

II.

STATISTICAL SKETCH

OF

KAMAON.

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KAMAON, with the annexed territory of *Gerhwal*, forms almost an equilateral parallelogram facing N. E. and S. W. On the north, where it is separated from Tartary by the Himalaya, the frontier extends from Long. $79^{\circ} 15'$ Lat. $31^{\circ} 4'$, to Long. $80^{\circ} 45'$ Lat. $30^{\circ} 10'$, giving a line of about 100 miles: the eastern boundary which is formed by the river *Kali*, or *Sarde*, gives a line of 110 miles, extending from Lat. $30^{\circ} 10'$ Long. $80^{\circ} 45'$, to Lat. $26^{\circ} 2'$ Long. 80° . On the west, the province is divided from the Raj of *Gerhwal* by the rivers *Kali* and *Alakananda*, with a line of frontier of about 110 miles, stretching from Lat. $31^{\circ} 4'$ Long. $79^{\circ} 15'$, to Lat. $29^{\circ} 55'$ Long. $78^{\circ} 10'$; and on the south, the province joins on Rohilkund, the line of demarcation being nearly parallel and equal to that on the north.

Within the Boundaries above detailed, the horizontal superficial contents of the province may be stated at 10,967 square miles, of which the following is the estimated distribution :—

Snow,.....	$\frac{4}{15}$	2924	square miles.
Barren and incapable of cultivation,	$\frac{4}{15}$	3655	„
Cultivation,.....	$\frac{3}{15}$	2193	„
Uncultivated,.....	$\frac{3}{15}$	2193	„

The whole province consists of numerous ranges of mountains, the general run of which are in a parallel direction to the northern and southern line of frontier : they are, however, by no means uniform or parallel to each other in their whole course, while innumerable branches of various height and extent, strike off from each range in every point and direction. The intervals between the bases of the mountains are every where extremely small, and the whole country, when viewed from a commanding position, exhibits the appearance of a wide expanse of unconnected ravines, rather than of a succession of regular ranges of mountains.

The peaks and ridges necessarily vary in height : commencing from the plains of Rohilkund, estimated at 500 feet above the sea, the first range gives an elevation of 4,300, while the second range, called the *Ghagar*, attains the height of 7,700 above the sea. This elevation is no where exceeded throughout the center of the province, but as the ranges approach the Himalaya, their altitude rapidly increases, till it reaches in the lofty peaks of the latter range, an extreme height of 25,500 feet.

The valleys (if the narrow intervals between the mountains can aspire to that designation,) are lowest on the banks of the largest rivers, and it is in the same situations that the greatest portion of level land is generally

to be met with: these spots, however, in no instance exceed, and in few cases equal half a mile in breadth: the site of the town of *Srinagar*, on the banks of the *Alakananda*, is of this description, and is only 1,500 feet above the level of the sea.

The *Tarai*, or *Bhawal*, included in this province, is very unequal in extent; under the *Gerhwal* pergunnas it averages only from two to three miles from the foot of the hills, while in *Kamaon* proper it is no where less than from 12 to 15 miles in breadth. From *Kotedwara*, Long. $78^{\circ} 20'$, to near *Bhamouri*, Long. $79^{\circ} 20'$, the *Bhawal* is divided from Rohilkund by a low range of hills, which contains numerous passes, some of them practicable for wheel carriages: the remaining *Bhawal*, to the east and west of these points, is wholly open to the plains. The *Bhawal* is at present only partially cultivated, and consists almost wholly of thick forest, of Sal, Sisu, and Bamboos.

The quantity of land calculated for cultivation, as afforded by nature, is, within the hills, extremely small, and in order therefore to remedy this deficiency, the sides of the mountains admitting of such an operation, have been cut down into terraces, rising above each other in regular succession, and having their fronts supported by slight abutments of stones. These terraces necessarily vary in breadth and length, according to the form and slope of the mountain on which they are situated, but as a great portion of every mountain, more particularly near the summit and ridges, is not sufficiently productive to warrant the expense and labor of the operation, those spots are clothed with grass, and generally covered with forest, consisting chiefly of pines, oaks, and rhododendrons, whilst some parts, from their rocky and precipitous nature, are wholly barren, or only partially sprinkled with tufts of rank grass.

A few lakes are to be found in various parts, the most remarkable of which are *Nagni Tal*, *Bhim Tal*, and *Now Kuntia Tal*, situated in the

Chakata district, near the *Bhamouri* pass. The first, which is the largest, measures, one mile in length and three quarters of a mile in breadth. The water of this and other lakes is perfectly clear, being the produce of internal springs, and the depth in the centre is represented as being exceedingly great. The Himalaya range also presents several lakes, which are fed from the melted snow.

The bases of the mountains are invariably separated from each other by streams of greater or less magnitude, formed principally by the innumerable springs and fountains which pour down on each side. Of these the principal, entitled to the rank of rivers, commencing from the N. W., are the *Kali*, or *Mandakini*, the *Bishenganga*, the *Duli*, the *Nandakini*, and the *Pindar*, all rising in the Himalaya, and forming, after a junction with each other, the united stream of the *Alakananda* or Ganges, which river, in its course throughout the province, from the depth and impetuosity of its current, is no where fordable. To the east, the *Kali*, the *Dhauri*, the *Gauri*, the *Ramganga*, and the *Sarju*, having also their origin in their snowy range, form, by their junction, the *Sarda*; or *Gogra*, and in addition to these, are the *Ramganga*, two *Nyars*, the *Kosilla*, the *Suab*, the *Gourmati*, the *Ladhia*, and the *Ballia*, all of which derive their source from springs in the interior of the province. The small Nullas are extremely numerous, but do not merit particular detail.

The hill rivers in their descent to the plains, immediately on entering the *Tarai*, lose a considerable portion of their body of water, and, in numerous instances, totally disappear at that point, during the hot and cold season, when the bed of the river continues perfectly dry for the space of nine to ten miles, after which it again fills; while at the same distance from the hills, numerous other petty nullahs are formed by the copious springs which gush out of the earth. These phenomena may be accounted for by the nature of the soil at the foot of the hills, which consists of a deep bed of alluvial shingle.

It is by the beds of the rivers that access into this province from the plains on the south, and from the table land of Tartary on the north, is afforded, and the frequented passes into the hills from these points, will always be found to follow, in the first instance, the opening formed by the course of some river, and those ghats which have no facilities of this nature are invariably difficult, and rarely available for commercial intercourse.

The passes through the Himalaya, are *Mana*, *Niti*, *Jowar*, *Darma*, and *Byani*, which will be hereafter described when treating of Bhote; the principal ghats of the plains frequented by trade, are *Bilasni*, *Bhorí*, *Sigdhi*, *Chokí*, *Kotdwara*, *Palpúr*, *Babli*, and *Kangra*, in *Gerhwal*; *Dhikúli*, *Kota*, *Bhamouri*, *Timli*, *Birmdeo*, in *Kamaon*.

Besides these, there are many *Chor* ghats leading to individual villages, and seldom travelled except by the neighbouring inhabitants.

The roads of communication throughout the province, consist merely of narrow foot paths, which are only partially practicable for laden cattle, while rocky precipices frequently present themselves, which are scarcely passable for cattle in any state. These paths, from the nature of the country, are seldom direct, but wind along the faces of the mountains or pass over them, according as facilities of ascent and descent are afforded. No attempt would appear to have been ever made by former governments to facilitate commercial intercourse by the construction of roads calculated for beasts of burthen: fragments of old roads are to be met with leading to some of the principal temples, but as they always proceed directly up the steepest acclivities by means of flights of stone steps, they could only have been intended for foot passengers. A road was also made under the Gorkha government through the centre of the province from the *Kali*, or *Gogra*, to the *Alakananda*, and passing through *Almora* to *Srinagar*, which formed the continuation of a

military road of communication extending from Nipal, and was regularly measured and marked off with coss stones : the construction was left to the Zemindars of the nearest villages, and therefore little more was done than repairing the existing path: it is, in consequence, not superior to the common cross paths of the province. The heaviness of the autumnal rains within the hills, must ever have rendered it difficult to keep any kind of road in tolerable repair, as at that season clefts in the sides of the mountain frequently take place. Military roads of communication have been formed under the British government, from the plains to the posts of *Almora* and *Petoragerh*, through the ghats of *Bhamouri* and *Birmdeo*. The latter road passes through the Cantonment of *Lohú* ghat, while a further new road connects that post with *Almora*. All these roads are practicable throughout for beasts of burthen. A commercial road from the plains through the *Dhikúli* pass, has also been commenced.

The rapidity of the mountain rivers offers great impediment to communication and intercourse, more particularly during the rainy season, when (in the absence of bridges,) the traveller, his baggage and cattle can only be crossed over the large rivers by the assistance of the ghat people, who swim supported on gourds. The bridges are of four kinds: the first, consists of a single spar thrown across from bank to bank; the second, is formed of successive layers of timbers, the upper gradually projecting beyond the lower from either bank towards each other, in the form of an arch, until the interval in the centre be sufficiently reduced to admit of a single timber being thrown across the upper layers, the ends of the projecting timbers being secured in the stone piers; these bridges, which are called *Sangas*, are usually from two to three timbers wide, and have sometimes a railing on each side. The third description of bridges, called the *Jhúla*, is constructed of ropes; two sets of cables being stretched across the river, and the ends secured in the banks, the road

way, consisting of slight ladders of wood two feet in breadth, is suspended parallel to the cables by ropes of about three feet in length. By this arrangement, the horizontal cables form a balustrade to support the passenger, while reaching from step to step of the ladders. To make the *Jhala* practicable for goats and sheep, the interstices of the ladders are sometimes closed up with twigs laid close to each other. A construction of this kind necessarily requires a high bank on both sides, and where this evident advantage may be wanting, the deficiency of height is supplied by a wooden gallows, erected on the two banks over which the ends of the cables are passed. The fourth and most simple bridge consists merely of a single cable stretched across the stream, to which is suspended a basket traversing on a wooden ring, the passenger or baggage being placed in this basket, it is drawn across by a man on the opposite side by means of a rope attached to the bottom: this is termed a *Chinka*.* The two last descriptions of bridge are constructed at a very trifling expense, as the ropes used are made of a silky species of grass, which is produced in abundance in every part of the province. Iron chain bridges, as described in Turner's Thibet, would appear to have been used in this province at a remote period, but no remains of them now exist. A considerable number of bridges (*Sangas*) have been erected under the British government, and many, from the want of durability in the timbers, have had to be renewed after three or four years, so that it will no doubt be eventually found advantageous to resort to the plan of iron chain bridges.

The constant succession of falls and rapids, joined to the rocky nature of their beds, render the hill rivers impracticable for boats at any season, while, during the rains, a further obstacle is presented in the extreme impetuosity

* Meaning, it is supposed, *temporary*, being derived from the Sanskrit term *Kalanika*.

of the current. The only boat to be found within the hills is a small canoe, which plies as a ferry during six months of the year at *Srinagar*, on the *Alakananda*.

The buildings of every description throughout the province are constructed of stone laid in clay. The private houses are usually of three or more stories, having slated roofs with gable ends. In towns, the lower story forms the shop, and is left open towards the street, but in the interior this part is appropriated to the cattle. The wood used in buildings, is commonly some description of pine; but, where easily procurable, toon is preferred. The floors are made of clay beat down: in some parts of the province, where slates are not at hand, shingles, or planks of pine are substituted for them in roofing.

The temples are nearly all built in the same style of architecture: the principal part, in which the idol is placed, consists of an octagon, from ten to twelve feet in diameter; from the height of eight or nine feet, the sides are made gradually to incline inwards, till they meet; thus forming a cone, the apex of which is surmounted by an ornament in the style of a Turk's cap, and has, sometimes, a slight square projecting roof covered with slates or sheets of copper: in one side of the octagon is the door, and from this generally projects a small vestibule, having a pent roof of slate or copper, with a door of entrance in the gable end.

The *Baulis*, or covered fountains, are not remarkable either for their size or beauty: the bounty of nature, which has furnished innumerable springs on every mountain, renders excavation in search of water unnecessary, and all therefore that is required is a reservoir, enclosed in a small covered building, to secure the water from waste and contamination: such are the *Baulis*, built at the expense of individuals; a few are, however, to be met with, erected by former Rajahs, which exhibit some architectural ornaments

being surrounded by light verandas, supported by pillars, and having their interior decorated with sculpture. The construction of a *Bauli* being considered a meritorious work, numerous buildings of this description are to be found in the neighbourhood of all villages, and along roads of particular resort.

The only buildings which remain to be described, are the forts, which, from the state of internal government under the ancient Rajas, were extremely numerous, but the greater number are now mere ruins. They were usually built of large blocks of hewn stones, neatly fitted to each other, with loop holes in the walls for matchlocks, or small *jinjals*, and were always situated on the peak of some mountain, from which circumstance no doubt they derived their name of *Kalanga*. The choice of their position depended on the difficulties of approach, the steepness of the sides of the mountains, and the proximity of water. The mountain, towards the summit, was rendered as perpendicular as possible by scarping, and where the ridge approaching the peak admitted, a trench was dug across, which was passable only by means of a removable bridge. Having thus described the form and nature of the buildings in this province, the number and extent of its towns will now be noticed.

The slender and diffused nature of the resources, joined to the difficulties of transport in these mountains, by rendering the supply of provisions to a large community precarious, must ever have checked the establishment of towns or large villages. It was consequently, at the immediate seat of government alone, that a population to any extent was ever collected, and such was the origin of *Almora*, *Srinagar*, *Champawat*, and *Joshimath*, the only towns in this province. The latter, though never the place of residence of the actual sovereign, yet owed its existence to the presence of the *Ráwal*, and the numerous establishment of the temple of *Badarinath*, and as the *Ráwal* possessed absolute authority in the districts round *Joshimath*, and had always the disposal of a considerable annual income, he may be considered in the light of

a petty prince. With the exception of these four places, there is not a single place that can boast of a permanent bazar, or that contains 120 houses.

Almora, situated in latitude $29^{\circ} 24'$, longitude $79^{\circ} 39'$, is built on the top of a ridge, running east and west, and elevated 5400 feet above the sea: it was founded about three centuries and a quarter ago, by a Raja of the last dynasty, who, at that period, having extended his dominion over the western districts, removed his court from *Champawat* to *Almora*, as a central point of his kingdom. From the nature of its situation, it is confined to a single street, nearly three quarters of a mile in length, paved with stone, and consisting of two bazars, divided from each other by Fort Almora, and the ancient palace of the Rajas. Detached houses, chiefly inhabited by Brahmins, are scattered along each face of the mountain below the town. At the western extremity, and immediately joining on the town, are the lines of the regular troops, in the rear of which is the fortification now termed Fort Moira: at the eastern extremity is a small martello tower, called St. Mark's. The palace of the Rajas consisted of a confused pile thrown together in an irregular style, and as the whole was in a state of considerable decay, it was in consequence knocked down, and the materials appropriated to the public works: the principal part of the ground on which it stood, is now occupied by the jail. There are several temples in *Almora*, but none requiring any particular mention. By an enumeration in 1821, the number of houses in the town and suburbs was found to be 742, divided among the different classes and castes as follows:—

<i>Hindus</i> ,	228	<i>Doms</i> ,	127	<i>Mohammedans</i> ,	75
<i>Brahmins</i> ,	228	Stone Cutters,	51	<i>Tradesmen</i> ,	57
<i>Merchants and Bankers</i> , ..	184	<i>Masons and Carpenters</i> , ..	33	<i>Not engaged in trade</i> ,	18
<i>Goldsmiths</i> ,	40	<i>Blacksmiths</i> ,	27		
<i>Petty Traders</i> ,	53	<i>Copper Smiths</i> ,	8		
<i>Dancing Girls</i> ,	53	<i>Curriers</i> ,	8		
<i>Not engaged in trade</i> , ..	19				

The number of inhabitants will hereafter be detailed under the head of population.

The Kacheri and other civil buildings are at *Almora*, but the houses of the civilians are at *Hawelbagh*, which is considered as the civil station, and at which the provincial battalion is cantoned: this place is five miles north of *Almora*. The town of *Almora*, from having become the station for the regular troops and the civil establishments, has, during the last six years, much increased in the number of its inhabitants, and many new houses have been erected during this period. Under the Gorkha government, the town was fast hastening to decay.

Srinagar, the antient capital of *Gerhwal*, is situated in lat. $30^{\circ} 14'$, long. $78^{\circ} 37'$, and is built in a valley on the bank of the *Alakananda*, the principal branch of the Ganges. It owes its origin to an ancestor of the present Raja of *Gerhwal*, who, about three centuries past, having established the monarchy of *Gerhwal*, founded the town of *Srinagar*, and established it as the capital.

As the whole trade of *Gerhwal* soon centered there, it would appear at one period to have attained a very flourishing condition, and far exceeded *Almora* in extent and population; but during the last twenty years, this town has suffered most severely from the successive calamities of earthquake, flood, and invasion, and to these must now be added the decrease of trade: by the recent partition of *Gerhwal*, it has lost all share in the trade of that portion of the country made over to the Raja, while the greater part of the traffic from the eastern district, which formerly centered in *Srinagar*, now flows direct through the more convenient passes of *Kamaon*. From these causes, the merchants are daily deserting to *Almora* or *Tiri*, (the capital of the Raja) and the few who remain are retained there principally by the influx of pilgrims, who annually pass through the town in their route

to *Badarianath*. The town contains one bazar, running north and south: In 1821, the number of houses was 562, distributed as follows :

<i>Doms</i> , 96	<i>Mohammedans</i> , 28	<i>Hindus</i> , 438
		Brahmins, 129
		Merchants and Gold } 84
		Smiths, }
		Dancing Girls, 30
		Gosaens, 73
		Petty Traders and not } 122
		engaged in trade, ... }

The number of Hindu temples is very great : nearly forty receive allowances from the government, but none of these buildings are deserving of description. The palace of the Raja must once have been a handsome structure, and, considering the poverty of the country and difficulties of building here, is certainly deserving of admiration. It consisted of an extensive quadrangle, having three grand fronts, each four stories high, with projecting porticoes, the whole of the lower part being profusely ornamented with sculpture neatly executed. The materials consist of large wrought blocks of a close grained black stone, laid in mortar. The greater portion of this building has been thrown down by earthquakes, and the three porticoes abovementioned, are now alone standing. The native establishments for the revenue and police of the western half of the Gerhwal districts are stationed in *Srinagar*, and there are two *Jhulas* and a canoe for crossing the *Alakananda* established, and in the immediate vicinity of the town.

Champawat, in long. 79° 28', lat. 29° 19', and elevated five thousand four hundred and seventy feet above the sea, is situated in the district of *Kalikamaon*, near the extremity of the province : it was originally a village,

the residence of the principal Zemindar of that quarter, but became, between six and seven centuries past, the capital of a small independent principality, established by the Zemindar in question, out of the wrecks of the *Káttar* monarchy destroyed at that period: it subsequently became the entrepot for the trade of Tartary, passing from the *Dharma ghat* to *Belhary*, in the plains; and to this circumstance must be ascribed its continued existence as a town, and its retention of a bazar, after it had ceased to be the residence of the court. The present number of houses is sixty-one, of which forty-six are shops: the antient palace of the Rajas, and the fort in which it stood, are now a heap of ruins. The Kacheri of the *Tehsildar*, for the eastern districts of *Kamaon*, is stationed here, and three miles north of the town, at a place called *Lohu ghat*, is a military cantonment, at which is stationed a force for the protection of the frontier. Another post of the same kind is established twenty-two miles north of *Lohu ghat*, at *Petoragerh*. Two small fortifications have been recently erected at these posts.

