: the various workings are nearly always parallel and super-imposed.

The mining is all done by pick and blast, water being used as a solvent when driving blast holes: the work is not continuous, but is carried on during the day only.

All the salt is sent down by the tramway to the Warthganj Dépôt at Khewra, where it is hand-picked for impurities and for all salt under about half inch cube, this going to swell the huge mound of waste which disfigures the place: whatever waste is picked out in the mine itself is used for filling up abandoned workings, which in the case of the old ones is most necessary for their safety, those along the southern boundary of the workings sometimes causing anxiety by collapsing: but the danger to the miners from this cause, which was formerly so great, is now practically non-existent in the later workings on the systematic principles sketched above. The mine is now well ventilated; and the mine hill is remarkably dry, there being much less water in the mine than twenty years ago, owing to the large number of surface drainages constructed. The brine collected in the workings was removed with steam pumps a few years ago; and drains have since been made inside the mine by which any water that may find its way in is carried out along the low level tunnel.

The total amount of salt excavated since the creation of the Salt Department in 1850 is over $2\frac{1}{4}$ million tons; and the present annual output is about 1,900,000 maunds, or nearly 68,000 tons, and this could be considerably increased if necessary.

The salt is remarkably pure, chemical analysis giving an average of 98.36 per cent. pure chloride of sodium, the remaining 2.64 per cent. being made up as follows:—Other salts 0.90; insoluble matter 0.38 per cent.; moisture 0.36 per cent. These figures give the average quality of the salt issued in 1897-98; that now being issued is as good as any that has ever been produced.

The Indus Preventive Line maintained up to 1898 in order to confine Kohat salt to the right bank of the Indus, at a cost of from Rs. 26,000 to Rs. 42,000, has now been abolished: and the trans-Indus salt is materially cheaper to the consumer than that from Khewra; the two, however, do not compete, the consumption of the former being confined to the right bank of the Indus and prohibited in the Cis-Indus country.

The average cost of production of 100 maunds of salt is nearly s. 4 (or not quite Re. 1 per ton), this amount being

distributed roughly as follows:—

	Rs.	as.
Net wages of the miners	2	8 47
Miner's powder, 1 sér	0	3 20
Miner's oil, $\frac{1}{2}$ sér	0	3 33
Miner's tools	0	0 50
Net wages of the carriers	0	13 00
Carrier's oil	0	3 00
Gangmen's share	0	0 50

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In addition to the Khewrah mine there is in this district the so-called Núrpur mine, situated some miles from the village of that name in the Nílí Váhan gorge of Rakh Núrpur: it is on a very small scale, producing only about 4,000 maunds of salt per annum.

The subjoined table shows the gross income derived from the Salt Range mines for different years at five yearly intervals up to 1901-02: the heading "other mines" includes the Makrách mines closed in 1864-65, the Sardhi mines closed in 1874 (which produced a revenue of about two lakhs of rupees); the Warchha mines in Sháhpur; and the Kálábágh quarries in Míanwálí:—

Years.	Mayo mines.	Other mines.	Miscellaneous revenue.	Gross income.	Expenditure.	Net revenue.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1850-51 ...	9,26,886	6,10,520	354	15,37,760	1,21,352	14,16,408
1860-61 ...	20,25,835	7,08,903	9,168	27,43,906	1,80,977	25,62,929
1870-71 ...	27,99,092	8,65,310	23,995	36,88,397	2,09,001	34,79,396
1880-81 ...	31,28,834	5,07,445	92,937	37,29,216	2,64,999	34,64,217
1890-91 ...	45,06,113	3,44,590	1,48,607	49,99,310	2,86,372	47,12,938
1896-97 ...	46,00,672	4,65,601	1,53,693	52,19,866	3,36,963	48,82,903
1901-02 ...	54,94,851	6,84,879	67,969	62,47,699	2,84,793	59,62,906

The above figures include the income from the duty on salt: this was reduced on 18th March 1903 from Rs. 2-8 to Rs. 2 per maund, and the revenue of 1904-05 fell to Rs. 51,06,267. The duty was again reduced on 22nd March 1905 to Rs. 1-8 per maund, and the revenue is likely to fall still further. Salt is now delivered free in railway wagons at the Warthganj depôt at the rate of Rs. 1-9-3 per maund, which is taken to include cost of production and issue. The cost in fact varies somewhat from year to year and has risen as high as 1 anna 4-39 pies per maund; but in 1902-03 was only 1 anna and 1-9 pies, and in 1904-05 only 11-54 pies per maund.

The supply of labour for the mine is ample: the great majority of those employed are hereditary miners and their families, but at the Mayo mine a fair number of agriculturists find casual work, chiefly above ground, as trammers and so on. The number of persons employed was in 1905 as follows:—

Below ground: men, 516; boys, 64; women, 425; total, 1,005.

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Above ground : men, 58 : or 1,063 persons in all ; but of course the number varies from time to time. It has always been customary for the women of the miners' families, and boys over 10 years old to work in the mines as carriers. The health of the miners is good, and accidents infrequent, there having been only 42 serious and 4 fatal accidents in the thirteen years ending with 1898.* No work is done at night, and the number of working days in the year is only about 200, the miners keeping up their old practice of taking a holiday of two months in the rains, and migrating to their "hill-stations" a few miles off in the range ; though the main original reason of this practice, the danger of falls of the workings in that season, is now practically a thing of the past. The miners are paid once every two months, not caring to receive their wages more frequently on account of the interference with work caused by the necessary measurements : a fact which seems to indicate a very fair amount of prosperity amongst them. On the whole it may be said that there are very few miners in the world who work under such fortunate conditions.

The work of the miners is supervised by gangmen and *lambardárs*. The former take half an anna per rupee of the miners' earnings ; *lambardárs*, in addition to this, get Rs. 5 to Rs. 12 *per mensem* as their pay, and have to keep up a gang of at least 25 working minors each : they act also in a general way as the headmen and representatives of the mining community. The system has been found to work very well, and it would be difficult to devise another system of keeping up a steady supply of labour at once as cheap and as efficient.

The earnings of the miners (noted further on) are reduced by the payments to the carriers, who work half the day on carriage of salt, at 9-14 annas per 100 maunds ; and half the day on carriage of wastage at 8 pies per maund. An adult carrier earns about 4 annas a day and a child about 2 annas.

The number of journeys to and fro which the carriers make daily is on the average about 35. The adults as a rule carry 70 lbs of salt at each turn, but sometimes they will carry pieces weighing over 80 lbs. The total cost of carriage to the miner is about Re. 1 per 100 maunds, leaving a net sum of Rs. 3 per 100 maunds for his own remuneration, which, as he can on an average quarry 20 maunds of salt in a day, represents Re. 0-9-7 per day. Other charges, gangmen's dues, powder for blasting, oil and tools, reduce this sum to rather more than 8 annas, which may be taken as the average earning of a working day.

The miners are a peculiar people, a class apart from the other inhabitants of the tract, and are much given to complaints for little or no reason ; they have more than once threatened to strike on

* Accidents, 1905, fatal 21, serious 6, simple 47. These include petty accidents of which no account was formerly taken.

account of their supposed grievances, the last occasion when there was serious trouble being in 1863, when they claimed proprietary right in the mines, rights of cultivation in the surrounding state lands (the mines being situated in one of the Government forests), besides free grazing, grass and fuel; the claim to proprietary rights was of course preposterous, but they were allowed to cultivate a considerable area of Government land on very lenient terms, and were granted substantial concessions in regard to grazing, fuel, &c., which they still enjoy: at the recent Settlement the area in their possession for cultivation has been increased, the rent payable having at the same time been raised, though still very moderate.

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The salt from the Mayo, Núrpur, Warcha (Sháhpur district) and Kálábágh (Míánwáli district) mines is consumed in the Punjab, but it is also taken in large quantities into Oudh, the eastern districts of the Agra Province and Behár, and in lesser quantities into Lower Bengal, the Central Provinces, Rájputána, and even Bombay, and is used by Hindús in their religious ceremonies owing to its purity, and because it is not a manufactured salt. Its consumption and its area of consumption are still increasing.

Practically the whole of the salt sold at Khewrah (98·7 per cent. in 1902-03) is sent direct by rail to the purchasers; they pay their money in to their local treasury, Post Office, or (on the Indian Midland Railway) Station-master's Office: the Treasury Officer, Post-master or Station Master, as the case may be, grants a receipt for salt revenue received, which the purchaser forwards with instructions for despatch, and empty bags for the salt, to the Assistant Commissioner at Khewrah. This officer does the rest, the purchaser being put to no further trouble until the salt reaches his local Railway Station.

Besides the establishment maintained at the Mayo Salt Mine and Warthganj Depôt at Khewrah, there is a preventive establishment, whose duty it is to guard salt outcrops, which are numerous in most of the gorges of the Salt Range. This establishment consists of five officers; one Superintendent stationed at Núrpur, and four inspectors stationed at Malot, Makrách, Khewrah and Kushak. They supervise the work of 213 men of all ranks, who chiefly remain at 77 guard posts near the salt which has to be guarded. The establishment, officers and men included, is maintained at an annual cost of Rs. 25,788.

Preventive establishment.

This establishment is a good deal smaller than formerly, having been greatly reduced some years back: 20 years ago there were 6 officers and 426 men, with 95 posts, costing Rs. 37,853 per annum.

In the tertiary formations of the Salt Range gold is found in the shape of minute scales, and has doubtless been derived from plutonic and metamorphic rocks, the disintegration of which has furnished the material of which the strata of the series are

Gold.

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Gold.

composed. And in the beds of the numerous *nallahs* or *kassís* which flow through the miocene formations, the sand is washed for gold. It seems to be obtained in the largest quantity towards the Indus, north of the Salt Range. The original beds whence gold is derived have not yet been found. Indeed they cannot be supposed to exist anywhere near the surface of this district. The gold in its comminuted state is evidently derived from the soft upper tertiary sandstones.

The process of washing the river sands for gold is as follows : when a likely spot in the bed of a *nallah*, generally near the sides of the stream, or above its lowest level, has been fixed upon, the superficial mud is scraped off and the lower sand taken out with a wooden shovel and carried to the spot where it is to be washed, close at hand. The washing is effected in a long wooden box resembling a small flat-bottomed boat wide at one end and narrow at the other, where there is an opening for the escape of the water. The wide end of the cradle, or *drún* as it is called, is slightly bent upwards so as to give its flat bottom a gentle inclination towards the fore part. A coarse sieve of reeds is then placed across the wide end of the tray; on this the sand is thrown, and water dashed upon it, till all the finer sand is washed through into the cradle, and the coarse gravel retained on the sieve. By continuing the washing with a gentle stream of water, the lighter particles of fine sand are carried down the inclined floor of the cradle and escape with the water, while the heavier and auriferous sand assumes the highest level, next to the point where the water is applied. In a very short time nothing remains but a thin stratum of black iron sand, in which scales of gold may occasionally be seen. By continuing the washing still further, the lighter particles are removed, and the auriferous portion concentrated within narrow limits. When the washing in the cradle has been carried as far as is considered safe, the sand is removed by hand into a saucer-shaped platter, made of *shisham* or some other hard wood. In this, by a circular motion, it is agitated with water, and thus an additional portion of the black sand is got rid of by centrifugal motion, and washed away from the inclined sides of the plate by a stream of water skilfully applied. The residue is then rubbed up with a little mercury, which quickly amalgamates with the gold and leaves the black sand. The mercury is then removed from the platter and wrapped in a fragment of cloth, and placed on a bit of live charcoal. The mercury quickly sublimes, leaving the gold entangled only with the ashes of the cloth from which it is freed by rubbing. It is taken next to the goldsmith, who uses it with borax, and thus it is cleaned. The gold-washings of the Salt Range are nearly all in the Jhelum district, where they are confined to the *kassís* flowing northwards from the hills: the number of workers is small, and the gold they obtain is barely sufficient for their livelihood, the total output of a year being very trifling.

The *kirdār* of Makhad told Dr. Fleming in 1848 that the production of gold in 1844 to 1846 averaged 328 tolas (of 165 grains); but the gold-washers conceal the amount as much as possible to reduce the tax. In the year 1858, 158 cradles were at work, and they were taxed from Rs. 2 to Rs. 5 per *dūn*; the total tax then amounted to Rs. 525, while in 1870-71 the revenue derived from the Jhelum gold-washings amounted to Rs. 365, and at present the average is about Rs. 400. There is nothing received under this head from the Pind Dādan Khān tahsil. Off and on a gold-seeker is said to make about six annas a day. Eight of them generally make up one party. They are called *kué log* by the villagers.

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The subjoined account of the coal formations of the Salt Range is taken from the "Economic Products of the Panjab," page 27. A detailed report on the coal strata of the Salt Range was published by Dr. Oldham in 1864:—

Coal formations.

"In the Salt Range there are two formations of coal or lignite. These I shall distinguish as oolitic coal and tertiary coal.

"I—*Oolitic coal*.—Among the shales of the oolitic series occurs what is called Kálábāgh coal, which has to a certain extent been employed as fuel for the Indus steamers. This bed is in a ravine about a mile west of Kálábāgh. The coal is found in lumps of various sizes in dark bituminous shales. It does not occur in beds but in detached masses, which appear to be compressed and fossilized trunks of trees; in many cases the junction of trunks and branches can be traced. The occurrence of these masses is altogether irregular and uncertain, and nothing like a systematic working of shaft-cutting to reach it would be in any degree remunerative. 'The coal,' says Dr. Fleming 'is very hard and light; exhibits a conchoidal fracture in which its woody structure is most apparent. It is of a jet-black colour, has a brown streak, and often encloses nests of half-decomposed wood resembling peat.'

"It burns quickly without coking, to a light coloured ash and emits a large amount of smoky yellow flame; on being distilled, it yields a light spongy coke of a glistening metallic colour, with a large quantity of inflammable gas. On analysis the following results were obtained in 100 parts:—

Carbon (coke)	...	...	...	...	...	37.5
valale (bituminous inflammable matter)	...	...	...	...	...	60.0
Ashes, silica, &c.	...	...	...	...	...	2.5
						<hr/> 100.0 <hr/>

"The large amount of bituminous matter at once refers the coal to the category of lignite, or coals imperfectly carbonized; the amount of ash is small, which may be accounted for by the solid nature of the wood not admitting of the infiltration of earthy matter.⁽¹⁾ This coal burns very rapidly. The evaporative power of coal is in direct ratio to the amount of carbon it contains. English coal yields 50 to 70 per cent. of

(1) Fleming's Report. Selected Correspondence of the Punjab Government, No. XXII, p. 310.

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carbon, this coal only 37.5; hence double the quantity of this coal would be required; but still it has twice the evaporative power of wood, which has only 16 to 18 per cent. of charcoal. During 1850, Dr. Fleming tells us, 200 maunds of this coal were dug, and from 1851 to March 1852 2,126 maunds, at the rate of eight maunds per rupee, which could not remunerate the miners for any length of time. Calculating that an ordinary steamer burns 600 lbs. an hour of English coal, and that of Kalábágh coal the consumption would be nearly double, from considerations adduced above the whole produce of the year 1850 would keep a steamer going 166 hours.

"II—Tertiary coal.—The most important series of coal strata in the range, however, are the beds occurring in the strata of the eocene series. It is principally in the lower alum shales that coal occurs; it is found at many places all along the range, and also across the Indus in the Chichalli range. The first coal occurs at Bághánwála, ten miles west of Jálálpur, being about half way between it and Pind Dáian Khán. The seam is about 32 feet thick at its widest part, and gradually thins out towards either end. It is enclosed in shales and yellow marl, resting on variegated sandstone. The seam dips conformably with the strata at an angle of 45° or 50°. This coal was brought to the notice of Government in 1847. It is very brittle and alternates in parts of the seam with shale, which renders it also very friable. There would be considerable difficulty in sinking shafts on account of the brittle nature and the steep incline of the strata, but Dr. Fleming notices this seam as the most hopeful one to be worked, should Government determine on mining the coal. At Drengan coal again appears, which is probably a continuation of the Bághánwála seam.

"Kheura.—This coal was found in 1848 in a seam about two feet thick at the bottom of a roundish hill of nummulitic limestone in a ravine about a mile to the north-east of the salt mines. It rests on blue clay containing septaria and crystals of gypsum. In 1849 500 maunds were extracted, but this is not a productive seam, as the extraction appeared to have exhausted it. On the road from Khewra to Choya Saidan Sháh, coal occurs at Pidh. The coal is not so good: it occurs in two seams. At Dandot, Makrách and Núrpur coal occurs in a seam of about two feet thick, of inferior quality, and difficult of access. At the top of Karmián above Katha, shales of iron pyrites occur, enclosing beds of coal, much more compact and mineralized than most of the other lignites; the seams were only about six inches thick. In 1852 Dr. Fleming remarked that the outcrop of the coal had become concealed by huge masses of limestone thrown down by an earthquake.

"The coal of the Salt Range generally, very much resembles that called splint coal, but is soft and brittle. It is not used as fuel by natives, but ground to powder and administered with milk as an *osteocolla* for wounds and broken bones internally. It is often called *sang-i-salájit*, and sometimes *múmiái*, though *múmiái* properly is hardened bitumen or petroleum.

The collieries.

The existence of coal in the hills of the Salt Range was known to the natives before the time of annexation: it was used by them as a medicine, administered internally, as a mixture with milk, for bruises and other external injuries: they were not probably acquainted with its use as fuel. The existence of these deposits was first noticed officially as early as 1849, when Dr. Andrew Fleming,

Assistant Surgeon, 7th Native Infantry, was deputed to make an examination of the mineral wealth of the range: his report was published in the journal of the Asiatic Society of Bengal, 1849, pages 661 to 693, and has been referred to in the preceding paragraphs. A small quantity of the coal was raised in 1850 to 1852 with a view to supplying the river steamers, but its quality was poor and the difficulties of transport great, and the experiment was abandoned until some thirty years later, when the coal began to be in demand for the railway, and was raised in small quantity by contractors under the Forest Department, on payment of a royalty of Rs. 2 per ton. As the mines developed this system was found to be unsuitable, and they were transferred to the North-Western Railway, by which they were worked experimentally from 1884 to 1887, and from thence onward continuously: practically speaking production began in 1887, when the outturn was 7,523 tons, which by 1892 had increased to 66,352 tons; recently the production has again fallen off, the outturn in 1904 being only 31,003 tons. The total production to end of 1904 amounted to 10,00,918 tons. Of the whole amount raised in the twenty years 1884 to 1904, 70 per cent. was steam coal and the rest slack, meaning thereby all that passes through a screen with a three-eighth inch mesh: the "nut-coal" again is separated from the slack by passing it over a screen with quarter inch mesh: the proportion of slack is large, as the coal is soft and brittle, and owing to the system of mining it undergoes much unnecessary handling. There is a steady demand by the public for the slack coal, for lime and brick burning, but only about half of it is sold, all the rest of the coal produced being used by the North-Western Railway.

The mines are situated at a height of roughly 2,000 feet above sea level, in a limestone formation at the summit of the hills of the Salt Range: those at present worked are at Dandot, nearly opposite to Pind Dádan Khán. A continuation of the Khewrah branch of the Sind-Ságar line runs to Kálápáni, at the foot of the hills below Dandot, with which place the broad gauge line is connected by a series of "inclines" or cable tramways; the lowest of these is 3,600 feet in length, with a gradient of 1 in 3 to 1 in 7: the next with a length of 1,500 feet has a gradient of 1 in $2\frac{1}{2}$; and the highest section is 1,450 feet long with a gradient of 1 in 3 or 4. The total rise between Kálápáni (officially "Dandot") station and the top of the incline is about 1,200 feet. The surface works also include about $5\frac{1}{2}$ miles of railways on the range, chiefly that which connects Pidh with Dandot.

The main mine at Dandot lies directly under the large village of that name, which has suffered considerably from subsidence of the surface, causing damage to houses and tanks for which compensation has been paid by Government to the owners. Damage to cultivated land is also complained of, but with very little reason.

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Mines and
Minerals.Description
of mines.

The coal apparently consists of a single seam, which is worked at a number of different places; it is found in isolated patches, in strata which are said to be of the Tertiary Age, in which nummulitic limestone predominates: it differs entirely from the continuous coal seams of the English coal bearing tracts. The thickness of the seam is on an average about $2\frac{1}{2}$ feet at Dandot and 4 feet at Pidh: the roof consists of 30 to 35 feet of soft shale covered by limestone: the floor also consists of dark shale, in Dandot soft and friable, forming a soft mud with water, and in Pidh of a harder character. The nature of the roof and floor is productive of much inconvenience in working, the former being very apt to fall, a great danger to be guarded against, involving the use of an enormous amount of securing timber; while the floor rises with pressure, and blocks up the air courses necessary for the ventilation of the workings.

The coal is only moderately good at its best, being soft and easily broken and somewhat liable to spontaneous combustion: at its worst it is very bad indeed. As regards the permanency of the supply there seems to be no clear information: the Pidh mines, which have of late furnished most of the coal produced, are now (1906) closed, and further exploration is needed to show the extent of the seam at Dandot; for this purpose a shaft has been sunk some distance down towards the coal in the centre of the plateau. Experimental works are also being carried on in the adjacent hills, but, though coal occurs in other parts of the hills, there is, so far as is known at present, no locality which would repay working and take the place of the Dandot supply when that is exhausted. The only attempt hitherto made in this direction, at the so called Bāghwānwāla mines, near Ara in the east of the range, proved a costly failure: they were at work for about five years from the end of 1893, producing in all 40,674 tons of coal, and were then abandoned, with a net loss of over five lakhs of rupees, due largely to the disproportionate magnitude of surface arrangements, which included 9 miles of broad gauge railway from Haranpūr to the foot of the range, an incline of 2,800 feet with a gradient of 1 in $2\frac{1}{2}$ to 5, and five miles of narrow gauge railway, including 3 tunnels and 7 bridges, on the top of the hills. The broad gauge line has been taken over by the North-Western Railway as it gives access also to valuable stone quarries around Rawāl; the other works have been dismantled. The seam which lay at an angle of 48° had an average thickness of 3 feet, with a floor and roof of sandstone; the mines were capable of yielding 80 tons daily, and gave employment to over 200 persons.

The coal at Dandot is worked by horizontal galleries from the face of the hill, the longest working in Dandot Main Mine, extending to a distance of 2,200 feet from the mouth. At Dandot the workings are laid out on the long-wall system, all the coal being taken out at one operation, and no pillars being formed

or left in. The necessary roadways for the extraction of the coal are built up in the worked out space or "goaf." At Pidh a modification of this system was in force; there, in some instances, where the coal was thick, pillars were formed in the first operation, and were subsequently removed in slices. About three-fourths of the space is filled with ripping-dirt and other rubbish. The work continues throughout the 24 hours.

CHAP II B

Mines and Minerals.

Method of Working.

In the working of the mines the contractors play a very important part; they find and control the workmen, supervise the work in the mines, find and fix the mining timber, pay for repairs, find tools and oil, &c., and pay for ventilation. They have also to compensate the heirs of men killed by accidents and to give full pay to injured men in hospital. Under their contracts, which are terminable at the pleasure of the authorities, they have to produce a given amount of coal in a given time and to deliver $2\frac{1}{2}$ per cent. in addition to what they are paid for to make up for waste.

The miners pick at the face of the seam, without much method: it would pay better to work on the coal by undermining the soft floor of the seam, or by blasting, a process at present little employed, and disliked by the miners, only about 100 shots per month being fired.

The coal is brought out from the workings in trucks pushed by men, or in bags of about $2\frac{1}{2}$ maunds carried by men, to a distance of sometimes as much as 225 yards. It is hand-picked for dirt at Kálápáni station, where, too, most of the screening is done, and is then loaded for despatch to the consumers.

The workings are very warm and steamy, and ventilation is defective, though in this respect there has been considerable improvement in recent years; there is no firedamp and hardly any noxious gas is met with; open lights are used.

The superior mining establishment consists of the Mining Manager (Executive Engineer), two English Deputy-overmen, and four sub-overmen. Establishment, &c.

The surrounding tract furnishes most of the labour employed, especially the villages of Dandot, Bhuchhál, Dhrukna, and Jhámra, but miners also come from Poonch, Gujar Khan, the Kangra Valley, Sindh, and Mekran: nearly all are agriculturists, who, for the most part, work intermittently, many doing so for alternate fortnights (chiefly those from the Vunhár iláka), others for three or four months at a time. The average number of men employed in 1905 was 1,360; about 71 per cent. below ground and 29 per cent. above ground; the majority being cutters or hewers, 46 per cent. of the total; fillers, 18 per cent., or trammers, 10 per cent. The number employed is less now than was formerly the case, the figure for 1896 being 2,063. No women or young children are employed.

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Establishments, &c.

The men employed above ground work for 12 hours daily; those below ground work in three shifts of 8 hours each.

The climate of the tract from which the workmen are drawn is good; but miners who have worked long in the mines become pale and anaemic, and there is also a good deal of bronchitis and similar diseases; the anaemia, which is so common amongst the men employed, is called *bhussa* by the people from the pallor which accompanies it.

On a long average of years, about six fatal accidents occur every year and about 18 cases of serious injury in addition, chiefly caused by falls of the roof, which, for reasons already stated, are very difficult to prevent altogether; there has, however, been a very marked decrease in the number of accidents in recent years.

The wages earned are good; one man cutting and one man carrying can turn out together 16 maunds of coal daily; and the stronger men, especially those from the Vunhar, produce as much as double that amount: the outturn per man is of course less than it would be if they worked continuously. The earnings of cutters range from about eight annas to one rupee per diem, which is far more than could be earned by the same class of labour outside the mines, but the somewhat unpleasant conditions under which the work has to be done make it unpopular with those to whom it has not become customary.

The mines provide lucrative employment for a large number of men of the agricultural classes in the district, and could provide for more if they were willing to take it: they are a very valuable resource in times of scarcity, and it will be a great misfortune for the district if it ever becomes necessary to close the works.

Rates and profits on working.

The contractors are (1905) paid Rs. 5-12 to Rs. 7-4 per ton for steam coal and from 8 annas to Re. 1-4 per ton for slack: the former is sold to the North-Western Railway at Rs. 8 per ton and to the public at Rs. 17: nut-coal goes to the railway at Rs. 6 per ton, and the slack chiefly to other departments at Rs. 10 per ton for quantities over 100 tons and at 8 annas more for smaller amounts. A small amount of shale refuse is also sold at Rs. 3 per ton to private consumers who cannot get slack. The all-round cost of the coal was in 1904 Rs. 7-5-5 per ton loaded for despatch. These selling rates provide no profit, but on the contrary a slight loss is sustained. In 1904 the total receipts amounted to Rs. 2,01,048, and the total expenses to Rs. 2,27,549, giving a net loss of Rs. 26,501. In former years, however, the mines yielded a good rate of profit; in 1899 the net profit was Rs. 3,02,448, or 68 per cent. on the capital outlay. The cause of this falling off is the recent decrease in the outturn of coal. It should be noted here that a royalty of 2 annas per ton is credited to Provincial Revenues on all coal raised.

Though the profits were formerly large, the amount of coal raised in this district has always been relatively very small, being under two per cent. of the production for the whole of India. There are no other collieries in the Punjab.⁽¹⁾

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In connection with these mines, but under the management of another department of the railway, there is a Briquette factory at Haranpur, capable of turning out 20 tons of briquettes per diem at a cost of Re. 1-2 per ton. It is (1902) proposed to shortly treble the size of the plant and to increase the outturn to 60 tons per diem.

Briquette Factory.

Gypsum occurs in the marl beds above the salt strata of the Salt Range, being found either in irregular beds or in detached masses, and could be produced in large quantities if a demand arose. Whenever it occurs in beds, it is much cracked, and the fissures are filled with red marl or a bluish clay. Beds of it seem to lie above and below the salt. In some localities the strata of gypsum are remarkably bent and contorted. The mineral is for the most part of a light grey colour, with a shade of blue, and translucent on the edges, with a saccharine appearance, but masses in which a coarse crystalline structure prevails are by no means uncommon. Red varieties also occur and beds of a dark gray earthy gypsum are generally associated with the saccharine kind. It is a nearly pure sulphate of lime without any carbonate, and, when calcined, it yields a plaster of Paris; but plaster of Paris without carbonate of lime is less coherent as a cement than when it contains from 10 to 12 per cent., and the best plaster would be obtained therefore by mixing some lime with it. Natives only use it mixed with pure lime into mortar, to give a shining marbly appearance to the finer kinds of *chunam* works, and appear to be wholly ignorant of its value as manure.

Gypsum.

It is in the gypsum of Mári, Kálábágh and parts of the Jhelum hills that the beautiful regular quartz crystals (called Kálábágh and Mári diamonds) occur. They are transparent, milky, or red. The specimen marked "Bohemian topaz" in the Jhelum collection of the Lahore Museum consists of small crystals of this quartz, in the form of dodecahedra or double six-sided pyramids, but there is not the six-sided prism so characteristic of quartz. The Kálábágh diamonds are quartz in six-sided prisms, terminated by six-sided pyramids.

Kálábágh "diamonds."

Stone suitable for road-making, or for railway ballast, is common in most places, and good building stone, both sandstone and

Stone.

(1) The above account is compiled from information and reports kindly supplied by Mr. E. L. Hope, late Mining Manager, Dandot; the report chiefly used is that of Mr. Grundy, Inspector of Mines in India, 1896; the half-yearly reports of the Mining Manager have also been used. For further Geological information, Wynne's *Geology of the Salt Range*, and *Memoirs of the Geological Survey of India*, Vol. XIV, may be referred to. The more recent figures have been supplied by Mr. W. Thomson, the present Mining Manager.

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Mines and Minerals.

Stone.

lime stone, is frequently met with. The best quarry hitherto for building stone has been that at Tarakkí, on the North-Western Railway, and under the management of its officials. This yields building stone of excellent quality; while another small quarry at Farásh, a short distance from it, produces paving stones of considerable size. The Tarakkí quarry has, however, been comparatively little worked of late, having been to a great extent superseded by the large workings opened at Bághánwálá, at the foot of the hills north-east of Pind Dádan Khán, which has supplied most of the stone required for the Jhelum Canal works. It is connected with the Sind-Ságar Branch of the North-Western Railway by a branch line from Haranpur, constructed originally for the unsuccessful coal mines at Ará. Another quarry, a few miles west of this, has now been abandoned. The commoner limestones are also much burned for lime, especially near the south end of the Tilla range: and the harder varieties are extensively quarried for *chakkís* or hand-mills, there being one locality specially known as Chakkí Par or mill-stone hill. In one or two places a variegated variety is manufactured into cups and platters and similar fancy ware. Marble of three or four varieties is found among the hills in detached blocks.

Talc.

Talc occurs in the hills, but is of no commercial value, as there is little of it, and that of very inferior quality.

Copper.

Fragments of copper and earthy iron haematites can also be met with, but are quite unimportant.

Galena.

Sulphuret of lead or galena is found in small nodules in two or three localities, that of Mount Karangli being the best. It is much sought after and fetches a high price, ranging from 7 *tolas* 10 *mashas* to 10 *tolas* per rupee. It is chiefly found in clefts in the most inaccessible precipices of the hills: and the peasants who search for it used formerly to let themselves down the face of the precipice and pick the mineral out of the clefts, a perilous adventure in which lives were often lost; but this pursuit is now seldom practised. A safer but less certain method of obtaining it is to go out after rain and pick up the small fragments by actual search. It is held by the natives to be antimony (*surma*) being used as a salve for the eyes, and is believed even to restore their sight to the blind, except those born blind. He who has faith, and anoints his eyes with the *surma* of Karangli for forty nights shall arrive at such perfection of vision as to see the stars in the daytime.⁽¹⁾

Clays.

Good clay for pottery, and a lavender-coloured earth which serves for soap, are to be found in some places; but like all the other mineral productions of the district except stone, and coal, and salt, they are commercially quite insignificant.

(1) C. the Legend of Karangli, Punjab Notes and Queries, Volume IV, Section 33.

Section C.—Arts and Manufactures.

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The following abstract gives the percentage of the total population engaged in each main branch of occupation :—

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tures.
Occupations.

Agricultural	62	per cent.
Industrial	21½	„
Commercial	1½	„
Professional	...	...	...	...	2	„
Miscellaneous	...	...	...	...	13	„

Some remarks on the traditional occupations of the various tribes and castes, including most of the artisan classes, have been made in another chapter. The processes of the more important industries have been fully described in the various Monographs on manufactures in the Punjab. An account of the important salt and coal mining industries has been given in the foregoing section.

The principal village industries are the tanning of hides and tanned leather work by the Mochis, the weaving of coarse country cloth, used for the clothing of the common people, by the Páwalis, raw hide and basket work by the Musallis, rough iron work by the Lohárs, carpentry by the Tarkhás, oil pressing by the Telis, and silver and other similar work by the Sunáras. None of these require detailed notice, there being nothing unusual or remarkable in the work produced.

Village ar-
tisans.

Silk *lúngis* are made to a small extent in Pind Dádan Khán, and some other ornamental weaving work is done in small quantities, such as the coloured checks made at Núrpur and Pachnand, but there is nothing of the kind at all important.

Weaving.

Silver mounted leather cutting whips are a Pind Dádan Khan⁽¹⁾ speciality : they are not very durable.

Whips.

Good cheap blankets are made at Bal Kassar and other villages.

Wool.

There is a small colony of glass-workers called Chúrígars, at the Gakkhar village of Sultánpur above Jhelum : these grimy workmen call themselves Patháns, which they really seem to be, and say they came here with the founders of the village, which is unlikely ; but at any rate they have been here for many generations :

Glass work-
ers.

(1) In 1850 there was said to be a considerable manufacture of bechoba tents and numdah at Pind Dádan Khán (J. A. S. B., 1850, pages 43-64). This has disappeared.

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formerly they made their own crude glass, collecting stones of the kind required in the river bed, and mixing them, pounded, with nine times their weight of *sajji*, to be burnt for 24 hours in furnaces. Now they find it cheaper to import the raw material from Mainpuri, Etawa, and other places: they (or rather the shopkeeper who finances them) generally get up a truck load at a time of the crude glass (*kacch*), together with material for colouring it: a truck takes about 340 maunds, and by the time it reaches them the cost of the material is from Rs. 2 to Rs. 2-8 per maund. One maund is sufficient for 1,000 bracelets of the largest size, which sell for about Rs. 4, out of which they have to find fuel, &c.: they are allowed to take small driftwood from the river, and also buy wood from the zamindars at trifling cost. One man can make in a day about 125 of the large thick bracelets about 3 inches across, 250 of the same size but thinner, and 500 of the small ones $1\frac{1}{2}$ inches in diameter, which sell for Re. 1-4 per thousand. It is not a rich industry, it will be seen, the average earnings all round not much exceeding 4 annas a day.

The furnace consists of two parts, the lower being a large trough in which the glass is mixed and coloured, and then taken out and cooled for use when required: above are six small troughs for the actual work, at each of which one man can work. He takes up on an iron rod in his right hand sufficient molten glass for his purpose, and moulds it with a circular motion, on a cone-shaped implement held in the left. The bracelets are generally ornamented with a line of dots of some other colour, which is separately dropped in a melted state on the finished ring.

The large rings are exported by the camel load by Jammu traders to State territory across the river: the smaller ones are mostly sent in the direction of Peshawar: some are used locally.

The work is trying to the eyes, and generally has to be given up at the age of about 40. There are 40 families of these Churigars with seven workshops: they nearly all hold a little land as occupancy tenants. Strange as it may seem they are rather well off, though said to be extravagant in comparison with other artisans. The industry does not seem to be declining.

Metal work-
ers.

The following is an account of the brass workers of Pind Dadan Khan, abridged from an interesting article in the *Civil and Military Gazette* (1901). It refers to other places also, but seems chiefly to be taken from Pind Dadan Khan, to which it at any rate applies.

It should be first explained that the *kasera* is the seller of *kansi* (an alloy of copper, tin and lead) and of other metals; and that he generally finances the *thattiar* or founder:—

“Each little *bannia's* shop in a village contains a smaller or larger supply of old copper coins and worn out vessels, which are brought to them in exchange for groceries by the *zamindars*; the coin

have, perhaps, been ploughed up from the site of some ancient village or town, of which there are a great number in the Punjab; these and old pots, screws, nuts, stopcocks and articles of every conceivable description, made of the requisite metal or alloy, are purchased for very small sums and sold to the *kaseras* at the rate of about 8½ annas a seer.

"Besides the old metal collected in this way, the *kasera* receives large quantities by rail from other provinces, and he obtains imported sheets of copper and tin and blocks of zinc from merchants in Bombay, Karachi and Calcutta.

"In another part of the town quantities of smoke may be observed issuing from holes in the roofs of mud-brick houses, whence a most infernal din issues day and night while the *thattiars* are at work, for these are their workshops.

"They are generally a separate class from the shopkeepers; here and there, however, a man may be found who spends part of his time in collecting old metal and part in constructing and selling his wares, but the combination of all three must mean very hard work. Inside the workshop is rather like that of a small blacksmith in England, for there are large and small hammers, long tongs and tweezers, anvils and other such like implements lying about, while the roof and walls are covered with soot, and from the furnace glowing sparks may frequently be seen to fly. The furnace consists of a large, partly spherical, hole in the ground, the mouth of which is surrounded by a low circular mud wall; on the top rests a cover some four inches thick, also made of mud or clay; the whole has been thoroughly well baked from frequent use. In the front part of the furnace there is an entrance through which the large earthen pots containing the metal or alloy to be melted are put in and taken out by means of long tweezers so constructed as to grasp the pots round their circumference: this entrance is also closed by means of a slab of baked clay.

"At one side a tube is let into the ground so as to pass into the furnace near the bottom; through this air is forced by means of a pair of bellows made from two goatskins or of a paddle wheel contained in a box and worked by a revolving handle like a thermantidote.

"Although all the tools and apparatus are very primitive in appearance, yet, in the hands of these clever and industrious workmen they produce most wonderful results.

It is little short of marvellous that the quarters of *thattiars* are not periodically burnt to the ground, for the heat raised in the furnaces is immense; they are seldom provided with chimneys, the smoke and sparks having to find their way as best they can through the hole in the roof; and the roofs are generally composed of wooden beams and rafters covered with small sticks, grass or *chatai*, over which the usual layer of mud and *bhúsa* plaster is placed.

"There are two principal modes of construction, viz.,—

(a) Moulding,—

(b) Heating and beating sheet metal.

"The moulding process is the most interesting, and although it takes longer than the other, does not require nearly so much physical exertion. The moulds, which are composed of clay and other materials, are shaped by working a lump of the clay when moist and of the consistency of dough,

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on a block of wood or stone like a millstone without the hole in the middle; this stone is made to revolve on a pivot, either by forcing it round from time to time with the hand or by a sort of pedal arrangement; first of all the finger is inserted into the lump and a hollow made in the centre, this is rapidly worked with the hands and fingers inside and out until a round bowl of the required shape has been constructed; it is then dried and slightly baked.

"A layer of wax (*mom*), made from the skimming of honey, is laid on the outside of the earthen bowl until a little thicker than the metal vessel which is to be moulded; over the wax a coating of clay is placed until the wax is entirely covered up; a small hole about half an inch in diameter is now made through the outer coating of clay; when this is ready it is left to dry gradually and then placed over a slow fire so that the wax runs out from inside and a hollow mould remains; this is baked until quite firm; a small rim is built up round the hole, and through the funnel thus formed the molten metal or alloy is poured into the hollow until full up; on the metal cooling the earthen casing or mould is broken off and the rough metal bowl remains. This is attached to a wooden lathe (a piece of wood resting on two supports and made to revolve by means of a piece of cord twisted round it and pulled backwards and forwards by an assistant), by means of strong glue (*sarais*) and is chiselled and polished until perfectly smooth and bright inside and out. It is then ready for delivery to the shopkeeper.

"Pots with narrow necks cannot conveniently be made in one piece, as the moulds would not hold together, and it would be difficult to polish them inside; they are constructed in two pieces and afterwards soldered together so neatly, that the join, which is further concealed by means of several lines, cut on the outside of the vessel, can with difficulty be discovered.

"The copper vessels and the brass and copper *hookahs* are generally engraved after being plated, and this is either done by the *thattiars* before delivery to the *kaseras* or, if more finished work is required, they are handed over to *sunaras* (gold and silver smiths) to complete; but of course this raises the price considerably.

"The second process merely consists in cutting pieces out of metal sheets and then beating them, when red hot, into the required shapes.

"The *kasera* hands the metal over to the *thattiars* by weight and, when the vessels are returned, he pays for the workmanship at rates which vary according to the labour expended in making the various kinds; thus, for constructing brass *dekchies* (cooking-pots) which are moulded in either one or two pieces the rate is about 4½ annas per seer or Rs. 11 per maund; but for making a *dekchi*, which is merely beaten out of brass or copper sheeting, the rate is only 3 annas per seer or Rs. 7-8 per maund.

"For constructing *thalis* or large round trays, 6 annas per seer is charged, for the trays are thin, and require more beating out than the thicker *dekchies*, and the decoration has to be paid for. For constructing *katauras* or little high rimmed saucers, as much as Rs. 18 per maund or 7 annas per seer is charged, for these are made by the more laborious process; they are generally made of an alloy of lead (*sikka*), tin (*kalai*) and copper (*tamba*). The lead is obtained from various sources, but principally from persons who collect used bullets from the vicinity of rifles and artillery ranges, and also more legally from contractors who obtain the right to extract the lead from butts.

"The selling price of the completed vessels about is half anna per seer above the cost of the metal and the price of the labour, but when the vessels are sent to other places for sale, of course their prices rise considerably, for the cost of carriage has to be added, and the retail vendors add a small percentage for profit."

The vessels made are principally trays, saucers, cooking vessels and the like; also *baltohis* or large *ghara* shaped water or cooking pots.

The industry is now a decaying one, and the number of *thattis* is already much smaller than formerly.

There is a small soap factory at Pind Dádan Khan at which the local *sajji* is used.

Turned lacquered wood ornamental boxes, lamp stands, vases, &c., are made at Chak Hamid near Pind Dádan Khan and at some other places. The colours used are chiefly red, black and yellow; some of the plainer work is good. One favourite way of making ornamental patterns is to put one colour over another and then scatch off the top one where necessary. The colour is applied by being held in a dry form against the wood while it is rapidly revolved by the lathe.

Large lacquered ornamental chains for use at weddings, &c., are made in different sizes at some small villages in Chakwal.

Fine combs, &c., of wild olive wood are made at Pinnanwal. The hill people who supply the wood generally steal it from Government rakhs.

Good gold-embroidered shoes are made at Chak Hamid; also at Chakwal and one or two other places.

The flower-worked *chádar* or *phulkári* is scarcely an article of commerce. Those made at Jhelum by native ladies are sometimes very handsome, but they are not made for sale. The commoner kinds are not very good.

Fireworks are manufactured to some extent in the larger places.

Reed matting for prayer mats and the like is made at Munára on the Salt Range from materials imported from the frontier.

A good deal of boat-building goes on at Jhelum, Jakálpur and Pind Dádan Khan. A large native boat is called *béri*; some of them can carry as much as 1,000 maunds. Those who choose may believe that the model was supplied by Alexander the Great. There was still a good deal of river-borne traffic twenty years ago, but with the opening of new railways it has almost entirely disappeared. The number of boats in the district is nevertheless now 257, nearly 100 more than at the previous settlement, but these are almost all for local use on ferries, &c. A small boat on a European pattern is called a *machhúa*; and if of a native pattern, a *dúnga*.

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Manufactures.
Water-mills.

There are over 200 water-mills in the district which pay an annual income to Government of Rs. 1,761, which is divided between the Forest Department and the ordinary land revenue. The mills are called *janor* or *ghat*. They are merely ordinary large *chakkis* worked from below by a small stream which gives rotation to a paddle and are used exclusively for grinding corn.

Government
service.

Service under Government can hardly be classed as a trade or as an industry; but it is an employment of a special character, and those employed are in this district a very important class, which numbers among its members many who belong to the most considerable families of the most considerable tribes.

How important a feature in the economy of the district is the income from Government service, or pensions, will be clear from the following figures which relate to 1898-1901:—

TAHSIL.	ANNUAL INCOME IN RUPEES FROM PAY AND PENSIONS ENJOYED BY		Number of individuals.
	Muslims.	Hindus.	
	Rs.	Rs.	
Jhelum	5,25,301	2,13,394	4,677
Pind Dādan Khān	2,46,650	2,29,829	2,936
Chakwāl	3,34,072	1,80,523	2,642
Tallagang	93,635	26,466	767
District	12,99,658	6,50,212	11,022

The total income from this source is therefore close on twenty lakhs per annum, or more than twice the land revenue by the new assessments; it is of course the gross income, and not the savings, but in time of trouble there is in many parts of the district a constant stream of money orders from men absent on service, which bring a considerable amount of money into the district; it is not so widely distributed as might be thought, a large proportion going to a comparatively small number of villages.

The above takes no account of the considerable income derived in some parts of the district (chiefly in Jhelum and Pind Dādan Khān), from casual labour in the Dandot Collieries, the quarries of Rawāl and Tarakki, and on the Railways and the Shahpur Canals; these earnings cannot well be estimated, but the Coal Mines alone formerly provided work on the average for 1,500 zamindārs, earning at least two-and-a-half lakhs per annum, and probably much more; in the Salt Mines the work is nearly all done by professional miners, but two or three hundred zamindārs find employment about them.

Section D.—Commerce and Trade.

CHAP. II, D

Commerce
and Trade.Course and
nature of
trade.

Grain.

The principal trade is that in wheat and oilseeds, which in the last 12 or 15 years, owing to the opening of railways and the operations of large European firms, has reached important dimensions, but of late (1901) the harvests have been so bad that there has been little or nothing to export: on the contrary the district for a long time imported food-grains from other places; but these interruptions are only temporary. Chakwāl is the centre of the wheat trade of the northern tahsils, the grain merchants there forwarding the produce to the market which has sprung up at Gujar Khān in Rāwalpindi: the same place takes some of the surplus (which is, however, comparatively small), direct from the northern part of the Jhelum and the nearest parts of the Chakwāl tah-īl. The rest of the Jhelum trade finds its way to Jhelum itself, or to the other stations on the railway, such as Dīna and Sohāwa, though there are no regular grain markets at those places. The Pind Dādan Khān trade used to pass through Pind Dādan Khān itself, but its course has been changed by the establishment of prosperous markets at the railway stations of Lilla and Haranpur to east and west, and to some extent at Khewrah also, these places being unhampered by octroi restrictions, one of the principal results of Municipal administration at the larger town. Some of the Tallagang trade finds its way to Lilla and Khewrah instead of Chakwāl: the opening of the Mārī-Attock Railway, though one of its stations is only just outside the north-western corner of Tallagang, does not seem to have attracted the trade of that tahsil to any appreciable extent: though the distance is less, the roads are worse, and the treacherous Sawān torrent has to be crossed.

There is a considerable trade in timber at Jhelum, which is the depôt for most of the timber produced in the forests of Kashmir: it is nearly all passed on to other parts of the Punjab. The British and Kashmir Forest Departments have depôts at Jhelum, and there are some large private ones as well, such as that of Rāja Sir Amar Singh of Kashmir.

Other articles exported are cotton goods, blankets, shoes, and brass ware, all in small quantities: the salt trade, the most important of all, has been elsewhere noticed. The imports are chiefly timber, European piece-goods, metals, sugar, and some food grains, such as rice from the frontier and maize from Kashmir territory.

Other arti-
cles.

Latterly a considerable export of hides and bones has sprung up.

Jhelum is one of the districts in which foreign trade is registered. The registration ports are at Tangrot, Mangla, Gatāliān, and Pind Ratwāl, where there are minor ferries, each with a Customs post of the Kashmir State adjoining it: traders using the Pind Ratwāl route have, however, the option of paying duty on arrival at Mirpur town: duties are levied by the Darbār only on goods

Foreign
trade.

CHAP. II.E. imported into Kashmir territory. No duties are levied by the British Government. The chief articles exported from this district to Kashmir are—

Foreign trade.	Cotton piece-goods, duty	...	...	1 anna per rupee.
	Salt, duty	...	...	Re. 1-2 per maund.
	Sugar, duty	...	...	1 anna per rupee.

The chief imports from Kashmir into this district are *ghi*, food-grains and firewood.

The annual value of the imports from Kashmir territory into Jhelum on the average of the five years 1898-1903 was Rs. 2,01,921 and the value of the exports Rs. 4,83,261. The bulk of the trade goes by the Gatálián route.

Section E.—Communications.

Communications. The figures below show the communications of the district as returned in 1903:—

	Miles.
Navigable rivers	127
Railway	74
Metalled roads	28
Unmetalled roads	1,080

The North-Western Railway passes through the Jhelum Tahsil, and the Sind-Ságar Branch traverses a great part of the Pind Dádan Khán plain, while the newly opened Mári-Attock Line has a station at Injra close to the north-west corner of Tallagang; this recent addition to the railway communications of the district must have some influence on prices in this the most backward portion of the tract, but it does not so far seem to be great. Twenty years ago, however, the railway only touched the district at Jhelum itself, so its external communications have improved considerably since then. Internal communications remain as before; the Grand Trunk Road, running parallel to the railway through the Jhelum tahsil, is the only one that is metalled; the rest of the district is fairly well furnished with *kachá* roads, as shown on the map, a few of them in parts passable for carts; but there is no cart traffic, camels and other pack-animals being used instead; internal communications are on the whole bad, and from the nature of the country are likely to remain so.

The principal passes across the Salt Range are from Lilla *viá* Sar Mátan to Bhilemár and Tallagang; from Lilla to Kallar Kahár and Chakwál; from Pind Dádan Khán *viá* Choa Saidan Sháh to Chakwál (the only one at all practicable for light wheeled traffic); and from Bágíánwála to Phadíálín Jhelum: there is also a rough road from Jalálpur to Wagh. The neck of the Tilla range just east of the main hill is crossed by a fair bridle path passing by Mogli; and its spurs are crossed by the Jhelum-Domeli main road

at Rohtás. The Nálí range has several fair roads across it, in addition to the Grand Trunk between Tarakkí and Soháva: the best is from Soháva to Domeli. CHAP. II, E.
Communi-
cations.

The railway stations in the district are as follows:—

Main Line.—Jhelum, Kálá, Kálúwál (flag station), Díná, Domeli road, Tarakk, and Soháva.

Sind-Ságar Branch.—Haranpur, Chálísa, Pind Dádan Khán, Golpur, and Lilla.

Khewrah-Dandot and Bághánwála Branches:—Gujar, Khewrah, Kálápáni and Dandot, Pidh and Bághánwála. Except Khewrah these are, however, used only for the Government mining traffic.

The Jhelum is navigable for country craft up to a point about ten miles above the town of Jhelum or for 85 miles out of the total distance through which it fronts the district. Small boats can go as far up as Dhangrot. The depth of water is about 15 feet in summer and 9 feet in winter. The country boats carry loads varying with the season and the depth of water from 5 to 25 tons in the winter and from 25 to 50 in the summer. The ferries and the distances between them are shown below, following the downward course of the river:— Rivers and
Ferries.

NAME.	Regular ferry boats. Private and trading boats.		No. of CHANNELS TO BE CROSS-ED, C= CONSTANT, V= VARYING.		TIME TAKEN IN CROSSING.		Distance in miles from preceding ferry.	REMARKS.
			Cold weather.	Hot weather.	Hot weather.	Cold weather.		
Dhangrot ...	4	1	1 C	1 C	15 minutes	10 minutes	6½	Crossing easy; west bank difficult.
Mangla ...	3	2	1 C	1 C	Ditto	Ditto	7	Crossing easy.
Gatalián ...	5	1	1 C	1 C	1 hour	30 minutes	12	Crossing easy: the river bed, rocky above, has become broad and sandy.
Pind Batwál ...	7		2 V	1 C	Ditto	Ditto	4	Crossing easy.
Jhelum ...	9	17	2 V	1 C	3 hours	1 hour	5	Crossing easy. Railway and road bridge.
Kot Basira ...	5	6	1 C	1 C	Ditto	Ditto	3	Crossing easy.
Kohár ...	3	3	2 V	1 C	Ditto	Ditto	4	Ditto.
Purán ...	2	2	1 C	1 C	4 hours	Ditto	5	Heavy sand.
Rasúli ...	4	4	2 V	1 C	Ditto	Ditto	5	Ditto.
Mariála ...	4	4	1 C	1 C	5 hours	Ditto	6	Ditto.
Jalálpur ...	6	7	2 V	1 C	Ditto	Ditto	6	River wide; heavy sand.
Jaintipur ...	4	3	2 V	1 C	Ditto	Ditto	9	Ditto.
Chak Nizám ...	2		3 V	1 C	Ditto	Ditto	6	Crossing easy. Also railway bridge and foot way.
Pind Dádan Khán ...	9	15	2 V	1 C	6 hours	2 hours	6	Difficult crossing. Wide river bed.
Ahmádábád ...	4	3	4 V	1 C	Ditto	Ditto	14	Ditto.

CHAP. II. E.
Communica-
tions.
Rivers.

There is a railway bridge across the river at Jhelum with a roadway for cart traffic, &c. The bridge was originally designed for a railway on the metre gauge and the cost, including some protective works, was £139,502, or £28-11s. per lineal foot.

It was converted to bear more safely the broad gauge traffic in 1894-95, the substitution of the new and stronger work being effected without stopping the traffic.

There is another broad gauge railway bridge with a footway for passengers by which the Sind-Sagar branch line crosses the river about 7 miles above Pind Dádan Khán at Chak Nizám.

The following table shows the principal roads of the district, with halting places on each, and the conveniences for travellers to be found at most of the stages :—

No.	ROUTE.		Halting place.	Distance in miles.	REMARKS.
	From	To			
1	Jhelum ...	Khusháb ...	Sangoi	10	Unmetalled road throughout. Cross Kahán torrent. Sarai and rest-house.
			Darápur	10	Cross Bucha torrent. Sarai and rest-house.
			Jalálpur	12	Sarai and rest-house. Encamping ground.
			Dhariála	10	Sarai and rest-house.
			Pind Dádan Khán ...	11	Rest-house.
			Lilla	18	Small rest-house.
2	Jhelum ...	Bannu ...	Robrás	12	Rest-house. Unmetalled road.
			Adrasa	10	
			Gura Uttam Singh ..	11	Rest-house.
			Dahman	14	Ditto.
			Chakwál	12	Ditto and encamping ground.
			Bal Kassar	12	
			Tallagang	14	Rest-house.
			Tamman	19	Ditto.
3	Jhelum ...	Tallagang ..	Tráp	12	Ditto.
			Rohtás	12	Ditto Unmetalled road.
			Baragowáb	13	
			Phadiái	13	
			Cho-Saidan Shah ...	19	Ditto.
			Dalelpur	8	
			Kallar Kahár	10	Ditto.
			Bharpur	9	
4	Jhelum ...	Ráwalpindi	Tallagang	10	Ditto.
			Dína	12	Metalled road, encamping ground, rest-house and sarai.
5	P. D. Khán	Mandra ...	Soháwa	16	Ditto ditto.
			Choa Saidan Shah ...	14	Partly metalled : rest-house, &c.
			Dhek Táhlán	9	Unmetalled.
			Chakwál	14	Ditto Rest-house, &c.
			Dhudbiál	12	

Except on the Grand Trunk Road nearly every one of the above stages is more or less interrupted by unbridged ravines and torrent beds, large and small, usually dry and sandy, but the larger ones impassable after heavy rain. The Bunhá and Kahán torrents are in parts well over a mile wide.