Joshimath, long. $79^{\circ} 32'$, lat. $30^{\circ} 33'$, is situated near the junction of the *Bishenganga* and *Dauli*, (branches of the Ganges) and is elevated 7,500 feet above the sea. The *Ráwal*, and other attendants of the temple of *Badarinath*, reside here during half the year, when the temple is blocked up with snow. There are 119 houses, distributed as follows:

Brahmins,	21
Merchants,	14
Cultivators,	68
Doms,	16

Some trade is carried on from this town with Tartary, through the *Mana* and *Niti* passes.

Bageswar, situated at the conflux of the river *Sarju* and *Gomati*, long. $79^{\circ} 35'$, lat. $29^{\circ} 50'$, contains a bazar consisting of forty-two shops, which

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are all the property of the *Almora* merchants, erected solely with a view to the Tartar trade, two considerable fairs taking place here annually: as these houses are only inhabited during two or three months in the year, they must be considered rather as coming under the description of a temporary *Gunj*, than of a town. From the great improvement in the Tartar trade, within the last six years, the number of houses in this place has greatly increased.

Some notice of the size of the villages may now be taken. From the nature of the arable land in this province, as already described, it rarely occurs that such quantity exists in any one spot, as to require the labor of a large resident population: the villages are consequently, with a few exceptions, universally small, and are, in fact, nothing more than detached hamlets, scattered along the sides and bases of the mountains, wherever facilities for cultivation are afforded.

The total of inhabited villages and hamlets, as will be seen by the accompanying statement (*a*) amounts to 9034, while the whole number of houses contained in them, is only 44,569, giving an average of nearly five houses to each village. The number of hamlets consisting of one house is very great, while only 25 villages are to be found in the province, which exhibit more than 50 houses, and the largest village exhibits 115 houses. On this head, I regret that it is not in my power to offer more certain information than such as is derived from an estimate of the average of inhabitants to each house throughout the province. An attempt was made to ascertain the amount by actual enumeration, and, as far as related to the towns, this measure was executed without difficulty, but in the interior, obstacles occurred which rendered the attempt nugatory. The revenue officers, from the extent of their jurisdictions, and the smallness of their establishments, were necessitated to call in the aid of the *Kamins* and *Seyanas*, and the returns furnished through this

assistance, exhibited such extraordinary incongruity, both with respect to the proportion of males and females, and to the average rate of inhabitants to each house in different villages, that no reliance could be placed on them. This inaccuracy must be ascribed, no doubt, to a suspicion on the part of the land-holders, that the information was required solely with a view to some fiscal arrangement, as, under the former government, the amount of the cultivating population had formed one of the principal grounds in the adjustment of the village assessment. A recourse to the mode now adopted was, therefore, found to be unavoidable; and it remains to consider the principle on which the estimated average has been founded.

The state of population in the towns does not afford an exact criterion on which to form a judgment of that in the interior, as the inhabitants of the former, from the difficulties of procuring grain, are compelled to maintain a part of their family in villages. To this cause must be ascribed the smallness of the average exhibited in *Almora* and *Srinagar*, the former being five and a half, and the latter not quite four and a quarter to each house, a rate which by no means corresponds with the size of the houses, or can be reconciled to the custom of the country. The erection of a house, from the nature of its materials, requires a very considerable outlay: this consideration tends greatly to check the subdivision and separation of families, and many generations are constantly to be found residing under the same roof. Under these circumstances, the proportion now assumed, of six and a half residents to each house, will not perhaps be thought excessive. Taking, therefore, the number of houses in *Kamaon* and the annexed pergunnas of *Gerhwal*, as exhibited in statement (a) at 44,569, the above average will yield a population for the interior, including *Bhote*, 289,698 souls. To this must be added the inhabitants of the towns, amounting to 7348, and if a further addition of 4000 be made for troops, camp followers, and civil establishments, the total of the residents in the province may be estimated at 300,046, giving about 27½

to the square mile. As however $\frac{1}{3}$ of the province, consisting of $\frac{4}{15}$ snow in the north, and $\frac{1}{15}$ turrae in the south, is almost wholly uninhabited, the proportion in the remaining parts will be about $40\frac{1}{2}$ persons to the square mile. The proportion of Mohammedans is extremely small, as they are only to be found in the towns of *Almora* and *Srinagar*, and in two or three villages along the Ghats to the plains; the former amount to 494, and the latter 154; to these may be added the troops and camp followers of the same sect, estimated at 100, and the total will then stand at 748.

A detail of the inhabitants of the towns is here subjoined:

		<i>Houses.</i>	<i>Males.</i>	<i>Females.</i>	<i>Children.</i>
Almora,	.....	742	1369	1178	968
Srinagar,	.....	561	945	887	512
Champawat,	.....	61	338 details not given.		
Joshimath,	.....	182	225	322	101

The great proportion of females to males in the latter town, may be ascribed to the number of female slaves, the property of the temple of *Badadrinath*.

On the Zoology of the province, it is not pretended to offer scientific descriptions, but merely to notice any peculiarities to be found among the animals in these mountains. The animals of the *Bhawar* or *Tarai* are too well known to require any notice; but it may be stated, that the elephants in that quarter are numerous, and many of the herds are represented by the Zemindars as very large. A few of these animals are annually caught by means of *Kumki* elephants, at the expense of the Nawab of *Rampur*. The practice of digging pits is forbidden, and as the elephants are now little molested, it is to be hoped that they may, at some future period, prove available to the service of the state. The domestic animals are the same as in the

plains, but of smaller size : horses and asses must, however, be excepted, for of the former there are only a few ponies, which are imported from Tartary, and of the latter there are none. The hill sheep have invariably short tails like deer. Further notice will be taken of the cattle, when on the subject of agriculture. The wild animals are tigers, by whom great numbers of people are annually destroyed, leopards, bears, jackals, wild cats, weasels, flying squirrels, moles, porcupines, rats, and mice, monkeys, two varieties, the *bender* and *langúr*. The beasts of chase are wild boars, and five species of deer, two, the *jarao* and *sarao*, large, and three, the *thar* or chamois, the *ghúrér* and the *khaker*, small ; also hares. The animals peculiar to the Himalaya will, hereafter, be noticed in a separate article. Among the birds are, one eagle, vultures, kites, hawks, ravens, crows, daws, jays, wood-peckers and an endless variety of small birds. The game birds are pheasants, five varieties, all differing from the Europe, jungle fowl, partridges, three sorts, quails, woodcocks, peacocks, snipes, and wild fowl. The latter, as well as other aquatic birds, are very rare, owing, in all probability, to the rapidity of all the mountain rivers. The common barn door fowl is bred by the inhabitants of low caste.

Reptiles are by no means numerous. The snakes are of three or four kinds, but all harmless excepting the *Cobra capella* : this last is, however, only to be met with in low hot situations, such as *Srinagar*, where fatal accidents occasionally occur from its bite. This remark applies also to scorpions, those on the tops of the mountains being very small, with little or no venom. The remaining reptiles are *gosamps*, armadillos, lizards, asps, frogs, toads, &c.

The rivers and lakes, in these hills, offer very few varieties of fish, not probably exceeding seven or eight, among which are the trout and eel : alligators and turtles are not found higher than the Tarai. Land crabs are common. The rivers, for some distance from the Himalaya, are entirely

free from every description of fish, owing, probably, to the coldness of the water from the snows.

The insects are extremely numerous, but offer no new or peculiar varieties; and it will therefore be sufficient to mention the bees, which are of two kinds. The domestic bee varies only in size from that of Europe, being considerably smaller. The hives for their reception, which are to be met with in almost every village, consist merely of a log of wood, hollowed out, and the ends stopped with pieces of boards fitted in, and so fastened as to admit of being easily removed. A swarm of bees being procured in the common mode, the hive is then built into one of the outer walls of the house, and a small hole is made at one end for the egress and ingress of the bees. When the honey is considered as ready, the bees are driven out by a continued knocking on the inner end of the hive, the hole of entrance is then stopped to prevent their immediate return, and the board at the back being removed, the honey is taken out; after which the hive is restored to its original state, and the bees suffered to retake possession. The quantity of wax afforded by these bees is trifling; the honey is, however, remarkably white and fine flavored. The wild bee, which exactly corresponds with the humble bee of Europe, builds its nest on the rocks and in the caves at the base of the snowy mountains: as their honey is not an object, the nests are not taken till voluntarily evacuated, and being thus unmolested the bees continue, year after year, to build at the same spot. The nests in question yield from two to eight seers of wax each. It may be remarked, that locusts rarely visit these hills: some considerable flocks made their appearance in 1820, after an interval of twenty years, but they were almost immediately destroyed by rain.

As the diversity of temperature and climate to be found at the various degrees of elevation on the mountains, tends so greatly to multiply the

varieties of vegetable products, some description of the former appears requisite.

The heat is generally moderate, as will be seen from the annexed statement of the average range of the thermometer in the shade, throughout the twelve months.

	7 A. M.	2 P. M.		7 A. M.	2 P. M.
January,.....	35°	47°	July,.....	72°	78°
February,.....	37°	55°	August,.....	72°	79°
March,.....	46°	61°	September,.....	67°	75°
April,.....	54°	66°	October,.....	55°	69°
May,.....	57°	73°	November,.....	42°	60°
June,.....	73°	76°	December,.....	34°	52°

These observations were taken at *Hawil Bagh*, an elevation of 3887 feet above the sea. The heat necessarily diminishes, as the height increases. At *Almora*, which is, as already stated, 5400 feet above that level, the difference is between two and three degrees less than the above average, and so on in proportion. During the cold season, on the contrary, from the greater evaporation, the thermometer, before sun-rise, is always lowest in the valleys, and the frost more intense there than on hills of moderate height, (that is below 7000 feet,) while at noon the sun is more powerful. The extremes, in twenty-four hours, have been more than once 18° and 51°, being a difference of 33°; an inequality which proves destructive of horticulture, and highly injurious to trees until they have attained a certain age, after which they are no longer affected by such changes. Snow by no means falls equally every season; the natives fix every third year as likely to be snowy. No year, however, passes without its partial occurrence, The snow never lies but on the mountain tops and ridges, and from thence it soon disappears, unless sheltered from the sun by forests: where the

latter are thick, it remains many months. It may, in most years, be found on the summit of the *Ghagar* range, between *Almora* and the plains, so late as the middle of May.

No month in the year is without rain: the periodical season for its fall is from the middle of September, and there usually occur five or six days of continued rain in the end of February, or beginning of March. During the remainder of the year, it is partial and uncertain. In April and May, the rain is usually attended with violent storms of thunder and of hail. From the result of observations made with a pluviometer at *Hawil Bagh*, it may be assumed that, one year with another, the average quantity of rain in the twelve months, is between forty and fifty inches. Thunder is frequent and always loud; buildings are often struck, and lives occasionally destroyed by lightning.

The soil on the ridges and sides of the mountains is generally poor and stony, while the depth of earth is seldom great, and rock is commonly to be met with at a few feet from the surface: in such situations, therefore, the aid of frequent supplies of manure is required to renew the fertility of the land.

In the valleys, which consist almost wholly of alluvial soil, deposited by the rivers, or washed down from the mountains by the rains, the land is tolerably productive, though not to be compared with that in the Tarai or the plains.

Among the trees, the most numerous are the pines, affording eight varieties, some of them remarkable for their size and qualities. The oak also offers six or seven species, all differing from the Europe oak, with the exception of the *ilex*, which is similar. To these may be added the *rhododendron*, two sorts, white and red, horse chesnut, toon, &c., an endless variety, some common to the plains, and others peculiar to the hills. The fruit trees include

the apple, pear, apricot, cherry, walnut, pomegranate, mulberry, peach, mango, guava, orange, lemon, two kinds, citron, four kinds, plaintain, arbutus or tree strawberry, raspberry, barberry, grape vine, blackberry, and *giwain*, besides some peculiar to the hills, as the *bhamora*, and the *chári*, or butter tree, which produces a small edible fruit in the shape of a pear, containing a stone, from the *kernel* of which is formed the butter, while from the saccharine matter contained in the flowers, a species of sugar is also manufactured. To conclude the list of fruits, the strawberry, the water melon, and pumpkin, may be added. Among the shrubs it will be only necessary to mention the dog rose and hawthorn, *siddharúa*, from the bark of which paper is manufactured, and the dalachini, (the wild cinamon.) Garden vegetables were confined to onions, turnips, sweet potatoes, egg plants, and cucumbers, all remarkable for their size and flavor; spinach was also much cultivated. Potatoes have now been introduced with partial success, but the greater number of Europe vegetables have been found to thrive extremely well. The flowers are extremely numerous; the most remarkable are lillies, many varieties, flags, pionies, wild tulips, &c. &c.

Hitherto the only minerals discovered, are the coarse metals, viz. copper, iron, and lead. The copper is produced in many parts of the province, though not always in the same species of soil, the matrix in some of the mines being a dark sandy stone, and in others a white soapy rock. The principal mines now worked, are *Gangoli* and *Sira*, in *Kamaon*, *Nagpur* and *Dhanpur*, in *Gerwal*. Each mine consists of a horizontal shaft, run into the side of a mountain: these shafts are about $3\frac{1}{2}$ feet high by $2\frac{1}{2}$ feet wide, and have their floors gradually declining towards the moath, to prevent the water from lying and accumulating. Where a rich vein is discovered, traverses of the same description as the shaft are struck off, and when the ore is exhausted a new mine is commenced near the old one. This measure is adopted also when the old mine, from earthquake, or other cause, becomes blocked up by the falling in of the

roof. Some of these shafts are carried for a very considerable distance into the bosom of the mountain. The period of mining is during the cold and hot weather, when the produce is collected at the mouth of the pit, where it is washed by the women and children, a small stream being always conveyed thither for the purpose: the clean ore is then carried to the houses of the miners, where the greater part remains for smelting till the rainy season. Two or three men only are employed in working at the same time, and these are relieved every hour. The ore is brought out of the mine on buffalo hides, which are dragged along the ground by boys, with a rope tied to one end, and passed round their bodies. The instruments used are merely hammers, small iron wedges, and crow bars; strips of turpentine fir are used for light. The copper usually sells on the spot for sixty rupees the maund.

Iron exists in all parts of the province, and as the process of extracting it is extremely simple, a great number of mines are constantly worked. The ore is found near the surface, in extensive strata of rocks, but varying very materially in appearance at different mines. In preparing the iron, the ore is, in the first instance, broken small, and roasted by the miners, until the whole quantity adheres together, forming a single mass: in this state it is delivered by them, for the further process, to the blacksmiths, by whom the roasted ore is once more broken small, and then exposed in crucibles to a strong heat, sufficient to fuse the vitreous matter, which runs off through a hole left for that purpose. The metal remains in the crucible, and is then beaten up into small bars for the market, where it sells at a price fluctuating between 3-8 and 4 rupees per maund. The common produce at the different mines is from 40 to 50 per cent. So imperfect, however, is the smelting, that from $1\frac{1}{2}$ to $1\frac{1}{2}$ is, subsequently, lost in working up this iron.

Of lead, a few mines exist in the province, but none of them are worked.

The rocks of the southern and midland parts of the province offer little variety, consisting almost uniformly of coarse mica, containing nodules of quartz, sand stone, and slate. In the northern districts, the prevailing kinds are granite, quartz in large masses, and white marble. Garnets, of an inferior description, are to be found every where embodied in quartz or mica. Rock crystal exists in plenty in the Himalaya. Organic remains and fossil bones are also found in that part of the country; the former consists of *madrepores* and *salagrams*; the bones would appear to have belonged to some large animal of the ox species, probably the *yak*. Bitumen is found on the summits of many of the high mountains in the province: it exudes from the crevices in the rock, and is of a dark black color, with a strong unpleasant odour. It is used in medicine by the natives, under the name of *Silajit*.

A white saponaceous stone, resembling and used for the same purposes as pipe clay, is produced in many places. In *Gerhwal*, various vessels are turned from it, which, when polished, have the appearance of marble. They retain liquid, but being extremely brittle, are little used.

If volcanic appearances are ever discovered, it will no doubt be in the *Himalaya* range: a few hot springs are to be met with in the passes through it; the heat of these vary; one at *Badarínath*, where it issues from the ground, shows a heat of 138° Fahrenheit. The inhabitants residing at the base of the range in question, state that smoke is occasionally seen to rise from the interior. The frequent occurrence of earthquakes renders it possible, that some volcano is situated there, but the inaccessible nature of the interior of the *Himalaya*, must ever render it impossible to ascertain its existence by actual inspection.

With respect to the origin of the inhabitants, recourse can only be had to vague traditions and conjectures. The country, from its situation, must

necessarily have been peopled from the *table land* of *Tartary*, or the plains of *Hindustan*. Judging, however, from the personal appearance of the inhabitants, their religion, and language, the latter appears the most probable, as had the first settlers been *Tartars*, some communication would doubtlessly have been maintained with the mother country, by subsequent migration from thence. The original occupants of the country, whenever they may have come, would appear to have been completely uncivilized, and wholly ignorant of agriculture and of the common arts of life. At a period, comparatively speaking, not very remote, the celebrity of the *Himalaya*, in the Hindu Mythology, by inducing a constant resort of pilgrims, led to the gradual colonization of the country, by natives of various parts of *Hindustan*, who introduced their religion and knowledge; and the country having, by these means, been rendered an object of competition, its invasion and conquest soon followed. Such are the current traditions, and their simplicity entitles them to consideration.

Of the aborigines, a small remnant, pertinaciously adhering to the customs of their ancestors, are to be found in the *Rawats* or *Rajis*. They are now reduced to about twenty families, who wander in the rude freedom of savage life, along the line of forests situated under the eastern part of the *Himalaya*, in this province. In all probability the outcastes, or *Doms*, are in part descendants from them; a conjecture that is founded chiefly on two circumstances, first, the great difference in the personal appearance of the *Doms* from the other inhabitants, many of the former having curly hair, inclining to wool, and being all extremely black, and secondly, the almost universal state of hereditary slavery in which the *Doms* are found here. With the origin of this slavery, even the proprietors are unacquainted, it may, however, easily be explained, by supposing a part of the aborigines to have been seized, and reduced to that condition by the first colonists above-mentioned.

The sanctity of the Himalaya in Hindu mythology, by no means necessarily implies the pre-existence of the Hindu religion in this province, as the enormous height and grandeur of that range visible from the plains would have been sufficient to recommend it as a scene for the penances of gods and heroes. The worship of *Vishnu* would appear to have been introduced into this province by missionaries, from the peninsula of India. All the most celebrated shrines and temples dedicated to the incarnations of that deity, owe their undoubted foundation to the former princes of that quarter, and to the present moment these temples, including *Badarínath*, *Kedarnath*, *Raghumath*,* at *Deoprag*, *Narsinh*, at *Joshímath*, &c., are exclusively administered to by priests, natives of the peninsula. To the polytheism of the Hindu creed, has been here superadded a variety of local superstitions, and the great bulk of the population are now Hindus in prejudices and customs, rather than in religion. Every remarkable mountain, peak, cave, forest, fountain and rock has its presiding demon or spirit, to which frequent sacrifices are offered, and religious ceremonies continually performed by the surrounding inhabitants at small temples erected on the spot. These temples are extremely numerous throughout the country, and new ones are daily erecting; while the temples dedicated to Hindu deities, in the interior, are, with a few exceptions, deserted and decayed. The ceremonies peculiar to the local deities are uninteresting: on particular festivals, dancing forms a principal part, when the dances are performed by any number of men, who move round in a circle with various contortions, their motions being regulated by the slow measure of song, which is sung by the leader of the party, the rest joining in the chorus.

The former government, together with the principal people of the pro-

* Although it is scarcely possible that the author of this paper should have been misinformed, yet the general impression derivable from original authorities is, that some of these are shrines of *Siva*, not of *Vishnu*.—H. H. W.

vince, and the inhabitants of the towns, professed the pure Hindu Brahminical tenets. Either from the absence of any intimate connection with Mohammedan powers, or from an abhorrence of the excess committed by Mohammedan invaders against the Brahminical worship, in this and other countries, strong prejudices were ever entertained against that sect. The profession of the Mohammedan religion was rather tacitly permitted, than openly tolerated in both *Kamaon* and *Gerhwal*, and no public processions, *Taxias*, &c., were ever suffered to take place either at *Almora* or *Srinagar*, at which places only Mohammedans are to be found in any number.