There is a dâk bungalow only at Jhelum, which is completely furnished and is provided with servants: the rest-houses have a more or less complete outfit of furniture, crockery, and sometimes cooking utensils, but have no servants.

A list of all the post offices in the district is given in Part B, which also shows the work done by them. The increase under almost every head, even since so recent a time as 1895-96, is very remarkable.

There are telegraph offices at Jhelum, Dína, Tarakki, Soháva, Haranpur, Pind Dádan Khán, Golpur, Lilla, Khewrah and Dandot: none away from the railway lines: telegraph lines to Chakwál, Tallagang and perhaps to Choa Saidan Sháh are much to be desired in the interests of the administration as well as of trade.

A tonga service, which receives a small subsidy from the District Board, has recently been introduced on the road between Chakwál and Mandra station on the North-Western Railway. This service, which has been very successful, conveys both mails and passengers; it is under the supervision of the authorities of the post office. A project for metalling portions of this road is now before Government; the proposed light railway between Chakwál and Mandra has, after lengthy enquiry, been at last definitely shelved on the ground that it would not pay.

Section F.—Famine.

Of famines prior to our rule the district has had the same share as the rest of the Northern Punjab, *viz.*,—

1st.—A three years' famine ending with the year A. D. 1783 (Sambat 1840) commonly known as the *cháliswan*, when wells and springs dried up and wheat could not be had for three *sérs* the rupee; and the mortality among the people and cattle was unprecedented.

2nd.—Three years' bad harvests ending June 1813, when wheat sold at seven *sérs*; but in severity not equal to the previous one.

3rd.—A two years' complete failure of crops ending September 1834; wheat rose to 14 *sérs*, and the distress and mortality were very great. The year 1833 A. D. (Sambat 1890) is commonly known as the *markan* year; a plant of that name sprung up spontaneously everywhere in great abundance as soon as the first rain fell, and afforded great relief both to cattle and to human beings.

CHAP. II, F.

Famine.

River.

Post Office.

Telegraph.

Tonga-ser-
vice Chakwál
to Mandra.

Famine.

CHAP. II, F.

Famine.

Since annexation there has been no famine in the district and nothing approaching a famine until a few years ago: in 1860-61 the scarcity in the lower Punjab and Hindustan caused wheat to rise to 8 *sérs* per rupee, giving rise to some distress amongst the poorer non-agricultural classes, but the local crops did not fail, and there was no general distress. From this time forwards up to the year 1895, though there was occasionally widespread crop-failure, there was nothing amounting to general scarcity, but from 1895 there set in a period of bad harvests, very fortunately broken by an average year in 1897-98 and a good year 1900-01, which lasted until 1902: in other words, there were five very bad years out of seven, and in consequence the distress was at times considerable, though never amounting to famine; the worst year was 1899-1900, when out of 746 thousand acres sown only 214 reached maturity, against an average of 754 out of 1,014. There was a most severe fodder famine, and, in spite of various expedients for increasing the supply, nearly half the live-stock of the district perished. Both grain and fodder were long at fabulous prices, and the zamindars, already weakened by previous bad years, were in sore straits, migrating in large numbers to more favoured tracts in the neighbourhood, the Chenab Colony in this way affording invaluable assistance.

The following account of the scarcity of 1895—1900 is gathered from the report made by the Deputy Commissioner at the end of 1900.

Though the distress in 1896-97 was considerable, no relief works were found necessary; test works were opened, but were not largely attended.

The continued drought from the beginning of 1899 to the rains of 1900 caused severe distress, but it is chiefly from its effect on the cattle that it will be remembered; about half of them perished. All parts of the district were affected.

Test works were opened in November 1899 and closed in August 1900; they remained "test works" to the end. The largest work was the partial excavation of the proposed Jalálpur Canal, under the supervision of the Irrigation Department; the number of persons employed on this work fluctuated considerably, but was never much over 3,000; and in June 1900 fell to 500, when an outbreak of cholera caused the closing of the work. Two famine Naib Tahsildars were employed. Work completed was paid for at rates fixed from time to time, the average daily wage being about one anna three pies per head. The remaining works consisted of road-making and tank clearance and were of an unimportant character.

The total expended was Rs. 38,655, of which Rs. 26,592 was spent on the Jalálpur Canal.

The persons relieved were almost all of the agriculturist or agricultural menial class.

CHAP. II. F.

Famine.

Liberal suspensions of the land revenue demand were allowed, amounting to about Rs. 50,000 in 1898-99, and Rs. 5,13,000 in the following year; Rs. 1,00,000 was distributed as gifts from the Famine Relief Fund for purchase of fodder and cattle, in addition to Rs. 1,65,500 for these purposes and for purchase of seed grain, nominally recoverable, though much of it has not actually been realised.

Prices were not so high in 1899-1900 as three years earlier, wheat being seldom higher than 10 *sers* per rupee, and maize standing at about 12 *sers*. Grain was freely imported by railway.

The effects of the scarcity were, (1) the enormous loss of live-stock, due to the scarcity of fodder, and practically unpreventable owing to the difficulties of transport: *bhūsa* at Jhelum sold for about a maund per rupee, while in Chakwāl it was hardly procurable at two rupees per maund; (2) a marked increase in land alienation and agricultural indebtedness; (3) a considerable temporary emigration, chiefly to the Chenāb Colony, which still made itself felt at the Census in March 1901.

The winter of 1899-1900 witnessed a serious outbreak of crime, 30 dacoities being reported within three months; how far this was due to the scarcity it is difficult to say: in its origin it was due to other causes, but the unsettled state of men's minds no doubt tended to facilitate the continuance of this epidemic of violence, which subsided, however, as quickly as it arose, long before the season of scarcity came to an end.

Apart from the misconduct of these few individuals, the behaviour of the people was exemplary, and they showed great patience under their misfortunes.

The last serious invasion of locusts was in 1891, when the spring crops in about one-third of the district were ruined, and considerable damage done elsewhere: there have often been great numbers of them in the district since then, but they have come at a time when they could not do very great damage to crops. Before 1891 the last year in which the district suffered materially from this

CHAP. II. F. pest was 1848, the year of the Sikh war, when much damage was caused in the Pind Dádan Khán Tahsíl, and in the west of the district.

CHAPTER III.—ADMINISTRATIVE.

Section A.—Administrative Divisions.

The district is in charge of a Deputy Commissioner subject to the control of the Commissioner of Ráwalpindi. The headquarters of the district are at Jhelum, but the Deputy Commissioner is allowed to make Tilla his headquarters during part of the hot weather. The ordinary district staff consists of a District Judge, two or three Assistant or Extra Assistant Commissioners, and usually an Assistant Commissioner in training. An Assistant Commissioner or Extra Assistant Commissioner is also posted at Pind Dádan Khán and holds charge of that Tahsíl in addition to the Thánas of Kallár Kabár and Níla, which extend into the Chakwál Tahsíl, and the Jalápur Thána, which includes part of the Jhelum Tahsíl. His charge ranks as a subdivision, and until recently embraced the Tallagang Tahsíl, which now forms part of the Attock District. During the hot weather he is permitted to take his work to Choa Saidan Sháh. The Official Staff is assisted by two Honorary Magistrates, Resáldár Major Mumára Khán of Domeli, who exercises 2nd class powers in the Domeli, Dína, and Soháwa Thánas, and Bhai Sher Singh of Kála: until recently there was a third, the late Resáldár Major Sardár Bahádur Duní Chand of Bhon, who had jurisdiction in 21 villages of the Chakwál Tahsíl. The Station Staff Officer is *ex-officio* Cantonment Magistrate. Jhelum is also the headquarters of a Divisional Judge, whose charge includes the Gujrát District as well. In recent years pressure of work has necessitated the occasional appointment of an Additional Sessions Judge to the Sessions Division.

**CHAP.
III, A.**
**Adminis-
trative
Divisions.**

Civil and Cri-
minal staff.

For revenue purposes each of the four tahsils is in charge of a Tahsildár, assisted by a Naib-Tahsildár, the first always, and the latter almost invariably, a Magistrate as well as an Executive and Revenue Officer. The village revenue staff, which is supervised by a District *kánúngo* stationed at Jhelum, is as follows:—

Revenue
Staff.

Tahsil.	Office Kánúngoes.	Field Kánúngoes.	Patwáris.	Assistant Patwáris.
Headquarters	2	...	...	...
Jhelum	1	4	73	4
Pind Dádan Khán	1	4	63	5
Chakwál	1	3	71	5
Tallagang	1	2	42	3
Total	6	13	249	17

The pay of the *patwáris* has been materially improved during the recent Settlement operations: they are divided into three grades

**CHAP.
III. B.****Civil and
Criminal
Justice.**

Rs. 14, 9, and 10 (the average rate being Rs. 12) per month, while assistants receive Rs. 8. They were paid, up to 1906, from the proceeds of a special cess at 6½ per cent. on the land revenue demand: this cess was recently remitted by Government, which will in future defray these charges from Provincial funds.

Munsiffs.

There are three Munsiffs or Native Civil Judges in the district, two having jurisdiction within the Jhelum and Pind Dādan Khān Tahsils, respectively, while the third has both Chakwāl and Tallagang. Only one estate, at Dulla, is under the management of the Court of Wards, whose functions are exercised by the Deputy Commissioner.

Section B.—Civil and Criminal Justice.**Criminal
Justice.
Offences
against per-
son.**

The Criminal Statistics of the district present many features of interest. Of all the districts in the Province this is one of the worst for murders, and in spite of increased rigour in placing parties on security, the figures do not cease to give cause for regret. In 1901 there were 25 murders, and in 1904 though the Tallagang Tahsil was transferred early in this year to the Attock District, there were as many as 30. The figures for culpable homicide are not less excessive. This class of violent crime usually springs from disputes about women or land, and is practically confined to the Chakwāl and Tallagang Tahsils and the Vanhār ilāka of the Pind Dādan Khān Tahsil where the Kassars and Awāns are numerous, these being the tribes most addicted to feuds and factions. The difficulty with which charges of murder are proved doubtless attracts men of keen passions to a form of revenge, which is peculiarly complete, while the punishment demanded by the law is by no means inevitable. In these localities there is at any rate a popular predilection for this method of retaliation.

**Offences
against pro-
perty.**

The district as a whole is free from grave offences against property: but there is occasionally a more or less serious outbreak of crime of this kind. Thus in 1901 and 1902 there were 74 dacoities or robberies recorded, due no doubt in some degree to the prevailing scarcity in those years. It must be noted also that there were numerous predatory bands abroad at the time, whose operations extended over the districts of Shāhpur and Rāwalpndi as well as that of Jhelum. The statistics for theft show that this form of crime has prevailed consistently and to a large extent: cattle theft is, however, by no means common except in a few villages near the river, whose position gives them considerable opportunities in this respect. Offences relating to coin numbered no less than 20 in 1901, but now practically occur no longer. Marriage offences fell from 173 in 1901 to 109 in 1902, and this was attributed to the adoption of a system of Marriage Registration: but the improvement in this respect has not been maintained.

The foregoing remarks represent in some degree the salient features of the criminal statistics, as far as the Indian Penal Code is concerned. Of Local and Special laws the Forest Act deserves particular attention owing to the large area of the Government reserves in the district, and the extensive import of timber by river from Kashmīr. The temptations to misappropriate timber are peculiarly enhanced in flood time, when the logs are often deposited far from the river bed in places, where it would scarcely occur to the river rangers to look for them, especially as the flood generally washes away the villagers' homes at the same time, and wood for building purposes becomes very scarce. There were 143 Forest cases in 1901, but the numbers had decreased to 61 in 1902. These figures are satisfactory enough, but it has been observed that such apparent improvements too often denote an absence not of crime but only of vigilance in those whose business it is to detect offenders: and the observation may perhaps be applied with truth to this class of crime. In 1901 there were no less than 76 cases under the Workmen's Contract Act, which mainly arose from the employment of superfluous labour at the Bāghanwāla Stone Quarries: but with the removal of this cause of offence the number of cases has practically fallen to *nil*.

It is satisfactory to observe that the district stands high in the Province in percentage of convictions: in 1903 and 1904 it stood third on the list with percentages of 40 and 39 respectively. The Deputy Commissioner usually employs his enhanced powers under Section 30 of the Criminal Procedure Code to try about 12 cases per annum, and the District Judge, who is similarly empowered, hears about 20.

The Civil Courts of the district present no special characteristics either in their constitution or jurisdiction. The passing of the Land Alienation Act of 1900 has brought about a steady decrease in the number of civil suits for the possession of land and has also been effectual in reducing the list of suits for money. Matrimonial suits, and suits to establish a right to pre-emption of land, may perhaps be mentioned as prominent features of the civil litigation of the district. Of these the former have shown a tendency to increase, but the new Pre-emption Act is expected to reduce the numbers of the latter cases.

The Local Bar at headquarters numbers 12; of these 4 (including one who holds the position of Public Prosecutor) are barristers-at-law, 3 pleaders of the first grade, 3 pleaders of the second grade, and two *mukhtárs*. They have a "Bar Association". At Pind Dādan Khān there are three pleaders, who accompany the subdivisional officer on tour as a rule, their practice being confined to his Court, besides one barrister and three *mukhtárs* who appear for the most part in the Munsiff's Court. At Chakwāl are four *mukhtárs* and one pleader, who practise

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III, B.Civil and
Criminal
Justice.Offences
against Local
and Special
laws.

Civil Justice

Local Bar.

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Criminal
Justice.

in the courts of the Munsiff, Tahsildár and Naib-Tahsildár. There are 30 petition-writers of the first grade, and 39 of the second grade, practising in the different courts of the district.

Registration. The arrangements for registration are under the control of the Deputy Commissioner as *ex-officio* Registrar. There are three offices, one at each of the Tahsíl headquarters in charge of a Sub-Registrar. The following table shows the number of deeds registered and fees realized during the years 1901, 1902, 1903:—

YEAR.	FEES REALIZED IN RUPEES.		Number of deeds registered.
	For registration.	For copies.	
1901	2,527	1,061	2,512
1902	2,899	1,169	1,964
1903	2,752	1,091	2,224

The passing of the Land Alienation Act has had the effect of reducing the number of registrations by 50 per cent. Registration of *bai-bil-wafa* mortgages, which were never popular in the district, has now completely ceased: and registrations are now practically confined to Agricultural Tribes. A room has lately been provided at headquarters for the centralization of records.

Tribal Law. The customs regulating the devolution of property and similar matters were investigated at the recent settlement, and a "General Code" containing the results of the enquiry has been published in a separate volume; a brief notice of the customs obtaining is given below⁽¹⁾:—

The frequency of marriages between near relations, amongst the Musalmáns, is noticeable. The effect of this has been that, as a man's sister's son or daughter's son may be also his agnatic relation, for instance if his daughter has married his brother's son, alienation of the property to a sister's son or daughter's son does not necessarily mean alienation to a non-agnate; thus the power of the agnates to forbid such an alienation has been much weakened, and alienation to such relations through females are much more common than they are in the east of the Province. Indeed the power of the agnates to forbid alienation having been thus weakened, it is among at least one tribe, the Awáns, no longer strong enough to prevent alienation to a sister's son, or daughter's son though he be not himself an agnate, and can hardly prevent alienation even to a non-relative by a sonless man.

Betrothal and marriage. Generally speaking, marriage is a contract, not between the persons to be married, but between their families, and is arranged

(1) From introduction to the *Code of Tribal Custom* for the Jhelum District, 1901, this introduction is adopted from that of the similar publication for the Sháhpar District, by Mr. J. Wilson, C. S. I.

for them by their agnates with the consent of the mothers, usually while the parties themselves are too young to give an intelligent consent. Exchanges of betrothals are, however, common; the sale of daughters is not absolutely unknown, but takes place only amongst persons of low class, and not openly even then. If either of the parties die before the marriage actually takes place, the contract is at an end, and the boy's family are not considered entitled to claim that the girl should be married to another boy of their family, if her original betrothed should die. There is also a general feeling that while a girl's family have no claim to compensation if the betrothal be broken off, the boy's family have a claim, not only to a return of their expenses, but to damages for the breach of contract against the girl's family. The ceremony of marriage actually transfers the ownership of the girl from her agnates to those of the boy. After the marriage the girl remains in her father's house, and actual possession of her is not ordinarily delivered until she reaches puberty.

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and marriage.

While such is the usual course of betrothal and marriage, it is common in Jhelum for betrothal and marriage to be deferred until the parties are grown up, and unmarried women of full age are much more numerous in Jhelum than they are further east. One consequence of this is that the consent of the parties themselves becomes much more important, and though it is uncommon for a grown up girl to refuse to marry the man selected for her by her parents and guardians, she sometimes does so and elopes with the man of her choice. Such conduct is bitterly resented, not only by the family of the man she has rejected, but by her own family, and often leads to quarrels and litigation, although the Musalmáns cannot deny that such a marriage is valid by Muhammadan Law.

Effects of
betrothal.

Although a Musalmán may marry four wives, all alive at one time, and a Hindú as many as he pleases, it is not very usual for a man to have more than one wife at a time; and where he does marry a second wife during the lifetime of the first, it is generally because the first has not borne him a son, or because of some serious quarrel with her; or when he marries the widow of deceased brother.

Number of
wives.

Divorce is very rare, and although a dower is always mentioned at a marriage of Musalmáns, it is rarely paid, it being usual for a wife to relinquish her right to dower to her husband on his death-bed.

Divorce and
dower.

Ordinarily the whole family remains living in common until the father's death, and his wife, children and sons' wives and children are under his control, as well as the whole of the joint property. As the daughters grow up, they are married into other families, and leave their father's control for that of their husbands.

Inheritance
—Sons.

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—Sons.

fathers. As the sons grow up, wives are found for them who join the father's family and come under his control. Often the father gives a married son a separate house with a share of the moveables and sometimes a separate plot of land; but this is a matter for the father's own decision, and such a partition, unless approximately fair and intended to be final, is liable to be cancelled on the father's death. Where that occurs, the whole of the father's estate devolves on the sons, who sometimes continue to live as a joint family, but more often make a division among them of the moveable property and dwelling-houses, and either then or afterwards, of the land also. Ordinarily all the sons take equal shares without regard to age and without regard to the number or tribe of the mothers, though there are many exceptions to this rule. The custom of dividing the property among the sons according to the number of mothers, is practically unknown in Jhelum, though followed by some of the Gakkhars. If one of the sons have died before his father, his sons or widow take his share of the estate by representation. In the presence of sons or sons' sons, daughters get no share of the property; they are maintained by their brothers until suitably married into another family.

Inheritance
—Widow.

Where there are sons, their widowed mother usually gets no share of the estate, but is maintained by her sons; and if they divide the joint estate among themselves, they usually set apart a portion for their mother's maintenance during her lifetime. Where there are no sons, or sons' sons, the whole of the estate devolves on the widow, two or more sonless widows taking equal shares. The widow holds the whole estate till her death or re-marriage, and has power to make all ordinary arrangements for its management and to enjoy the whole of its produce. Generally she can do as she pleases with the moveable property, but must not permanently alienate the immoveable property without the consent of the husband's agnates. If, however, the agnates do not make proper arrangements for necessary expenses, the widow can alienate so much of the husband's immoveable property as is absolutely necessary, even without their consent. When a widow in possession of her deceased husband's estate dies or re-marries, even though she marry her deceased husband's brother, the whole of her former husband's estate, moveable and immoveable, reverts to her husband's agnates who take it in the shares in which they would have taken it had he died without leaving a widow. A widow having minor sons has much the same power over the estate as has a sonless widow, until her sons are old enough to manage it for themselves; but if she re-marry, she loses not only her control over her former husband's estate but also the guardianship of his children. If she does take them with her to her new home, they cannot succeed to any share in the estate of their step-father; they still belong to the family of their own father, and (if sons) are entitled to succeed to their father's estate.

When a man dies without agnatic descendants or widow, the married daughters or their sons in no case succeed to a share in the estate; but it is the almost universal custom in this District that the unmarried daughters succeed in equal shares to the whole of their father's property, moveable and immoveable, till their death or marriage, when it reverts to the agnatic heirs, the powers of the daughters over the estate being similar to those of the widow. Failing unmarried daughters, the father of the deceased takes the estate; if the father be also dead it goes to the brothers in equal shares. Ordinarily all the brothers, whether of the same mother or not, succeed equally.

Wills are almost unknown, and as far as known are almost entirely a recent development; they were seldom or never made before the 2nd Regular Settlement of 1874-81. If a proprietor wishes to interfere with the devolution of his property according to the ordinary rules of inheritance, he must carry out his intentions in his lifetime. An expression of his wishes as to the disposition of his property, if not carried out in his lifetime, has no force after his death.

Adoption is practically unknown, even amongst Hindús, who alone admit that a valid adoption can be made.

The power of an owner to alienate by gift his *moveable* property is practically unrestricted, unless when he has sons or sons' sons, in which case he ought not to give away an unreasonably large portion of the moveables so as to injure the sons. A proprietor having sons or sons' sons has no power to alienate by gift without their consent any portion of the immoveable property, except that he can give a small portion of it in dowry to a daughter, or for charitable or religious purposes; and he cannot give a larger share of the immoveable property to one son than to another. But a proprietor having no sons or sons' sons is, among the Tallagang Awáns, almost absolute owner of his whole estate, and can give it to any relative without the consent of the others; among other tribes he cannot make a gift of immoveable property to one relative without the consent of the agnate heirs, except sometimes a small portion to a daughter or daughter's son, or son-in-law.

Briefly it may be said that the influence of the Muhammadan Law on the custom of Musalmán tribes is confined to questions relating to marriage and divorce, and does not extend to questions relating to property. Among all Musalmán tribes a marriage must take place by *nikáh*, and any marriage which is legal according to Muhammadan Law is allowed to be valid, and although the rules regarding dower and divorce are rarely acted on, they are admitted to be binding on all Musalmáns; but the elaborate rules of the Muhammadan Law regarding inheritance, wills, and legacies are never acted on, the custom in such matters being founded on the entirely different basis of agnatic relationship. For instance, a

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ing families.

daughter gets no share in the presence of sons, a sister no share in the presence of brothers, a widow either gets the whole estate or none at all, and the right of representation prevails to the fullest extent. The only effect of Muhammadan Law on questions relating to property has been the indirect influence already mentioned, viz., that by breaking down the rule requiring a woman to be married to a non-agnate, it has weakened the power of the agnates to forbid an alienation of immoveable property to a relation through a female.

A good many of the leading men have special family schemes of inheritance, which are all so framed as to give the eldest son a larger share than he otherwise would get. There are instances of this at Dárápur, Vatli, Bághanwálá, Rúpwál, Tallagang, Tamman and elsewhere. These special rules of inheritance are commonly known as *haqq sirdári* or *haqq tika*, and for the most part consist in giving to the eldest son in each generation a certain share of the inheritance in respect of his position as head of the family, and then dividing the remainder under the ordinary rules.

Section C.—Land Revenue.

Village
Communities
and Tenures.

The following figures show the village tenures as broadly classified at the recent revision of Settlement —

Tahsil.	Privately Owned.				Owned by the State.	Total.
	Zamindári.	Pattidári.	Bhaiachára.	Total.		
Jhelum	17	34	389	440	21	461
Pind Dádau Khán ...	12	10	188	210	24	234
Chakwál	8	21	219	248	12	260
Tallagang	1	6	78	85	18	103
District	38	71	874	983	75	1,058

Zamindári estates are those owned by a single proprietor, or in common by more than one; *pattidári* villages are those in which each proprietor owns, not the particular fields he holds but a specific ancestral share in the whole estate; *bhaiachára* villages are those in which every man is owner of the land in his possession, or as it is commonly put "possession is the measure of right." The actual village is hardly ever a perfect example of any of these classes, but a mixture of two of them, with the characteristics of one class predominating.

One would expect to find the number of *bhaiachára* estates increasing at the expense of the other two classes; *zamindári* estates become *pattidári* when the single joint holding of which they consist is split up on shares, an event which is bound to occur sooner or later; and in *pattidári* villages the tendency is to abandon

ancestral shares, and make possession the measure of right; this was done in a number of cases at the recent Settlement, where in the course of time some of the sharers have come to hold much more than their share, while others hold much less; it then usually becomes necessary to do away with the old arrangement by shares, though for certain purposes such as *malba* payments the owners sometimes elect to continue to be bound by them.

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Some of the villages, *bonâ fide* estates held by one proprietary body, are of enormous size, larger probably than in any other part of the Province. Lāwa, for instance, exclusive of the great Lāwa *rakh*, now included in the Government estate of Rakh Sakesar, is 16 miles long and 14 miles broad. Thohā and Trāp are little smaller, and there are 34 villages which have about 10,000 acres. Their position as chiefs of these enormous villages gives many of the headmen of this district an importance not known among the peasantry elsewhere. In these huge estates the whole inhabitants are not massed together in one village site, but most frequently the actual cultivators of the soil live in scattered hamlets. This is especially the case where the country has been under the rule of a dominant tribe such as that of the Gakkhars. In such estates the superior tribe live in a large central village with all the village servants, while the Jat cultivators occupy small hamlets of from one to 20 houses or more. There are sometimes as many as 30 or 40 of these hamlets in a large estate, some of them mere farm-houses, others considerable villages. In many cases it was found just or necessary, at the time of the Regular Settlement, to form such *dhoks* into separate estates paying a small annual sum to the parent village. But this was only done when the cultivators proved a more than ordinary degree of independence of the superior tribe. Where, however, both the villages, the parent as well as the *dhok*, were of the same caste, the Settlement Officer allowed separation when claimed by the *dhok*, if he considered it strong enough to stand by itself.

The curious double tenures resulting from the diverse degrees in which the subordinate and cultivating classes had freed themselves from the dominant tribes whose tribal territory they held, were found to exist in Jhelum, no less than in Hazāra and the frontier districts to the west; but the diversity was smaller, perhaps because the political disturbances of the period immediately preceding annexation had been less in a district nearer the centre of Sikh rule. Perhaps, too, the matter was not so well understood at the time of the Regular Settlement of the Jhelum District, when the tenures were investigated and given their present form. Mr. Brandreth, who made the Regular Settlement, thus describes his action and its results:—

Superior and
inferior pro-
prietors.