The institution of caste exists here, among the upper ranks, in its utmost rigour, and any infringement of its ordinances or restrictions is immediately followed by degradation, nor can a restoration to the privileges of caste be obtained, but by undergoing various prescribed penances agreeable to the nature of the offence. In the interior, the inhabitants are comprised under three classes only, Brahmins, Rajputs, and Doms: in the towns, other castes and branches are to be found. The principal classes of Brahmins are *Joshis*, *Panths*, and *Pandes*, in *Kamaon*, and *Khandiris* and *Dobhals*, in *Gerhwal*, all of which are extremely scrupulous and prejudiced. Among the lower ranks of Brahmins, great latitude is taken in regard to labor, food, &c., and their claim to the distinction of that caste is, in consequence, little recognised: the mass of the labouring population, from similar causes, have still less pretensions to the designation of Rajputs, which they assume. The Doms are, of course, out castes, and to them are left the whole of the inferior trades, those of carpenters, masons, blacksmiths, coppersmiths, quarriers, miners, tailors, musicians, &c., and by them also are performed the most menial offices.

The ceremonies and periods at which marriages are concluded, are almost wholly similar to those followed by the Hindus in the plains. A sum

of money is, however, invariably paid by the suitor to the nearest relation of the bride, a practice reprobated in the plains. This sum varies from twenty-five to a thousand rupees, according to the rank and property of the parties, and from this amount are defrayed the expences of the marriage ceremonies, and of the bride's portion. In equal marriages, among the high classes of landholders and merchants, and among the Brahmins, the disbursement generally exceeds the sum received from the bridegroom. In cases of second and subsequent engagements entered into by persons of this description, the new bride is received on terms of inferiority to the first wife, and the *dower*, and other expences, are less proportionate to the sum paid. The latter observation applies to all contracts of this nature, which take place in the remaining classes of the population, such transactions being, in point of fact and custom, one of regular sale, conveying to the husband and his heirs, the free and disposable property in the person of the wife, a right which, though now not recognised, was, under the former governments, daily put in practice. When the means of the suitor are insufficient to satisfy the demands of the parents, an equivalent is sometimes accepted in the personal services of the former, for a given period of years. The marriage is completed on the signing of the contract, and at its expiration, the contractor is at liberty to carry away his wife.

The custom of many brothers having one wife in common, has long ceased to be practised in any parts of this province, but the widow of an elder brother is commonly re-married to the next brother.

The dead bodies are here burnt, with the usual Hindu ceremonies. Where death may have ensued from any disorder supposed to be contagious, the body is usually buried in the first instance, and after the lapse of two or three months, the remains are dug up and burnt on a pile. *Satis* were numerous under the former government, but have now greatly decreased,

and the annual average does not now amount to three. As this practise is now confined wholly to the Rajput families of the highest class (which are by no means numerous) it may be expected to become daily more rare. The other classes have almost invariably proved most ready to listen to the persuasions of the public native officers, and have been satisfied with the salvo offered to their character, by the ostensible intention and preparation without proceeding to the completion of the sacrifice.

There are no public institutions of the nature of schools, and private tuition is almost wholly confined to the upper classes. The teachers are commonly Brahmins, who impart to their scholars the mere knowledge of reading, writing, and accounts. The children of respectable Brahmins are also taught Sanscrit, and are occasionally sent to Benares to complete their studies, where they pass through the usual course of Hindu education, consisting of theology, astronomy, judicial astrology, and sometimes medicine. The Pundits here, however, by no means appear to excel in any one of these branches, as the most learned usually resort to the courts of the Hindu native princes in the plains. The colloquial language is pure Hindi, derived chiefly from the Sanscrit, without any admixture of Persian. The terminations and punctuations are, however, extremely corrupt, more particularly in the northern pergunnas. The language used in *Gerhwal* differs very considerably from that of *Kamaon*. The bulk of the population in both parts are, however, acquainted with Hindustani, as spoken in the plains.

In the division of time, the Hindu mode is exclusively followed, and the years in use are also Hindu, being the *Sambat* and *Saka*. The latter is the most generally adopted in written documents: it differs from the *Sambat* by a period of thirty-five years.

The religious establishments are numerous, and the lands assigned for

their support amount to about one-fifteenth of the total arable lands of the province. Under the former government, large sums were distributed on particular occasions, and festivals to the temples of the favorite deities, a few of which will be here particularly noticed.

The shrine of *Badarínáth*, dedicated to an incarnation of *Vishnu*, and one of the most sacred in the Hindu mythology, is situated within the *Himalaya*, in the *Mana* pass, immediately below the village of that name. The temple is built on the bank of the *Bishenganga*, immediately over the site of a hot spring, the existence of which no doubt led to the original selection of this remote spot. The present building, a modern erection, is small and neat, the material being a hard white stone, and the roof formed of copper tiles. The constant danger from avalanches, renders a contracted style of building indispensable, and even with these precautions, many former temples have been overwhelmed and destroyed. The *Ráwal*, or chief priest, who administers this institution, is invariably a Brahmin from the Carnatic, or Malabar coast, no other description of Brahmin being allowed to touch the idol. To prevent any inconvenience or cessation of the religious rites, in the event of the sickness or death of the *Ráwal*, a Brahmin of the same caste remains in attendance at Joshimath. The *Ráwal* has a regular establishment of vizirs and secretaries, treasurers, &c., to manage the temporal concerns of the institution, and under the former Rajas, this personage exercised supreme and uncontrouled authority in the villages attached to the temple. The shrine, notwithstanding its extraordinary sanctity, is far from rich. The idol is adorned with only one jewel, a diamond of moderate size, in the middle of its forehead, while the whole paraphernalia, including ornaments, dresses, gold and silver utensils, &c., do not exceed 5,000 rupees in value. As some explanation of this comparative poverty, it may be stated, that on the Gorkha invasion of Gerhwal, the Raja took jewels and plate to the amount of 50,000 rupees, as a loan from the temple. The revenues of the

temples are derived from two sources—the offerings of votaries, and the rents of assigned lands ; but the difficulties of access, by checking the resort of rich pilgrims, renders the first branch less productive than might have been expected. The season of pilgrimage commences at the beginning of May, when the temple is opened, and concludes in November, when it is again closed : in ordinary years, the number of pilgrims varies from seven to ten thousand, of which, however, the greater portion are Jogís and Byragís. The offerings in such years, amount to between 4 and 5,000 rupees, but at the *Kúm*, and half *Kúm*, the numbers and receipts are proportionably greater. In 1820, the pilgrims who reached the temple, amounted to 27,000, while many thousands turned back from the fear of the cholera, which then raged in Gerhwal, or fell sacrifices to that distemper on the road. The receipts, at the same time, were 15,750 rupees, exclusive of gold and silver ornaments and vessels, to the value of near three thousand more. The revenue derived from land by no means corresponds with the number of villages with which the temple is endowed. The institution possesses no less than two hundred and twenty-six villages, one hundred and seventy in *Gerhwal* and fifty-six in *Kamaon*. Of the former, many are large and populous, and were acquired rather from the poverty than the piety of the former Rajas, having been assigned in satisfaction of considerable loans. The rents are paid partly in produce and partly in money, agreeably to the specification in the original grants. As the proprietors of these villages were almost universally Brahmins, the assessment was fixed in permanency at a very low rate in the deeds in question. The value of the proceeds of every description from these villages, may be estimated at 2,000 rupees ; 1,500 from *Gerhwal*, and 500 from *Kamaon*. The expenditure is regulated, in some measure, by the receipts, and consists chiefly in the support of the *Ráwal* and numerous establishment, in the daily distribution of food and alms to pilgrims, and in the regular allowances to Brahmins on various festivals. In ordinary years, the disbursements exceed, by a few hundred rupees, the gross income, as above estimated, at between 6 and 7,000 rupees,

in which case the deficiency is supplied by loans, which are liquidated by the surplus proceeds of productive years. In the year 1820, the sum of 7,500 rupees was, in this manner, devoted to clear off former incumbrances. These statements have been formed from the original detailed accounts, which, from the various checks that exist in their formation, must be generally accurate. During the winter months, the temple is blocked up and covered with snow, and the attendants remove to *Pandkesar* and *Joshimath*.

The temple of *Kedarnath*, similarly situated in the *Himalaya*, is also dedicated to an incarnation of *Vishnu*. The present building is larger and handsomer than that at *Badari*, and has only recently been completed at the expense of *Kajee Amer Sinh* and his family. The *Ráwal* here is also invariably a native of the Malabar coast, of the *Lingam** sect. He does not, however, perform the religious ceremonies in person, but resides constantly at *Ukhimath*, and sends his deputy (of the same class) to *Kedarnath*. The season of pilgrimage, and the number of pilgrims, are nearly the same at both temples, a previous visit to *Kedarnath* being considered a necessary preparation to the pilgrimage to *Badarinath*. A few pilgrims annually devote themselves to destruction there, either by precipitating themselves from the summit of a particular rock, or by penetrating into the *Himalaya*, till overwhelmed in the snow. The receipts and disbursements of this temple may be taken at one-third of those of *Badarinath*. There are also several charitable endowments, for distribution of food to pilgrims proceeding to *Kedarnath* and *Badarinath*, which are supported by lands exclusively assigned for the purpose, the greater part, during the Gorkha government; at each of which the pilgrims receive one day's food either going or returning.

* How is this reconcileable with its being a Vaishnava shrine? H. H. W.

The village of *Púchasao*, in the *Jawar* pass, is in *Sadawart*, for pilgrims proceeding to Lake Manasarovara.

Kamaleswar at *Srinagar*, and *Jágeswar* near *Almora*, are the only other religious establishments in this province, which deserve consideration from the extent of their endowments.

The remaining temples, holding one or more villages, are extremely numerous. *Raj Rajeswari* in *Dewalgerh*, *Gerhwal*, receives an annual allowance from government, amounting to rupees 652, and several other temples at *Srinagar* and *Almora* also enjoy each a small money pension.

The junctions of all large streams offer sacred objects for pilgrimage, of these the principal are *Deoprag*, *Rudraprag*, *Karnaprag*, *Nandprag*, and *Bishenprag*, situated at the confluence of the Ganges, with the *Bhagirathi*, *Mandakini*, *Pendur*, *Nandakini*, and *Bishenganga*, respectively.

Bageswar, at the junction of the *Gomati*, and *Rameswar*, at the junction of the *Ramganga* with the *Sarju*, respectively, are most celebrated in *Kamaon*, and have each their periodical fairs.

The *Government* consisted of a simple monarchy, but the power of the sovereign was, in point of fact, far from absolute, being ever controuled in a greater or less degree by the will of the aristocracy.

The latter, from the poverty of the country, was confined to a small number, consisting merely of the civil and military officers of the state, and of a few principal landholders. Many of the chief offices of government comprising *Diwans*, *Deftereas*, *Bhendaris*, *Vizirs*, *Foujdars*, *Negís* and *Thokdars*, had become hereditary in particular families, a circumstance which rendered

the influence of their holders boundless in their several departments. The Raja's authority was still further circumscribed by the corrupted state of feudal tenure which existed here. The country was allotted in separate divisions for the payment of troops, to the commander of which was entrusted the civil administration of the lands assigned. The revenues of some districts were originally reserved for defraying the expences of the court, but these had been nearly absorbed by grants of the junior members of the royal family, to the civil officers of government, and to the attendants of the court, all of whom, from the highest to the lowest, were supported and remunerated in land. A further alienation of the royal domains had taken place, in the frequent donations to Brahmins and temples by successive Rajas, so that with these numerous deductions, the actual amount of rents which reached the treasury was extremely small.

A portion of the most fertile land in the neighbourhood of the capital was retained for the exclusive supply of grain to the Raja, being cultivated at his own expence, but the principal source of the ordinary revenue of the sovereign, consisted in the frequent offerings presented by his subjects at the several Hindu festivals, and on occasions of extraordinary disbursement, such as the marriage of the reigning prince, or of his son or daughter, a general impost was levied to defray them, from all the assigned lands of the country. With all these aids, the sovereign was ever poor, and during some of the latest reigns was frequently reduced to absolute indigence and want: a fact confirmed to me by the present Raja of *Gerhwal*. The sovereign had the undoubted prerogative of resuming all grants of land of every description, but as this right could only be enforced by the concurrence of the prevailing party in the state, its exercise afforded him little personal advantage, the resumed lands immediately passing to some one of the party in question as the price of its assistance.

The judicial administration formed one source of the revenue of the state.

In the interior, justice was administered in civil and petty criminal cases by Foujdars, or governors, while cases of magnitude, and those originating in the capital or neighbourhood, were determined in the Raja's court, under the superintendance of the Dewan.

Under the *Gorkha* government, the former duty was entrusted to the commandant of the troops holding the assignment, and the latter was executed by the governor of the province, assisted by those military chiefs who might be on the spot. As the commanders of the troops were seldom present in their respective assignments, they delegated their powers to deputies, called "Becharis," who either farmed the dues on law proceedings at a specific sum, or remained accountable for the full receipts. The forms of investigation and decision, under both governments, were the same. A simple viva voce examination of the parties and their witnesses, usually sufficed to elucidate the merits of the case, and where doubts or contradictions occurred, an oath was administered by laying the *Haribans*, (a portion of the *Mahábhárat*,) on the head of the deponent. In intricate suits, such as disputes regarding boundaries, or where no ocular testimony could be produced to substantiate the claim or defence, recourse was had to ordeal, the modes of which will be hereafter noticed. The case being adjudicated, a copy of the judgment, under the seal of the officers composing the court, and witnessed by the bystanders, was delivered to the party in whose favor it had been pronounced, and the losing party was, at the same time, subjected to a heavy fine, proportioned to his means, rather than to the value of the cause in action. Private arbitration, or *Panchait*, was frequently resorted to, more particularly for the adjustment of mutual accounts among traders or for the division of family property among heirs. Claims, when nearly balanced, were sometimes decided by lot

in the following manner: the names of the parties being written in separate slips of paper, these were rolled up, and laid in front of an idol in a temple, the priest of which was then employed to take up one of the rolled slips, and he whose name appeared, gained the cause.

Criminal offences of magnitude, were tried at the seat of government, and accusations might be proved or rebutted by ordeal. The usual punishments for almost every degree of crime were fines or confiscations, and even murder was rarely visited with death, the convict, if a Rajput, being heavily mulcted, and if a Brahmin, banished. Treason was, however, generally punished capitally.

Greivous offences against the Hindu religion, and system, such as the wilful destruction of a cow, or the infringement of the distinction of caste by a Dom, such as knowingly making use of a *hukka*, or any other utensil belonging to a Rajput or Brahmin, were also capital. The mode of inflicting capital punishment was either by hanging or beheading; the Gorkhas introduced impaling, and sometimes put convicts to death with the most cruel tortures. Under the Raja's government, executions were very rare, and confined almost wholly to prisoners of the Dom caste; during the last government, they became far more numerous and indiscriminate. In petty thefts, restitution and fine were commonly the only penalties inflicted; in those of magnitude, the offender was sometimes subjected to the loss of a hand or of his nose. Crimes of the latter description have ever, in these hills, been extremely rare, and did not call for any severe enactments. Acts of omission or commission, involving temporary deprivation of caste, as also cases of criminal intercourse between parties connected within the degrees of affinity prescribed by the Hindu law, offered legitimate objects of fine. Adultery, among the lower classes, was punished in the same manner. Where, however, the husband was of rank or caste, the adulterer was commonly put to death, and

the adulteress deprived of her nose. The revenge of the injury was, on these occasions, left to the husband, who, by the customs of the country, and by the existing principles of honour, was authorized and required to wash off the stain on his name by the blood of the offending parties, and no lapse of time, from the commission or discovery of the crime, proved a bar to the exaction of this revenge. Convicts were occasionally condemned to labour on the private lands of the Raja, to whom they, from that period, became hereditary slaves. Criminals also settling at a royal village in the *Tarai*, called *Gergaon*, received a free pardon, whatever might have been their offence. In cases of self-destruction, the nearest relations of the suicide were invariably subjected to a heavy fine.

The most oppressive branch of the police, and that which proved the most fruitful source of judicial revenue, consisted in the prohibitions issued under the late government against numerous acts, the greater part of which were, in themselves, perfectly unobjectionable. The infringement of these orders were invariably visited with fines: indeed, they would appear to have been chiefly issued with such view, as among the many ordinances of this kind, it may be sufficient to specify one, which in *Gerhwal* forbade any woman from ascending on the top of a house. This prohibition, though apparently ridiculous, was, in fact, a very serious grievance: a part of the domestic economy hitherto left to the women, such as drying grain, clothes, &c., is performed there, and fire-wood and provision for immediate consumption are stored in the same place, and the necessity for men superintending these operations, by withdrawing them from their labour in the fields, was felt as a hardship.

Three forms of *ordeal* were in common use: 1st, The "*Gola Dip*," which consists in receiving in the palms of the hands, and carrying to a certain distance, a red hot bar of iron. 2d, The "*Karai Dip*," in which the hand is plunged into a vessel of boiling oil, in which cases

the test of truth is the absence of marks of burning on the hand. 3d, "*Tarazu ka Dip*," in this the person undergoing the ordeal was weighed, at night, against stones, which were then carefully deposited under lock and key, and the seal of the superintending officer ; on the following morning, after a variety of ceremonies, the appellant was again weighed, and the substantiation of his cause depended on his proving heavier than on the preceding evening.

The "*Tir ka Dip*," in which the person remained with his head submerged in water, while another ran the distance of a bowshot and back, was sometimes resorted to. The *Gorkha* governors introduced another mode of trial by water, in which two boys, both unable to swim, were thrown into a pond of water, and the longest liver gained the cause. Formerly, poison was, in very particular causes, resorted to as the criterion of innocence : a given dose of a particular root was administered, and the party, if he survived, was absolved. A further mode of appeal to the interposition of the deity was by placing the sum of money, or a bit of earth from the land in dispute, in a temple before the idol, either one of the parties volunteering such test, then with imprecations on himself if false, took up the article in question. Supposing no death to occur within six months in his immediate family, he gained his cause ; on the contrary, he was cast in the event of being visited with any great calamity, or if afflicted with severe sickness during that period.

The collection of rents from the assigned lands was, as already stated, left to the commanders, and as these, from their military duties, could seldom be present for any length of time in their respective assignments, they were under the necessity of employing deputies, and as the most simple and economical plan, entrusted the details of assessment and collection to some one of their principal landholders, whom they made responsible for the amount

of the rents. Hence the original of *Kamíns* in *Kamaon*, and *Sianas* in *Gerhwal*. The latter, again, appointed one of the proprietors of each village, under the designation of *Padhan*, to levy and account directly to them for its cess. These officers were both removeable, the first at the pleasure of the assignee, the second at the will of the *Kamín* and *Siana*. The influence once obtained in the situation, generally led to its continuance in the same family, even when the individual holder was changed, and, in some instances, the *Kamíns* themselves eventually succeeded in obtaining a grant of the feud under the usual conditions, which arrangement led to the nomination of *Under Kamíns* and *Sianas*, who are to be found in some *pergunnas*. The remuneration of the *Kamíns* and *Sianas*, consisted in a trifling *Naserána* from each village, and in offerings from the *Padhans* on certain festivals, and on occasion of births and marriages in their own families. They were also entitled to a leg of every goat killed by the *Padhans* in their division, and enjoyed a portion of land, rent-free, in their own village. The dues of *Padhans* were exactly similar, but leviable only from their own tenants.