"The disputes, though very different in kind, were all the same in principle. In one, a Gakkhar family were disputing with their Jat tenants; in another, one class of Jats or Gujars claimed to be superior owners of the

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land held by another branch of their own tribe, living in the same village. In a third, an Awán or Kasar family claimed to have superior right over the rest of their brotherhood. In a fourth, a Janjúa Chief claimed to recover a superior right in the villages from which the Sikhs had long ago dispossessed him. In all, the main line of argument was the same. The tenants would show how the Sikh *kárdár* had bullied the old owners and protected them; would declare that the old owners were only contractors, and never landowners; would endeavour to prove that these owners had ceased to manage the village for 50 or 60 years; and always ended with the great point in their mind, *viz.*, that they had cultivated 4, 8, or even 20 generations, and had never paid a rent-rate or *málikána*. 'Whatever we have paid, they always paid the same,' was the universal cry. On the other hand, the Gakkhar or other owners would call on the *kiníngó's* records to show that for hundreds of years they had always been recorded as owners, *wáris*; that far and wide they were so known; they would ask (and this was often a most important point) how, amidst such powerful tribes, always plundering each other, a small Jat community could have existed for a day except under their protection; they would point out that they had been seized and imprisoned for the balance, and that it was only when they had nothing left that the *kárdár* levied the rent from every one; or they would prove that, though the *kárdár* had ejected them from the management they had always allowed them some land rent-free or some present or percentage in lieu of their rights. The Awán or Kasar would show that, though the defendants were his relations, he had ruled the village entirely alone, and that under our rule he had taken grain rents even from his own cousins. The Jats or Gujars would show that they had founded the village, and had only allowed the others to come in subsequently out of kindness; that though the Sikhs had left no profits to the owners, yet that they alone had been headmen and had managed the village, and located cultivators: this latter point was all important in each of these cases. The claimants would also attempt to show that they had taken certain fees on marriages or had levied door dues from the village servants, or that they alone had collected and expended the village *malba*. The Janjúa Chief would endeavour to show that, though the Sikhs had ejected him, he had returned now and then, and obtained presents or fees from his old tenants; and would show that even the Sikhs had never disputed his real ownership, and that when they left, he returned to his village and took his land without anyone's permission.

"In these cases, I was a good deal mistaken at first, as I was not sufficiently acquainted with the history of the country. It was, moreover, then the rule to aid the cultivators as much as possible, and to depress the sons of the sword. But as I became more acquainted with the country, I learned that these owners had been left much more real power than had been the custom nearer Lahore. True they had never taken any rent or *málikána*; it was not the custom, as the Sikh left nothing, but they were allowed instead some land rent-free or a certain sum from the *kárdár's* collections. As long as the land was well tilled and the *kárdár* got his revenue, he did not interfere with these powerful owners, and they kept the Jats more as industrious serfs than anything else. They did not want to eject a good cultivator, but never hesitated to do so, if for any reason it seemed advisable: the copy-hold was really at the will of the lord, and not nominally so. For the reasons given above, my first decisions were decidedly hard upon the owners. I generally made the cultivators sub-owners paying some fees to the old owner. In some villages, I did not even allow this. In the later cases, I have gone a good deal the other way. I learnt how very similar the rise of right in landed property at home, especially among

the Scotch nobility, had been to that which was occurring in this country, before we suddenly came upon them with our record of rights and equalized everybody.

"Where the tenants were not a separate body, but living with the owners in the centre village, the case was different. They could not be created subordinate owners in the way the Jats had been, when residing in distinct hamlets; and yet they could not be made co-sharers. How then were those tenants to be recorded who had acquired such prescriptive right that they could not fairly be made to pay a rent-rate? This difficulty gave rise to the institution of the *mālik qabza*, who has often been called a copy-holder, but is really nearer the English free-holder, or owner of an estate tail, than anyone else. The only limitation to his rights is the universal law of pre-emption; if he sells his land, he must offer it first to the village owners. Latterly he has sometimes been made to pay a small fee or seignorage due to the old owners, but this has not interfered with his rights as proprietor."

Mr. Brandreth goes on to state that the classes from whom the *qabza mālikān* have been drawn are chiefly members of the family of the original owners who have fallen into an inferior position, tenants of old standing who had become to all intents and purposes proprietors of their fields; men who came into the village by gift or marriage; purchasers of particular fields; and those who were put in by the authorities of the time to manage the village during the dispossession of the real owners. The position of the *mālik qabza* as described by Mr. Brandreth is this; he has full rights over the particular fields that he holds, but that is all; he "has no share in the rights and responsibilities of the village he is not responsible for losses, and therefore he cannot claim a share in the reduction arising from increased cultivation; he has only to pay the sum fixed at settlement and has nothing to do with the village. There is this peculiarity that when the owners have no other means of meeting their losses, they can make this *mālik qabza* a sharer and owner in the village, and call upon him to pay his share like the others."

Whether Mr. Brandreth's opinion that the *mālik qabza* has no share in the responsibilities of the village now holds good, is more than doubtful; he is "landowner" under the Land Revenue Act and under Section 61 is therefore liable, in the absence of a notification under the first proviso of that section, which has never been issued; even if it be held that he is an "inferior landowner," he is still under proviso (b) and Rule 208 liable for the land revenue in the same way as any other owner.

If Mr. Brandreth intended that the *mālik qabza* should be unaffected by alterations in the assessment of his village, his intentions have not been carried out: except in a few cases where lump payments were distinctly ordered, the position of the *mālik qabza* since last settlement has been that he pays the revenue assessable on his holding in the ordinary way and in addition *mālikāna* taken by the full proprietors, a percentage on the land revenue. This

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arrangement has been continued at the present re-assessment: and the *málik qabza* now differs from the full owner only owing to the fact that he pays the *málikána*, and that he has no share in the *shámildát*.

The above remarks relate only to the old *málikán qabza* created at the first Regular Settlement, who are of two kinds; the first class includes those whose *málikána* was fixed by separate orders of the nature of judicial decisions; the second and largest class contains those who were not made liable to the payment by any order of this kind; their *málikána* arises from the circumstance that when Mr. Brandreth reduced his original assessments, these men were given no share in the reduction, and at the next settlement the proportion between their payments and those of the full owners was maintained, the difference being then for the first time treated as *málikána* at so much per rupee of the land revenue: the *málikána* rate thus depends not on the history of the particular holding but on the amount of the reduction, from the benefits of which the *málikán qabza* were excluded by Mr. Brandreth's orders.

There is now a third class of *málikán qabza*, the men who have bought land without a share in the *shámildát* since the first Regular Settlement; they pay no *málikána* except in a few villages in Tallagang, where in the recent *báchh* proceedings they agreed to pay at the customary rate in the Tahsíl one pice per rupee.

Wárisán
qabza.

In some villages there is a variation of the *qabza málik* tenure, the proprietors being divided into three classes: (1) *asl málikán*, or *asl wárisán*, (2) *wárisán qabza*, (3) *málikán qabza*; their respective rights and liabilities are not everywhere the same: but in general the third class has as usual no share in the *shámildát*: the second takes a share therein calculated on its own holdings only; and the first takes a share calculated on the holdings of the *málikán qabza* as well as its own.

These *qabza málik*, and *wáris qabza* tenures are found in 294 villages, of which only 2 are in the Jhelum Tahsíl. The rates of *málikána* paid vary from $1\frac{1}{10}\%$ to $40\frac{1}{10}\%$ per cent., the lower limit being usually not much exceeded. The total *málikána* paid comes to Rs. 3,655 only.

Talúqdári
tenures.

These tenures are found in 73 estates, and take the form of a surcharge on the revenue, varying in amount from one pice to four annas per rupee of revenue, the total amount of these "*talúqdári*" payments (as they are vulgarly called) being only Rs. 7,106; the recipients are usually the representatives or members of the leading families of the Gakkhar, Janjúa, and other dominant tribes, who were generally allowed these dues as the last vestige of their former ownership or lordship of the villages which pay them, they occur chiefly in the Jhelum and Pind Dadan Khán Tahsíls. Major Wace at the second Regular Settlement proposed that whatever arrangements were then in force should

be continued, and this proposal was sanctioned by the Punjab Government: the former arrangements, which were accordingly continued, have now become stereotyped and are not open to dispute. The *talugdárs* are in fact *ála málíks*, and have in some cases been so recorded in the papers, though they have no rights of any description in the *talugdári* villages, except to receive these small dues, they have nothing to do with the payment of the revenue.

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tenures.

The regulation of tenant right in this district was mainly effected by Mr. Arthur Brandreth at the first Regular Settlement. During the Summary Settlements some tenants paid rents in kind; but the great majority paid in cash at the Government revenue-rate and no more. They were thus on a practical equality with those whom we now recognise as owners. This equality was the natural outgrowth of the Sikh system which generally refused to recognise any privileged status between the Government and the cultivator. Mr. Brandreth put an end to this state of matters. In every village he first defined and set apart those whom he considered to be owners. All other cultivators were distributed among four classes of tenants, of which the first three were granted rights of occupancy, and the last were the tenants-at-will.

Tenant right.

These classes were as under, viz. :—

Classes of
tenants.

- I.—Ancient tenants, *asámi kadímí*, being those who had come in before the great famine of 1783.
- II.—Old tenants, *mustakíl purána*, who had been in possession about 50 years on the average (say from 1810 A. D.).
- III.—New tenants, *mustakíl noya* or *jadíd*, who came in after 1810, but were considered to have a claim to rights of occupancy.

All the above classes were granted rights of occupancy, or, to use the language of the district, were made *mustakíl*: the fourth class comprised all the tenants-at-will or *ghair mustakíl*. This system of classification only developed itself after the Settlement had been some time in progress; it was, therefore, never applied in Tahsíl Jhelum, where only the broad distinction of *mustakíl* or *ghair mustakíl* was recorded. In the other three tahsils, however, it was generally enforced, but many modifications were allowed in individual cases, especially in the matter of rent, for the question of rents was also regulated by Mr. Brandreth. Rents in kind were recognised and maintained whenever it was possible to do so, and cash rents were regulated as follows :—The ancient tenants of the first class were charged the revenue-rates and cesses with a small additional sum for *malba*. The old *mustakíl* tenants or second class paid the revenue rates and cesses, together with a *málíkána* of from two to four annas on each rupee of revenue.

Rents.

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The third class or new *mustakil* tenants paid the same as the second class, except that in their case the *mālikāna* was put at from four to eight annas. In actually assessing the *mālikāna* the theoretical scheme was often a good deal modified. The cash rent of tenants without rights of occupancy could not of course be fixed, but the rate then existing was duly set down, and in practice it has not been very often since departed from. Such cash-rents are, however, very rare. Mr. Brandreth intended that these rents should be recorded in the gross result merely, without details of the calculation by which it was reached; and it was further proposed that these gross rentals should be modified periodically in accordance with the price of corn. This part of the scheme has always been a dead letter; it was impossible to keep secret the details of the calculation, and in practice all the parties concerned have paid attention to nothing but these. No one has ever wished or attempted to have his rent revalued upon a corn standard, and so it has come about that all tenants pay rentals in kind, or rentals in cash equal to the sum assessed upon the land with cesses and with or without a *mālikāna* or *malba* surcharge of various amount.

New classification of tenants.

In the record of the subsequent Settlements all these rentals have been carefully maintained in their old proportions. They all take the form either of rental in kind, or of a payment of a *mālikāna* in cash in addition to the revenue and cesses now assessed upon the land, but the old classification of occupancy tenants has not been followed: it has no connection with the Punjab Tenancy Act, and is therefore practically obsolete: in the new record all tenants with rights of occupancy have been recorded as holding under either Section 5 or Section 6 of the Tenancy Act, and no further discrimination has been attempted. The practical result is that the more part of the old *asāmīs kadīmī* with a few others have been placed under Section 5; and the rest under Section 6.

Size of proprietary holdings.

The size of holdings is a somewhat important factor in the revenue-paying capacity of a tract; though if any subsidiary occupation is available to the zamindārs, smallness of holdings is not necessarily an argument for low assessment, and may even make the realisation of a fairly high demand easier than would otherwise be the case; to some extent the Jhelum Pabbi is an instance of this. The Assessment Reports contain detailed information as to the size of holdings; their average size is least (from 6 to 12 acres), in the Jhelum Tahsíl, the hills of the Salt Range, and the Lundí Pattí Circle in Chakwál; largest in the Pind Dádan Khán Thal (24 acres), and in Tallagang (31), where the cultivation is more rough and the land less productive than in other parts: elsewhere the average varies from 15 to 19 acres. In a general way it may be said that holdings are inconveniently small only in the Pabbi, and in parts of Lundí Pattí and the hills; elsewhere usually sufficient

and even too large for really good management in the Tallagang Tahsíl and parts of the Dhanní.

The number of proprietary holdings has increased enormously during the recent Settlement, from about 314,000 to 364,000. To a great extent this is due to the strong tendency amongst the joint owners of land to break the tie that binds them together, and to have their shares definitely separated. How active this tendency is may be judged from the fact that the area dealt with in partition proceedings, (including private partitions sanctioned by mutation orders), in the five years 1895 to 1900, was 236,034 acres, including 154,664 acres cultivated, or 15 per cent. of the whole cultivated area of the district, paying about one-ninth of the total revenue demand.

The size of tenants' holdings is usually small, averaging from $1\frac{1}{2}$ to $2\frac{1}{2}$ acres, except in Tallagang where the average is nearly 6 acres: but in many cases the tenant has other land of his own.

The area held by tenants-at-will is about $31\frac{1}{2}$ per cent. of the total cultivation. The percentage is much higher than it was 20 years ago, owing to the large amount of land alienated to the non-agricultural classes, who must of course put in tenants to cultivate for them: very often these tenants are the previous owners of the land. The owners themselves cultivate 55 per cent. $1\frac{1}{2}$ per cent. pays no rent; and 12 per cent. is held by occupancy tenants.

A few general remarks on the relations between landlords and tenant may be made here; on the whole, they are fairly good; large landlords are uncommon; the bulk of the occupancy tenants pay merely the land revenue with a small *málikána* at so many pice or annas per rupee of the revenue, and in their case there is nothing to quarrel about; but occupancy tenants paying rent in kind are not uncommon, and relations between them and the owner are not unnaturally often strained, the landlords trying to enforce on the tenants an appraisal of the value of the produce, which the latter do not consider fair; in such cases trouble is usually avoided if the landlord gives up the practice of *kankút* or appraisal, and divides the actual produce on the threshing floor.

These produce-paying occupancy tenants make desperate attempts, as Settlement comes round, to get their rents converted into cash, and for a year or two there is confusion; without the landlord's consent, which he would never dream of giving, such conversion is of course impossible; after a time the tenants realise this and then things quiet down again.

Tenants-at-will are not in a position to quarrel with their landlords, even if they are harshly treated, as they often are, especially in the Dhanní, where the Máirs and Kassars make hard landlords, being much attached to the *kankút* system referred to above; a half assets assessment based on the rents that these men

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III. C.Land
Revenue.Size of pro-
prietary hold-
ings.Size of ten-
ancy holdings.Area held
by tenants.Landlord
and tenant.

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Land
Revenue.

realise on their own appraisalment would be a conclusive answer to any complaints of over-assessment; but there is no accurate record of their takings.

Revenue history up to the current Settlement.

Land revenue
under native
rule.

Mr. Brandreth thus describes the system under which the Sikhs assessed and collected their land revenue:—

"In the Sikh times the cultivators usually paid by what was called the *bigha* rate; the *kārdār* and the appraisers of the crops would select a fair field and very fairly calculate the produce by the eye; a deduction of one-tenth would be made for the village servants, and half the rest taken as the Government share. The field would then be roughly measured by a man's paces, or the area guessed; they can do this with unusual accuracy: the produce per *bigha* of this field was thus calculated as an average *bigha*; the *kārdār* would afterwards visit each field of each owner, examine the standing crops and assess it as equal to so many average *bighas*. It was here that the owners gained; they were, it is true, allowed nothing from their cultivators, except where they were a very powerful body, and had to be conciliated, but their headman accompanied the *kārdār*, and by assessing the cultivators highly, induced the *kārdār* to treat their own fields with considerable leniency; of course, a system like this gave enormous opportunities for fraud and favouritism.

"The number of *bighas* agreed upon was entered against each man, and as soon as the price of grain for the harvest was fixed, the value was calculated. And the village money-lender had to advance the whole, or a large portion of the amount to the *kārdār*. The *kārdār* then aided him in collecting the corn from the tenants. When the villagers obtained a fixed contract they followed the same system, only modifying it by fixing the number of average *bighas* each man's land was equal to, and then dividing the sum due by this number, and consequently when they came to make a permanent division they assessed the different sorts of soil as equal to so many *bighas* of the worst soil, and divided the revenue accordingly." The amount of the (estimated) Sikh revenue is shown on the next page.

Settlements
under British
rule.

The Sum-
mary Settle-
ments.

The greater part of the district joined the standard of Chattar Singh in the second Sikh War, and the first Summary Settlement made immediately afterwards, by Major John Nicholson in Jhelum and Lundī Pattī, and by Mr. Bowring elsewhere, was somewhat severe; the standard of assessment was two-fifths produce or the Sikh demand, whichever might be lowest; the second Summary Settlement of 1852, by Major Browne, was intended to correct the more obvious inequalities of the first. These Summary Settlements on the whole worked fairly well; the assessments were easily paid in Chakwāl and Tallagang, but with some difficulty in the other two Tahsils, notably in the Thal and Phaphra Circles of Pind Dādan Khān and in the central Salt Range; in two or three estates only the owners refused the assessment, and relinquished their proprietary rights.

First Regu-
lar Settle-
ment.

The first Regular Settlement was conducted by Mr. Arthur Brandreth. It commenced in June 1855 and was finally completed in May 1864. The assessment has been elaborately explained by the Settlement Officer in his published report. Speaking generally,

it may be said that the demand was so framed as in no case to exceed half assets.

The following table exhibits the value of the land revenue under Sikh rule and under the first three British Settlements.

The amount shown as the Sikh demand professes to be the average of what they took in the last four years of their rule; in fact the Sikh demand cannot be stated with any accuracy; the local officers of the Lahore Darbār, the *kārdārs*, took as much as they could get, the standard being one-third produce in Tallagang, and half produce elsewhere; that is, the share of the produce now regarded as the landlord's due. The entries as to the Summary Settlements are average results deducted from the whole period of the currency of each. *Jāgirs*, *ināms* and *māfis* are always included:—

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III. C.

Land
Revenue.

Comparative
results of all
three Settle-
ments.

TAHSIL.	Sikh average.	AVERAGE OF SUMMARY SETTLEMENT.		Regular Settlement, 1st year.
		1st.	2nd.	
	Rs.	Rs.	Rs.	Rs.
Jhelum	2,16,644	1,86,148	1,83,397	1,68,720
Chakwal	1,85,599	1,80,468	1,75,861	1,80,489
Tallagang	99,698	90,665	87,150	91,468
Pind Dadan Khān	2,06,899	2,06,261	2,05,769	1,82,724
Total	7,08,840	6,63,542	6,52,177	6,22,401

Of the revenue payable during the first year of the Regular Settlement Rs. 5,78,050 was receivable by Government and the balance was alienated to *jāgirdārs*, *māfidārs* or *inām khwārs*.

The Regular Settlement was essentially in regard to the assessment a village settlement. Assessment circles were no doubt formed; but they were not much used. In the main the demands were fixed by the personal knowledge of the Settlement Officer, and by his opinion of what each village could afford to pay. He arrived at his conclusions after consideration of a multitude of matters all more or less relevant to the subject of taxation. These assessments undoubtedly worked well; they were in nearly every case paid with ease and regularity, and led to a general increase in the prosperity of the district and in the amount of cultivation. Any difficulty or hardship that occurred was due, for the most part, to over-assessment of new lands formed by the river, and under-remission in respect of old lands washed away.

Working of
the first Re-
gular Settle-
ment.

The working of Mr. Brandreth's assessments was, however, never tried by widespread crop-failure. There were occasionally in-different harvests, but never anything approaching scarcity.

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III. C.Land
Revenue.Revision of
Settlement,
A.D. 1880.

In December 1874, a revision of Mr. Arthur Brandreth's Regular Settlement was set on foot, under the direction of Major Wace, who held charge till May 1877. Various officers presided over the operations from that month till September 1878, when Mr. Thomson assumed the direction, and completed and reported the Settlement in the cold weather of 1880-81. The assessment of the land revenue was wholly performed by Major Wace himself, while the forest Settlement was chiefly made by Mr. Thomson.

Briefly, since the Regular Settlement which was to be revised, the area of cultivation and the permanent value of agricultural produce had each increased by some 40 per cent., population had expanded by at least one-third, railway communication had lately been extended to the district, the former assessments had everywhere been easily paid, and the people generally were prosperous.

The standard of assessment was, as it is still, "half net assets". That is, the assessment was nowhere to exceed half the net profits which a landowner would realise if he cultivated his land through tenants. In fact, the assessment was everywhere much less than this.

Result of the
Revision.

The general results of the 2nd Regular Settlement were as follows :—

TAHsil.	Demand of last year of 1st Regular Settlement.	Final De- mand of Second Regular Settlement.	Perce- tage of increase.	Deductions, Assigned Revenue, &c	Balance or Net Govern- ment Revenue.
	Rs.	Rs.		Rs.	Rs.
Jhelum	1,57,998	1,89,355	16	5,190	1,84,165
Pind Dadan Khan ...	1,78,662	2,02,200	13	13,810	1,88,390
Chakwāl	1,78,155	2,17,430	22	8,122	2,09,308
Tallagang	89,174	1,20,110	34	9,751	1,10,359
Total District ...	6,03,989	7,29,095	18	36,873	6,92,222

The second
Regular Set-
tlement.

Major Wace's assessments were considered by the Financial Commissioner too lenient: some alterations were therefore made in the revenue rates of five circles, and the proposed demand was slightly raised in all, giving an enhancement for the whole district of 18 per cent. against 13 per cent. proposed by the Settlement Officer; the increase due to the Financial Commissioner's orders was in no case large enough to have any perceptible effect on the working of the Settlement, and with few exceptions the demand had been paid without difficulty in all parts of the district, until recently a long series of bad years rendered large suspensions necessary.

Before 1887, it does not seem to have been customary to grant suspensions; at any rate none were granted, and it is hardly possible that none were needed; since 1887 there has been

only one year in which neither suspensions nor remissions were required in any part of the district. This must be accepted as a normal condition of affairs; such a circle as the Thal needs constant attention, and some other parts of the district are only less insecure than the Thal.

Full particulars of the amounts suspended and remitted in the year 1887-88 to 1900-01 have been given in the Final Report of the recent Settlement: here it is enough to note that the total remitted in that period was Rs. 71,336, of which over Rs. 65,000 was on account of the damage done by locusts in 1890-91, and the rest was due partly to the great flood of 1893 and partly to hail. The amount suspended was Rs. 7,40,848, almost entirely on account of drought, no less than Rs. 5,13,081 occurring in the very bad year 1899-1900. Out of the sums suspended some Rs. 74,000 had been subsequently remitted up to the end of 1900-01, and over $4\frac{1}{2}$ lakhs of rupees then remaining was entirely remitted in the following year. These large remissions were, however, in a very exceptional measure due to the long series of bad harvests from which the district has recently suffered.

It has been said that the past Settlement has worked easily, and the figures given above are no proof to the contrary; in a dry tract dependent on a precarious rainfall even a very moderate fixed assessment would not obviate the necessity of giving rather frequent suspensions; if *remissions* are avoided, otherwise than for unforeseen calamities such as hail and locusts, or such exceptionally prolonged drought as that of recent years and the bulk of the revenue is paid with punctuality, a Settlement may be said to have worked satisfactorily.

THE CURRENT SETTLEMENT.

The second Regular Settlement was sanctioned for a period of 20 years, beginning from Kharif 1879: in anticipation of the completion of this period, the district was again placed under Settlement towards the end of 1895, Mr. W. S. Talbot being appointed Settlement Officer and retaining charge of the operations until their completion at the end of 1901: to some extent the length of the proceedings was due to interference with the work due to the bad harvests.

One of the first stages of the work is to divide the tract under settlement into Assessment Circles of more or less homogeneous character.

From the description given in Chapter I it may have been gathered that the district consists of three main divisions: first, to south, a belt of low-lying almost level alluvial plain, part of the valley of the Jhelum: second the hills of the Salt Range including not only the uplands of the Pind Dádan Khán Tahsíl, but also the subsidiary ranges of the Jhelum Tahsíl, and the somewhat elevated broken country between them; lastly, the plateau north of the hills,

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III, C.

Land
Revenue.

The second
Regular Set-
tlement.

Assessment
Circles.

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III. C.Land
Revenue.Assessment
Circles.

a tract with an average height of 1,500 or 1,600 feet, in its general aspect undulating or nearly level, but cut up at frequent intervals by ravines.

The arrangement of Assessment Circles follows these natural divisions; the plains, wholly situated in the Jhelum and Pind Dádan Khán Tahsils, form five circles, the River Bank Circle of each Tahsil being more or less what its name implies; the rest of the plain in the Jhelum Tahsil forms one circle, Maidán; and in Pind Dádan Khán two circles, Phaphra and Thal, both in the strip of country at the foot of the hills, and of the same general character, though the former is much the best of the two. The second division, the hills, includes the circle of that name in Pind Dádan Khán, comprising the whole of the Salt Range in that Tahsil: the corresponding circle in Jhelum is the Khuddar, or ravine tract between the Nili and Tilla Hills. The third division, the northern plateau, includes the small Pabbi Circle in Tahsil Jhelum north of the Nili Range, and the whole of the Chakwál and Tallagang Tahsils, which do not readily lend themselves to division for assessment purposes, and are therefore somewhat arbitrarily split up into three circles according to past or present administrative divisions; Chakwál takes two of these, Lundí Pattí to east, and Dhanní to west, while the third consists of the whole of Tallagang.

These Assessment Circles were arranged by Colonel Wace at the second Regular Settlement, and it would be difficult to improve on them by any general re-arrangement; no change, therefore, has been made at the present Settlement.

A detailed account of the principles and procedure followed in the assessment operations is contained in the published reports of the Settlement. The instructions, briefly stated, were to make the estimated value of half the net produce of each village the maximum for the Government demand, taking as a principal guide the rents paid in money and kind by an ordinary tenant-at-will, care being taken not to tax unfairly the capital invested in improvements, and full allowance being made for all circumstances directly or indirectly bearing on the profits of the landowners. How far the actual demand falls short of the estimated half assets, will be seen from the figures given below:—

Tahsil.	Assessment Circle.	Demand of last year of former Settlement.	Demand of first year of new Settlement.	Half Assets Estimate.	Actual increase in rupees.	Increase per cent.
		Rs.	Rs.	Rs.		
Jhelum.	River Bank	34,896	39,798	53,596	4,902	14½
	Maidán	73,313	88,088	1,21,445	14,775	19½
	Khuddar	49,088	66,065	88,697	16,977	34
	Pabbi	31,173	37,788	43,821	6,615	21
	Tahsil	1,88,470	2,31,739	3,07,539	49,269	23

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III. C.Land
Revenue.Assessment
Circles.

Tahsil.	Assessment Circle.	Demand of last year of former Settlement.	Demand of first year of new Settlement.	Half Assets Estimate.	Actual increase in rupees.	Increase per cent.
		Rs.	Rs.	Rs.		
P. D. Khán.	Hills	67,606	85,006	1,23,260	17,400	25
	Phaphra	18,405	19,709	21,599	1,304	7
	Thal	39,595	44,018	52,553	4,423	11½
	River Bank	75,784	94,358	1,30,947	18,574	24½
	Tahsil	2,01,390	2,43,091	3,28,350	41,701	20½
Chakwál.	Lundi Patti	46,911	59,324	91,258	12,413	26½
	Dhanní	1,73,172	2,23,624	3,92,220	50,452	29
	Tahsil	2,20,083	2,82,948	4,83,478	62,865	28½
Tallagang	... ..	1,21,375	1,59,848	2,17,334	38,473	32
District	... ..	7,31,318	9,17,626	13,36,710	1,86,308	25

There is an additional sum of Rs. 1,361 assessed on mills bringing the total new land revenue demand up to Rs. 9,18,987.