In the reserved districts, the royal domains were managed by the *Vizirs* and *Bhandáris*, (treasurers,) and the rents of the alienated villages were collected by the grantees. No establishment of *Kamíns* or *Sianas* existed in these *pergunnas*.

A general record of the arable lands of the country, their extent, appropriation, &c. was kept in the office of the *Defteris*. To render these accounts more complete, these officers had deputies in each district, whose duties corresponded, in a great measure, with those of the *pergunna Kamungos* in the plains. To defray the expences of this establishment, the *Defteris* were entitled to a percentage of half an anna in the rupee on the rent of every village; and for their own support, they received grants of lands in common with the other public servants.

The full property in the soil has here invariably formed an undisputed part of the royal prerogative, and on this right was founded the claim of the sovereign, either in person or through his assignees, to a large fixed portion of the produce, both of agriculture and mines. The power in the crown, of disposing of such property at its will, has never been questioned, but has been constantly enforced, without consideration to any length of occupancy or other claims in individual holders. The peculiar nature of the country rendered the exercise of this right frequent in the neighbourhood of the capital. The difficulties of procuring supplies in this province, have been already alluded to : individuals settling at *Almora* or *Srinagar*, under the auspices of the reigning prince, in consequence, received the gift of a small portion of land for the establishment of their families. The merchants and principal artisans falling under the above description, as being commonly emigrants from the plains, were particularly favoured in this respect, and many of the attendants of the court, who were of the same origin, required and received the same assistance. The commandants and officers of the regular troops stationed at the frontiers, or in forts, enjoyed similar grants of land in the vicinity of their posts. The tenure on which grants of this kind were made, is called *Thát*, which conveyed, in the first instance, a literal freehold, as it vested the grantee with an hereditary property in the soil as well as in the produce. The rents of these lands have, at subsequent periods, been almost wholly resumed to the rent roll, but the property in the soil has been generally suffered to remain with the heirs of the grantee. The term that is used here, is synonymous with *Zemindari* in the plains, and it is on grants of this nature, that the rights of a large body of the occupant landholders are founded. The land, in the interior, seldom changed proprietors : the greater part of the present occupants there, derive their claims to the soil, solely from the prescription of long established and undisturbed possession ; and this remark applies also to many individuals, more particularly Brahmins, whose ancestors having, originally, obtained

estates on grants, not conveying any property in the soil, their descendants have, subsequently, by the migration of the actual occupants, come into the full possession both of land and produce.

In assignments of the revenue of villages to individual servants of government, both public and private, the deed specified the class and description of service in consideration of which the grant was made, as "*Kaminchari, Negichari,*" &c., and in these cases, also, the actual occupancy in the land, frequently became vested in the descendants of the assignee, by the mode noticed in the preceding paragraph. Grants to individuals not holding any particular employment, were in "*Khangi,*" or, when Brahmins, in "*Vrata ;*" to the latter also, and to religious establishments, grants in perpetuity were made with various ceremonies, under the terms of "*Sankalp*" and "*Bishenpirt.*" Under the Nipal government, the terms of "*Mana Chaul,*" and "*Gunt,*" were introduced, the former meaning, literally, "a seer of rice," was used in grants, for services to individuals, and under the latter tenure were included all lands and endowments belonging to religious establishments.

The modes of private transfer are, first, by absolute sale, called "*Dhali Boli,*" in which the purchaser becomes vested with the same rights, and under the same obligations, as the vender. In the second mode, termed "*Mat,*" the purchaser receives the land rent-free, the vender making himself responsible for the annual amount of its assessment during his life, and on his death, the purchaser becomes answerable for the demand. There was another species of "*Mat,*" in which the sale was not absolute, right of redemption being reserved to the mortgager and his heirs, on payment of the amount advanced, but till this took place, the latter continued to pay the revenue. When no heir of the mortgager remained forthcoming, as in the former case, the rent fell on the mortgagee. The fourth form was that of simple mortgage, or "*Bandhak,*" in which right of redemption was, sometimes, expressly barred, after the

expiration of a given term of years; most commonly it was reserved indefinitely. The landed proprietors, however, ever evince the most tenacious attachment to their estates, whatever be their extent, and never voluntarily alienate them, except under circumstances of extreme necessity. This, joined to the repeated family partitions arising under the Hindu law of inheritance, has reduced landed property throughout the country to the most minute state of subdivision.

The intersection of the country in every point by rivers, would have afforded prominent boundaries for local division, had the state of government been originally such as to admit of the establishment or continuance of a regular arrangement of that nature, but the existence of numerous petty principalities, the chiefs of which were engaged in constant aggressions on each other, necessarily led to frequent changes in the division of the country, as the conquered villages, in receiving a new master, were incorporated in his own district, or formed into a separate *pergunna*, under some new name. The ultimate union of the country under one monarch, produced no remedy, as the distribution which took place among the feudal tenants of the crown, led only to a multiplication of subdivisions, without producing order in their demarcation. Every new grant to these military chiefs tended to further perplexities, as from that moment, the villages in the grant, whatever might be their actual situation, became an integral part of the district in which the previous assessment of the grantee lay. Various services of the state, which were provided for by allotments of country, gave their names to such districts. Thus, two lots of villages dispersed over the whole province appropriated to the gun-powder manufactory and magazine, formed the *pergunnas* of *Silkhana*, and *Mahrúri*; while a line of villages, extending from the snowy mountains to *Almora*, was known as a separate division, under the designation of *Him Pal*, being appointed for the supply of snow to the Raja's court. These incongruities ceased in a great

measure under the Gorkha administration, when the country was regularly assessed and settled, though in many of the subdivisions, the former arbitrary mode was continued, the villages of a pergunna being frequently classed into *Pattis*, according to the caste of the owners, without reference to actual situation. It may be here noticed, that the word pergunna was not in use here, the terms being *Gerkha, Pal, Row, Pattí, Kote, Al, &c.*

The mode of calculation in use throughout the hills is, by the estimated quantity of grain which the land will require to sow it. The adoption of so uncertain a standard is doubtless to be ascribed to the nature of the arable lands, the actual measurement of which would have required greater perseverance and science than the natives of this province ever possessed. The denominations by which land is computed in *Kamaon* are extremely numerous, and vary in different parts, and it may therefore be presumed, that they were established at a remote period, when the country was divided into several petty independant principalities. In calculating the extent of villages, only such lands as had been rendered capable of cultivation by the operation already described, were taken into consideration. These have been gradually augmenting, and as no revised survey has recently been made, the existing records by no means correspond with the actual quantity of arable land in each village.

The most common denomination is the *Bísí*, which has now been adopted as a general standard. The regular *Bísí* ought, as its name implies, to contain land requiring twenty *Naks* of seed; its actual extent, therefore, varies according to the quality of soil, as the grain is sown much wider in poor lands near the summit, than in rich lands at the base of the mountains. With every allowance of this kind, villages are invariably found far to exceed their nominal *rukba*, when computed by this standard. It also varies in the same district, a portion of the land being calculated by

one description, and the remainder by another description of *Bísí*, which incongruity arose from the practice of former Rajas, of doubling or otherwise augmenting the nominal *rukba* of rent-free land in the deed of grant. Such increased *rukba* became, from that time, permanently enrolled and fixed in the record. A further mode of calculation is, by the estimated produce of land in *bilkas*, or sheaves, the number of which ought to correspond with the number of *Nalís* in each *bísí*.

It will now be sufficient to detail the different denominations in use in *Kamaon*, with their computed contents, without entering into further explanation.

Júla, various	=	12 9 6 and 3	Bísís.
Bhara,	=	...	$2\frac{1}{2}$ Bísís.
Alí,	=	...	$2\frac{1}{2}$ Bísís.
Bísa,	=	...	4 Bísís.
Ans,	=	...	1 Bísí.
Nalí,	=	...	$\frac{1}{2}$ Bísí.
Taka,	=	...	$\frac{1}{2}$ Bísí.
Masa,	=	...	$\frac{3}{4}$ Bísí.
Ríní,	=	...	1 Bísí.

In the *Bháwar*, actual measurement is used, and the calculation is made either in *Bighas* or *Hothas*. The former corresponds to the *Bigha* of the plains, the latter contains 1600 square paces.

Another mode of computation is by the *plough of two yoke of bullocks*, twenty being required for one *Bísa*: a plough of land contains the quantity which can be turned in one day.

In *Gerhwal*, the only denomination in use is the *Júla*, which is divided

into *Chukrís*, or 4ths, and *Anas*, or 16ths : it varied in its extent, according to the description of person holding the land, as will be seen in the following detail :

Júla Thakuralí (chiefs,)	= 16 Dhons.
Ditto Thaní, (principal landholders,)	= 12 ditto.
Ditto Rowlía, (padhan mukaddem,)	= 8 ditto.
Ditto Chakar, (tenantry,)	= 4 ditto.
Ditto Tyargain, (temporary cultivators,)	= 16 ditto.
Ditto Umraí, (courtiers,)	= 8 ditto.
Ditto Kotkarkí, (militia,)	= 12 ditto.
Ditto Tob, (regular troops,)	= 10 ditto.
Ditto Kotya, (followers,)	= 6 ditto.
Ditto Topchí, (huntsmen,)	= 4 ditto.
Ditto Seúk, (personal servants,)	= 4 ditto.
Ditto Jaghirdar, (rent free to private individuals,)	= 12 ditto.

The implements of husbandry are similar to those in use in the plains, and the different operations of ploughing, harrowing, sowing, weeding, reaping, &c. are carried on in the same way. The land being first manured, is usually ploughed three times, or oftener, and harrowed previously to being sown: the drill plough is not used. In coarse grains, the harrowing is generally repeated when the plants have sprouted two or three inches above the ground. In the finer grains, at the same period, additional manure is commonly scattered over the fields, which are then weeded with spuds. During the *rebbí* crop, the fields, where irrigation is practicable, are usually watered every third or fourth day. A regular routine of crops is pursued; following the native arrangement. In the first, or *kharíf* crop, rice is sown in April, and reaped in September, the land being immediately re-prepared, receives a crop of wheat, which ripens in April or early in May; to this succeeds a crop of *Mandúaa*, and as the last is not fit for the reap hook before the

end of November, too late for sowing wheat, the land is then suffered to remain fallow till the following spring, when it is again prepared for rice. Different kinds of pulse and vetch are occasionally substituted for one or other of these grains. Where land, which has been fallow, is newly broken up, a crop of *Mandua*, or other coarse grain is first taken. Transplantation is adapted in regard to rice wherever the land can be easily flooded; in other parts the rice is sown as other grains. Irrigation is performed by means of aqueducts or small streams, which are either branches of large streams, or are formed of a collection of many small springs. These aqueducts are frequently carried a very considerable distance, and at much expence along the sides of the mountains. In places where precipitous rocks occur, troughs of wood are made use of, and where the soil is too loose, walls of stone, having a channel at the top, made water tight with clay, are built. The manure used, is commonly the dung and refuse of the cattle shed, which is collected in a regular dunghill with that view. Where the quantity of this may be insufficient, leaves collected from the jungles, are placed in heaps to rot in the fields. As a further substitute, bushes and branches of trees are laid on the land, and when sufficiently dry to burn, are reduced to ashes.

There is a species of periodical cultivation, which deserves notice: this consists in cutting down the forest, and clearing patches of land along the summits of the ridges: the trees are left for a few months to dry, and being chiefly pine, are then easily consumed, and the ashes used for manure; as the declivity of these spots is usually too great to admit the use of the plough, the land is prepared with a hoe.

Only one, or at most two crops are taken from each spot, after which it is abandoned for another, and not again touched till after the lapse of from six to twelve years, according to the nature of the soil; such land is termed *Kála*

Banjar. The cultivators, who descend during the winter to the *Tarai*, take land in farm from the Zemindars there also, and have thus two crops on the ground in different parts at the same moment. This they are enabled to effect by the difference in the period of harvest in the plains and hills; the *Rebís* crop in the former being sown later, and ripe earlier than in the latter.

The following is a statement exhibiting the various products, together with the average rate of their return, as collected from reports of every peggannah in the province.

The three kinds of land are, 1st. The *sera*, or valley, fully capable of irrigation; 2nd, not irrigatable, but in low situations; 3rd, near tops of mountains. The average price of each kind of grain, during the last six years, at *Almora* is also added. In the interior, particularly of *Gerhwal*, where the demand is small, the prices are infinitely lower.

KHARIF, OR FIRST CROP.

<i>Grains.</i>	<i>Best Land.</i>	<i>Middling.</i>	<i>Worst.</i>	<i>Remarks.</i>
Rice, Seers } per Rupee, }	32	20	11	28
Mandúa, ...	50	40	35	40
Jangora, or } Manora, ... }	50	38	30	42
Kowní,.....	48	36	24	40
Chína,.....	60	42	35	40
Chúa, or } Marsa, }	100	85	72	40
Kodú,.....	16	12	10	80 Partially cultivated.
Ugal,.....	„	25	15	16 Ditto ditto.

Bajra, .....	„	.....	25	.....	17	.....	26	Partially cultivated.
Juwar, ....	„	.....	25	.....	17	.....	36	Ditto ditto.
Makae, or } Boota, }	36	.....	24	.....	10	.....	24	Ditto ditto.
Ganra, ...	80	.....	60	.....	„	.....	30	{ Cultivated only in Bhawar at both seasons.

PULSE.

Urd,	16	.....	11	.....	7	.....	18	
Bhat,	16	.....	12	.....	8	.....	24	
Gahat,.....	„	.....	„	.....	15	.....	24	Partially cultivated.
Ryas,	18	.....	14	.....	11	.....	22	Ditto ditto.
Tori, or } Arher, }	8	.....	7	.....	3	.....	20	Ditto ditto.
Mung,.....	10	.....	8	.....	6	.....	16	
Goranse,...	16	.....	16	.....	9	.....	22	Ditto ditto.
Titirfa,...	16	.....	12	.....	8	.....	30	Ditto ditto.

OIL SEEDS.

Serson, ...	40	.....	30	.....	15	.....	30	At both crops.
Til, ...	48	.....	36	.....	22	.....	12	Partially cultivated.
Bhinjra,...	16	.....	12	.....	10	.....	10	Ditto ditto.

REBBI, OR SECOND CROP.

Wheat, ...	18	.....	9	.....	9	.....	22	
Barley, ..	24	.....	17	.....	13	.....	28	
Ganra, ...	80	.....	60	.....	„	.....	30	Only in Bháwer.

PULSE.

Masur,.....	25	.....	20	.....	15	.....	20	
Chena, ...	14	.....	9	.....	7	.....	17	Partially cultivated.

Kalau	}	16	.....	10	.....	8	.....	18
Mutter								

OIL SEEDS.

Atsi..... 16 14 12 16

Serson..... 40 30 15 32 Cultivated chiefly in Bháwer.

Cotton is not much grown in the hills : the produce is, however, of excellent quality, and by native judges is said to be superior to that of the plains, in softness of texture, gloss of color, and length of fibre.

Hemp: the growth of this article was, at one time, considerable, as the Company procured an annual investment of it from this province: these purchases have now ceased; the demand for it for the manufacture of cloth, of which much is consumed in the province, still encourages the cultivation. The quality of the hill hemp has been always much praised: the plant attains the height of from 12 to 14 feet, and the fibre is extremely strong; other advantages are derived from a crop of hemp, which will be best shown in a statement of the produce; taking a pukka bigha to require 8 seer of seed in wheat, 16 seers of hemp seed would be necessary to sow the same extent, the produce of which would be in the first place, 4 sers of *Chiras*, the inspissated juice of the leaf, value 8 rupees; 4 maunds of hemp value 8 rupees, and 48 seers of seed capable of yielding 6 seers of oil, value 1. 8. 0, giving a total money return of 178 rupees the bigha. The cultivation of hemp is confined almost entirely to *Gerhwal*, and is only to be occasionally met with in *Kamaon* proper.

Sugar cane is raised in some parts of the province where the land is particularly good, but the total quantity of sugar manufactured in the province is very trifling.

Ginger, Turmeric, Cheraita, and some other plants and roots used in native medicine are grown chiefly with a view to exportation. Ginger yields 7 fold; about 40 maunds to the bigha, and turmeric 8 fold, or 45 maunds: the prices on the spot are respectively 2 and 1. 12. 0 rupees per maund.

The *Ginya*, or sweet potatoe, is grown on a very extensive scale in the *Bhāwar*, the net produce is commonly 40 maunds per bigha, and the value one rupee per maund. *Tobacco* is raised for private consumption, in small quantities.

The *Kharif* crop is the most extensive and important as affording the staple articles of food (Rice and Mandua) to the population. The *Rebbi* crop, owing to the confined means of irrigation, is very uncertain: in the event of a sufficiency of rain not falling during the cold weather, the ears of the wheat do not fill, and occasionally the grain is rotted from the opposite cause. Since 1815, two years of failure have occurred, one from drought, the other from too much rain.

Having completed the detail of agricultural products, the other branches of rural economy may now be noticed.

The cattle in this province; as already stated, are small, and are almost universally black or red. The herds are driven each morning to the ridges of the mountains for pasture: at night they are kept in the ground story of the house, or if numerous, a temporary shed is erected for them near the village. Chaff is never prepared for them, but after the wheat harvest has been cut, they are turned into the fields to eat down the straw, which is left standing; merely the ears being cut off and carried away; the dry hay of the grain, *urd*, &c. is also given to them in an unchopped state. Coarse grass and branches of trees are also cut for feeding the bullocks employed in ploughing.

During the later winter, and the summer months, the pasture, from frost and sun, becomes very scanty : at this period, therefore, the inhabitants of the southern and midland districts of *Kamaon* send down their cattle to the forests in the *Tarai*, reserving only a few cows for milk, when a great part of the inhabitants accompany them : this migration commences in November, after the sowing of the wheat is completed, and the return is delayed till the end of April, or beginning of May, when the crop is ready for reaping. While in the *Bhitar*, the inhabitants of two or three neighbouring villages, and sometimes of a whole pergunna, canton together for mutual protection against decoits. As this custom has existed from time immemorial, each community has its own particular tract of forest to which it annually returns. Some parts of the *Tarai* affording little or no grass ; the Zemindars, in such situations, cut boughs of trees for their cattle. The temporary villages called *Got'hs*, which they occupy, are mere sheds, formed of branches of trees, and covered with leaves or grass. The site of them is changed according as the pasture in the immediate neighbourhood is exhausted. During the season that the cattle remain in the forests, a very large quantity of ghee, remarkable for its goodness, is made by the Zemindars, and exported to the plains. In the northern pergunnas, where the forest lands are more extensive, the necessity for sending the cattle to the *Tarai* does not exist, and in the summer months, abundance of fine pasture is produced on the summits of the high mountains after the snows have melted. The practice is very little followed in *Gerwal*, which may be ascribed to the greater proportion of waste land that is to be found there : the cattle are, however, remarkably poor and badly conditioned, and consequently die off rapidly. Few buffaloes are reared in that part of the country.

Neither bullocks nor buffaloes are here used for commercial transport, but they are employed to carry the baggage of the cultivating classes in their annual migration to the *Bhitar*.

Cows and bullocks vary in price, from 5 to 12 rupees each; the latter, when broken for the plough, fetching the highest.

Female buffaloes sell for 15 to 20 rupees.

The number of cattle, agreeably to enumeration in 1822, was as follows; giving a total of 241,314 animals.

	<i>Cows.</i>	<i>Bullocks.</i>	<i>Buffaloes.</i>
Kamaon,	58,280	36,938	42,959
Gerhwal,	66,355	28,546	8,286

The goats in this province are, generally speaking, low, and stout made: those bred in the northern pergunnas attain, however, a very fair size. The rearing of these animals is difficult, as during the rainy months they are liable to many disorders, and are frequently poisoned by eating the rank weeds. As there is considerable demand for goats, both for religious sacrifices and for food, they bear a high price, full grown males and females selling for from two to eight rupees each, and half-grown kids in proportion. The goats of the northern pergunnahs, which are used for carriage in the Tartar trade, sell for four to ten rupees each.