The sanctioned rates of assessment per acre are as follows:—

Tahsil.	Assessment Circle.	Irrigated.	Sailáb.	Superior unirrigated.	Ordinary unirrigated.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Jhelum.	River Bank	4 0 0	1 8 0	1 12 0	1 6 6
	Maidán	3 8 0	1 4 0	1 14 0	1 2 6
	Khuddar	5 0 0	...	1 10 0	0 13 0
	Pabbi	4 0 0	...	2 0 0	1 0 0
P. D. Khán.	Hills	5 0 0	...	1 8 0	0 11 0
	Phaphra	{ 2 3 0 } 2 6 0	...	1 5 0	0 11 0
	Thal	1 5 0	1 12 0	0 13 6	0 6 0
	River Bank	2 6 0	1 12 0	1 0 0	0 12 0
Chakwál.	Lundi Patti	5 0 0	...	1 9 0	0 14 0
	Dhanní	5 0 0	...	1 6 0	0 11 6
Tallagang	4 4 0	...	0 14 0	0 7 3

The average rate per acre for the whole district is 14 annas 3 pies.

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III. C.Land
Revenue.Assessment
Circles.

As stated above the former Settlement terminated at the end of 1898-99; but owing to the season of distress through which at that time the district was passing, the announcement of the new assessments was deferred under the orders of Government, and they did not take effect until kharif 1901, when there had been two good harvests. Unfortunately the year 1901-02 proved to be a bad one agriculturally, and considerable suspensions had to be granted, so the new Settlement did not start under favourable circumstances.

It is as yet too early to say much about the working of the assessments. The enhancement of the demand is much greater than the increase in resources due to extension of cultivation; but on the other hand the prices of agricultural produce are at least 30 per cent. higher than they were before, so that the pitch of the assessment is actually less, measured in grain, than that of the old demand, which was itself thought to be very moderate. There is no doubt, however, that the revenue payers will require sympathetic treatment in years of bad crop-failure.

Lambardári
arrange-
ments.

The lambardári arrangements of the district are not very satisfactory. The number of lambardárs appointed during the Summary Settlements was very large. When the Regular Settlement commenced, Mr. Brandreth was strongly in favour of having one or two lambardárs in a village who might receive a substantial remuneration: he therefore began cautiously to confine the office to the old headmen of the Sikh times. At first his plan was successful, but when the working of it was handed over to his assistants, the selection of these headmen was carelessly carried out, and gave rise to many appeals and much dissatisfaction. Some of the dismissed men were restored individually; and at last a general order was issued directing the restoration of all lambardárs who had been in office under the Summary Settlements. In carrying out these restorations the dismissed men were sometimes put back without conditions, and sometimes only for their own lives without remainder to their issue. In the final Report of his Settlement, Mr. Brandreth expressed himself in favour of a gradual reduction in the number of the lambardárs by the absorption of all death vacancies which it did not appear necessary to fill up. These views were supported by the Commissioner, and for a long time were generally acted upon. When a lambardár died his successor was not appointed as a matter of course; but the whole circumstances of the village were passed in review, and, if the deceased man did not appear to have had any strong claims to his appointment in the first instance, his office was frequently done away with, and its emoluments made over to one of the remaining lambardárs. This was especially the case where the deceased man had been put in for life only, or where the retention of the lambardári in his family did not seem advisable or profitable upon administrative grounds. But the lambardári arrangements of the district were again reviewed at the second Regular Settlement, and as a result of the instructions then issued

the appointments have since been made for the most part in regular succession under the ordinary rules, reductions being only allowed in exceptional cases or on proof of real necessity. The number of lambardárs in this district is in many villages certainly much greater than good administration requires. The inconvenience that results is sometimes considerable, and at the recent Settlement it was intended to go into the matter fully, and propose a scheme for the gradual reduction of the superfluous posts; but the conclusion was eventually arrived at that sweeping reductions would do more harm than good, owing to the bad blood and soreness on the part of the families whose posts would be reduced, which in a district like Jhelum would sometimes have serious consequences; it was decided therefore that reductions should only be proposed where no fit heir was available, which is of course very seldom the case.

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Land
Revenue.
Lambardári
arrange-
ments.

The result is that the number of lambardárs ⁽¹⁾ is practically the same as before, nine posts having been reduced and six new ones having been created, in addition to new appointments for the Government *rakhs* containing leases, &c., which hitherto have had no headmen, as they should do according to the rules.

Where there are several lambardárs in an estate, they have usually hitherto collected and paid in the revenue jointly, an arrangement which has often very unsatisfactory results; steps in such cases have been taken to make each responsible for the payments of certain specified owners, the joint liability of the village in the ultimate resort being of course unaffected: collections will, it is believed, be a good deal facilitated by this measure. Exceptions have, however, been made, where the lambardárs agree well together, and were opposed to a change, so there are still a few estates where the headmen collect the revenue jointly.

In the course of these proceedings, as well as on other occasions, the distribution of the *pachotra* or lambardár's fees came under discussion, and owing to the changes that have occurred since their shares were fixed, there has in some cases been reason to revise them; but action of this kind gives rise to bad feeling, and has been avoided as far as possible.

There is one more point to notice in connection with the lambardári arrangements; in a few villages one or more of the lambardárs takes double *pachotra*, 10 per cent. instead of the usual fees of 5 per cent. on the revenue. The double *pachotra* is usually levied from a particular section only of the owners, nearly always

(1) Jhelum	768
Pind Dádan Khán	568
Chakwál	543
Tallagang	211
District	2,085

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arrange-
ments.

the *málikán qabza* referred to above; and it seems to be more of the nature of *málikána*, or seignorage, than remuneration of the lambardár as a village officer; but in some cases the origin of the cess is different, the double fees being taken by two different men: the reason for this arrangement is that at the first Regular Settlement, when the men entitled to the post of headmen had been appointed, the *qabza máliks* or some other section of the owners, who had been given no representative of their own, were allowed to have one on condition that they should pay for his *pachotra* in addition to that of the lambardár previously appointed. It is unnecessary now to interfere with arrangements of long standing, to which no one objects, even though they may not be usual.

Ala Lam-
bardárs.

Ilákadárs.

There are no *ala* lambardárs, and none are wanted.

It has been decided by Government that the present system of *ilákadárs* is not to be replaced by the more formal *zaildári* system; the *ilákadári* arrangements which were first introduced shortly before the Settlement began, have since been very carefully reconsidered and revised, and, it is hoped, placed on a more satisfactory footing; there have been a certain number of complaints due to the changes made, for some one is sure to be dissatisfied by any alteration, and the people of this district when dissatisfied have no hesitation in making the fact known. The new arrangements are believed to be working well.

It is perhaps as well to explain that an *ilákadár* is for all practical purposes a *zaildár* under another name; but the greater elasticity of the rules under which the system is worked render it more suitable for a district like Jhelum.

Riparian
boundaries.

The Jhelum river is the boundary of the district for over 100 miles, where it borders on the Kashmír State and on the Gujrát and Sháhpur Districts. In Pind Dádan Khán (with one trifling exception), and for about 10 miles adjoining in the Jhelum Tahsíl the boundary has long been a fixed one, unaffected by changes in the course of the river; but in the next 26 miles the deep-stream rule (*hadd sikandari*) has until recently been in force between the Jhelum villages and those of Gujrát adjoining: during the late Settlement, however, action under the Riverain Boundaries Act resulted in the demarcation of a permanently fixed boundary in this part of the river also, the inconvenience and uncertainty of the deep-stream rule being thus ended. Where the district borders on Kashmír the custom which had grown up was a rather curious one, the boundary not being permanently fixed, though the deep-stream rule was not in force, and the greater part of the line at any given time was a fixed one; when the matter came under discussion at Settlement it was not proposed to substitute a permanently fixed boundary, because it was understood that the State authorities would not agree to this, and the existing arrangement worked well enough; but it was recognised that a fixed boundary would

certainly be more satisfactory; and since the Settlement the Kashmir Darbār have agreed to the demarcation, which was carried out in 1902-03. The river boundary is now therefore wholly fixed.

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III. C.
Land
Revenue.
Cesses.

The following are the cesses payable in addition to the land revenue :—

	Rs.	a.	p.	
Local rate	10	6	8	per cent. on the land revenue demand.
Lambardāri cess	5	0	0	per cent.
Patwāri cess	6	4	0	per cent. (1)
Total	21	10	8	per cent.

These are the same as before, except that the patwāri cess has been raised from Rs. 4 per cent. to Rs. 6.4.

The proportions of the demand to be paid in each of the two harvests is a matter which the people are allowed to settle for themselves: but where, as is usual, the *rabi* is by far the most important crop of the two, they were generally advised to pay two-thirds then, and only one-third in the *kharif*, and many villages adopted the suggestion: many, however, elected to pay equally on both harvests, and some preferred to pay three-fifths in the *rabi* instead of two-thirds. For the whole district the amount payable (1903-04) in the *kharif* is Rs. 3,65,404 and in the *rabi* Rs. 5,03,166: plus cesses, *kharif* Rs. 82,300, *rabi* Rs. 1,13,288.

Instalments.

The dates for the payments are 1st January and 1st February for the *kharif* instalment, and 1st July and 1st August for the *rabi*: this is a fortnight later than the dates for the payments before the Settlement, and should allow the people ample time to realise on their produce to advantage.

Of the total demand by the new assessments, Rs. 45,214, or 5 per cent., is assigned, as follows :—

Assignments
of revenue.

	Rs.
Māfis and Jāgirs	26,604
Ināms	18,610

The principal grantees are: (1) Sardār Mehr Singh, Chhāchhi, &c., of Pachnand in Tallagang, Rs. 6,629; (2) Sodhī Harī Singh, &c., of Haranpur in Pind Dādan Khān, Rs. 6,021; (3) Bhāi Gurdit Singh of Kariāla, in Chakwāl, Rs. 1,116; (4) Pīr Sahj Nāth, of Tilla in Jhelum, Rs. 1,029; (5) Pīr Ilāchī Nāth, of Kot Sārang in Tallagang, Rs. 715.

It is noteworthy that none of these large grantees are zamīndārs, in the ordinarily accepted meaning of the word; the largest of all are absentees.

The revenue assignments in this district other than *jāgirs* and *ināms* are neither very numerous nor very important.

(1) Remitted in 1906.

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III. C.Land
Revenue.

Ināms.

A very useful form of land revenue assignment is the *safed-poshi inām*, or grant to deserving yeomen, the leaders of the agricultural community. These vary considerably in amount, but are worth on the average a little over Rs. 100 per annum. In the recent Settlement these grants were revised, and eventually the creation of 54 new *ināms*, of the aggregate value of Rs. 4,015, was sanctioned by Government. The number of the old *ināms* was at the same time reduced from 102 to 100, but their value was raised from Rs. 12,883 to Rs. 15,196. The net cost of the alterations was thus Rs. 6,378 per annum.

Frequent
subjects of
dispute at
Settlement.

Before concluding this section, it may be of interest to mention briefly some of the matters which are apt to give rise to disputes in the village communities, more especially when rights and obligations are enquired into at Settlement.

Kamiana

Kamiana, the dues or cess taken by the owners from the *kamīns* or artisans plying their trade in the village, were in the recent Settlement the subject of frequent dispute: these fees are referred to in paragraphs 127 and 286 of Mr. Brandreth's Settlement Report, and in paragraph 214 of Mr. Thomson's; the origin and nature of this cess is involved in some obscurity; Mr. Brandreth remarked that it had in most of the Punjab Districts been abolished, but in this Division had been preserved by Mr. Thornton; he considered that it was partly the rent of the land on which the artisans' houses are built, but chiefly an acknowledgment of the superior rights of the village owners. Major Wace (quoted by Mr. Thomson) observed that the levy of *kamiana* had become a matter of much uncertainty, owing to the issue by the Government of certain orders which he cites; he says nothing as to the nature of the cess, though in a civil suit from Bhon he had gone fully into the matter, and after an exhaustive enquiry regarding the practices in the villages of southern Chakwāl, came to the conclusion that *kamiana* is a tax levied by the owners from all artisans who actually carry on their trade in the village, and depend on it wholly or partly for their subsistence, their liability being unaffected by their becoming full owners in the estate, (and *a fortiori* unaffected by their purchasing the sites of their houses); if this view is correct, as it is believed to be, the common objections of the *kamīns*, that they are no longer liable for the payment if they become proprietors in the estate or buy the site of their house, or that the payment is on account of watch and ward, are untenable; the real test is whether they ply their trade for profit in the village or not.

The artisans are becoming more and more independent, and show a strong tendency to throw off, as far as they can, their hereditary subordination to the owners; where, therefore, as is often the case, the proceeds of the *kamiana* tax go to pay the *chaukidārs* of the village, the *kamīns* generally claim that what they

pay is not *kamiána*, but a *chaukidári* tax; this claim is not correct; the method of disposing of the money realised does not in any way alter the nature of the payment. Where, however, the due is recorded in the former Settlement papers as *chaukidára*, it has necessarily been again so recorded now. *Kamiána* has now been recorded as due in 275 estates distributed over all the district, except the Jhelum Tahsil, where there are four instances only.

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III. C.
Land
Revenue.
Kamiána.

The next most fruitful subject of disputes during the Settlement regarding matters of this nature was *haq-bakri*, the payment of a few rupees by non-proprietors to the owners, or more commonly to one or more of the headmen, on the occasion of the marriage of a daughter; the payment was recorded as due in 76 estates, confined almost entirely to the Pind Dádan Khán and Chakwál Tahsils; this due is most strongly objected to by the Hindús; and it is in fact a payment, which in their case tends to fall into disuse, as it is often inconvenient for the *lambardárs* to disoblige them; in seven cases a previous entry conferring the right has been struck out by consent of the parties.

Haq-bakri.

Other disputes connected with the *Wájib-ul-arz*, or village administration paper related to the rights of tenants as to trees; rights in the water of torrents; management of, and method of dividing the *shámilát* or common land; *malba*, or the village fund for common expenses; fees on water-mills; and other matters. Some remarks are added on some of these subjects.

Rights in torrent water; the rules for the division between estates of the flood water of the hill torrents are of importance only in the plains of Pind Dádan Khán: the respective rights of different villages have been enquired into and recorded in the *Wájib-ul-arz* where there were disputes, which have in most cases already been the subject of civil suits; within estates the distribution is regulated by the simple rule that those may take who can, that is, the owners of the higher fields are entitled to take as much as they want before passing the water on to those below them. The complicated shares in the water of springs have also been recorded, in some cases for the first time.

Rights in
water of tor-
rents and
springs.

Management of the shámilát; it has become rather a frequent practice for owners to enclose common land for their exclusive use, without any formal partition, a course which causes much inconvenience to the non-proprietors, but one with which it is not easy to interfere, as the owners are within their rights. The old entry giving all the inhabitants the right of free grazing over the undivided common land of the estate has, however, been repeated for what it is worth; and the people generally agreed to a new entry extending the right, in accordance with the existing practice, to the stubble (*wadh*) for a short time after the harvesting of the crops.

Management
of common
lands.

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III, D.Miscella-
neous
Revenue.The Malba
Fund.

Malba; the old entries were in accordance with the existing orders and have been repeated; following, however, orders issued by Government in 1813, the purposes to which the fund may be applied for the common benefit of the village have been set forth in detail, and it has been provided that the lambardárs must maintain accounts, which shall be open to inspection by the co-sharers; the administration of the *malba* fund gives rise to many disputes and much ill-feeling, and it was, therefore, at one time proposed to introduce a system whereby the lambardárs should get a fixed sum per annum to be realised with the land revenue, and should be responsible (except on extraordinary occasions, such as re-measurement of the village) for all expenses, whether more or less than their realisations: but this provision was not agreed to in any case by all of those concerned: and under existing orders it could not be forced upon them. The lambardárs have therefore to recover the amount due as best they can, with the result that the more influential members of the community, and particularly money-lenders, pay nothing towards the village expenses. It has been held, however, that beyond recording customs relating to the *malba*, we should abstain from all attempts at regulation. It is open to the lambardár to sue recalcitrant contributors in the Revenue Courts, and no other assistance can be given to him.

Water mills.

Disputes regarding water-mills were chiefly in respect to the alleged right of the village owners to get their grain ground for them without charge, where they exact no rent for the use of the site of the mill.

Section D.—Miscellaneous Revenue.

Excise.

One of the main items under this head is the income derived from Excise, though the district is relatively one of the least important in the province in this respect. The consumption of spirits and other liquor is confined almost entirely to the few small towns, and nine-tenths of the population do not consume alcohol in any form. There were formerly three distilleries in the district, at Chakwál, Pind Dádan Khán and Jhelum, but these have all been discontinued in accordance with the present policy of the Excise Department. Smuggling is almost unknown, and illicit distillation, though it has occurred in the extreme north of the Chakwál Tahsíl, is rare.

The gross receipts and expenditure during the period from 1901—1904 may be tabulated as follows:—

Years.	Receipts.	Expenditure.
	Rs.	Rs.
1901-02	15,932	1,361
1902-03	16,878	1,345
1903-04	12,477	1,430

The steady increase in receipts is chiefly attributed to enlarged sales of country liquor. By far the greater part of the spirit consumed in the district is obtained from the Ráwalpindi distillery. A smaller quantity is obtained from the Rosa Distillery, U. P. Beer has of late become a popular beverage among the well-to-do native classes. The number of gallons of spirit manufactured in British India, and sold to licensed vendors during the years 1901-02, 1902-03, 1903-04, is 4,139, 3,848, 5,224 respectively.

The Opium administration is only concerned with import trade. The cultivation of the poppy is prohibited in the district, and there is no export traffic. The greater part of the opium consumed comes from Sháhpur, the Sháhpur opium being cheapest. Of late much has also been brought from the Hill States, the popularity of this species being attributed rather to its intoxicating powers than to any intrinsic superiority. A little Excise opium is consumed, but from Málwá hardly any is imported. *Bhang* and *charas* are the only hemp drugs used at all extensively in the district. Of these the former grows wild in the sub-montane regions of the Jhelum and Pind Dádan Khán Tahsils, and this local produce is used largely by the licensed vendors, though not exclusively: in bad seasons a considerable quantity has been imported from Hoshiárpur and Ráwalpindi. There are no warehouses for *bhang* or *charas* in the district.

The total annual consumption of opium and hemp drugs in seers during recent years is tabulated below:—

Years.	Opium.	Bhang.	Charas.
1901-02	512	876	438
1902-03	877	882	559
1903-04	677	672	478

The incidence of the gross receipts from exciseable articles on each 10,000 of the population in rupees was as follows:—

Years.	Liquor.	Opium.	Drugs.
1901-02	179	193	214
1902-03	59	64	64
1903-04	23	27	33

The consumption per head of population during the same years:—

Years.	Liquor.	Opium.	Charas.	Bhang.
	Oz.	Tolas.	Tolas.	Tolas.
1901-02	1.3	.06	.05	.1
1902-03	1.3	.09	.07	.1
1903-04	1.4	.09	.06	.03

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Miscellaneous
Revenue.

Excise.

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III, D.Miscellaneous
Revenue.

Income tax.

The Income Tax administration presents few features of interest, and by comparison with many other districts the collections are inconsiderable. Incomes are assessed only under Parts I and IV of the Act, as the district figures include no contributions from Companies or Securities. The total amount is under Rs. 15,000, and of this as much as Rs. 4,939 was collected in 1904-05 from Jhelum City alone. This sum, however, is inclusive of a large item paid annually by the Kashmir Darbār on the sales of timber brought down by river for disposal at Jhelum. The receipts under this head form almost the only notable feature in the administration of the Income Tax Act. The large majority of assesseees was, and still is, composed of small bankers and money-lenders in the villages. In 1902-03 these amounted to 698, but the passing of Act XI of 1903 reduced their numbers to 217. The further reduction in the number of assesseees in 1904-05 is due to the exclusion of Tallagang at that time from the district. The work of the Department is easily carried on by a single *Moharrir* under the control of the Deputy Commissioner.

The following table exhibits some of the more important figures in connection with its administration:—

Years.	Number of assesseees.	Net collections.	Incidence per head of population.
		Rs.	
1902-03	1,064	23,825	039
1903-04	349	14,497	024
1904-05	312	14,238	028

Stamps.

The records for the receipts and charges on Stamps for the past three years are given below and show a substantial income. During the year 1904-05, a considerable diminution will be observed. This is due chiefly to the transfer of the Tallagang Tahsil to the Attock District, but in a measure also to the passing of the Land Alienation Act, which has very perceptibly reduced not only litigation but also the demand for stamps to be used on bonds. The population has moreover been diminished of late by the visitations of plague. The vend premises are frequently inspected by the Excise *Dárogha*, who acts under the supervision of the Deputy Commissioner: no prosecutions for fraud or embezzlement have occurred within recent years:—

Years.	Number of licensed vendors.	Gross receipts.	Charges.	Net receipts.
		Rs.	Rs.	Rs.
1902-03	83	1,15,652	4,832	1,10,820
1903-04	85	1,03,973	3,719	1,00,254
1904-05	68	83,415	3,199	80,216

A number of items remain which may be classed as miscellaneous revenue. The figures indicate the average annual collection under each head:—

Miscellaneous Revenue.

	Rs.
Talbána on warrants	343
Málikána or proprietary dues	256
Gold washings	397
Water mills on Government lands	466
Revenue fines and forfeitures	858
Other items of miscellaneous Land Revenue	2,428

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III. E.

Local and
Municipal
Government

Miscellaneous
Revenue.

Section E.—Local and Municipal Government.

There are now only two Municipalities in the District, those of Jhelum and Pind Dádan Khán. Both are second class Municipalities and were constituted as such in 1867. There were formerly Municipalities at Tallagang and Chakwál, but these were both abolished many years ago. The latter place has, however, been a Notified Area since 1901.

Municipali-
ties.

The following table shows the variations in population during the most recent years of census:—

Population.

Year.	1881.	1891.	1901.
Jhelum	21,107	2,748	14,951
Pind Dádan Khán	16,724	15,055	13,770
Chakwál	5,717	6,070	6,520

It will be seen that the population has varied very considerably at Jhelum. The large numbers in 1881 are to be attributed to the fact that the town was then the terminus of the railway and the base of operations for the Afghan war. With the extension of the Railway the superfluous population gradually melted away and the numbers became normal. The figures for Pind Dádan Khán show a steady decrease owing to the gradual diversion of the salt traffic to Khewra. At Chakwál alone has there been a consistent increase.

At Jhelum the President of the Municipal Committee is usually the District Judge, at Pind Dádan Khán the Sub-divisional Officer is president *ex-officio* and the Tahsildár is usually Vice-President. The only tax levied is the octroi and at both places there is a bonded warehouse for the benefit of through trade, which is thus exempted from this imposition. The bulk of the Municipal income is derived from octroi, but other miscellaneous sources also contribute largely such as cattle pounds, rents of lands, conservancy and dispensary receipts, school fees, markets and slaughter-houses, bonded ware-

Sources of
income.

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III. E.

houses, sale of trees and license fees for plying carriages and the sale of kerosine.

Local and
Municipal
GovernmentHheads of
Expenditure.

The principal items of expenditure are those usually connected with Municipal Administration, such as lighting, police, water supply, drainage, conservancy, dispensaries, arboriculture, markets and slaughter-houses, vaccination, registration of births and deaths, engineering, roads and buildings, schools, and prevention of fire. Neither of the municipalities have attempted any very ambitious works of public utility. At Jhelum a *ghāt*, known as the Jubilee *ghāt* was presented to the city by the munificence of four native gentlemen some years ago and is now maintained by the Municipal Committee. A drainage scheme which is to cost Rs. 15,000 is also sanctioned, but its execution is delayed for want of funds.

Drainage and
water supply
at Pind
Dādan Khān.

A similar project has been sanctioned for Pind Dādan Khān, but the low level of the city and its proximity to the river make the ultimate success of the scheme improbable or at least doubtful. The water supply of Pind Dādan Khān is very uncertain and this too has engaged the attention of the municipality from time to time. As far back as 1868 Mr. Moore, Sub-divisional Officer, had an Inundation Canal constructed with the object of filling the seven large tanks in the town and supplementing the otherwise bad supply. More recently the canal was made over to the Irrigation Department, but the experiment has hardly proved successful, and it is probable that it will be returned before long to the municipality. For drinking water the town is entirely dependent on a large well situated at a considerable distance from the town and worked by a single pair of bullocks, the water from which, though good in quality, is very insufficient in quantity. A new market house, Agnew Ganj, was also recently built outside municipal limits to encourage trade, but the results have not as yet been very favourable.

Floods, &c.

Both municipalities, but more especially Pind Dādan Khān, are from their situation liable to disastrous floods. In 1893 the water reached the level of the town at Jhelum and submerged a large part of Pind Dādan Khān. In 1905 at the latter place 300 houses and much municipal property were destroyed by a similar visitation, while a fire before this had levelled 80 buildings to the ground. In recent years plague has largely decimated both towns in spite of energetic precautions.

District
Board.

The District Board performs for the district at large many of the functions, for which the towns are indebted to their Municipal Committees. It consists of the principal executive officials and of the leading men of the countryside, who are nominated by Government. The Deputy Commissioner is president, but most of the practical work is done by the Tahsildars in their respective Tahsils. The Board controls the District Fund, which is now largely composed of the income derived from the Local Rate. Until the

passing of Act XX of 1883 separate cesses used to be levied for the various objects of the Board's concern, such as the Road cess, the Dák cess, the Education cess; but they have now all been merged, in a single charge which is recovered from the zamindárs in addition to the Land Revenue. Other sources of income are cattle pounds, school fees, garden receipts, cattle fairs, ferries, sale of trees, stage bungalows and *serais*, and *nazul* properties. The Fund is mainly spent on repairs of roads, buildings and bridges, cattle pounds, grants in aid for scholarships and other educational purposes, dispensaries, arboriculture and gardens, veterinary expenses, pauper burials and cremation, and other similar charges.

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Local and
Municipal
Government

District
Board.

At the Tahsil headquarters horse and donkey stallions are kept for breeding purposes and this innovation is having excellent results in the district.

The following tables show the constitution, income, and expenditure of the Municipal and District Boards:—

Constitu-
tion, Income
and Expendi-
ture.

A.—Constitution of Committees.

Name of Committee.	Total number of members.	Ex-officio.	Nominated.	Elected.	Official.	Non-official.	European.	Native.
Jhelum	15	2	3	10	4	11	1	14
Pind Dádan Khán ..	15	2	3	10	3	12	1	14
Chakwál	8	4	4	...	4	4	1	7
District Board	72	9	63	...	9	63	3	69

B.—Income and Expenditure.

Year.	1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Jhelum Municipality ... {						
Income	35,726	34,256	36,080	37,370	34,211	37,360
Expenditure ...	28,936	33,962	34,236	46,750	41,039	35,151
Incidence per head	2-2-6	1-12-1	1-10-2	1-11-1	1-6-10	1-9-2
P. D. Khán Municipality {						
Income	28,130	26,407	28,756	27,287	22,332	23,477
Expenditure ...	24,728	29,778	27,294	25,509	27,036	27,020
Incidence per head	1-9-11	1-7-11	1-12-7	1-10-7	1-3-10	1-4-0
Chakwál Notified Area .. {						
Income ... ..	...	...	...	...	1,927	1,944
Expenditure ...	...	...	...	...	1,690	1,667
Incidence per head	...	...	...	...	0-4-7	0-4-7
District Board {						
Income	66,624	62,288	1,09,069	86,827	1,12,178	97,876
Expenditure ...	81,259	71,385	1,04,806	91,090	97,900	80,120
Incidence per head	0-1-10	0-1-8	0-3-1	0-2-5	0-3-2	0-3-4

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III, F.Public
Works.

Railways.

Section F.—Public Works.

The Main Line of the North-Western Railway crosses the district between Jhelum and Sohāwa, this section being managed by the District Traffic Superintendent, Ráwalpindi. Further west, the Sind-Ságar branch, which leaves the Main Line at Lála Músa, enters the district near Haranpur and proceeds towards Khusháb, after throwing off branches to Dandot and Bághanwála. The Jhelum River is twice crossed by bridges, at Jhelum and Haranpur, of which the former also carries the Grand Trunk Road. The Engineering Department of the Railway has an Executive Engineer stationed at Jhelum, and generally an Assistant also.

Roads.

The Grand Trunk Road, which follows the Railway for the most part, is controlled, so far as this district is concerned, by the Executive Engineer, Provincial Division, Public Works Department, Ráwalpindi, through an Assistant at Jhelum. The same authority has charge of the Pind Dádan Khán-Chakwál-Mandra road, as well as the various Public Buildings not maintained by the Deputy Commissioner. The most important of these are the military buildings in the Cantonment, and the Jail and Kacheri buildings in the Civil Lines.

Telegraphs
and Post
Offices.

The Telegraph Lines are controlled by the Assistant Telegraph Superintendent at Ráwalpindi, and the Post Offices by the Superintendent of Post Offices at Jhelum, which is now the headquarters of the Sind Ságar Postal Division.

Mines.

The head of the Salt Department, whose operations in the district are more fully dealt with in another chapter, is the Assistant Commissioner, Northern India Salt Revenue, Khewra; and the Colliery at Dandot has its own separate Executive Engineer, who is stationed there as Mining Manager.

Section G.—Army.

Jhelum
Cantonment.

The only Military Station in the district is the Jhelum Cantonment, which is situated about a mile from the town. The normal garrison formerly consisted of a Native Cavalry Regiment and two Native Infantry Regiments: but the recent redistribution scheme has almost doubled the number of troops by the addition of two more Native Infantry Regiments. There is also a Camel Corps and a Mule Corps. New lines have recently been constructed for the latter near the Encamping Ground on the Grand Trunk Road, and extensive buildings are in preparation for the new regiments towards Sangof. The strength of the garrison is about 91 European Officers, and 3,659 Native combatant ranks. The Cantonment forms part of the Ráwalpindi Military District and is under the command of the General Officer commanding there.

The local affairs of the Cantonment are managed by a Cantonment Committee under the Presidency of the Colonel commanding the station.

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—
Army.

Recruiting.

The district is perhaps most conspicuous, however, from the military point of view, from the fact that the headquarters of the Recruiting Staff for Punjābi Musalmāns are at Jhelum. Captain Jackson, 90th Punjābis, has been kind enough to furnish the following very full account of the field of operations covered by the Officers under his control:—

“The headquarters of the Recruiting staff office was transferred from Rāwalpindi to Jhelum in 1897. With the reconstitution of some of the Bombay and Madrás Regiments and the formation of mule corps and cadres, a very large demand for Punjābi Musalmāns was created, and the numbers enlisted annually have greatly increased during the last ten years. Punjābi Musalmān recruits were formerly taken chiefly from the Rāwalpindi and Jhelum districts, and recruiting was practically restricted to comparatively few tribes of high social standing and reputation. During the last decade, however, the whole of the Punjab has been laid under contribution and almost every tribe and clan has been exploited, with varying success, from the Indus to the Sutlej. The numbers for the last ten years are as follows:—

Numbers.

1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
338	1,084	1,276	902	1,099	745	2,159	2,485	4,384	4,358	3,086

These figures require some explanation. From 1898-1900, the decrease in the number enlisted was due to scarcity of crops. This at first sight appears exactly the opposite of what might be expected. As a rule famine tends to drive people into employment, and particularly into the army. In a time of scarcity, however, the Sepoy is by no means anxious to take his discharge, and those intending to join the Reserve postpone the event until a more favourable season; consequently there are fewer vacancies to be filled, and less demand for recruits. The large increase of later years is due to the reconstitution of Madrás regiments and the Transport Service. The decrease in 1905 was due to a reduction in the demand for recruits owing to the requirements of the newly formed regiments and mule corps being satisfied. It is estimated that the numbers enlisted in the present year will exceed all previous years owing to a demand of 400 Punjābi Musalmāns for the Somāliland Protectorate, the re-arming of the artillery with quick firing guns, which will necessitate a third line of wagons, and the formation of a few more squadrons of cavalry.

In calculating the numbers of each tribe available, or likely to enlist, experience shows that 2 per cent. of the total male population is the outside limit. The standard of physique is high, the age required is 16-19, and the medical examination is exceedingly strict. The actual averages during the last few years are:—

Age.	Height.	Minimum Chest Measurement.
17-19	5 feet 8 inches.	34 inches.

The classes enlisted are agriculturists only. It is true that artisans and even menials occasionally succeed in enlisting, but this is due to the

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carelessness, and unfortunately in some cases to the venality, of the Patwáris and Lambardárs, upon whom falls the duty of verifying the caste and antecedents of all recruits enlisted, under the orders of the civil officers of districts.

Janjúas.

From the recruiting records it appears that the Jhelum District was formerly the recruiting ground *par excellence* for Punjábí Musalmáns. The Janjúas of the Salt Range are considered second to none in martial spirit and tradition, and with the Gakkhars and Tiwánás form the *élite* of the Punjábí Musalmáns. They are held to have been over recruited in recent years, but it is doubtful whether this is really the case. They certainly have supplied large numbers of recruits to the army, but their physique is somewhat less robust than that of neighbouring tribes, and consequently recruiting parties find greater difficulty in getting sufficient numbers of their caste up to the high standard of physique required. It is not that the Janjúá recruit turns out physically inferior to other classes, but owing to the reluctance of the "Rájpút" to delve or spin, he is, when caught at an age of about 17, less developed than an Awán who has been clodhopping for years. They are particular as to the regiments in which they take service, and would not enlist readily into a company which was not commanded by a Sayyad, a Gakkhar, a Janjúá, or some tribe of equal standing to their own. They are, like all natives, anxious to enlist in cavalry, and make good riders and good horse masters.

Gakkhars.

These remarks apply equally to the Gakkhars. They do not care to enlist in regiments where the classes are much mixed, but will come forward readily enough where their claims to social position and pride of race find recognition and sympathy within the bounds of impartial discipline.

Awáns.

The Awáns of the Salt Range, including the Sún *iláka* of the Khusháb Tahsíl and the Chakwál Tahsíl, are practically the backbone of Punjábí Musalmán recruiting. They are men of splendid physique and come forward readily for every branch of the service. They are perhaps not so intelligent as the Janjúas, and cavalry officers complain that though plucky riders they are heavy handed. Nevertheless they supply a large number of recruits to the cavalry, and there is perhaps not a single Punjábí Musalmán squadron or company in the service, except the specially constituted regiments, which does not contain representatives of these Awáns.

Máirs,
Kassars,
Kahúts.

The Chakwál Tahsíl contains three important clans, the Máir, the Kassar and the Kahút, who are fast rising in popularity as soldiers, and who afford a very promising field for future recruiting. Like the Awáns they are of somewhat slow intelligence and given to faction feuds; they are also supposed to be of an exceedingly jealous and vindictive temperament, but there has been no trouble on this score in regiments which enlist them. In physique and hardihood they are unsurpassed.

Mughals.

The Mughals of Jhelum do not now enlist as readily as in former days. The true Mughals (Chughatta and Barlás) are entitled to rank with the best as regards martial spirit, pride of race, and the tradition of a distinguished and brilliant past. Unfortunately a large number of minor tribes have assumed the title of Mughal and enlisting as such, have brought the proud name of the Mughals into some disfavour. With the Chughatta and Barlás, the Kayáni might fairly be included, and the Phaphras and Lillas, though they have no sort of title in reality to the name of Mughal, make good soldiers; but a large number of insignificant tribes with no claims to a military reputation have assumed Mughal

descent, and it is necessary, in consequence, to be especially careful in enlisting a man who calls himself a Mughal. As an instance of the high repute in which the Mughal is held, it is worth mentioning that the Ghebas, who could claim cousinship with the Tiwánás of Sháh-púr and the Sials of Jhang, and are in all probability Panwár Rájpúts, now call themselves Mughals.

The Rájpúts and Jats are largely enlisted and make good soldiers. The number of clans is legion, and it is impossible to draw the line between a Rájpút and a Jat. The Bhattís are by far the most numerous, both Rájpút and Jat. The Chauháns and the Manhás are the next most important; of these few, if any, call themselves Jats. The Jat tribes enlisted are mainly the Kaniál and Tárar. They are men of excellent physique, and make splendid soldiers, but as long as Janjúas, Gakkhars, Mughals and Awáns can be obtained, they are not much in demand. They are largely enlisted in mule corps, and should make most efficient muleteers.

A few Chibs are found in the Jhelum District and a few Sayyads and Qureshis are taken. The latter are keen on service in the army, but at present do not find favour with commanding officers.

The Hindús enlisted are Muhiál Brahmans and Khatris, of whom a few are required, chiefly by cavalry regiments.

It is probable that nothing shews up the tribal organization of the Punjábí Musalmáns so distinctly as recruiting for the army, and this is particularly marked in the trans-Jhelum districts. This organization is being broken down by our system of Government, which treats Rájpút and Jat, Gakkhar and Gujar, Mughal and *kamin* with strict impartiality. It is impossible in the scope of notes of this nature to enter into the details of the origin of the numerous tribes; it is sufficient to say that each tribe has a history of its own, hopelessly inter-mixed with legendary matters and religious superstitions in which traces of Brahmanism, Hinduism and Buddhism are abundant. This confusion of fact with fiction has reproduced a feature characteristic of many primitive communities, namely, the adoption of an artificial ancestry, which here appears in the tendency of the Punjábí Musalmán to base his origin on the Arab founders of his religion, or the Mughal conquerors of his country. It is also interesting to note the effect of the varying conditions, under which these tribes have lived, upon their social and tribal organization. Before the invasion of the Sikhs the Punjábí Musalmáns were divided into distinct tribes in a continual state of feud with each other. The necessity for each tribe to combine either for protection or aggression kept them sharply distinct, and no man had any doubt, as to which tribe he belonged. The conquests of the Sikhs largely put an end to these inter-tribal feuds, and the antagonistic race feeling died down, though it still left that pride of birth and race, for which the Punjábí Musalmán is notorious. The advent of British rule not only wholly stopped the feuds, but introduced a new element of indifference to social precedence, based only in descent, when it was unaccompanied by some collateral recommendation for zeal or industry. The high born Rájpút, who considered himself demeaned by putting his hand to the plough and preferred semi-starvation as an alternative, was somewhat coldly received by the English, who depend chiefly on agriculture for the revenue of the country.

It is astonishing to note how, within the last twenty years, the various tribes have adopted some class, other than the true one, to suit their own particular fancy. For example, the Máirs, Kassars and Kahúts of the Chakwál Tahsil are sprung from some common stock, probably Jat. They live together in a comparatively small area, and their language, customs,

CHAP.
III. G.
Army.

Rájpúts, Jats.

Chibs, Sayyads, Qureshis.

Hindús.

Tribal organization.

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III. H.Police and
Jails.Tribal or
organisation.

and character are identical. Yet the Máir now calls himself a Rájpút, the Kassar has become a Mughal, and the Kahút announces himself to be "Asli" or descended from some original stock of supernatural genesis. Similarly the Khokhar is now an Arab descended from Kutb Sháh, like the Awán, the Gheba is a Mughal, and so on. When a man is asked to name the tribe to which he belongs, his reply may follow one of several lines. He may state his tribe and origin as:—Janjúa Rájpút. He may give his tribe and clan as:—Chib Mamdál. Sometimes all three as:—Máir-Manhás-Rájpút. He sometimes does not know it. He may state his tribe, and claim at the same time social standing equal to some of those higher in the social scale, as:—Awán Rájpút, which, though obviously paradoxical, is quite intelligible, in that he wishes to state that he is an Awán and enjoys rank equal to a Rájpút. As a sign of the times it is worthy of mention that a Janjúa once said, when asked his caste, "I am the son of a District *Darbári* and *Kúrsi Nashín*."

Section H.—Police and Jails.

Police.

The Police force for the District is controlled by a Superintendent of Police at headquarters, who is subordinate to the Deputy Inspector General of the Western Range, whose headquarters are at Ráwalpindi. An Assistant Superintendent is sanctioned for the Pind Dádan Khán sub-division, but the charge is most frequently held by an Inspector. There are three kinds of Police in the District, which may be classified as follows:—

Class of Police.	Total strength.	DISTRIBUTION.	
		Standing Guards.	Protection and Detection.
District (Imperial)	402	62	340
Cantonment	8	...	8
Municipal	91	...	91
Total	501	62	439

These figures include the Tallagang Tahsíl but take no account of the Railway Police, who are separately organized under the control of the Inspector General of Railway Police, Lahore.

In addition to the regular police force, the village *chaukidárs* form a body of rural police. They are, as elsewhere, constituted under the *chaukidári* rules framed under Act IV of 1872, and are paid Rs. 3 *per mensem* by the villagers. As a rule their cost is defrayed from a *chaukidára*, to which each of the villagers contributes according to his circumstances, but sometimes it is partly met from the *kamiána* cess levied from the village *kamins*. There are 612 *chaukidárs* and 15 *daffadárs*, in the district. The constables are recruited by the Superintendent of Police, who is influenced in his selection chiefly by considerations of caste and

physique. In regard to the latter a minimum standard of 5 feet 7 inches for height, and 33 inches for chest measurement, has been adopted. The recruits on being enrolled undergo a course of training for 3 months in the Police lines. In addition to this, one constable is detached from each Police Station in the District every month for instruction in drill and law at headquarters, while four constables are sent annually to the Police training school at Phillour to undergo a more liberal course in the same subjects. There are 15 Rural Police Stations and two in the Municipalities of Jhelum and Pind Dádan Khán, besides the Police lines at headquarters. Their limits correspond as far as possible with Tahsíl boundaries, but in spite of a recent revision the coincidence is still incomplete. Thus Kallar Kahár Thána is partly in Pind Dádan Khán Tahsíl and partly in Chakwál, Jalálpur Thána is partly in Pind Dádan Khán and partly in Jhelum, and these are not the only discrepancies. The Police Stations with their subordinate outposts are classified as follows:—

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III. H.Police and
Jails.

Police.

Tahsils,	Thánas,	Outposts included in the Thána.
Jhelum	1 Jhelum Sadr	{ 1 Cantonment. 2 Camping ground. 3 Ferry.
	2 Jhelum Police Lines.	
	3 Jhelum City.	
	4 Dína.	
	5 Soháwa.	
	6 Domeli.	
Pind Dádan Khán...	7 Pind Dádan Khán, Sadr.	
	8 Do. City.	
	9 Choa Saidan Sháh.	
	10 Lilla.	
	11 Jalálpur.	
Chakwál	12 Chakwál.	
	13 Duhman.	
	14 Kallar Kahár	Bhuchhál Kalán.
	15 Níla.	
Tallagaog	16 Tallagaog.	
	17 Láwa.	
	18 Tamman.	

CHAP.
III. H.Police and
Jails.Criminal
Tribes; detec-
tion of crime.

There is a cattle pound at each Thána and also at Dhariála Jálap, Bhon, Dalwál, Sangoí, Sáúwál, Dhudiál, Núrpur, Ahmad-ábád, Bheth.

There are no criminal tribes in the District, though 3 Sásís are registered under the Criminal Tribes Act. Violent crime is very rife, as appears from the remarks under the heading "Criminal Justice", and successful investigation is a matter of difficulty. Owing to the physical contour of the District it is not easy for the superior Police officials to move about freely, and much depends on the assistance afforded in investigations by the leading residents of the locality affected, though caste ties frequently operate to hinder any such assistance being rendered. In the case of habitual criminals good results have flowed from the system of recording finger impressions of criminals. These are recorded by qualified officers, who take not less than three sets of impressions in each case. One of these is registered in the office of the Superintendent of Police, another is deposited in the central Bureau at Phillour, and the third in the District Jail at Jhelum.

Jail.

There is only one Jail in the District. This is the District Jail at Jhelum.

It is 4th class, and has accommodation for only 333 men and 13 women. The Jail is under the charge of the Civil Surgeon. The buildings are spacious and well situated to the north-west of the civil offices: the health of the prisoners is consequently good, the yearly mortality being only two or three. By far the greater portion of the prisoners come from the agricultural tribes, a fact which follows naturally from the absence of large towns in the District. The Jail industries are insignificant: coarse dusters, country paper, oil and *bán* are the principal articles of manufacture. The former is sold to private purchasers, while the latter is mostly employed in the Government offices; oil is used in the Jail and sold to a very small extent: *bán* is used for the *charpais* of the warders. The following table shows some of the most interesting figures in connection with the administration of the Jail:—

Years under report.						Daily average number of prisoners.	Total cost of maintenance.	Cost of maintaining each prisoner.	Profits of Jail industries.
							Rs.	Rs.	Rs.
1900	...	...	...	...	...	261	19,562	70	2,014
1901	...	...	...	...	...	208	15,221	73	1,170
1902	...	...	...	...	...	227	16,348	72	1,124
1903	...	...	...	...	...	258	17,669	68	1,183
1904	...	...	...	...	...	171	14,470	84	1,594
1905	...	...	...	...	...	161	13,194	82	2,421

Section I.—Education and Literacy.

Education in this District, as in others, is partly indigenous, that is to say merely continued on the lines indicated by tradition before the advent of the British rule, partly modern and scientific. There are a large number of schools of both kinds. The former are practically unorganized and uncontrolled; the latter, together with a few aided indigenous schools, are under the direct administration of a department of Government. Both possess importance; the former, if less effective, have nevertheless some antiquarian interest; the latter are without these picturesque features, but on the other hand their existence is one of the essential elements in the political system.

CHAP.
III. I.
—
Education
and
Literacy.

In this section the unaided indigenous schools are described first, and the note which follows has been kindly supplied by Shekh Muhammad Dín, of the Jhelum Bar:—

Unaided
Indigenous
Schools.

"The total population of the district in 1881 was 589,373; of these 17,336 could read and write or were under instruction. By 1891 the population had increased to 609,056, while the number of literate persons rose to 24,539. The 1901 statistics showed that the population had decreased since 1891, the numbers having fallen to 594,018, but there was nevertheless a slight increase in the number of literate persons, which then amounted to 25,693. The figures in the table which follows will show at a glance the number of educated persons in every 10,000 of each sex according to the Census Returns of 1881, 1891 and 1901, respectively:—

Statistics
of Literacy.

	1881.	1891.	1901.
Males	546	750	820
Females	87	24	36

In the last Census, of the educated Classes, 11,969 were Hindús (11,587 males and 382 females) and 9,071 Musalmáns (8,715 males and 356 females). These figures are remarkable, when it is observed that the entire Hindú population only amounts to 51,801, while the Musalmáns number 526,725. This total includes 1,885 males and 87 females who could read English, 127 being Europeans.

It will thus appear that education has been less progressive between 1891 and 1901 than it was between 1881 and 1891. This can to a certain extent be explained by a sentence from the Census Report of the Punjab for 1901, Chapter V, paragraph II, which reads as follows:—"The tendency (in 1901) apparently was to record mere beginners as illiterate, because in this, as in other matters, the instructions issued for the recent census were read in the light of those issued on

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Literacy.

previous occasions, and as the rule to record those under instruction was omitted it was inferred that beginners were not to be recorded." It may be mentioned in passing that there are two native newspapers published at Jhelum, the *Sirāj-ul-Akhhār* and the *Mohyāl Gazette*, which are however of no great consequence.

The Indigen-
ous Schools.

There are no *maktabs* of the old type in the district. Those which existed some time back are now extinct, and their place has been taken either by the Board Schools or indigenous schools started after their model. The latter are now conducted by persons, who formerly used to teach in the *maktabs*, but finding the tendency of the people in favour of the Board Schools on the increase could not compete and were obliged to adopt the new system. Unable to find employment in the Education Department they started indigenous schools of their own in the mosques, where pupils are taught up to the Vth Standard, though the curricula are lighter than in the Board Schools. Some of them have recently even built schools at their own cost and removed their pupils from the mosques. In these schools Musalmāns and Hindūs join equally, as no religious instruction is imparted during school hours, and they differ only slightly from the regular Boards Schools, to which the students can easily pass on.

The latest returns, which do not include the Tallagang Tahsíl, show the number of unaided indigenous schools to be 22. Circumstances, among which may be mentioned their supervision by the Education Department and the introduction of regular courses of instruction prescribed by that department, have contributed to increase both the popularity and the efficiency of these schools, to which it is now proposed to extend the Grant-in-Aid system. The Inspector of the Circle remarked very recently that both in numbers and instruction they were on the whole the best in the Circle.

Statistics
of Private
Schools.

The private schools numbered 216 in 1905-06, and they were attended by about 3,800 pupils. In one of them Arabic is taught, in another Persian and in a third Sanskrit. In 15 Urdú is the language employed, in 22 Gurmukhi, 2 are for instruction in Landa Mahájani; while the remaining 174 are attended by 3,017 pupils, who learn the *Qurán* by rote.

System of
instruction in
the mosques.

The sort of instruction imparted in the mosques at the present day can hardly be classified, and it is also very difficult to call it either secular or religious, because it is both at once. However, for the sake of convenience it can be said to comprise three stages or standards, Rudimentary, Lower and Higher. At the Rudimentary stage both the males and females of all classes take part equally. It consists in reading the *Qurán* without any attempt to understand its meaning and the study of a few small books in Punjābi on the elements of the Muhammadan theology, ceremonial and jurisprudence. Some students generally of the male class are made to learn the *Qurán* by heart. Ever since the time of the Prophet this practise of learning the *Qurán* by heart has prevailed amongst Musalmāns: hence their boast that not a single verse of their Holy Book has been changed. Every year thousands of people learn the book by heart without knowing its meaning, and once a year, in the month of *Ramzán*, they assemble in large numbers and repeat it at the time of evening prayer. The practice, if not otherwise advantageous, remarkably develops the memory of the person who learns the book. The Jhelum District, and especially the Chakwāl and Tallagang Tahsils, are celebrated amongst Musalmāns as pro-

ducing a large number of "Háfizes", for so these persons are called. At the same time they can scarcely be called literate. In the case of male children this form of tuition is conducted by the *Imám* of the mosque in person, in the case of female children by his wife, their charges being practically nominal. It is very curious that no classification worth the name is attempted, though there may be as many as 50 children in one mosque, each of whom is receiving separate attention from the teacher.

CHAP. III. I.

Education and Literacy.

System of
instruction in
the mosques.

The Lower Standard begins with the reading of small selections of Persian poetry, such as *Karima*, and writing. The course takes seven years; the most advanced students scarcely learn to read and write, and when they leave the mosque after wasting so much of their early life they are no better than their illiterate brethren. They do no Arithmetic and know nothing of Accounts, Geography or History. A little letter writing is attempted.

At the Higher Standard the scholars are divided into two divisions. The first consists of those who desire only the secular education which is confined to Persian; the second of those who wish to acquire a religious as well as a secular education. The highest ambition of the first class is to be able to read and write fluently: the latter have to study both Arabic and Persian and aspire in time to the position of an *Imám* of the mosque or a native physician. The pupils of the first division begin with the *Gulistán* of Sa'adí and finish only when they have read the *Bostán*, *Zulaikhá*, *Sikandar Náma*, a course which may take years to complete. The pupils of the second division begin early to acquire a knowledge of Arabic grammar. After this they proceed to Logic and Philosophy and along with those subjects they learn *tafsir hadis* and *fiqh*. There are no regular classes for these advanced students, who are consequently compelled to wander about from place to place in search of proper instruction. There are no *waqfs* or endowments in the district, and these scholars and teachers invariably depend upon the charity of the people of the village or town in which they live.

The secret of the success of the mosque instruction in developing the memory lies in the slow progress at the beginning, which ensures a sound foundation, and the constant repetition of the same book.

Agriculturists' children generally receive Rudimentary education, but a fair number of them now go to the Board and Mission Schools. Some of them even go in for higher education and obtain degrees. Traders' children also receive Rudimentary instruction as far as the religious side is concerned. Their system of Accounts and Book-keeping they learn from their fathers or relations, the script employed being generally *Landa Hindí*. There is no regular institution for imparting such instruction in the district, except a *Mahájani* branch at the Municipal Board High School at Pind Dádan Khán. Artisans' children generally receive no education worth the name. Very few of them undergo even Rudimentary education.

Female education is very backward in the district. There are only seven regular indigenous schools for girls: four of them are for Hindus and the instruction in these is given in Gurmukhi. The other three are for Muhammadan girls, who learn in Urdú. Otherwise they have to be content with the Rudimentary education described above, or acquire what they can at the house of the *Bibi*. Latterly there has also been a tendency to send girls to the Boys' indigenous schools, and some persons have begun to employ private teachers for their daughters. But it is to be

Female
Indigenous
education.

CHAP.
III.: I.Education
and
Literacy.The Govern-
ment system.

feared that the *pardah* system and the paucity of qualified female teachers will for sometime stand in the way of substantial progress in the direction of female education."

The Government system of education comprises High, Middle and Primary Schools; all are under the general control of the Inspector of Schools, Ráwalpindi Circle, to whom, as well as to the Deputy Commissioner, the District Inspector of Schools is subordinate. The following account has been brought up to date as far as possible. It includes the Tallagang Tahsíl, which now forms part of the Attock District.

High School.

The High Schools are three in number, a Government School at Jhelum, a Board School at Pind Dádan Khán, and an Aided School at Dalwál under the management of the Catholic Mission there.

Middle
Schools.

The Middle Schools are situated at Tallagang, Chakwál, Jhelum, Sangói, Kála, Rohtás and Bhon. The first five of these are Anglo-Vernacular; the Schools at Chakwál and Tallagang are under the management of the District Board; those at Jhelum and Sangói are Aided Schools, controlled by the American United Presbyterian Mission at the former place. The School at Kála was founded by the late Sardár Bahádúr Rattan Singh and is also an Aided one. The two Schools at Rohtás and Bhon are under the District Board; they differ from the other Middle Schools in being Vernacular only.

Primary
Schools.

The Primary Board Schools are at Chakrí, Bheth, Chutála, Domeli, Chak Abdul Kháliq, Bishandaur, Maira, Malot, Lehri, Surgdhan, Baragáwah, Akra Mohra, Dárápur, Tahlianwála, Saila, Sultánpur, Padrí, Dulmiál, Pindí Saidpur, Haranpur, Pinnanwál Waháli, Núrpur, Sáúwál, Dhariála Jálap, Ahmadábád, Khewra, Dhuddí Phaphra, Kandwál, Bhuchál Kalán, Ara, Hasola, Kariála, Muríd, Padshábání, Balkassar, Dulla, Dharuggí Rúpwal, Dhudiál, Ohdarwál, Sadwál, Munde, Mangwál, Láwa, Pachnand, Chinjí, Pihra Fattiál, Kot Sárang, Thohá Mahram Khán, Dhurnal, Tráp and Jabbi. Of these the Schools at Sultánpur, Padrí, Bhuchál Kalán, Ara, Jabbi and Mangwál are *zamíndári* Schools; the remainder are ordinary Primary Schools. Besides these there are 48 aided Primary Schools, of which one is a *zamíndári* School, one an ordinary Primary School, and all the rest indigenous schools, where the courses of instruction are somewhat lighter.

Female
education.