The breeding of sheep is confined to the northern pergunnahs: the same causes which check the rearing of goats, prove equally fatal to the sheep, and they are bred only with a view to sale, for carriage to the *Bhotias*, who willingly pay from three to six rupees each for them.

The grain is ground by means of water mills, which are extremely numerous: the declivity of the rivers, which is always considerable, greatly aids the erection of these machines. A small stream being diverted from the

main channel, is carried on a level along the bank, until a sufficient height is obtained to admit of a fall of eight or ten feet : the mill is then erected below, and the stream is directed by an inclined wooden trough on an over shot wheel. The mill stones are commonly from one and a half to two feet in diameter : the grain is placed in a funnel-shaped bag, suspended over a hole in the centre of the upper stone, and drops gradually from it as in an hour glass. By a simple contrivance the shoot of water can be increased or diminished at pleasure, and the wheel is stopped by removing the wooden trough, when the water passes through a channel under the wheel. A mill requires but one person (usually a boy,) to attend it, and will grind from three to four maunds in the day. Where the diverted stream is sufficiently large, two or more mills are erected together, and worked by separate branches from it. The charges for grinding are usually two to three seers in the maund, including wastage : this, however, is small, as the flour is not cleared from the bran.

The public revenue under the former Rajas, arose from duties on commerce, agriculture, mines and law proceedings. An impost was laid on ghee, payable by the owners of cattle, at a fixed rate for each animal, amounting to four annas on a female buffaloe. The weavers throughout the province, were also subject to a separate tax. The assessment of land was, generally speaking, light, the government demand on agriculture being rated at only one-third of the gross produce in ordinary lands, and at one half in the very fertile. In mines, the royal share amounted to one half.

The collection was made in two forms—being imposed one year on the land, and a second year levied by a capitation tax on the inhabitants. As these, however, consisted solely of persons connected with agriculture, the source from which the payments were made, was necessarily the same, though the mode and detail of cess varied.

As the records of the above period, yield little or no information of the rents of lands and villages, rent free to individuals in tenure of service, or assigned to temples, it is impossible to form any correct account of the income derived from the country by the government or their representatives. Judging, however, from the very superior degree of population and cultivation which then existed, the sovereign's share of the gross produce of the country may be computed at about four lacks *kucha* rupees for *Kamaon*, and two for the districts of *Gerhwal*. The extraordinary revenue was levied in the form of a general house tax, and, of course, varied in its amount according to the nature of the emergency on which it was imposed. To account for the subsequent deterioration in the resources of the country, a short view of the *Gorkhali* revenue administration is necessary.

On the successive conquests of *Kamaon* and *Gerhwal*, by that power, the existing system was continued, and the country, including all the villages hitherto reserved for the support of the court and their attendants, was parcelled out in separate assignments to the invading army, and as this was kept up on a large scale, with the view to further conquests, the value of each assignment was estimated at an excessive rate, to meet the expenditure. The consequences may be easily surmised: the troops considering themselves merely as temporary holders, and looking forward to a change of assignment on every new acquisition, felt no interest in the condition or welfare of the land holders made over to them. The emigration, in the first instance, of a large portion of the principal Zemindars, tended still further to increase the evil. The villages were every where assessed rather on a consideration of the supposed means of the inhabitants, than on any computation of their agricultural produce. Balances soon ensued, to liquidate which, the families and effects of the defaulter were seized and sold; a ready market for the former presenting itself in the neighbouring towns of *Rohilkhand*.

The consequent depopulation was rapid and excessive; as is fully proved in the numerous waste villages deserted at that period, and in the incomplete state of cultivation which prevails generally in the villages still inhabited. After the conquests of the Nipal government had been further extended, and the subjection in this quarter fully established, measures were adopted to remedy these disorders. A commission was accordingly deputed immediately from *Katmandu*, for the purpose of fixing the revenues at an equitable rate. The settlement was formed on actual inspection of the resources of each village, but as the estimated profits of the trade carried on by the residents were taken into consideration, the assessment must be viewed rather as a tax founded on the number of inhabitants, than on the extent of cultivation. On the completion of this survey, a detailed account of each *pergunna*, showing the numbers, names, size, and extent of the villages, was submitted for the approbation of the Court of Nipal. From thence a copy, under the seal of state, was issued to the *Kamins*, or principal landholders, as a standard of the revenue demandable from their respective *pattis*, corresponding instructions being issued to the Officers holding assignments. The form of these accounts, together with the names and nature of the items, of which the revenue was composed, will be seen in statement (B) which gives an abstract of the total revenue as fixed for *Kamaon* and the *Gerhwal* districts by the commissioners in question. The demand thus authorized, generally speaking, was by no means excessive or unreasonable, but the absence of a controuling power on the spot, rendered the arrangement almost nugatory, and the military chiefs were enabled to evade it by the power vested in them, of imposing fines, at their own discretion, in the administration of the interior police. In *Gerhwal*, where the conquest had been more recent, these exactions were more heavy: the *Jama* imposed, soon exceeded what the country could yield, the deficiency annually increasing from the attempt to enforce the full demand.

The silver metallic currency in this province consists, principally, of new

Furruckabad rupees. A few old *Furruckabad* and *Bareilly* rupees are to be met with in circulation, as also *Mahendar Mallees*, a *Gorkha* coin, which passes for six annas. The copper coin is pice, 176 of which equal one *Furruckabad* rupee: cowrees are not used. In *Gerhwal*, in addition to the above, there is a three anna piece called *Timashí*, which is a favorite coin there. Under the former government, a mint for stamping the *Timashí*, existed at *Srinagar*: this has now been abolished, and this description of money having, in consequence, become scarce, has been greatly enhanced in its nominal value. Five only, instead of six, as formerly, are now procurable for the new *Furruckabad* rupees, the intrinsic worth is not much above two annas. The current rupee of account, throughout the province, is the same, being equivalent to 12 annas, new *Furruckabad* rupees. Gold coins are merely purchased for their metal, for making ornaments; a *Calcutta sicca* gold mohur sells, in the market here, for 19 new *Furruckabad* rupees, and other gold mohurs in proportion. The Tartar gold does not fetch more than from 14 to 15 rupees the *tola*. In *Gerhwal*, copper, in weight, would appear to have been once the principal medium of exchange. This circumstance, no doubt, arose from that metal forming the staple commodity of the country. In adherence to old usages, the *Zemindars* of *Gerhwal*, even now, in many of their contracts, stipulate a part of the price in a given weight of copper, but as this is no longer plentiful, the whole amount is paid in silver coin.

Grain, salt, and such articles are sold chiefly by measures of capacity. In *Kamaon*, the measure in use is the *nalí*, equal to about two seers of 83 *Furruckabad* sicca weight; fifteen *nalís* make one *perái*, and twenty *nalís* make one *rimí*. In *Gerhwal*, the *nalí*, there called *patha*, is subdivided into *manas*.

Thus, 4 *Manas* = 1 *Patha*.

16 *Pathas* = 1 *Dhon*.

80 *Dhon* = 1 *Khari*.

In the sale of metals, cotton, &c. the products of the country, the weight is commonly ascertained by the steel-yard. In this instrument the weight is fixed, and the object to be weighed, is moved along the lever, which is divided into *puls* and *pice*.

3 Pice making 1 Pul, and
20 Puls making 1 Dam.

This latter forms the maximum weight of the steel-yard, and is equal to about 100 *Furruckabad* rupees. In measuring cloth, the cubit is generally adopted. At *Almora* and *Srinagar*, the weights and measures of the plains, on a reduced scale, were also in use. These have now been fixed at a regulated standard, the seer weighing 84 *Furruckabad* milled rupees, and the guj, equal to the English yard.

The manufactures in these hills are so trifling, as scarcely to deserve particular mention. The principal are blankets, made in the northern pergunnas, *pankhis*, a coarse woolen camblet, also made there, and in *Bhote*, *bangelas*, a hempen cloth, manufactured in the midland parts of *Gerhwal*, where it forms the principal materials for clothes to the inhabitants during the hot season. Wooden vessels, of various forms and shapes, and made from several species of wood. Coarse cotton cloth is weaved in small quantities. Mats and baskets, of all kinds, are prepared from the small male bamboo, in a very neat style. The artisans universally exhibit great want of neatness and finish in the execution of their work, more particularly the smiths' in iron and copper utensils which are invariably rough and ill-formed. The potters throughout the province, excepting those at *Srinagar*, are unacquainted with the use of the wheel. The turning lathe, the large saw, and the plane, are unknown here : planks are split from the tree by the axe, and then partially smoothed by the adze. It may be mentioned as a curious fact, that the spirit blow pipe is to be met with in *Gerhwal*, where it is sometimes used by goldsmiths : this

instrument is composed of iron, and filled with whisky distilled from rice, and when used it is placed on a brazier of burning charcoal.

The traffic of the province is divided into two branches : first, the sale of the produce of the hills, and secondly, the carrying trade with Tartary : this latter again passes through two hands, the Bhotas, who hold direct intercourse with the Tartars, and the hill traders, who furnish returns and receive the Tartar merchandize in barter : the nature of the former of these transactions will be reserved for a separate article. The migratory habits of the Zemindars of the southern pergunnas, have given rise to a very general diffusion of commercial enterprise among them, and every individual possessed of a small capital, either singly or jointly with others, engages in traffic. With an investment composed of iron, copper, ginger, turmeric and other hill roots and drugs, the adventurer proceeds to the nearest mart in the plains, and there receives in barter for his merchandize, coarse chintz, cotton cloths, *gúr*, tobacco, colored glass beads and hardware, which return, after supplying the wants of himself and friends, is disposed of at the villages in the midland and northern pergunnas, or is reserved for sale till a fair occurs in the neighbourhood. Those, again, whose credit or resources are more considerable, enter eagerly into the Tartar trade. The imports from the plains are, in this case, the same as above enumerated, as fine manufactures or expensive articles are only brought up when previously bespoke ; from the Bhotas they receive in exchange, partly cash and partly Tartar and Bhot productions. The latter comprise hawks, musk, pankhis, (coarse camlets) wax, masí (frankincense) *kutkí*, and a variety of other roots and drugs. The Tartar products consist of borax, salt, gold-dust, and *chawr* tails. The zeal and industry evinced by this class of traders, in the execution of commissions, is very great, as they frequently proceed in person as far as *Furruckabad* and *Lucknow*, in search of the articles required from them.

The commerce carried on by merchants, is of the same nature as that last described, the only additional merchandize, not included in the above detail, supplied or received by them, in barter with the Bhoteas, consists of

Deliveries.

Fine Sugar Candy.
Spices of all kinds.
Europe Broad Cloth.
Corals.

Receipts.

Shawl Wool.
Coarse Shawls.
Ditto China Silks.
Saffron.
Bulgar Hides.
Ponies.

An enumeration of the exports and imports, from this province to the plains, is given in the appendix. As the value of the former by no means equals that of the latter, the deficiency is made up in specie. No transit duties being collected, it is impossible to form any correct estimate of the total value of the imports and exports : between four and five lacks for the first, and from three lacks to three lacks and a quarter for the other, is probably within the actual amount.

There can be no doubt that every branch of commerce in this province, more particularly that with Tartary, has experienced very great improvement during the last six years, and has probably been augmented in the proportion of full two-fifths. The only check to trade which now exists, arises from the expence and difficulties of carriage. At present, every kind of merchandize is transported on coolies, who carry from thirty seers to one maund pakha. The hire from *Almora* to *Kasipur*, the nearest mart in the plains, is two rupees and eight annas to each man, and the *Almora* merchant, accordingly, adds twenty-five per cent. on the *Kasipur* invoice price, to cover this and other incidental charges, and to allow him a profit. Proceeding

further in the interior, the prices gradually rise; and at the foot of the *Himalaya*, may be stated at from fifty to seventy-five per cent. above the cost in the plains. With the formation of public roads, practicable for beasts of burthen, these obstacles will gradually cease.

It now only remains to mention the marts of principal resort for the hill trade. To the east, the *Mandí* of *Belharí* is frequented by the merchants of *Champáwat*, and the traders of the eastern district; whilst the commerce of *Almora* and of the remainder of *Kamaon* (proper) is carried on with *Kasipur* and the *Chilkía Mandí*; to these also now flows that of the eastern purgunnas of *Gerhwal*. *Afzelgerh* is the market for the midland and *Najíbabad* for the western parts of *Gerhwal* and for *Srinagar*. Since the establishment of the British government, the petty traders by no means confine their transactions to these marts, but visit also most of the principal towns of *Rohilkhand* for the purposes of traffic. The merchants of *Almora* and *Srinagar* have no established correspondents at any town in the plains, with the exception of the marts above enumerated. There are no village marts for the disposal of agricultural and other produce, but the periodical *melas*, or fairs, at religious places of pilgrimage, to which the traders resort, are frequent in all parts of the country.

The foregoing view comprises only the commerce of the hills; a further branch in this province is that of the timbers, bamboos, terra japonica, &c., the produce of the forests in the *Bháwar*. This trade is engrossed by the inhabitants of the towns and villages of *Rohilkhand*, bordering on the *Taráí*, from whence, as the hill Zemindars have no transport, they are obliged to sell the articles on the spot at a low price, very inadequate to the labor expended in cutting and preparing them. The carriage in use, consists of hackeries and large buffaloes: tatoes are also used for the conveyance of light articles. The foregoing remark applies equally to the traffic in *Kuth*, or terra

japonica, though not from the same cause: this article is prepared only by persons of the lowest, or *Dom* cast, who, having no capital of their own, are obliged to work on advances, either at a given rate for the produce, or in the shape of wages. These speculations prove extremely profitable, and the returns are always quick. The *Kuth* does not cost the capitalist more than from five to eight rupees the maund, while in *Rampur* and other large towns of *Rohilkhand*, the price is commonly from ten to fourteen rupees the maund. The trade in timber, &c., proves equally advantageous; a hackery load, the original cost of which may have been two rupees, with an additional expence of eight annas, government impost, sells for more than double at the nearest mart. The continuance of these high profits is, no doubt, to be attributed to the almost universal dread entertained of the climate of the *Tarai* forests. The people who now carry on the trade, are, with few exceptions, invariably Mohammedans. For the convenience of the purchasers, the hill Zemindars have established small *Mandis*, or marts, at which the timbers and bamboos are collected, when cut and prepared; they are conveyed thither by manual labor. The forests nearest the plains being now totally exhausted of timber, the traders are obliged to come almost to the foot of the hills, where a supply of the finest timbers, calculated for the consumption of years, presents itself. *Sisu* forms an exception, as large trees of this species are becoming scarce in every part of the *Kamaon* forests. A list of the productions exported from the *Tarai* forests, will be found in the appendix.

A short view of the present Judicial and Revenue Systems, will now be taken. The first calls for little notice, as the general absence of crimes in this province, renders this branch of administration of minor importance. From the 1st January, 1820, to the 31st December 1821, the total of criminals confined in jail, amounted to sixty-five, for the undermentioned offences.—

	<i>No. of Prisoners.</i>	<i>No. of Crimes.</i>
Murder,	4	4
Thefts above 50 rupees,	3	2
Forgery,	1	1
Perjury,	1	1
Adultery,	3	3
Petty thefts and receiving stolen property,	} 29	17
Assaults, defamation, and other petty misdemeanors,	} 24	15
Total,	65	43

In addition to the preceding, one murder, and two thefts above fifty rupees were perpetrated, in which the offenders eluded apprehension. Affrays of a serious nature are of very rare occurrence, and even petty assaults are not frequent. Decoities sometimes take place in the *Bhāwar* or *Tarāi*, perpetrated by robbers from the neighbouring districts of *Rohilkhand*, to which they return immediately after the commission of the crime. The offence of adultery is, from the lax state of morals, extremely common among the lower orders, but it seldom forms a subject of complaint in the court, except when accompanied by the abduction of the adultress. Infanticide was formerly practised among some Rajput families of high caste, attached to the Raja's court at *Srinagar*, but since the emigration of these persons on the *Gorkha* invasion, no case has ever occurred in the province. Suicide is very prevalent among females of the lower classes. The commission of this act is rarely found to have arisen from any immediate cause of quarrel, but is commonly ascribable solely to the disgust of life generally prevalent among these persons. The hardships and neglect to which the females in this province are subjected, will sufficiently account for this distate of life, as with a trifling

exception, the whole labor of the agricultural and domestic economy is left to them, while food and clothing are dealt out to them with a sparing hand. Suicide is never committed by males, except in cases of leprosy, when, as in other parts of India, the leper sometimes buries himself alive. Deaths from wild beasts are very frequent; they probably do not fall short of one hundred annually. Complaints against individuals for sorcery and witchcraft are very common indeed; an infatuated belief in the existence of such power, pervading the whole body of the inhabitants of this province. All cases of unusual or sudden sickness and mortality, are immediately ascribed to witchcraft, and individuals are sometimes murdered, on suspicion of having occasioned such calamities. Applications to the court on the subject of caste are numerous: these are invariably referred to the Pundit of the court, whose decree delivered to the party concerned, is always conclusive. These references are, no doubt, a consequence of the practice established under the former governments, by which the cognizance of cases involving deprivation of caste, was confined to the Government Court. The public at large still appear to consider such reference as the only effectual means for obtaining restoration and absolution.

The management of the Police in the interior, is entrusted to the Tahsildars, and the only establishments exclusively devoted to this duty, are the Thanas at *Almora*, and at the five principal Ghats, towards the plains, namely, Kotdwara, Dhikuli, Kota, Bhamourí and Timlí. The expence of these establishments amounts to three thousand and sixty-two rupees per mensem; the charges under the same head, on the 1st May, 1816, stood at eight hundred and seventy-two rupees per mensem.

The provincial battalion is also available for police duties, and during the healthy season, from November to April inclusive, a line of guards, extending along the frontier of *Rohilkhand*, are stationed for the protection of

the *Tarai* from Decoits. These posts have superceded the Chokis formerly occupied by the *Heri* and *Mewati* Chokidars, who, under the former governments, engaged, on certain considerations, to repress robberies in the *Tarai*, and made themselves answerable for the restoration of all property which might be stolen within their respective jurisdictions. The remuneration for this service consisted in a fixed tax leviable on all persons, merchandizè, or cattle, passing certain limits. On the introduction of the British government, it was found, that the system itself was far from efficient, and that numerous abuses were daily practised in the collection of the authorized Chokidari dues. Thefts of cattle were frequent, and suspicion attached to the Chokidars themselves, of being participators, if not principals in their perpetration. The responsibility of the head Chokidar proved merely nominal, as restitution of the stolen property was, in most instances, evaded. The system was, on these grounds, totally abolished in the year 1817, and the advantages resulting from this measure have been fully evinced, in the almost total suppression of robberies and other outrages, hitherto so prevalent in that part of the country: the *Tarai* under the *Gerhwal* Pergunnas, which is almost wholly in the *Moradabad* jurisdiction, must be excepted in this remark. No class of people answering to the village Chokidars in the plains, are to be found in this province.