Female education, as has been already indicated, is still in a very backward stage. The girls' schools, which number 18, are all Primary, and the average daily attendance is not large. Those at Jhelum, Sangói, Bishandaur, Saidpur, Bhon, Chakwál, Balkassar, Dhudiál and Sar Kalán are aided by Government; there is also an ordinary Primary Mission School at Jhelum, and indigenous schools at Haranpur, Kála and Chakwál, all of which receive aid from Government. Two schools for girls at Tallagang and one each

at Rohtás, Jabbi, and Pind Dádan Khán are maintained from District Board funds. Quite recently a School has been opened at Pind Dádan Khán for Hindú girls, which is also maintained by the District Board.

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III. I.
Education
and
Literacy.

Description
of most nota-
ble schools.

The more notable of these schools deserve some special mention. The most important is the Government High School at Jhelum. It was founded as a Vernacular School in 1855. In 1860 it became a District School, and an English Department was added to it. In 1861 it was made over to the Mission, and Government resumed charge of it in 1870. Sixteen years later it was placed under the control of the Municipal Committee, and in 1891 it was raised to the status of a High School. During the last 5 years Sanskrit and Arabic have been regularly taught. Recently, in 1905, the school was resumed again by Government.

The High School at Pind Dádan Khán was formerly an Anglo-Vernacular Middle School; it became a High School in November, 1904.

The Dalwál Mission School, or to give its full name, the Salt Range High School, is perhaps the most interesting in the District. It was formerly a Board Primary School: in January, 1900, it was handed over to the Capuchin Mission of Lahore, and it became a High School in April, 1903. It is situated at an altitude of 2,400 feet, in a climate which is never rendered intolerable by excessive heat, and the boys enjoy considerable immunity from sickness. There are two boarding houses, for Christians and non-Christians, and the school is generally in a very flourishing condition.

Of the Middle Schools, the Board School at Chakwál is the most flourishing in the District. It was formerly a Vernacular School, but an English Department was added in 1898.

The school at Tallagang was started as a village Primary School in 1856. It was raised to the status of a Vernacular Middle School in 1881, and became Anglo-Vernacular in 1894.

There is an Anglo-Vernacular Primary School at Dandot, attended by about 40 boys. It is maintained by the income from fees and a grant from the Railway Department, and controlled by the Manager of the Coal Mines at Dandot. For these reasons it is not included under the table at the end of the section.

The following table shows the number of schools and scholars of the several classes and the progress made during the last six years. It should be remembered with reference to this and the next table that Tahsíl Tallagang was separated from the Jhelum District with effect from 1st April, 1904: consequently the last two years do not include figures for Tallagang:—

Statistics of
schools and
scholars.

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III. I.Education
and
Literacy.Statistics of
schools and
scholars.

Classification of Schools and Scholars.

	Boys.												Girls.			
	HIGH.						MIDDLE.						PRIMARY.			
	ENGLISH.						ENGLISH.						VERNACULAR.			
	Board.			Aided.			Board.			Aided.			Board.		Aided.	
	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.	Scholars.
1900-01 ...	...	1 422	...	...	2 402	2 427	3 819	2 819	2 402	2 427	39 3,112	30 1,508	1 45	12	411	
1901-02 ...	...	1 425	...	...	3 644	2 468	3 865	3 865	3 644	2 468	40 3,431	34 1,817	1 44	11	370	
1902-03 ...	...	1 401	...	...	3 617	2 505	3 863	3 863	3 617	2 505	40 3,618	34 2,042	1 31	10	372	
1903-04 ...	...	1 411	...	...	4 784	2 512	3 909	3 909	4 784	2 512	41 3,640	40 2,320	1 29	11	450	
1904-05 ...	1 385	1 315	1 240	...	3 500	2 466	1 446	3 500	3 500	2 466	38 3,252	38 2,097	1 32	11	415	
1905-06 ...	1 333	1 257	1 243	...	3 403	2 509	1 398	3 403	3 403	2 509	45 3,716	43 2,342	2 80	13	518	

The following table shows the total expenditure on education distributed between Provincial, District Board and Municipal Funds during the same years :—

CHAP.
III, J.

Medical.

Statistics of
expenditure.

Gross expenditure on education from various Funds during the last six years.

Years.	Provincial Revenues.	District Fund.	Municipal Fund, Jhelum.	Municipal Fund, Pind Dádan Khán.	Total.
1900-01	2,775	23,093	7,574	3,950	37,392
1901-02	2,885	23,982	8,200	4,383	39,450
1902-03	2,799	25,082	8,392	4,550	40,823
1903-04	3,181	26,587	8,965	4,634	43,367
1904-05	4,420	26,803	8,649	5,274	45,146
1905-06	12,875	27,456	2,294	7,027	41,392

Section J.—Medical.

This department is under the general administration of the Civil Surgeon. During the cold weather the District and Civil Station form a separate charge: in the summer months one of the Regimental Surgeons in the cantonment holds collateral control of them, when the Civil Surgeon is usually transferred to Murree. The charge formerly included as many as 8 dispensaries, which were situated at Jhelum, Pind Dádan Khán, Chakwál, Tallagang, Kallar Kahár, Láwa, Kála, Wahálí, besides the Good Samaritan Female Hospital and Police Hospital at Jhelum. The dispensary at the Sadr Station was opened in 1858 and is situated in the Northern outskirts of the town. The dispensaries are administered directly by Assistant Surgeons at Pind Dádan Khán, Chakwál and Jhelum and Hospital Assistants at the remaining establishments. There are no Lunatic or Leper Asylums in the district. The following table, supplied by the Civil Surgeon, shows statistics since 1900 of patients treated and accommodation, and since 1902 of operations performed. It will be observed that no statistics appear for Kála after 1900, at the end of which year this dispensary was closed, or for Láwa and Tallagang after 1903 owing to the transfer of the Tallagang Tahsíl to the Attock District:—

District staff,
dispensaries
and hospitals.

CHAP.
III. J.*Statement of patients, accommodation, and operations in the dispensaries from 1900-04.*

Medical.

Statistics of
patients,
accommoda-
tion and oper-
ations.

NAME OF DISPENSARY.	NUMBER OF PATIENTS.			NUMBER OF BEDS.	
	In.	Out.	Operations.	Male.	Female.
1900.					
Jhelum	332	20,546	...	12	4
Pind Dádan Khán	444	25,276	...	32	10
Chakwál	162	14,856	...	12	4
Tallagang	57	11,480	...	5	2
Kallar Kahár ... ..	...	4,435	...	...	...
Láwa ... ..	...	9,590	...	...	...
Kála ... ..	...	5,106	...	...	...
Waháli	11	4,154	...	4	...
Good Samaritan Female Hospital	147	13,238	...	...	30
Jhelum Police Hospital	126	1,456	...	14	...
1901.					
Jhelum	536	23,077	...	12	4
Pind Dádan Khán	529	20,820	...	32	8
Chakwál	317	16,438	...	12	4
Tallagang	94	12,890	...	5	2
Kallar Kahár ... ..	...	2,298	...	...	...
Láwa ... ..	...	9,215	...	...	...
Kála ... ..	...	...	...	...	...
Waháli	26	4,169	...	4	...
Good Samaritan Female Hospital	148	13,306	...	...	30
Jhelum Police Hospital	100	910	...	14	...
1902.					
Jhelum	509	24,094	836	12	4
Pind Dádan Khán	540	23,111	731	32	8
Chakwál	425	16,307	725	12	4
Tallagang	105	14,874	394	5	2
Kallar Kahár	60	4,409	82	2	...
Láwa ... ..	...	9,400	242	...	...
Kála ... ..	...	...	...	...	...
Waháli	14	4,359	66	4	...
Good Samaritan Female Hospital	148	14,993	...	...	30
Jhelum Police Hospital	100	501	15	14	...
1903.					
Jhelum	459	28,666	889	22	12
Pind Dádan Khán	672	27,780	1,063	32	8
Chakwál	336	15,801	572	12	4
Tallagang	79	16,330	454	5	2
Kallar Kahár	58	4,573	58	2	...
Láwa ... ..	...	9,130	189	...	...
Kála ... ..	...	...	...	...	...
Waháli	48	6,928	104	2	2
Good Samaritan Female Hospital	127	15,145	...	...	30
Jhelum Police Hospital	132	1,428	31	14	...
1904.					
Jhelum	797	29,623	889	20	8
Pind Dádan Khán	491	19,443	731	32	8
Chakwál	358	15,010	714	20	4
Tallagang ... ..	...	...	...	...	...
Kallar Kahár	63	5,789	82	2	...
Láwa ... ..	...	...	...	...	...
Kála ... ..	...	...	...	...	...
Waháli	42	6,695	66	2	2
Good Samaritan Female Hospital	177	5,734	105	...	26
Jhelum Police Hospital	94	1,266	31	14	...

The following tables show the details of income and expenditure affecting the dispensaries. No figures are available for the Good Samaritan Female Hospital or the Police Hospital, which are therefore omitted from the lists:—

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Income of
dispensaries.

Statement showing income in rupees of the dispensaries from 1900-04.

Name of Dispensary.	Government contribution for salaries.	Local Fund contribution.	Municipal Fund contribution.	Interest on investments.	Subscriptions from patients.	Miscellaneous receipts.	Total income.
1900.							
Jhelum	500	2,577	48	80	122	3,327
Pind Dádan Khán	792	540	4,029	87	18	14	5,480
Chakwál	3,185	...	21	...	...	3,206
Tallagang	1,461	...	...	...	...	1,461
Kallar Kahár	1,015	...	...	...	...	1,015
Láwa	1,322	...	...	...	...	1,322
Kála	180	...	...	435	...	615
Wahálf	140	...	...	190	...	339
1901.							
Jhelum	1,000	2,713	96	21	161	3,991
Pind Dádan Khán	792	3,540	3,874	87	160	20	5,473
Chakwál	365	...	21	...	...	3,386
Tallagang	1,281	...	21	...	...	1,302
Kallar Kahár	591	...	...	...	...	591
Láwa	1,032	...	...	...	...	1,032
Kála
Wahálf	240	...	...	5,663	...	5,903
1902.							
Jhelum	1,000	5,105	48	4	168	6,325
Pind Dádan Khán	792	540	5,129	87	1	41	6,590
Chakwál	3,547	...	...	32	...	3,579
Tallagang	1,796	...	...	...	...	1,796
Kallar Kahár	967	...	...	...	...	967
Láwa	507	...	...	...	...	507
Kála
Wahálf	591	...	...	...	...	591
1903.							
Jhelum	1,000	7,645	48	48	96	8,837
Pind Dádan Khán	792	540	4,103	87	13	5	5,540
Chakwál	3,708	...	...	...	...	3,708
Tallagang	1,632	...	...	...	...	1,632
Kallar Kahár	832	...	...	...	...	832
Láwa	909	...	...	...	...	909
Kála
Wahálf	878	...	...	...	...	878
1904.							
Jhelum	1,000	4,048	96	23	282	5,449
Pind Dádan Khán	792	540	4,333	43	10	2	5,720
Chakwál	3,658	3,658
Tallagang
Kallar Kahár	911	911
Láwa
Kála
Wahálf	285	494	769

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Statement showing expenditure in rupees of the dispensaries from 1900-04.

Medical.

Expenditure
of dispen-
saries.

Name of Dispensary.	Salaries.			Medicine.			Miscellaneous charges.	Building repairs.	Total expenditure.
	Medical officers.	Nurses.	Servants.	English.	Bazaar.	Diet.			
1900.									
Jhelum	778	...	656	1,070	99	299	384	47	3,333
Pind Dádan Khán ...	3,413	...	539	...	32	187	287	400	4,858
Chakwál	1,547	...	412	837	129	109	170	...	3,204
Tallagang	330	...	402	408	47	32	147	116	1,480
Kallar Kahár	291	...	259	350	27	...	55	31	1,013
Láwa	420	...	192	553	35	...	57	64	1,321
Kála	290	...	124	171	5	...	23	...	613
Wahálf	152	...	131	11	28	...	14	...	336
1901.									
Jhelum	1,537	...	641	796	132	258	480	123	3,967
Pind Dádan Khán ...	3,538	73	607	854	40	217	189	73	5,591
Chakwál	2,108	...	463	307	65	118	188	134	3,383
Tallagang	330	...	875	200	65	27	119	84	1,700
Kallar Kahár	169	...	112	206	16	...	34	51	588
Láwa	420	...	192	249	39	...	81	50	1,031
Kála ... ..	...	...	...	...	...	...	...	...	...
Wahálf	240	...	158	457	23	...	22	5,000	5,900
1902.									
Jhelum	1,148	319	468	776	779	310	3,103	...	6,903
Pind Dádan Khán ...	3,492	220	582	434	39	186	314	92	5,359
Chakwál	2,067	...	446	531	77	169	226	66	3,582
Tallagang	390	...	498	420	56	43	155	232	1,794
Kallar Kahár	300	...	204	47	29	...	66	30	676
Láwa	385	...	206	199	31	4	82	39	946
Kála ... ..	...	...	...	...	...	...	...	...	...
Wahálf	297	...	139	97	17	...	37	...	587
1903.									
Jhelum	1,200	...	395	663	98	159	359	4,466	7,340
Pind Dádan Khán ...	3,169	...	634	644	49	81	281	23	4,881
Chakwál	2,316	...	353	369	63	215	184	106	3,606
Tallagang	450	...	381	269	51	32	121	226	1,530
Kahar Kahár	300	...	220	170	28	...	83	20	821
Láwa	416	...	182	141	28	...	92	48	907
Kála ... ..	...	...	...	...	...	...	...	...	...
Wahálf	300	...	141	144	34	...	57	...	676
1904.									
Jhelum	1,439	...	728	1,092	112	183	386	106	4,046
Pind Dádan Khán ...	2,917	...	678	673	30	61	293	486	5,138
Chakwál	2,207	...	513	512	58	130	238	...	3,658
Tallagang ... ..	...	...	...	...	...	...	...	...	...
Kallar Kahár	300	...	190	287	32	...	102	...	911
Láwa ... ..	...	...	...	...	...	...	...	...	...
Kála ... ..	...	...	...	...	...	...	...	...	...
Wahálf	285	...	141	248	25	...	70	...	769

Apart from the work of the Civil Surgeon and his Assistants, there are a number of *hakims* practising privately, and not a few quack dealers in charms and nostrums; of these the former have some importance as the intermediaries to whom quinine is supplied for sale to the villagers. The population is generally a healthy one, although it is liable to suffer from short and sudden epidemics, which commit great ravages, and cause an abnormal rise in the death-rate.

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Medical.

The only active sanitary measures enforced in the District are those embraced in the spheres of Municipal Conservancy and Government Vaccination. Village sanitation there is practically none. Vaccination is carried out everywhere in the District, though it is compulsory only within the Municipalities of Jhelum and Pind Dádan Khán. It is generally primary, but there were 573 re-vaccinations in 1903-04 and 1,900 in 1904-05. The following table shows the cost of this department, the percentage of the population vaccinated, and the total number of vaccinations of both kinds carried out during the years 1900-05. The decrease in the number of vaccinations during the last year is easily accounted for by the transfer of the Tallagang Tahsil to the Attock District in the previous year.

Sanitary
measures.
Vaccination.

Year,	VACCINATION IN THE DISTRICT.		
	Cost of Depart- ment.	Percentage of population protected.	Total number of vaccinations.
	Rs.		
1900-01	2,094	3.22	19,514
1901-02	2,119	3.65	21,529
1902-03	2,227	3.24	19,216
1903-04	2,174	3.03	18,003
1904-05	3,562	2.55	12,824

The following note, which Captain Corry, I.M.S., Civil Surgeon, has been kind enough to write, describes very fully the methods of the numerous *hakims* practising in the District and the popular ideas on the art of healing:—

Native
methods

Jhelum is no exception to the general rule as regards native practitioners. They are almost all of them men without any diploma from a recognized school. There are five different types:—

- (1) So-called *hakims*, who belong to the family of *hakims* and have learnt the art either from their fathers or from others of their class. They are taught medicine after a preliminary study of Urdu and Persian, and practise it first under the supervision of their teachers and only afterwards independently.

Types of
Hakims.

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Types of
Hakims.

- (2) Common druggists, or dealers in indigenous drugs. These persons first open a shop and deal only in drugs. Presently they begin to treat patients by using the prescriptions which are sent to them by the *hakims*. They also read two well known books in Urdú and Panjābī named *dār-ul-shāfa* and *khairmunukh*, which contain the symptoms and signs given in the form of poetry. Gradually they sign their name as *hakim* so-and-so, and paint word *hakim* on their signboard. Their knowledge is very superficial, and, apart from a certain empirical skill they are totally unacquainted with scientific methods.
- (3) *Vaids* : of these there are very few in the District. They chiefly use herbs and metallic oxides called *kushtas*.
- (4) *Sanyāsīs* : these are chiefly Hindú *faqirs*, who go from place to place treating venereal diseases, impotence, sterility and phthisis. They use very dangerous drugs such as arsenic and mercury, rarely gold chloride and occasionally herbs. Their chief places of resort are Tilla and Kitās, where they assemble in large numbers from various parts of the country at the *Baisākhī* fair. Many people come to these places to find some good *Sanyāsī* and either take him to their homes or get medicine from him. To the same class belong the alchemists who are believed to have the power to turn copper into gold and tin into silver, though the number of those who can really bring about a change, is a fact which even those who believe in the possibility of this metallic transformation are in doubt.
- (5) *Maulvis*, or preachers in mosques : these also practise medicine. In old days instruction in certain medical books used to be given to *maulvis* as part of their Arabic course. The practice, though now less in vogue, is not yet extinct, and every now and then one does meet a *maulvi* who has got a fair knowledge of the *unānī* medicine. Some of them even know how to do venesection.

Native
Surgery.

These are the five chief groups of native practitioners in the art of healing. Those who practise surgery may also be briefly described. First among these is the common Barber. To a superficial observer he only appears as a trimmer of the cuticular appendages, but to one who knows him more fully he is also a surgeon. He can pull out a tooth with his crude *sambūr* (forceps), open an abscess, bleed for pneumonia, and perform scarification with his ever ready razor. Many a time he may be seen holding the forehead of a village boy on his knee and scarifying the nape of his neck, showing the black venous blood to the anxious mother as a proof that he has touched the diseased spot. Some of them treat ulcers, generally using copper sulphate and wax as the bases of their ointments.

Next to him comes the well known wrestler or *Pahlwān*, whose sole business is to set fractures or reduce dislocations. In the village this duty often falls to the common weaver who is believed to be an expert in his art. Bone-setting is effected by extension and counter-extension. To keep the broken ends in place a very dangerous procedure is adopted. A paste is made containing yolk of eggs, coriander powder, and some herbs called *maidāsak* and *sajji*. This is painted over the broken part, pieces of bamboo stick are placed on it lengthwise and over this another coating of the same stuff. The rule, or rather I should say the misrule, is to bandage tightly. Very often such patients are brought to the hospital with limbs either gangrenous from obstructed circulation or verging on mortification, and it falls to the lot of not a few of us either to amputate or perform some less serious operation. Reduction of dislocations is

always preceded by rubbing with sweet oil followed by manipulation. The patient is told to lie passive and the operation continues for several days.

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Medical.

Native
Surgery.

The third specialist in surgery is the much reputed *Rawal*. His chief, or rather sole, practice is Ophthalmic Surgery. Many of us must have seen the spoiled eyes of patients who come to hospital for cataract extraction. He does not take the lens out, but simply pushes it back into the vitreous and after getting his fee, bandaging the eye, and making the patient count fingers, quietly makes away giving directions that the eye is not to be opened for 3 days—time enough for him to be out of reach. Two places in this District are the headquarters of *rawals*, whence they go forth to distant countries, including even Africa and Central Asia. These are Mohra Kor Chashm and Sháhán-kí-Dherí, both in the Chakwál Tahsíl. But his services are less and less in demand as, like the use of quinine, cataract extraction has now taken a well deserved hold on the popular mind.

Next comes the common sweeper, who hawks in the streets for leech application: and mention must also be made of the women who come to cup patients with the hollow horns of certain animals. These latter place the horn on the part affected, suck air out of it by placing their mouth on the thin end and then keep it applied till the proper effect is produced. Under this head mention must also be made of the specialists in circumcision. They are commonly barbers, but only those of experience attempt the operation. The principle is the same as our own, only no sutures are used. The mucous membrane covering the glans is forcibly pushed back. Bleeding is controlled by fine cow dung which is dusted on the part, and an ointment is smeared over the wound. Water dressing is applied, if swelling appears.

Another class of practitioners are known as *Jaráhs*. They go about from place to place with a small round box containing their instruments and dressings. They can remove necrosed bones by forceps and can dress various kinds of wounds and ulcers.

These different groups having been described, a few examples may be cited to show how the *hakims* treat the more common complaints.

Methods of
treatment by
Hakims.

(1). **Fever**: this they say is the result of a certain poison in the blood. They give it several names, but the treatment is much the same in each case. In acute fevers, even when the temperature is very high, they will never put any thing cold on the head, saying that this treatment causes brain fever. Milk they do not prescribe, alleging that it contains fat and that fat is injurious during fever. The principle is to deplete the system and give vegetables and pulses. For chronic fevers they now allow milk and soup, perhaps from seeing us prescribe this diet without hesitation. For thirst they advise *sharbats* of tamarind and prune and *arq gaozabán*. As regards the use of purgatives, they sometimes refuse them at the start, but generally permit them after some days. (2). **Pneumonia**: venesection is the rule with old *hakims*. Food is the same as in ordinary fever, but opium is seldom permitted. (3). **Plague**: tonics for the heart and caustics for the *bubo* are generally prescribed. (4). **Dysentery**: purgatives and mucilaginous and demulcent drinks made from such drugs as *Isafgul* (*Plantago ovata*) are prescribed, when it is thought to be due to *scybulæ*; otherwise astringents, like ginger, bael fruit or mango-seed. (5). **Cholera** is believed to be the result of bad air. The treatment for this disease is eliminative in nature at the beginning, and the drugs prescribed are nutmeg and cloves during the cold stage, tonics for the heart, opium, red pepper and *asafetida* for controlling diarrhoea when excessive, ginger and sweet oil for rubbing on the body, with *khichri* (*dál* and rice) for food. Gram water is also given, and rice water to allay thirst. (6). **Small-pox** is thought popularly to be the manifestation of a

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Medical.

Methods of
treatment by
Hakims.

Goddess "Mata Devi." It is believed to be due to the menstrual blood, which is sucked in by the child *in utero*. In cold climates this material is destroyed. Very white people and albinos escape. The treatment adopted is intended to cleanse the blood; *ludhrák* is given after rubbing it up in rosewater, and pearls applied externally in the form of powder. Milk is given along with *munakká* to bring the pocks out. When the disease matures roasted gram is given to cause desiccation. (7) **Tonsillitis**: the treatment is as follows:—gargles of the pulp of *cassia fistula* boiled in milk, leeches externally, and *sharbat* of mulberry internally. The abscess is generally opened by the barber. (8). **Gravel**: the treatment prescribed is directed to promote fulmination, hot fomentation of poppy-heads or *khash-khash*, hot affusion on the kidneys, baths, *sang-i-yahúd* and *jau khár* to dissolve the stone. Meat is avoided. (9). **Gout**: The cause is thought to be phlegm and wind in the system. Purgatives are first prescribed, afterwards ginger or *tárámirá* or *harmal* taken internally; locally oils of the same drugs are employed. Milk is avoided, meat and *dál* recommended. Rice is not prohibited. (10). **Syphilis**: Mercury and arsenic are the chief drugs employed, with *sarsaporilla*, *chiretta*, *papra*, and *unáb* internally as blood purifiers. For local use *cachu mirdá sang*, and burnt *kauri* shell are recommended. Salivation is thought to be highly beneficial, as it is believed that after this process the poison is not transmitted to offspring, and sweating is similarly regarded. (11). **Dropsy**: three kinds are commonly distinguished, (a) Windy (*tabbí*) or *tympanitis*, (b) *lehmi* or general *anasarca*; (c) *zakkí* or *ascites*. The disease is attributed to liver and stomach troubles. The principles of treatment may be summarized as follows:—purgatives like camel's milk, milk of euphorbiaceous plants, rhubarb solution, *arq of kainch mainch (mako)*. Diaphoresis is effected by placing the patient in a hot oven. Hot baths and diuretics such as anise and *kásni arqs* are also enjoined. Cures can be effected in the initial stages of the disease, but not later on. (12). **Phthisis**: A distinction is made between consumption, called *tap diq*, in which there is no hæmoptysis, and *síl* in which there is hæmoptysis. Four stages are observed. First the fever stage, secondly disorders of the internal organs, thirdly the cough stage, and fourthly that of diarrhoea. The first two stages are curable, the third only rarely and fourth never. Cold and *tar* things like camphor, *arq* of milk, pearls and other tonics, barley-water, gram soup, dried turnips, and soups made from birds are generally prescribed. Opium is not usually permitted.

Popular
methods of
treatment.

Before closing this note a few points about the popular ideas of treatment would not be devoid of interest.

Cauterization is the common treatment for enlarged spleen, sciatica and deep-seated pains.

For ague cake another peculiar treatment is at times resorted to. A man, who is believed to be expert in that special method, places the cutting edge of a sword on the enlarged organ and presses on it with all his force, reading something while keeping up the pressure. This is done several times and it is said that the organ gets reduced and blood clots are passed *per rectum*.

For malarial fevers to check the paroxysms a sort of charm is written on a leaf, commonly of *banyán*, and the patient is told to look at it till the attack is past.

For neuralgia also a charm is written on a piece of paper which is doubled, and then hung over the eyebrow or other place affected. It is supposed that this expedient will effect a cure.

For meningitis hot bread is bandaged on the head.

Ram's fat from the tail end is plastered on the head in cases of tetanus.

In cases of general weakness nutmeg and almonds are prescribed as stimulants.

Demons are thought to be the cause of many obscure complaints, especially those attended by hysteria in any form. To wash the face of sick persons and especially to clean the eyes of children, when they are suffering from any sort of eye complaint, is strictly forbidden. Cowdung poultices are always the first step towards hastening maturity in an abscess. Milk and *ghí* are often taken by persons who suffer from stone in the bladder for their supposed anodyne and diuretic effect. Villagers frequently visit the tombs of saints before undergoing any serious operations. This is especially the case with chronic rheumatism and sufferers from neuralgia. Ventilation is not at all favoured as a means to health. Putting bed covering over the patient's face, surrounding him with numbers of friends, burning charcoal in the same room, all these are expedients, the efficiency of which it requires tact and persuasion to prove futile. Every food stuff is believed to possess qualities either of heat, cold, dryness, or moisture, or a combination of these four properties; and, when a medicine is prescribed, the mother will invariably ask whether it be hot or cold, &c.

English medicines are generally believed to be hot and dry in their effects.

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Popular
methods of
treatment.

CHAPTER IV.—PLACES OF INTEREST.

CHAP. IV.

Places of interest.

Apart from the towns described below, most of the places of interest in the district have already been dealt with in the foregoing pages: but for facility of reference those places and the pages of the Gazetteer, which will be found to contain particulars about them, are here detailed.

	Pages.
AHMADABAD	38, 56—61
BAGHANWALA	198, 200

BHON.

Bhon is situated in the Chakwál Tahsíl and lies only 8 miles from the Tahsíl headquarters. Its population has risen from 5,080 in 1881 to 5,196 in 1891 and 5,340 in 1901; it possesses a considerable number of *pakk*-built houses, and two masonry tanks. It is also provided with a school-building. Many families from among its inhabitants obtain service under Government from generation to generation.

It is situated, like Chakwál, with which it is connected, by a *tonga* service, on high ground intersected by ravines. The climate is dry and healthy.

CHAKWAL.