In Civil Judicature, the simple forms of the preceding government have been generally retained. The petition originating the suit, is required to be written on an eight anna stamp, but no institution or other fees are levied: a notice, in the form of *itala nama*, is then issued, which process is served by the plaintiff, and in three cases out of four, produces a compromise between the parties: where ineffectual, it is returned by the plaintiff into court, when the defendant is summoned. The parties then plead their cause in person, and should facts be disputed on either side, evidence is called for. Oaths are never administered, except in particular cases, and at the express desire of

either of the parties. Suits, for the division of property, or settlement of accounts, are commonly referred to arbitrators selected by the parties. In the issue and execution of decrees, the established forms are followed, but the leniency of the native creditors renders imprisonment and sales, in satisfaction of decrees, uncommon : since the introduction of the British government, only eight debtors have been confined in the *Almora* jail, six at the suit of individuals, and two on public demands in the commercial and commissariat departments. At present, only one court (the commissioner's) exists in the province for the cognizance of civil claims, and the absence of fees and simplicity of forms, as therein practised, joined to its frequent removal to every part of the country, have hitherto tended to prevent any inconvenience being experienced from the want of Moofusil courts. The gratuitous administration of justice, has not been found to excite litigation, as the absence of native pleaders, and the celerity with which causes are decided, operate as checks to such an abuse. The number of civil suits entertained during the year, from 1st January to the 31st December, 1822, amounted to 1,462, of which only four hundred and thirty-eight proceeded to the summons of the defendant ; of the latter, one hundred and thirty-one were subsequently withdrawn, by Razinamas, and three hundred and seven finally adjudicated. Disputes regarding land, form the greater portion of suits instituted. The value of those in action rarely exceeds one hundred rupees. The proceedings of the court are written in the Hindí, with the exception of the examinations, which, for the sake of expedition, are recorded in the Persian.

The revenue administration is here conducted on the same principles as are in force in the plains. On the conquest of the province, as a temporary arrangement, the revenue of each Pergunna was farmed for one year to the *Kamin* or *Siyana*. The receipts of the preceding year, as exhibited in the *Kanongo* returns, were assumed as a standard, a deduction of twenty-five

per cent. being allowed for the difference of currency. The Jumma thus fixed, amounted to 123,577 Furruckabad rupees. At the expiration of this settlement, the *Padhans* were called upon to engage for the assessment of their respective villages : as this mode of collection was, in some degree, novel, and as the individual responsibility of the *Padhans* remained to be ascertained, the arrangement in question was only partially introduced, and the leases restricted to one year, at a Jumma of 1,37,949 rupees. The success with which this experiment was attended, and the punctuality with which the revenue was realized, led to an extension of the system on the third settlement, which was fixed for a period of three years, at a Jumma of 1,60,206 rupees. The present settlement was formed on the same principle, and from the reluctance of the *Málguzárs* to engage for a longer period, was again fixed for a term of three years. The objections preferred against a longer lease were founded on the migratory habits of the lower class of cultivators. The Jumma of the 1st year, or 1877, amounted to 1,69,394 rupees, which has been raised in the last year of the term, 1879, by the rents of new villages, to 1,76,664 rupees. This sum is collected from 7883 *Málguzárs*, and is comprized of the following items :—

Cess on Agriculture, .....	.....	.....	1,69,566
Ditto ditto Copper Mines, .....	.....	.....	3,360
Ditto ditto Iron Mines, .....	.....	.....	1,100
Ditto ditto Pasturage, .....	.....	.....	2,638

A further branch, at former settlements, consisted of cess on the profits of trade, under which head 7000 rupees were annually collected from the *Bhoteas*. This source was forgone at the last settlement, and a remission to that amount made to the *Bhoteas*. The revenue derived from timbers, bamboos, kuth, &c., in the *Taraí* forests, may also be included in the land assessment, as, although levied in the shape of duties from the exporters, it

is, in fact, the government share in the value of the national products of those forests, all of which are public property. These duties have been hitherto let to farm on annual leases, at the undermentioned Jumma :—

1816-17	17-18	18-19	19-20	20-21	21-22	22-23
1,721	2,841	3,200	3,987	4,850	5,503	6,302

The total improvement which has taken place in these various branches of assessment, since the conquest, falls little short of 60,000 rupees, without taking into account the remission of 7,000 rupees above-mentioned.

Notwithstanding the general lightness of the government demand, a very extensive revision of the detailed assessment has been found indispensable at each succeeding settlement. This necessity has arisen from the contracted state of the laboring population, which renders it difficult for any *Malguzár* to replace sudden casualties among his tenants. In the present state of minute village assessment, the death or desertion of even a single cultivator, adds greatly to the burthen of the remaining tenants: where further losses occur, immediate remissions are generally made to save the village from total desertion. Such defalcations are supplied from a corresponding improvement in other estates, and as contingencies of this nature are best known to the surrounding *Malguzárs*, the distribution of the Pergunnah assessment has been, hitherto, intrusted to the *Padhás* themselves. This measure is executed in a general assembly, or *Panchait*, of the parties concerned in the scale of the expired Jumma: the increase is, subsequently, laid on in the shape of a *percentage*. The general equity with which these mutual assessments have been conducted, is sufficiently evinced in the facility and punctuality with which they have been realised. The village settlements are formed with the established *Padhán* in all cases, except where objected to, on sufficient grounds, by the remaining sharers on the

estate. The nature and dues of the above office have already been described : the small parcels of land attached to it, are particularly specified in the lease as *Hek Padhánchári*; the total of such lands in *Kamaon* proper amounts to about 5000 standard *Bísís*, being recorded at 8970 nominal *Bísís*. In *Gerhwal*, no public allowance of this nature exists, but a similar arrangement has always been made by the joint proprietors of the estate in favor of the *Padhán*.

It now only remains to be considered how far the rents paid by the actual cultivators correspond with the public demand. A large portion of the province, not less, probably, than three-fourths of the villages, are wholly cultivated by the actual proprietors of the land, from whom, of course, nothing can be demanded beyond their respective quotas of the village assessment. In these cases, the settlement is, literally speaking, *Ryatwára*, although the lease is issued only in the name of one, or at most of two sharers in the estate. The remaining part of the province may be comprised under two descriptions of estates : First ; Those villages in which the right of property is recognized in the heirs of former grantees, while the right of cultivation remains with the descendants of the original occupants. In these, the rents are commonly paid in "*Kút*," or kind, at an invariable rate, as fixed at the period of the grant. Secondly ; All villages in which the right, both of property and occupancy, have become vested in one and the same individual. In these, the *Málguzár* has necessarily the discretion of demanding the full extent of the "*Malik Hissa*," or government share, supposing no fixed agreement to have been made between him and his tenants ; but such improvidence on the part of the latter rarely occurs, and the great competition which exists for cultivators, in consequence of the contracted state of the labouring population as compared with the extent of the arable land, will long secure favourable terms and treatment to this important class of the community. Under this description of villages are included those newly brought into cultivation, and the *Paekasht* lands ; of the first, the proprietary right is always granted to the

reclaimer, in consideration of the expence incurred by him in the enterprise. By the term *Paekasht*, is implied all lands which are cultivated by non-resident tenants. In the *Taraí*, the system of rents is, in some respects, different. The estates there are, generally speaking, of large extent, but none are permanently inhabited with the exception of the villages of the *Tharus* and *Bogsas*, in the low *Taraí*, adjoining *Rohilkhand*. In these, the rents are calculated by the plough of land at an easy rate, never exceeding the proportion of one-tenth of the gross produce. In the upper parts of the *Taraí*, the farms are temporarily occupied by the hill *Zemindars* during the cold season; during the remainder of the year, the danger of the climate occasions their almost total desertion. The *rabi* crop, consequently, forms the chief source of rent to the *Málguzár*: the individual rates vary from four annas to three rupees the plough, according to the supply of water available for irrigation.

The local divisions having been found inconveniently numerous for the purposes of account and management, many of the petty divisions have recently been united to the adjoining *pergunnas*, of which they will, in future, form sub-divisions, while a few districts, composed of villages dispersed in various parts of the province, have also been broken up, and their villages re-incorporated with their original *pergunnas*.

By these arrangements, the number of *pergunnas* has been reduced to twenty-six, as detailed in statement (A.)

The revenue establishments now consist of four *Tahsildaris*, the relative extent and expence of which are as follows:—

	<i>No. of Villages.</i>	<i>Annual Jumma.</i>	<i>Annual Expence.</i>
Kamaon Hazur Tahsil,	4421	90253	3030
Kali Kamaon,	1162	28940	2106
Gerhwal Srinagar,	2241	28149	2148
Chandpur,	1210	29921	2148
Total, ..	9034	176663	9432

On the 1st June, 1816, the number of Tahsildaris was eight, at an annual expense of 20,216 rupees; since that period a reduction has also been effected in the Sudder native establishment, the yearly total of which is now 7488, instead of 9840, as it then stood. The Defteris, or Kanongos, nine in number, receive salaries to the aggregate of 3009 rupees per annum. Nine pergunna Patwáris have been established with a monthly stipend of five rupees each. The revenue of the resumed *nankar* lands has fully covered these allowances.

Of the mode of collections, it is only necessary to state, that the demand is divided into four kists, three of which fall on the *kharíf*, and one on the rabi crop. No talabána is levied from the málguzárs.

Transit duties of every description were finally abolished in this province in 1818. The consumption of spirituous liquors and drugs is trifling, and the revenue from that source correspondingly small, the present not exceeding 500 rupees annually. The use of stamp paper has been partially introduced in Judicial proceedings, during the last two years. The annual receipt on this account now amounts to 2000 rupees. A comparative view of receipts and expenditure of the province in the years 1815-16 and 1822-23, will be seen in the Appendix, statement E.

The rent-free lands may be classed under two heads, first the "*Gúnt*," or religious assignments, and secondly, those granted to individuals. The "*Gúnt*" villages amount to 973, and contain about 1-15th of the arable lands of the province, all of which are permanently alienated from the rent-roll of government. There are 175 villages enjoyed by individuals, the *rakba* of which may be estimated at 3000 bisís, or 1-70th of the arable lands of the province: the terms on which these lands are held are various, mostly for life. The largest rent-free estate in the possession of an individual yields about 1,000 Rs. per annum, and is held on a grant from the Nipal government in tenure of

perpetuity. The total revolution which took place in the government at the *Gorkha* conquest, and the comparative recentness of that event, will explain the small extent of the Jagir lands. At that period, all grants in favor of the public and private servants of the former Rajas were resumed, and subsequently, the Jagirs of private individuals, including even those of the Brahmins, were, with few exceptions, subjected to the same measure. During the last seven years, upwards of 150 villages, including those in *Nankar*, have been re-annexed to the rent-roll. The greater part of these had been surreptitiously abstracted from the public assessment, by the connivance of the executive officers of the Nipal government. The pensions chargeable on the revenues of this province, amount to 21,670 rupees per annum, according to the following distribution :

		<i>Per annum.</i>
	}	In perpetuity to Religious Establishments. 2,152
Pensions of former Govt.	}	For life to individuals. 348
	}	For life in Political Department. ... 9,600
Granted by British Govt.	}	Do. do. Military Invalid allowances. ... 9,570

It now only remains to offer a few concluding observations on the State of the Province and of its Inhabitants.

The deterioration which had taken place under the *Gorkha* government, has already been mentioned. On the conquest in 1815, cultivation was found at its lowest ebb, the rent-free villages alone exhibiting a thriving appearance. The laboring classes had been reduced to the extremest indigence, while the Kamíns and Siyanas were, for the greater part, overwhelmed with debts, contracted for the liquidation of the public demands. Since that period, a variety of causes have combined to ameliorate the condition of the industrious portion of the community. Light assessments, attended with constant high prices of produce, have more than doubled the

profits of agriculture, while the increased competition which has taken place in the trade with this province, has considerably enhanced the value of its exports. To the laboring classes, more particularly those in the neighbourhood of the military posts, the public works and the transport of stores have afforded continued sources of employment. The aggregate expenditure under these heads, during the last eight years has, probably, not been much short of 4 lacks of rupees, a large sum as compared with the amount of the population by which it will have been absorbed. It cannot, however, be denied, that the demand for labor on these accounts has, at some periods, been so excessive as to prove the occasion of inconvenience and hardship to the people concerned. Partial reductions in the military force, and the augmented resources of the province, have, in some measure, counteracted the evil. The whole province exhibits ample proofs of improvement; indeed it may be fairly stated, that the present cultivation exceeds that of 1815, in the proportion of full one-third. From the subdivided state of landed property, which here exists, few individual landholders have the means of acquiring wealth, but though all connected with the soil are confined to a state of equality, their condition, as a body, is no doubt superior to that of any similar class of tenants, in any part of the Company's territories. A knowledge of these advantages has induced a continual emigration of cultivators from the adjoining provinces of the *Rajas of Nipal and Gerhwal*. To some of the principal *Kamins* and *Brahmins*, the introduction of the British government, by destroying their former influence, has proved a cause of regret, but to the great bulk of the population, this event has been a source of unceasing benefits and congratulation.

ADDITIONAL OBSERVATIONS.

Page 137. The Province of *Kamaon*, as now formed, comprises the whole of the Raj of that name, together with a large portion of the principality of *Gerhwal*. Strictly speaking, the name of *Kamaon* is applicable only to the country lying between the *Kań*, or *Gogra*, and the *Rámgangá*, to which tract it was given by the Rajas of the last race, who sprung originally from a Chieftain of the Pergunna of that name. The appellation of *Gerhwal* is said to have been derived from the number of *Gerhs* (Fort) formerly existing there. *Almora* is said to have been so named from the abundance of wild sorrel (*Almorí*) which grows in its vicinity.

Page 153. A remarkable variety of snake is the "*Churao*," a species of *Boa* of immense size, found only on high mountains, and in the wildest solitudes. It is said to prey chiefly on *deer* and other wild animals, but occasionally seizes and swallows cattle which may have approached its cave. By the lower orders, more particularly the herdsmen, fabulous powers and features are ascribed to this animal: among other wonders, it is said to possess a long flowing mane of red hair, and to make use of a large pine tree as a walking stick, when descending the mountains. Of the real existence of the *Churao*, (stripped of these wonderful attributes) there can be no doubt, as it is occasionally killed by hunters.

The "*Gola*," or "*Gosamp*," is nearly white in the northern parts of the hills, and its skin, which is extremely hard, and forms a handsome material for sword scabbards, is rendered the more valuable from the scarceness of the animal.

Page 160. They represent themselves as being the descendants of one of the aboriginal princes of *Kamaon*, who, with his family, fled to the jungles to escape the destruction threatened by an *usurper* : under the pretension to royal origin, the *Ráwats*, or *Rájís*, abstain from offering to any individual, whatever his rank, the usual eastern salutation. The origin of this tribe, howsoever the claim to regal descent be disposed of, must certainly be referred to some race of inhabitants anterior to the settlement of the present race. The great difference in customs and religion from the Hindu tenets, which exists among the *Rájís*, might be ascribed to the savage mode of life pursued by them and their ancestors for so long a period, but the total dissimilitude of language, which renders the *Rají* and present *Kumaya* wholly unintelligible to each other, cannot be accounted for in the same mode, and can only be attributed to a separate origin. A conjecture may be hazarded, that the out-castes, or *Doms*, are in part descended from the aborigines. A marked difference exists in the personal appearance of this class and of the Hindu inhabitants ; the former being, for the most part, extremely dark, almost black, with crisp curly hair : they are, at the same time, in a state of nearly universal slavery, a circumstance which, from its extent, can scarcely be ascribed wholly to the mere process of purchase, but which may be explained by supposing a part of the aboriginal inhabitants to have been seized by the first Hindu colonists, and reduced to slavery, in which state their descendants have since remained.

Page 161. The name "*Badari*," is derived from *Badari*, *Sanscrit*, the *Berí* or *Jujube*. The legends respecting the origin of this idol differ : by

one account, it is said to have been, in remote ages, an object of peculiar veneration and worship in the adjoining province of *Thibet*, from whence it fled, about seventeen centuries past, to the spot on which the temple now stands: the second, and more probable legend, represents the idol to have been originally found in the river near the temple, which was then erected and dedicated to it by *Sankaráchári*, a missionary from the peninsula of India: the appearance of the idol, which bears scarcely any resemblance to the human form, and exhibits evident traces of having been once worn, and polished by the action of water, gives strength to this tradition.

Kedárnáth, an incarnation of *Sadasheo*, is not a form of *Vishnu*,* but the word "*Kedár*," is divided from "*Ke*," Sanscrit, water, and "*Dár*," abounding with: the worship of this idol, at its present site, is carried back to the remote of fabulous ages, being ascribed originally to the *Pándavas*. These brothers, after their battles with the giants, are said to have proceeded to *Haridwár*, with a view to expiations and to worship *Sadaseo*. That god, alarmed at their approach, fled under the form of a buffalo, and was pursued by them to *Kedár*, at which spot he dived into the earth, leaving only his posteriors visible above ground. This part, of which the *Pándavas* established the worship, continues to receive the adoration of the pilgrims at *Kedár*. The remaining portions of the body of the god receive worship at the temples of "*Kalpeswar*," "*Madhyameswar*," "*Rudranáth*," and "*Tunganáth*," all situated along the *Himálaya* chain, and which, together with *Kedárnáth*, form the *Panch Kedár*, a peculiar object of pilgrimage to pious votaries, but which, from the difficulties of the roads, few are able to accomplish.

In the rear of *Kedár* is the *Himálaya* peak of "*Mahá Panth*," celebrated in Hindu Mythology, as the point at which the *Pándavas* devoted

* This correction of the original passage, by the author himself, had not been received when page 161 was printed.—H. H. W.

themselves, and from whence they were taken up to heaven : a similar blessing, it is believed, will be conferred on every virtuous and pious person, who may reach the peak, or perish in the way ; from twenty to twenty-five votaries annually sacrifice themselves in the attempt to ascend the *Mahá Panth*, or *Great way*, or by throwing themselves over a precipice, called *Bhyrava Jhamp*, in the neighbourhood : by suicide, at the latter spot, the votary expects to have realized in his future state, that object and wish for which he expressly devotes himself. These suicides are chiefly from *Guzerat* and *Bengal*, and commonly leave their houses for the avowed purpose of proceeding to *Mahá Panth*, and such sacrifices by hill-people are rare ; it may, therefore, be reasonably presumed, that they are not occasioned by the influence or suggestions of the priest and attendants of the temple.

Page 164. The personal appearance of the inhabitants varies in a marked degree, in different parts of the hills, though the same general caste of countenance, a lank face, with prominent features, prevails throughout. In the northern districts, the people are short, stout-made and fair, while in the southern hills, the stature is somewhat greater, the form spare, and the complexion sallow : the natives of the midland pergunnas, present a medium appearance between the two first mentioned classes. The children of both sexes are, generally speaking, every where fair and handsome, but as the boys approach to manhood, their features become coarse, and their face loses its fullness. The females, from constant exposure to the weather, and from incessant labor, lose all pretensions to good looks at an early age, and when advanced in life, are commonly remarkable for their extreme ugliness. Women of the higher ranks, not subject to such vicissitudes, must be excepted, as they are invariably fair and often beautiful.

A similar variation in costume exists in the hills. In the northern districts, the principal article of dress, consists of an unsewn web of cloth,

either of hemp or wool. In the males, this is thrown over the shoulders, and descends down behind to the knees, from whence it is doubled, and carried back over the shoulders; the two ends are fastened on the breast, by wooden or metal pins, the corners being passed over and under the opposite shoulder, the sides are drawn forward, so as to meet over the body, and are secured in that situation, by a *kamerband* of cotton or hempen cloth. A narrow strip of cloth passed between the legs and fastened by a string round the waist, and a skull cap, complete the suit. The arms and legs are thus left bare and unincumbered; in rigorous weather, however, blanket trowsers are partially worn. The women fasten the web of cloth, in a somewhat different mode, as it reaches to the heels, and hangs full like a petticoat, and in addition, they wear commonly a boddice of dark coloured chintz, and a narrow scarf of white cloth. In other parts of the province, the dress of both sexes resembles that of the corresponding classes in the plains, excepting, that the turban is little used, and the "*jagúli*," or "*jáma*," reaches only to the knees. It may be observed, generally, of the hill people, that they are extremely indifferent in regard to the state of their every-day apparel, and continue to wear their clothes till reduced to mere shreds and tatters, but on holydays and festivals, individuals of either sex prefer absenting themselves from the festivities, to appearing in a worn out garment.