Chakwál is the headquarters of a Tahsíl, situated nearly equidistant from Pind Dádan Khán and Tallagang and 54 miles west of Jhelum; latitude $32^{\circ} 56'$; longitude $72^{\circ} 54'$; population according to the Census of 1901, 6,520. The buildings in the town are unpretentious. It has a *bázár* from south to north, and from east to west a grain market. The town also possesses a police station, a school, a dispensary, and a circuit bungalow. The main road from Pind Dádan Khán to Ráwalpindi passes through Chakwál. There is an encamping-ground adjoining the district bungalow.

It had once a Municipal Committee, but this was abolished many years ago. The place has, however, been a Notified Area since 1901. Chakwál has from time immemorial been the seat of administration in the Dhanní country. It is said to have been founded by a Máir Rájpút from Jammú, whose descendants are at the present day proprietors of the land in the neighbourhood. It is still the headquarters of the tribe. It is well situated on high firm ground, and drained by several ravines of a description which forms the distinguishing feature of the neighbourhood. The town has a moderate trade in grain, more notably in wheat and gram, the staple products of the neighbourhood; and is celebrated for its manufacture of superior shoes and sandals ornamented with tinsel, which are much prized by Punjab women, and are exported to distant marts. It is also well known for embroidered *phulkáris* of very

good quality, which merchants come to purchase from places as far distant as Lahore and Amritsar. There is a *tonga* service between Chakwāl and Mandra, where the road to Rāwalpindi meets the railway.

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—
Places of
interest.

	Pages.
DANDOT	199—202
DARAPUR	36, 52
DHAMIAK	37
DHANGROT	25
DILAWAR	36, 52
JALALPUR	37, 38, 53—56

JHELUM.

The town of Jhelum lies in north latitude $32^{\circ} 56'$, east longitude $73^{\circ} 47'$, and has a population of 14,951 persons. It is situated on the right or high bank of the river of that name, the main stream running very close to the town and thus affording great facilities for drainage. There are no groves or gardens round the town, but the scene from the bank on the other side of the river is picturesque; first the broad expanse of the rippling stream fringed with trees, from among which the church spire rises, a conspicuous object; beyond, verdant undulating land rising in the background to the Pabbi hills, a solitary range thrown across the plain, at right angles to the higher northern mountains. The view from the Railway Bridge also towards the snows on a clear winter's day is very fine.

The civil lines and public offices lie about a mile to the north-east of the town, and about the same distance to the south-west the cantonments are situated, in lands not many years ago "almost entirely destitute of vegetation," the ground being hard and stony, rendering the growth of the trees planted on the road sides slow in the extreme: trees have, however, grown up considerably since then, though the cantonments are still rather bare and uninviting.

The town is traversed by two main streets running east to west and north to south, the one passing through the other and forming the principal *chruk*, which is not known by any particular name. The town being small and of somewhat modern origin, there are no buildings of note; some of the houses, with river frontage, are fairly constructed, and large masonry or brick houses, more or less after the European style, are being yearly built by prosperous traders, lawyers and others: but the town is principally composed of low built mud houses. The streets are well paved and are in most cases broad; the drainage and sanitary arrangements are satisfactory, being greatly facilitated by the ample water-supply, but the variable character of the river at times causes great inconvenience: a few years ago

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Places of
interest.

precautions had to be taken lest it should carry away the town ; now it is far off and water for washing is scarce. There is no public water-supply on a large scale, but the wells afford excellent drinking water at a depth of from 18 to 20 feet, and the river water is also good.

The Jhelum cantonments, as above noted, lie about a mile to the south-west of the town. The surrounding country is a bare plain, and the cantonments themselves have too little vegetation. The bare fields give an air of desolation to the place which even the stir of military life fails to remove.

The present town is of modern origin ; it was at one time identified with the site of one of Alexander's cities built in commemoration of his passage of the Jhelum and his victory over Porus. But it is possible that the crossing took place many miles further down the river. The old town of Jhelum was at the left bank of the river and parts of it still exist. About the year 1532 A.D. some boatmen from old Jhelum established themselves on the right bank for the better management of the ferry, and thus founded the modern town. The new settlement gradually grew in size and was found at the time of annexation to contain some 500 houses.

It was then chosen as the site of a cantonment, and this circumstance had a great influence in attracting tradespeople—Parsís and others—to the place. This fact, and its position as headquarters of the civil authorities of the district, have given the town an importance which it would otherwise have wanted. For some years it was the seat of the Commissioner of the Division. In 1850, however, the headquarters of the Division were transferred to Ráwalpindi.

It is certain that an old town once occupied the hillock which is now covered by the bungalows of the railway officials. This has been dealt with in Chapter I—B. In the Sikh time there was a fort at Jhelum to protect the passage of the river, but the place was quite unimportant, and was mainly occupied by a settlement of Malláhs or boatmen. The fort has been absorbed into the present town, but is still called Andar Kot. Since the commencement of British rule Jhelum has thriven mightily. Owing to her position she has always been an *entrepot* for most of the trade of the district. But she has owed the greater part of her prosperity to the salt traffic, and, when that ceased to flow through the town, to the timber and miscellaneous trade.

Jhelum has always been the trade centre for most of the district; and especially (until the railways diverted it), for the salt of the Salt Range, which used to be boated up the river from Pind Dádan Khán to Jhelum, and thence distributed all over the country. The fact that the town formed the terminus of the North-Western Railway for some years gave it an extraordinary impetus.

But the completion of the line has in great part diverted the traffic in salt, which now goes straight through to its destination. Jhelum, however, will probably always maintain some position as a place of commerce, and a depôt for the general trade of the district.

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Places of interest.

The principal institutions of the town of Jhelum are:—The Charitable Dispensary, which occupies a central position in the town, in all respects convenient for the community; the District School, which is in close proximity to the town; the Municipal Hall, with a flower garden attached; this building is well constructed and has two wings of *pakka* quarters for the accommodation of members attending the District Committee, which also holds its sittings in the Hall; the Deputy Commissioner's Court-house, which is surrounded by the Police Office, the Jail, the Treasury, and the Treasury Office buildings.

There are two *sarais* adjacent to the town—one is on the banks of the river, known as Mangal Sain's *sarai*, and the other that of Devî Dâs, more recently built, which is more frequented by travellers than the older building, as it is nearer the Railway Station. The church, in the cantonments, has a very high and graceful steeple, which can be seen at a considerable distance, from the Railway line and other roads. The cantonment possesses a few good bungalows, and a small club-house, but most of the buildings are insignificant, and the cantonment garden is neglected owing to paucity of funds. There is a fine public garden in the Civil Lines adjoining the *kecheri* lands, which is kept in perfect order; and has lawn-tennis courts, &c.

Further information about Jhelum may be found on reference to pages 30, 60, 61, 72, 73.

						Pages.
KALA	30
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KUSAK	50, 70

LAWA.

Lawa is situated in the Tallagang Tahsíl, near the western border of the district, and a few miles only to the north of the Salt Range and mount Sakesar, in latitude $32^{\circ} 41'$; longitude $72^{\circ} 69'$. Its population according to the Census of 1881 is 6,245: but it has since risen to 6,248 in 1891 and 6,458 in 1901. Lawa is a large Awán village, and its inhabitants are almost exclusively agriculturists. There are four or five *chaudhris*, and party faction is rife. The population is mainly concentrated in the central village, though the *dhoks* or outlying hamlets, which are included in the Census of

CHAP. IV.

Places of
interest.

the town, are very numerous, and scattered over the area of 135 square miles, which forms the village domain. There is a police station at Láwa, also a dispensary : both are very useful.

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PIND DADAN KHAN.

The town of Pind Dádan Khán lies in north latitude $32^{\circ} 35'$, east longitude $73^{\circ} 5'$ and contains a population of 13,770 persons. It is situated about a mile from the river, and about five miles from the foot of the Salt Range. It consists of three distinct portions—Pind Dádan Khán proper in the centre, Kot Sáhib Khán to the north-east, and Kot Sultán to the south. To the south-east of the town facing the river there are some gardens, which, though not of much luxuriance, afford a pleasant contrast to the otherwise bleak aspect of the environs, in which saline efflorescence largely predominates; but few now remain, the rest having been killed by the salt or carried away by the river, which a few years ago seriously threatened the town. The town has long been an important place, and is much better built than any other in the district, though it does not possess many wide streets, and those of Kot Sáhib Khán are distinctly narrow. It has, however, never fully recovered from the effect of the great flood of July 1893, in which many houses fell or were damaged. The drainage of the town is attended with considerable difficulty owing to its disadvantageously low position on the skirt of a marsh; recent efforts at sanitary improvement have been attended with some success, and there are hopes of further progress. The municipality has two large tanks, one at Kot Sáhib Khán and the other lying between Kot Sultán and Pind Dádan Khán proper. The supply of drinking water is, however, deficient, that of the wells being brackish both in the town and neighbourhood: a fresh-water canal cut from the Jhelum supplies the want for a portion of the year, and a large well on the river bank connected by pipes with the town gives some assistance: but on the whole the scarcity of water, and the heat and glare of the white crusted soil, make residence at Pind Dádan Khán distasteful both to European and Natives.

Pind Dádan Khán was founded in 1623 by Dadán Khán, the head of the family of Khokhar Rájputs who reside in the place; Kot Sultán and Kot Sáhib Khán were built subsequently by the Rájas of the same tribe. The extension of the Railway to the

CATALOGUED.

Cat

No. 4

Map OF THE JHELUM DISTRICT.

(No. 3).

Scale—1 Inch = 8 Miles.

10 5 0 10 Miles.



REFERENCES.

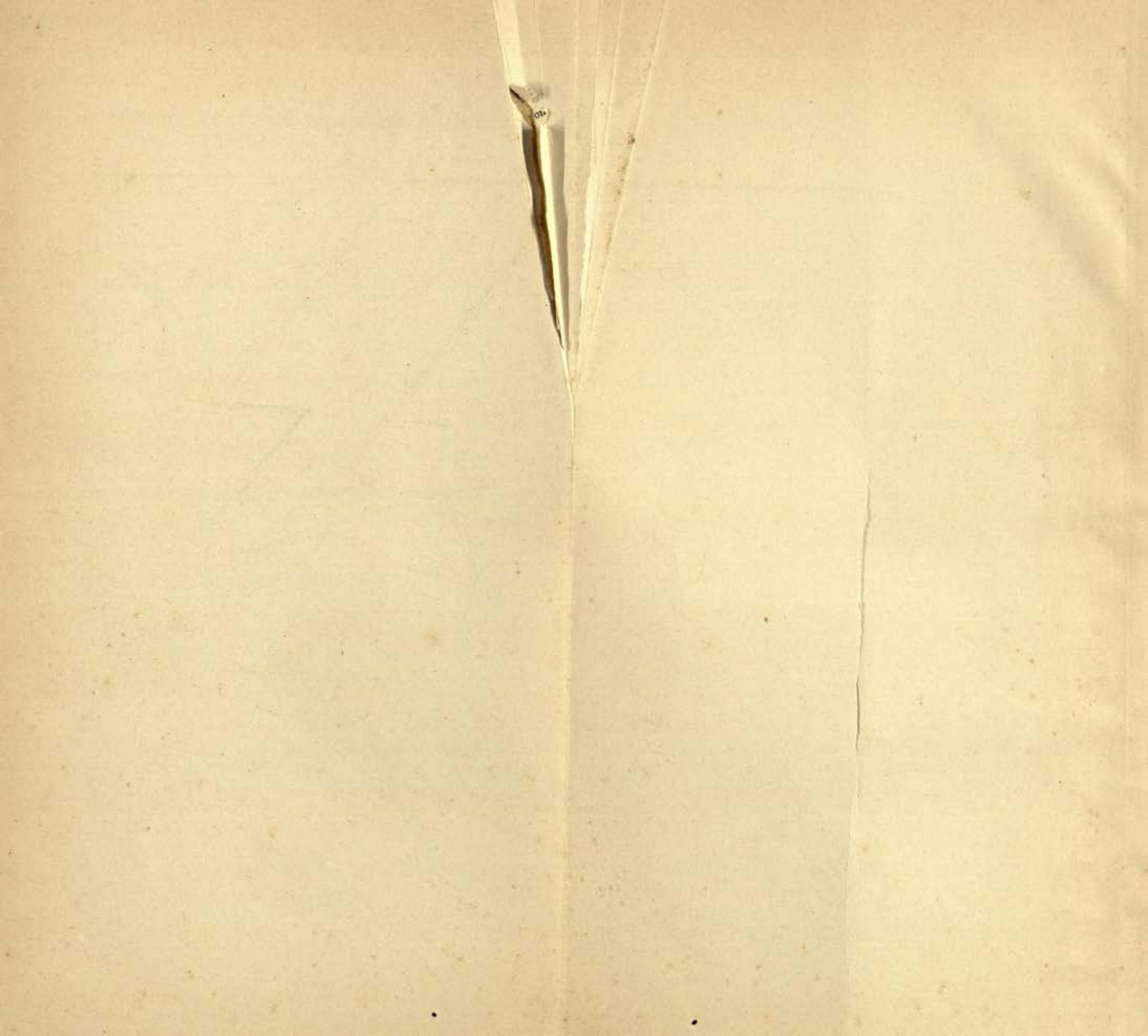
Head-quarters of District	JHELUM
" " " Tahsil	CHAKWAL
" " " Thana	DOMBIL
Census Towns over 20,000	○
" " " 10,000	●
Others	●
Villages	○
District and Tahsil Boundary	—
Tahsil	- - -
Railways	—+—
Metalled Road	—+—
Unmetalled "	- - -
River	~~~~~
Police Out-posts	Nila

Anglo-Vernacular	A. V.
Vernacular	V
Schools High	H.
Middle	M.
Primary	Pr.

Dispensaries	+
Post Offices	P.
Telegraph "	=

REST HOUSES.

District	□
Police	□
Public Works Department	□
Salt (Customs)	S



Map OF THE JHELUM DISTRICT.

(No. 2).

Scale—1 Inch = 8 Miles.

Miles. 10 5 0 10

OLD ILAQAS.

(Territorial Divisions)

1. Rupwal.
2. Babial.
3. Chopeda.
4. Masola.
5. Thirohak.
6. Haweli Chakwal.
7. Badshahani.
8. Duhman.
9. Kahutani.
10. Saidpur.
11. Wunhar.
12. Ahmadabad.
13. Kahun.
14. Jhangar.
15. Pind Dadan Khan.
16. Jalap.
17. Jalalpur.
18. Darapur.
19. Nara.
20. Chotala.
21. Padhri.
22. Dhurata.
23. Sangol.
24. Gura.
25. Pabbi.
26. Raju.
27. Askandral.
28. Tuliala.
29. Kala.
30. Pakhwal.
31. Jhelum.

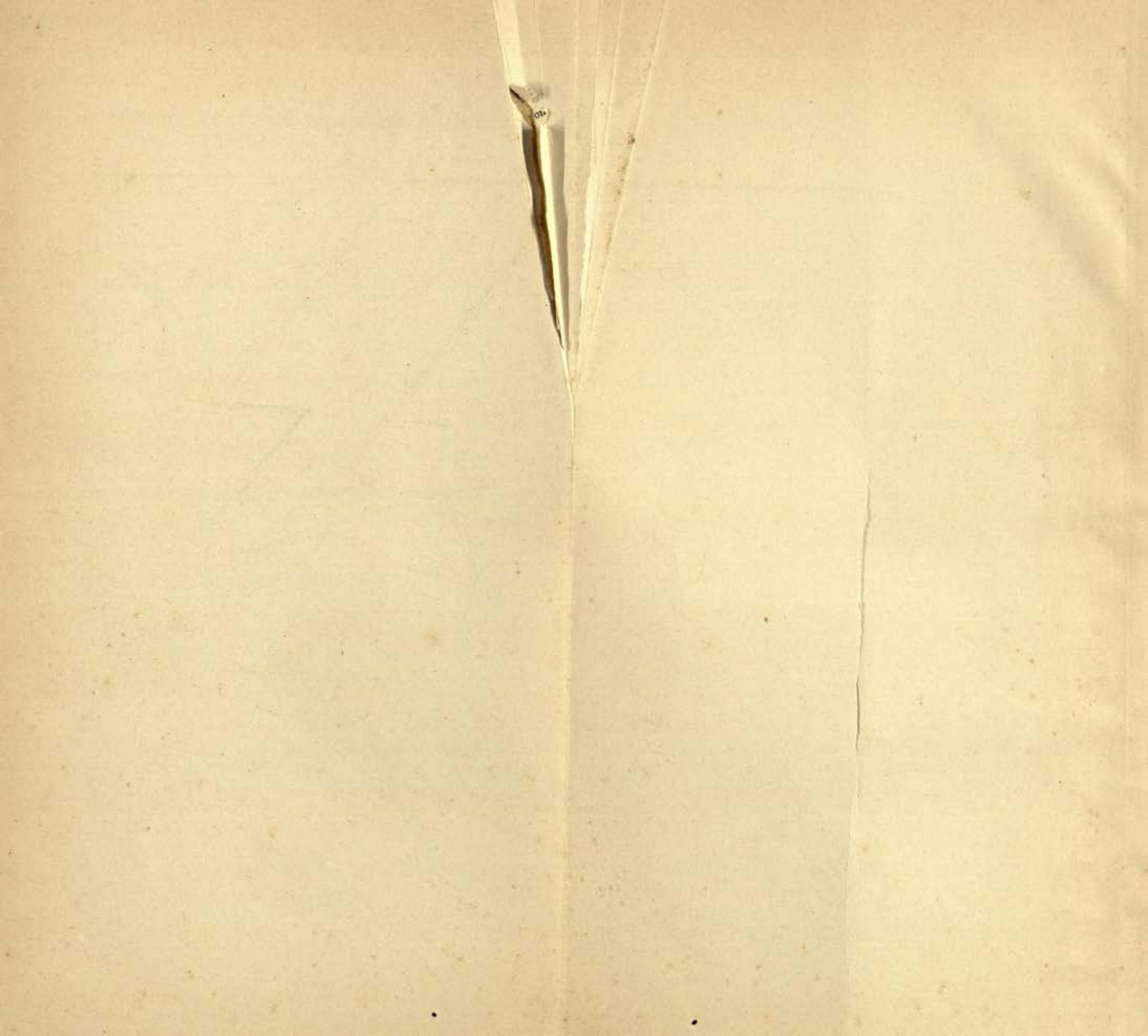
NOTE.

Area in Square Miles, ... 2,782.
Population in 1901, ... 501,424.



REFERENCES.

Head-quarters of District.....	JHELUM	
" " " Tahsil.....	CHAKWAL	If a Police Station also, in red.
" " " Thana.....	DOMERI	
Census Towns over 20,000.....	●	
" " " 10,000.....	○	
Others.....	○	
Villages.....	○	
District and Tahsil and Thana Boundary.....	—	
Tahsil and Thana Boundary.....	—	
Thana Boundary.....	—	
Tahsil.....	—	
Ilaqa.....	—	
Railways.....	—	
Metalled Road.....	—	
Unmetalled	—	
River.....	—	
Police Out-posts.....	—	
REST-HOUSES.		
District.....	—	
Police.....	—	
Public Works Department.....	—	
Salt (Customs).....	—	



MAP OF JHELUM & SURROUNDINGS.

(No. 4).

Scale—2 Inches = 1 Mile.



REFERENCES.

Civil Lines.

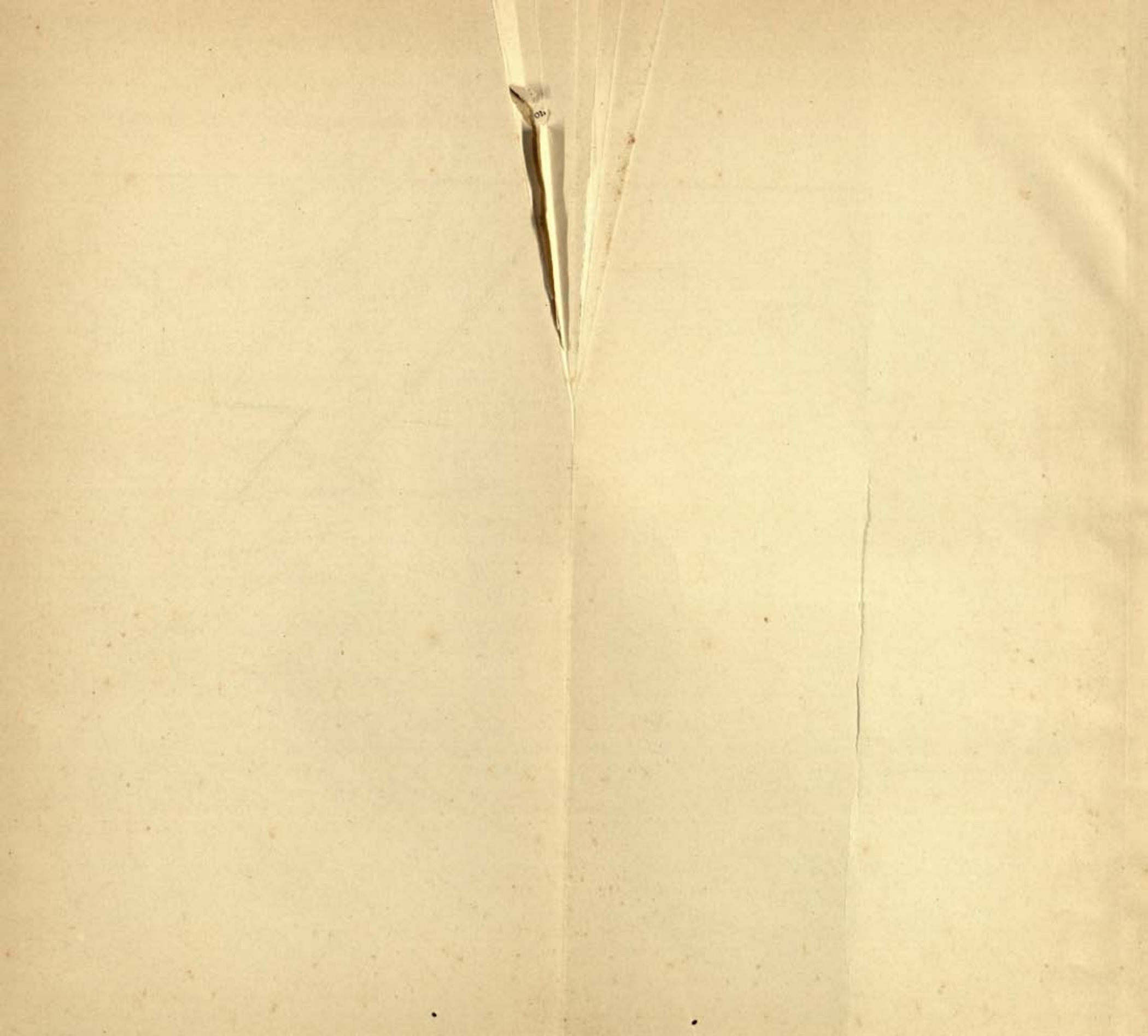
1. Police Lines.
2. Cutcherry and Post Office.
3. Police Office.
4. Treasury.
5. Civil Gardens.
6. Sessions Court.
7. Forest Dept. House.
8. Kashmir " "
9. Forest Dept. Office.

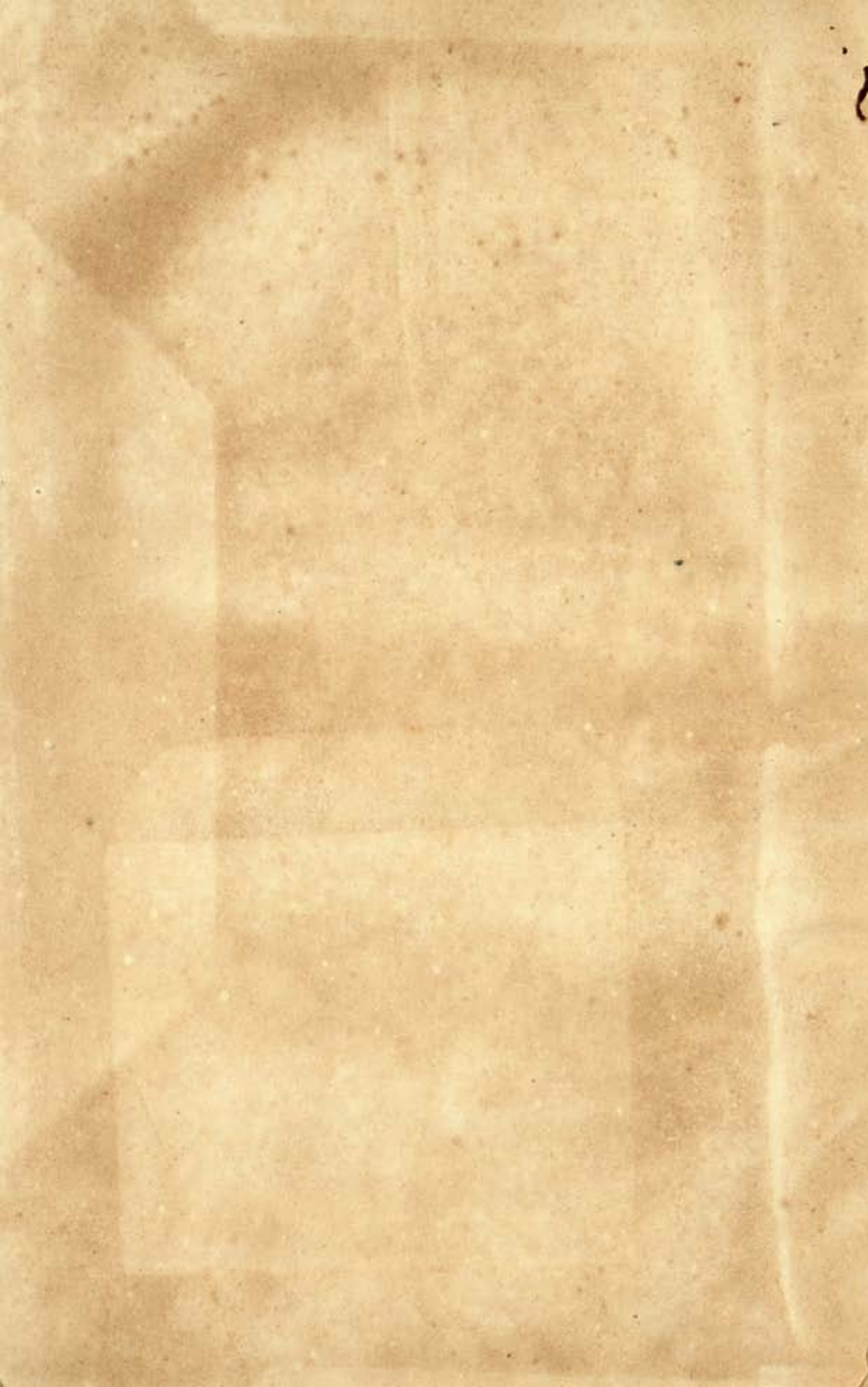
TOWN.

10. Govt. Timber Depôt.
11. Kashmir " "
12. Municipal Boarding House.
13. Mission Bungalow.
14. " Church.
15. Naya Mohalla.
16. Town Hall.
17. Municipal School.
18. City Police Station.
19. Dispensary.
20. Mandi.
21. Tahsil and Thana.
22. Railway Bungalows.
23. R. Amar Singh's Timber Depot.

CANTONMENTS.

24. Timber Depot.
25. Canal Dept. Bungalow.
26. Church.
27. Post Office.
28. Station Staff Office.
29. Mess.
30. Dak Bungalow.
31. Govt. Garden and Club.
32. Mess.
33. Cavalry Mess.
34. Boundary of Municipality, shown thus





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