The great bulk of the population subsists on the coarse grains, such as *Mandúa*, *Jangúra*, *Koní*, *Chena*, *Mana*, &c., and the inferior kinds of pulse, *Urd*, *Gahat*, *Bhat*, *Raens*, &c. The *Mandúa* is either made into bread, or is dressed as porridge, "*bári*," and seasoned with "*jhoí*," buttermilk and turmeric boiled together—the *Chena* and *Koní*, are also made into bread, or boiled whole, and eaten as rice. When travelling, the lower classes live chiefly on "*Satu*," the meal of parched barley, of which every individual carries a supply with him: this article requires only the addition of a little water to prepare it for eating. Rice forms the favorite food of all

those who can afford to purchase it. Wheat is only in partial consumption, chiefly on occasions of entertainments at marriages, &c., when the peculiar scruples of Hindus prevent the use of rice. Vegetables of all kinds, both cultured and wild, are objects of universal consumption; among the latter description, not already noticed, may be mentioned the nettle, fern, tulip, *maki*, &c., of which the shoots, root, and bean, respectively, are eaten: the list of herbs, roots, and leaves, considered edible by the natives, is endless: indeed, from their indiscrimination in this respect, fatal cases of poison sometimes occur. During the periodical residence of the agricultural classes in the Taraí, their principal food is "Gúya," or sweet potatoes, boiled, and eaten with butter-milk.

Animal food is in much request among all classes; with the exception of those animals, the use of which, as food, is prohibited by their religion, and excepting also reptiles of all descriptions, and carrion birds or beasts, every sort of animal is converted to food, in some part or other of the hills: by the southern *Gerhwalis*, rats and mice are considered as dainties. The favorite flesh is that of the goat, or of the sheep, where bred: against the sheep of the plains, an universal prejudice exists, its long tail rendering it, in the eye of the Highlander, a species of dog. No scruple as to the mode of decease exists, and animals dying a natural death from disease, or other cause, are eaten by the Hindus, as well as by the Doms.

Tobacco is smoked by all, but the highest caste Bramins, who substitute *Chir-ras*, the inspissated juice of the hemp plant: they, however, chew the leaf pounded and mixed with lime, a practice which prevails also among the other classes.

The use of spirituous liquors is, in Kamaon, confined to the lowest class or Doms: in *Gerhwal*, the Hindus are less scrupulous, and excepting a few

Brahmin families, all drink a species of whisky there manufactured, either from rice or barley: at the same time, they will not touch the common kinds of spirit, as prepared in the plains; the objection to the latter arising from the mode in which the liquor is made, as well as from the caste of people by whom the manufacture is carried on, whereas the *Gerhwal* spirit is prepared by Hindus of the Rajput caste, and is fermented by the juice of particular roots, against the use of which no religious prejudice prevails. Intoxication is rare, and takes place only at the religious festivals.

The mildness of the temperature of the hills would lead to the expectation, that the inhabitants would enjoy an exemption from most of the diseases incident to less favored countries, and that a different state takes place, is doubtless to be attributed, in a great measure, to the people themselves. By their avocations, the labouring classes are occasionally compelled to descend into the vallies, the air of which is invariably noxious during half the year. The purity of the natural atmosphere, is also counteracted by the state in which the villages are kept: the dung heap forms a prominent object in front of, and contiguous to every farm: the villages are commonly buried in dense crops of gigantic hemp, while the houses are enveloped with a profusion of scandent vegetables, such as cucumbers, water-melons, pumpkins, &c. &c. From the united operation of these causes, during the worst season of the year, general sickness prevails throughout the hills, in the shape of quotidian, tertian and quartan fevers. Contagious and typhus fevers occasionally break out, generated, no doubt, from an excess of the same cause. These always exhibit the rapid and malignant features of plague, as does also the small pox, which proves extremely destructive whenever it visits the hills. Rheumatism is common during the cold weather. Cutaneous eruptions of various kinds are universally prevalent among all ranks, and are ascribed by the inhabitants to the use of spring water. Leprosy does not appear so common as in the plains. To the above, must be added affections of the spleen and

of the lungs, bowel complaints, stone and dropsy, all of which are frequent. A general disinclination prevails among the lower classes to the use of physick, on the avowed principle, that from the pureness of their general diet, their stamina is not sufficiently strong to stand the effects of powerful remedies: cooling drafts and restoratives are, however, taken without hesitation: those in most general use, are infusions of fennel seed, black pepper, or cherayta, in water. In most disorders, recourse is had to cauterizing, performed by the application of lighted balls of tow, or of some other similar substance, either to the back of the neck, the breast, or the pit of the stomach. Firing by means of an iron, is also resorted to in cases of strains, swellings, or rheumatism. In all diseases, the principal reliance for their cure is placed on charms tied to the person of the patient, on magnetism, and on various superstitious ceremonies and sacrifices. Inoculation is never thought of in the interior, till the small-pox actually appears in the village itself, or in the immediate neighbourhood, and then, from the unskilful manner in which it is performed, or from the use of virulent matter, the precaution proves, in frequent instances, ineffectual. In the case of this, and of other contagious distempers, nonintercourse is found, by the inhabitants, to be the best preventative, and with this view they sometimes abandon their villages, and retreat, temporarily, to the summit of an adjoining mountain, and there continue for some days, till they presume the contagion to have passed away. Considering the rude state of medical science in these hills, it is somewhat remarkable, that lithotomy should be in common practice: this operation is performed on subjects of all ages, and apparently with very general success. The operators are from among the low caste Dom, and the only instruments used, are a razor and a pair of common forceps. Some notice may here be taken of the *Goitre*, which is common in these hills, although it is here a disease which injures only the personal appearance, and not the bodily health or mental faculties of the subject. This affection has been ascribed to various local peculiarities, or to a peculiar susceptibility in the constitution of mountaineers, but

the example of these hills fully demonstrates, that it cannot be referred exclusively to any one of the commonly assigned causes. The *Goitre* is here found among the residents of most elevated villages, as well as among those of the low vallies, in spots where snow is never seen, as well as in those near which it for ever lies; in districts where no minerals are known to exist, as well as in those abounding with mines; among people who drink none but river water, as well as among those who use only springs; among the rich equally with the poor; and lastly, it attacks individuals recently from the plains, as well as the natives of the hills. A conjecture may be hazarded, that the *Goitre* is in part produced by the effects of the keen mountain air acting on the exposed throat; a covering to that part seems at any rate to be the most effectual remedy as well as preventative; in cases of incipient *Goitre*, the natives have immediate recourse to the use of a neck-cloth, formed of *otter* skin, or some other warm substance, which is worn till the swelling has wholly subsided; and although instances have occurred here of European females and children being attacked by *Goitre*, no case of any European male being so afflicted has yet taken place. Various *nostrums* and remedies are prescribed by the native practitioners: among the latter, a simple sold in the bazar, under the name of "*Gellur Patta*," is in most request. Outward applications, cauterizing, and issues, are also resorted to, but all, notoriously, without the slightest prospect of success in any but incipient cases. In closing this subject it may be observed, that the practice of the "*Báids*," or Brahmin physicians, among the upper classes, is on a par with that in the plains, whither such practitioners are originally sent to study medicine. Musk appears to form an ingredient in almost every remedy administered by them, and, indeed, the inhabitants of the hills universally entertain the greatest confidence in the medicinal virtues of that drug.

The population of the interior, as has been already stated, is comprised almost solely of the agricultural classes. From the nature of the country, the

communication between villages is commonly both tedious and laborious, and the intercourse of the inhabitants of even adjacent hamlets is confined to the periodical festivals which occur at neighbouring temples: on these occasions again, the meeting is composed wholly of the villagers of the surrounding district, and the presence of individuals from other parts of the hills is viewed almost as an intrusion. This state of restricted intercourse, continued through ages, has tended to preserve a distinctness of character and manners among the mountaineers, who accordingly still exhibit the compound of virtues and defects common to agricultural tribes in a rude stage of society. Honest, sober, frugal, patient under fatigue and privations, hospitable, good humoured, open, and usually sincere in their address, they are, at the same time, extremely indolent, fickle, easily led away by the counsel of others, hasty in pursuing the dictates of passion, even to their own immediate detriment, envious of each other, jealous of strangers, capable of equivocation and petty cunning, and lastly, grossly superstitious. To personal courage, the lower order make no pretensions; the high Rajput families, who are most part descended from western adventurers, are in no way deficient in the inherent spirit of their race. Conjugal affection has scarcely any existence in the hills; wives are universally considered and treated as part of the live stock, and little or no importance is attached to the breach of female chastity, excepting when the prejudices of caste may thereby be compromised. To their children, they, however, evince strong affection, and instances of suicide, by fathers as well as mothers, from grief for the loss of a child, are far from uncommon. The indolence of the male sex is insuperable, even by the prospect of gain, and the whole labor of the domestic economy and of agriculture, excepting only ploughing and harrowing, is left to the women; and a rate of wages, greater by one half than that which exists in the plains, fails in inducing the voluntary attendance of day labourers: the people of this class will, however, without hesitation wander hundreds of miles, and spend weeks to gain a few annas by peddling the commodities of the plains. All mountaineers

unité in an excessive distrust of the natives of the low country, whom they regard as a race of swindlers and extortioners: the jealousy with which the mountaineers of one pergunna view those of another, amounts to a spirit of clanship, which feeling may, doubtless, be ascribed to the state of government that, at one time, existed in these hills, when every pergunna and subdivision formed a separate and independant principality. Local attachments are very predominant, and an eventual return to their natal village continues to be the cherished hope of those, whom the want of means of subsistence may have compelled to migrate: from the same sentiment, the petty landed proprietors entertain an overwhelming affection for their hereditary fields. Of the honesty of the hill people, too much praise cannot be given: property of all kinds is left exposed in every way, without fear and without loss: in those districts whence periodical migration to the Taraí takes place, the villages are left with almost a single occupant during half the year, and though a great part of the property of the villagers remains in their houses, no precaution is deemed necessary, except securing the doors against the ingress of animals, which is done by a bar of wood, the use of locks being as yet confined to the higher classes. In their pecuniary transactions with each other, the agricultural classes have rarely recourse to written engagements, bargains concluded by the parties joining hands, ("Hath Marna") in token of assent, prove equally effectual and binding, as if secured by parchment and seals. If exceptions to this general character for honesty exist in the hills, they are to be found only in the class of *Doms*, or outcastes, who are commonly of loose and dissipated habits, confirmed, if not acquired, by continued intercourse with the plains. At a former period, the higher orders would appear to have been rapacious, oppressive, and vindictive, and acts of violence and bloodshed, perpetrated from motives of rapine or revenge, were of common occurrence. The impotence of the government, which had neither the power to repress outrages, nor to redress injuries, was doubtless the principal cause of these disorders, which, under the strong and vigorous system of the *Gorkhas*,

soon ceased, and all classes are now equally conspicuous for their order and submission to public authority. The mountaineers are of a lively disposition, much inclined to singing, dancing, and sports; they are also fond of hearing and relating tales, and of puzzling one another with riddles; games of ball are prevented by the nature of the country, but sports of other kinds are numerous; and among them the Englishman will recognize Hocky, and many other games familiar to his youth. The most common sedentary amusements are *Bag,h Bakri*, fox and geese, *Ramchúr*, drafts and chowper; chess and cards (*Ganjifa*,) are played by the higher classes at *Almora* and *Srínagar*, among whom, more particularly the Brahmins, an inclination for gambling is generally prevalent. The style of dancing has been noticed among the religious ceremonies. The singing is of three kinds, each, with its peculiar time and measure. 1st.—The *Bharao*, a species of dramatic recitation, in which two or more characters are brought forward, the measures varying with the subject. In this class are also comprised the hymns, in honor of the local gods and demigo. 2d.—The *Josa* ballads, composed on popular and passing events, the time of which is quick and lively, more particularly in the chorus. 3d.—The *Byri*, or *Bhagnaol*, a species of duet, sung commonly by a male and a female, who respond to each other in extemporaneous stanzas alternately. The subject has commonly reference to the situation or actual occupation of the parties, clothed in numerous metaphors and similies, drawn chiefly from vegetable products: where the parties are skilful, the *Byri* is made the vehicle of personal praise or satire: this style of singing is highly popular in the *Kamaon* pergunnahs, and it is there a common saying, that no female heart can withstand the seductions of an accomplished *Byri* singer. The measure is slow and plaintive.

The only musical instruments in common use, are drums of various kinds, as in the plains, and the shepherd's pipe; this latter is rude and simple, formed from the small hill bambu: its power, as well as that of the performers, appears

to be confined to a few notes continually repeated and prolonged: when heard in the glens and dells, the melody of this instrument is wild and pleasing.

An attempt to collect the numerous superstitious beliefs current in these hills, would be an endless task, the result of which would by no means repay the labor bestowed, as these beliefs are for the most part rude and gross, displaying neither imagination nor refinement in their texture. The mountaineers believe implicitly in the existence of the various tribes of ghosts, evil spirits, demons, goblins, fanes, elves, &c., and have, moreover, the fullest evidence in the powers of sorcery and witchcraft: a few of the most current superstitions, under these several heads, may be stated.

The ghost tribe is divided into numerous varieties: the first and most formidable is the *Bhút*, or ghost: individuals who may have died a violent death, whether by murder, execution, drowning, and to whose remains due funeral honors may not have been paid. The *Bhút* continues to haunt his descendants for generations in an invisible shape, and requires to be occasionally appeased by sacrifices and offerings. *Masán*, or Imps, are the ghosts of young children, the bodies of whom are buried, and not burnt, and who prowl about the villages in the shape of bears and other wild animals.

Tola, or Will of the Wisps, are the ghosts of bachelors, that is of males, who may die at mature age unmarried. The society of the *Tolas* is supposed to be contemned by all other classes of ghosts, and they are, accordingly, seen only in wild and solitary places.

Airí, the ghost of a person killed in hunting, is believed to haunt the forest in which the accident may have occurred, and is heard, from time to time, hallooing to its dogs. To hear the voice of the *Airí*, portends some calamity to the hearer.

Acheri, or fairy, the ghosts of young female children; these reside on the tops of the mountains, but descend at dusk to hold their revels in more convenient spots. To fall in with the train, at the time, is fatal, as the *Acheri* punish such intrusions with death: they occasionally also molest those who may cross the sites of their abodes during the day, more particularly females, who may have any red articles of dress on their person at the time, the *Acheri* bearing a peculiar antipathy to that color. When female children are taken suddenly ill, it is immediately concluded that the *Acheri* have cast their spell or shadow (*Cháyá*) on the child, with the view of adding her ghost to their numbers. The optical illusions and shadows, seen in various mountainous countries, are also occasionally visible on some of the mountains in this province, which are accordingly celebrated as the peculiar resort of the *Acheri*, as the processions of elephants, horses, &c. which sometimes appear on the summits, are naturally ascribed to those ideal beings. A hill opposite to *Srinagar*, is celebrated in this respect; the train of shadows which, from time to time, appears to move along its ridge, continues visible for some minutes, and is, in consequence, viewed by numbers of the inhabitants of the town. It is therefore certain, that these shadows originate in physical causes, and are not created by the imagination of individuals. The theory, by which this illusion is explained in other places, is particularly applicable here, as the shadows in question, are invariably seen at the same hour, that is, when the sun is sinking below the horizon.

The *Deos*, or demons, form a numerous class, and scarce a village but has its particular *Deo*: some of the tribe are obnoxious to men, others to women or children, while a more ignoble race vent their malice on cattle. An account of one of these *Deos* will serve as a description of the whole tribe. This demon, called *Rúnía*, haunts the north pergunnas of *Kamaon*, removing occasionally from one place to another; in his migrations, he makes use of a large rock for a steed, on which also he nightly

perambulates the villages in the vicinity of his residence. Though invisible to the eye, his approach is indicated by the clattering of his massive courser: he molests only females: should he, in his excursions, fall in with, and take a fancy to any woman, her fate is assured: from that moment she is haunted by him incessantly in her dreams, and gradually wasting away, she falls eventually a victim to his passion. Such is the ancient belief regarding *Rúnia*, and an infatuated conviction of having become the object of his choice, is not uncommonly attended with a fatal termination.

The power of occasioning sickness, and even death, by means of incantations, *Ghát*, is ascribed to those skilled in witchcraft. The *Bogsa*, or Sorcerer, is further supposed to be capable of assuming the form of a wild beast, (as the man-wolf of Germany,) for the purpose of destroying his enemies. An old man residing near *Srinagar*, and practising as a physician, is a most notorious *Bogsa*, and is believed by his neighbours to be not less than two hundred years old: the reputation of having devoured many individuals, under the form of a tiger, cost him the loss of his teeth, many of which were extracted, by orders of the then *Ríja*, to render him less formidable in his future metamorphoses.

The evil eye has its effects here, as elsewhere, and many cases of sickness are ascribed to its operation. In *Gerhwal*, a peculiar superstition exists, which ascribes to inanimate objects the same effects as the evil eye. This is called *Bed,h Hona*, literally "becoming a mark to;" as where a new house, from being built on an eminence, or from its superior height, becomes a prominent object to, and overlooks other houses, the latter, in respect to it, are said to be *Bed,h Luga*, or "struck," and the sickness or death of the inmates can only be prevented by the lowering or total removal of the obnoxious building. This prejudice has no connexion with the jealous feelings regarding privacy, common to the east, as similar effects are ascribed to houses, and even

rocks on opposite and distant mountains, as well as to erections in the immediate vicinity. With so many imaginary sources of calamity and sickness, independant of natural causes, the population must have become extinct, had not the means of prevention and cure for the former existed, possessing the full confidence of the inhabitants. Religious ceremonies, sacrifices, exorcism, and counter-charms are resorted to, in all cases of sickness ascribed to the malice of ghosts, demons, fairies and witches. In cases of temporary affection, such as fits, &c., the devil is driven out either by flogging the possessed with nettles, or by fumigation with some horrible odour. A belief in the temporary and occasional presence of a deity in the bodies of individuals, is here universally prevalent, and the superstition applies equally to all the local deities, and to persons of both sexes, of all castes and classes. Individuals subject to the inspiration of some particular deities are, on such occasions, consulted as oracles, but in most instances, the fit evaporates in dancing: this consists in the motion of the head or body, at first slow, and gradually quickening, till it becomes convulsive, and beyond the controul of the inspired, and is thus continued till utter exhaustion: during this ceremony, the excitement is created and kept up by the music of a drum beat by one of the spectators.

Drought, want of fertility in the soil, murrain in cattle, and other calamities incident to husbandry, are here invariably ascribed to the wrath of particular gods, to appease which, recourse is had to various ceremonies. In the *Kamaon* districts, offerings, and singing, and dancing are resorted to on such occasions: in *Gerhwal* the measures pursued with the same view, are of a peculiar nature, deserving of more particular notice. In those villages of which *Káli* is the tutelary divinity, a sacrifice of bull buffaloes is offered up: the number of animals slaughtered on such occasions varies with the means of the inhabitants: each buffalo is successively led to the door of the temple for decapitation: the first stroke is inflicted by the principal Zemindar, and if not immediately fatal, is followed up by repeated

blows from the surrounding crowd, until the animal is despatched, or rather hacked to pieces. In villages dedicated to the protection of *Mahádeva*, propitiatory festivals are held in his honor; at these, *Bádís*, or rope-dancers, are engaged to perform on the tight rope, *Lang*, or to slide down an inclined rope stretched from the summit of a cliff to the valley beneath, and made fast to posts driven into the ground. The *Bádí* sits astride on a wooden saddle, to which he is tied by thongs: the saddle is similarly secured to the *bast*, or sliding cable, along which it runs, by means of a deep groove; sand-bags are tied to the *Bádí's* feet sufficient to secure his balance, and he is then, after various ceremonies, and the sacrifice of a kid, started off. The velocity of his descent is very great, and the saddle, however well greased, emits a volume of smoke throughout the greater part of his progress. The length and inclination of the *bast* necessarily vary with the nature of the cliff, but as the *Bádí* is remunerated at the rate of a rupee for every hundred cubits, hence termed a *tola*, a correct measurement always takes place: the longest *bast* which has fallen within my observation was twenty-one *tola*, or 2100 cubits in length. From the precautions taken as abovementioned, the only danger to be apprehended by the *Bádí* is from the breaking of the rope, to provide against which, the latter, commonly from one and a half to two inches in diameter, is made wholly by his own hand: the material used is the *bháber* grass. Formerly, if a *Bádí* fell to the ground in his course, he was immediately despatched with a sword by the surrounding spectators, but this practice is now of course prohibited: no fatal accident has occurred from the performance of this ceremony since 1815, though it is probably celebrated at not less than fifty villages in each year. After the completion of the sliding, the *Bart*, or rope, is cut up, and distributed among the inhabitants of the village, who hang the pieces as charms at the eaves of their houses. The hair of the *Bádí* is also taken and preserved, as possessing similar virtues. In being thus made the organ to obtain fertility for the lands of others, the *Bádí* is supposed to entail sterility on his own; and it is firmly believed, that

no grain sown with his hand can ever vegetate. Each district has its hereditary *Bádi*, who is supported by annual contributions on grain from the inhabitants, and by remunerations for his performance, at the occasional festivals in question.

In the *Kamaon* districts, a practice prevailed at the festival of the *Bagwali*, of the males of several villages meeting together at a particular spot, and there, divided into two parties, engaging with slings. Each party took post on the opposite bank of a stream, the passage of which formed the object of contest: as the mountaineers are generally expert in throwing stones with this instrument, bones were frequently broken, and even fatal accidents sometimes occurred in this sport. The apprehension of incurring a charge of murder in the event of such fatal termination, has led to the almost total cessation of the practice since 1815.

APPENDIX.

LIST OF EXPORTS FROM THE HILLS TO THE PLAINS.

Grain, of all kinds.	Cherafta.	Hemp.	Harítal.
Pulse, ditto ditto.	Mitha.	Hempen Cloth.	Birch bark.
Oil Seeds, ditto ditto.	Various kinds of Bark.	Chírras.	Hill Paper.
Turmeric.	Roots and Herbs, used	Opium.	Hill Bambus.
Ginger, green and dry.	either for dyes or medi-	Ghee.	Wooden Vessels.
Saffron, Cashmere.	cines.	Oil.	Hides.
Ditto, Hill, (Nagkesar.)	Tej-Pat, leaves of wild	Honey.	Cowtails, (Chaura.)
Hill, Cardamums.	Cinamon.	Wax.	Ponies.
Mari, (Frankincense.)	Red Pepper.	Musk.	Cattle.
Katki.	Dannas, hill Pomgranates.	Hawks.	Gold-dust.
Laljírí.	Walnuts and Hazel Nuts.	Borax.	Iron.
Nirbissí, Zedoary.	Pine Almonds.	Silajít, (Bítumen.)	Copper, in bars.
Archa, Rhubarb.	Sweet Potatoes, (Gúya.)	Khará Mittí (Chalk.)	Coarse Serges, (Pankhís.)

PRODUCE OF THE TARAI, EXPORTED TO THE PLAINS.

Timbers.	Wooden Vessels.	Oil.	Baber Grass.
Rafters.	Charcoal.	Grain, of all kinds.	Múng ditto.
Planks.	Lime.	Pulse, ditto ditto.	Tát.
Bambus.	Gum.	Oil Seeds, ditto ditto.	Bara.
Oil and Sugar Mills.	Gum Lak,h.	Sweet Potatoes, (Gúya).	Roghen.
Ebony.	Kat,h.	Turmeric.	Banslochan.
Fire-wood.	Ghee.	Red Pepper.	

LIST OF IMPORTS FROM THE PLAINS.

Cotton Piece Goods, coun- try and Europe.	Tobacco, raw & preserved.	Indigo, Lakh & other Dyes.	Kánch.
Cotton Prints, ditto ditto.	Gúr, soft Sugar, Sugar Candy	Alum, Potas, &c.	Lead.
Silk Goods.	Salt.	Sulphur, and various drugs.	Gun-power.
Broadcloth.	Spices of all kinds.	Hard Ware, of all kinds.	Coral.
Cotton, & Cotton Thread.	Betelnut.	Copper in sheets, (Europe).	Pearls, and Jewels.
Wool.	Cocoanuts.	Toys, Beads, Looking-glas- ses, &c.	Gold and Silver Laces, and thread.
Blankets.	Dried Fruits.	Tin.	Country Paper and Ink.
	Soap.		

STATEMENT A, shewing the number of Villages, Houses, and Cattle, in the Kamaon Purgunnas.

NAMES OF PERGUNNAS.	DETAIL OF VILLAGES.				DETAIL OF HOUSES.				DETAIL OF CATTLE.			
	<i>Khatas.</i>	<i>Rent-free to Individuals.</i>	<i>In Religious Assignments.</i>	<i>Total of Villages.</i>	<i>In Khatas Villages.</i>	<i>In Rent-free Villages.</i>	<i>In Assigned Villages.</i>	<i>Total of Houses.</i>	<i>Buffaloes.</i>	<i>Cows.</i>	<i>Oxen.</i>	<i>Total of Cattle.</i>
Pali,	1101	2	23	1126	2889	2	140	3031	4273	10523	6155	20956
Baramandal,	768	45	56	869	9625	176	133	3934	7117	8593	4622	20332
Chouger Kha,	409	25	91	525	1847	47	157	2051	3767	7710	4200	15767
Phalda Kote,	188	2	3	193	1314	16	1	1331	4134	3718	2445	10297
Dhanis Kote,	87	0	0	87	1152	0	0	1152	4368	4148	1744	10260
Danpoor,	342	5	71	418	835	8	109	952	571	2188	1488	4192
Gangoli,	485	37	53	575	1018	44	67	1129	237	2057	1076	3270
Kota Chakata,	310	0	2	312	2220	0	10	2230	7454	5831	8018	18603
Katoli Marori,	0	4	125	129	0	18	690	717	1375	1595	1025	2995
Total of Harur Tehsil	3640	120	424	4184	14900	311	1316	16527	33296	45723	25803	104227
Juar Bhoite,	153	8	1	162	887	78	4	969	164	773	450	1387
Dharma,	61	14	0	75	515	34	0	549	0	226	359	585
Bhoite,	214	22	1	237	1402	112	4	1518	164	969	809	1972
Kali Kamaon,	547	6	20	582	3474	26	215	3715	6066	4787	4066	15531
Dhianiraw,	107	0	1	108	1102	0	2	1116	2412	1416	1672	5514
Sher,	217	9	9	225	1425	0	30	1455	858	3199	2517	6574
Sira Askot,	238	0	9	247	313	0	23	333	136	2151	1462	3760
Tahsildari Kali Kamaon,	1109	6	47	1162	6920	26	275	7221	9499	11553	10326	31378
Kamaon Purgunnas,	4963	148	472	5583	23222	449	1595	25266	42959	58280	36938	138177

STATEMENT A, shewing the number of Villages, Houses, and Cattle, in the Gerhwal Pergunnas.

NAME OF PERGUNNAS.	DETAIL OF VILLAGES.				DETAIL OF HOUSES.				DETAIL OF CATTLE.			
	<i>Khalsa.</i>	<i>Rent-free to Individuals.</i>	<i>In Religious Assignments.</i>	<i>Total of Villages.</i>	<i>In Khalsa Villages.</i>	<i>In Rent-free Villages.</i>	<i>In Assigned Villages.</i>	<i>Total of Houses.</i>	<i>Buffaloes.</i>	<i>Cows.</i>	<i>Oxen.</i>	<i>Total of Cattle.</i>
Baraseo,	569	8	47	624	3013	24	259	3306	1298	7051	4764	13113
Dawal Gerh,	178	4	22	204	1596	21	97	1654	355	4852	2767	7974
Choundkote,	315	0	27	342	1690	0	151	1841	829	5171	2729	8729
Nagpur,	351	7	221	579	2356	64	1547	4007	2093	15277	4749	22119
Ganga Salan,	441	0	11	452	1831	0	54	1885	373	8964	2655	11992
Puenkhanda,	28	0	18	46	461	0	13	474	54	1168	682	1904
Tahsildari Srinagar,	1882	19	246	2247	10887	109	2171	13167	5002	42483	12346	65431
Chandpur,	238	0	15	353	1964	0	43	2007	958	6809	3159	10926
Bedhan,	248	0	32	280	1234	0	113	1347	679	4055	2112	6846
Talla Salan,	265	0	19	284	1066	0	58	1124	556	7011	2299	9866
Mulla Salan,	196	0	1	197	996	0	13	1009	457	3218	1829	5504
Dassoli,	0	8	88	96	0	43	606	649	584	2719	791	4094
Tahsildari Chandpur,	1047	8	155	1210	5260	43	833	6136	3234	23872	10200	37906
Gerhwal Pergunnas,	2929	27	501	3457	16147	152	3004	19303	8236	66355	28546	103137
Total Province,	7902	175	973	9040	39369	601	4599	44569	51195	124635	103293	241314

STATEMENT B, shewing the Abstract detail and amount of Revenue fixed by the Gorkha Government, for the district now forming the Province of Kamaon, in the Sambat year 1868, corresponding with 1812.

NAMES OF DIVISIONS.	Land Revenue.	Salami, (or Nazarana.)	Ghekar, (or Tax on Cattle.)	Mijhari, (or Tax on Dooms.)	Tundkur (or Tax on Looms.)	Sonyo Phagun, or Bhet on Festivals.	Adhami, Defteri, or Kanongo Allowances.	Sayer or Customs.	Tamba Khan, Tubul, or Mines and Mint Duties.	Kharsal, (or Kuth Mehals.)	Kat Bous, (or Timbers and Bamboos.)	Sayer, exclusive of Customs.	Asani Firmosi. (or estimated Fines and Forfeitures.)	Total Revenue in Gorkha Rupees.	Total in Farakhabad Kaddar Rupees.
Kamaon,.....	85525	2743	2352	621	50741	1360	4222	7500	2400	3200	1200	162	2500	164426	
Gerhwal,.....	82406	1147	0	454	1283	1495	1495	10900	2401	170	600	200	2000	104551	
Total Province,.....	167931	3890	2352	1075	52024	2855	5717	18400	4801	3370	1800	362	4500	268977	

STATISTICAL SKETCH

STATEMENT C, exhibiting the quantity of Arable Land, contained in the Province, agreeable to the recorded Rakba, as reduced, by estimates, to one common standard.

NAMES OF PERGUNNAS.	DETAIL OF VILLAGES.					PRESENT NOMINAL RUKBA.					NOMINAL RUKBA AS REDUCED TO STANDARD BESEE.				
	Villages in Settlement.	Rent-free.	Assigned to Temples.	Deserted.	Total.	Included in Settlement.	In Rent-free Villages.	In Assigned Villages.	In Deserted Villages.	Total Rakba.	Settlement.	Rent-free.	Assigned.	Deserted.	Total.
Pali,	1101	2	23	29	1155	7967	17	295	484	8763	15934	34	590	968	17526
Baramundab,	968	45	56	8	877	7423	467	542	116	8584	7423	467	542	116	8548
Chouger Kha,	409	25	91	186	661	5485	253	622	1716	8076	5485	253	622	1716	8076
Phalda Kote,	188	2	3	0	193	2609	20	11	0	2640	5218	40	22	0	5280
Dhanis Kote,	87	0	0	1	88	2272	0	0	14	2286	4544	0	0	28	4572
Danpoor,	342	5	71	73	491	3716	384	294	378	4772	3716	384	294	378	4772
Gangoli,	435	37	53	359	884	3127	208	203	1169	4707	3127	208	203	1169	4707
Kota,	310	0	2	10	322	11361	0	52	64	11447	16592	0	74	96	16762
Kali Kamaon,	547	6	29	81	663	11970	219	594	1158	13941	11970	219	594	1158	13941
Dhianrow,	107	0	1	5	113	1819	3	6	36	1864	1819	3	6	36	1864
Shor,	217	0	8	139	364	9094	0	177	1769	11044	9094	0	177	1769	11044
Sira,	238	0	9	161	408	5112	0	198	1398	6708	5112	0	198	1398	6708
Juar,	153	8	1	59	221	6624	507	21	917	8069	6624	507	21	917	8069
Dharma,	61	14	0	76	151	6266	254	50	2999	9509	6266	254	50	2999	9509
Katoli,	0	4	125	0	129	0	36	1132	0	1168	0	72	0	2169	2336
Kamaon,	4963	148	472	1137	6720	84949	2368	4197	12158	103672	101924	2441	5557	12688	122610

STATEMENT C, exhibiting the quantity of Arable Land, contained in the Province, agreeable to the recorded Rakba, as reduced, by estimates, to one common standard.

NAMES OF PERGUNNAS.	VILLAGES.					PRESENT NOMINAL RUKBA IN JOOLAE.					NOMINAL RUKBA AS REDUCED TO BESSER.				
	Villages in Settlement.	Rent-free.	Assigned to Temples.	Deserted.	Total.	Included in Settlement.	In Rent-free Villages.	In Assigned Villages.	In Deserted Villages.	Total.	Settlement.	Rent-free.	Assigned.	Deserted.	Total.
Baraseo,	569	8	47	66	690	889	10	65	71	1035	11868	120	780	852	12420
Chundkote,	315	0	27	32	374	431	0	16	29	476	5124	0	192	348	5712
Dawal Gerh,	178	4	22	163	357	447	8	26	160	641	5364	96	312	1920	7692
Nagpur,	351	7	221	291	870	326	5	208	193	732	9812	60	2496	2316	8784
Ganga Sulan,	441	0	11	61	513	616	0	8	106	730	7392	0	48	1272	8760
Puenkhunda,	24	0	18	19	65	312	0	34	19	369	3744	0	256	228	4428
Chandpoon,	338	0	15	66	419	726	0	12	329	1067	8712	0	144	2048	12804
Buddhan,	248	0	32	48	328	506	0	40	503	1039	6072	0	480	6036	12468
Tulla Sulan,	265	0	19	130	414	344	0	12	204	560	4128	0	144	2448	6720
Mulla Sulan,	196	0	1	7	204	199	0	2	68	269	2288	0	24	816	3228
	0	8	88	23	119	0	17	334	92	443	0	204	4008	1104	5316
Gurhwal,	2826	27	501	906	4260	4786	40	761	1774	7367	57432	480	9132	21288	68332
Total Province,	7892	175	973	2042	11063	0	0	0	0	0	159356	2921	14689	33976	210942

STATISTICAL SKETCH

STATEMENT D, exhibiting the Pergunna Land Assessment for each Year, from the Conquest, and also for the last Goorkha Settlement.

NAMES OF PERGUNNAS.	No. of Villages.	Nominal Rupees in Standard Beesets.	Jumma of last Goorkha Settlement in 1868.	Jumma of 1st Settlement in 1872.	Jumma of 2d Settlement in 1873.	Jumma of 3d Settlement in 1874.	Jumma of 4th Settlement in 1877.	Jumma of present year 1879.	Present Number of Leases.
Pali,	1101	15934	27500	21075	21179	25057	30024	31294	1282
Baramandab,	768	7223	14873	9496	10250	11113	14557	14967	716
Chonger Kha,	409	5485	6812	4119	4531	5098	6749	6969	429
Phalda Kote,	188	5218	9254	6432	6665	7181	7686	7754	171
Dhania Kote,	87	4544	9075	4922	5700	6518	7332	7394	116
Danpoor,	342	3716	6313	3489	3888	4170	4356	4478	251
Gangoli,	435	3127	5547	2702	3801	3307	3876	3973	406
Kota,	310	16592	8045	5196	5900	6372	8079	9611	223
Kali Kamaon,	547	11970	17235	8696	9477	10387	12022	12400	610
Dheeanerow,	107	1819	7885	4374	4578	5171	5596	6000	194
Shor,	217	9094	5684	3501	4001	4574	5487	5515	356
Seera,	238	5112	5346	2655	3076	3901	3755	3774	177
Juar,	153	6624	12890	5001	5633	5313	2546	2779	103
Dharma,	61	6266	13405	4956	5470	4816	1181	1225	35
Kamaon,	4963	101924	149864	86071	93722	102385	113246	118153	5009
Baraseo,	569	11868	12018	4577	6055	6670	7972	8002	450
Choundkote,	315	5124	6025	3069	3629	3933	4526	4539	254
Dewal Gerh,	178	5364	1957	1334	1790	2068	2399	2503	159
Nagpur,	351	3912	11104	3033	3900	4305	5214	5355	268
Ganga Salan,	441	9392	11634	5384	5891	6454	7687	7730	439
Puenkhanda,	28	3744	4700	1750	1750	1750	1039	1040	29
Chandpur,	338	6712	20826	7763	8744	8786	10676	10998	348
Badhan,	248	6072	9902	3612	4805	4721	5660	5920	338
Talla Salan,	265	4128	5960	3147	3586	3983	4922	6195	354
Mulla Salan,	196	2388	7132	4037	4574	5172	5753	6269	235
Gerhwal,	2929	57432	91258	37506	44224	47821	56148	58511	2874
Total Province,	7892	159356	241122	123577	137946	150206	169394	176664	7883

Comparative Statement of the Total Receipts in the years 1815-16 and 1822-23.

	<i>Land Revenue.</i>	<i>Cession Timbers and Fish.</i>	<i>Abkars and Druggs.</i>		<i>Stamps.</i>	<i>Customs, including Bhote Duties.</i>	<i>Profit and Loss.</i>	<i>Total.</i>	<i>Increase.</i>
1815-16	116577	1100	80	} Not Introduced, }		14016	970	132723	} 53408
1822-23	176664	6302	500			2100	Abolished,	560		186196

Comparative Statement of Expence of the Native Establishments in 1815-16 and 1822-23.

	<i>Sudder Establishment.</i>	<i>Revenue Establishment.</i>	<i>Police Establishment.</i>	<i>Total Annual Establishment.</i>	<i>Decrease.</i>
1815-16	9640	20216	10464	40520	
1822-23	7488	9432	4344	21264	19256

SUPPLEMENTARY STATEMENT.

Exhibiting the Result of the Survey of the Khalsa Lands, and of the Quinquennial Settlement formed in 1824.

NAMES OF PERGUNNAS.	R A K B A.			Jumma of the last Triennial Settlement.	Jumma of the Quinquennial Settlement.
	Bis in Cultivation.	Bis in Waste.	Bis in Hek Padam.		
Baramandal,	23805	4744	1829	31293	32929
Pak Pachaon,	15700	2062	974	14976	17341
Chowgarkha,	11761	7678	1377	6969	8164
Phuldakote,	9888	2695	886	7795	7903
Dhanjakote,	4415	769	337	4481	4913
Kota Chakata,	36034	51330	306	9614	13345
Ramgarh,	1134	287	90	2913	2124
Danpúr,	5475	5336	664	4478	5537
Gangoli,	4277	3197	446	2731	3868
Kali Kamaon,	26555	51615	2168	12559	15053
Dhanirow,	6564	12160	346	5999	7067
Shor,	7740	4804	715	5527	6176
Sira Askote,	8176	4686	673	5025	4660
Total Kamaon Pergunnas,	161523	151378	20815	114315	129080
Baraseo,	6843	7510	0	8017	10053
Choundkote,	2588	1916	0	4563	5566
Dewelgarh,	2281	2747	0	2504	3113
Nagpur,	4791	2831	0	5354	6272
Ganga Salán,	4220	3815	0	7736	8922
Chandpur,	10518	3970	0	10938	12514
Badhan,	7470	4860	0	5919	3697
Malla Salán,	3251	707	0	6002	6593
Talla Salán,	4239	1755	0	6461	7935
Total Gerhwal Pergunnas,	46205	30135	0	57498	66366
Bhot Mehals,	7582	5760	675	5042	5812
Total Province,	215310	187273	11490	176856	201258