

In the various accounts above given in the text of the erecting of Chaityyas we cannot fail to remark the care taken on every occasion to record religious events on stone or metal, and these accounts would have been some proof of this custom even if we had not known of the numerous Buddhist inscriptions, which are extant, especially those of the very Prince last named, Asóka [unless there were two of that name] which have of late years been brought to light by our indefatigable orientalist in India.

“After a while Phrâ P’hutthi Monthéan, a holy priest of Buddha, arrived from Lanka in a vessel bringing with him a pipal tree, which he privately planted unknown to anybody. Another personage after this sailed to the Golden Sands, but was wrecked there and lost most of his effects. But he built a Chaityya and a Vihan before he departed.” [The Siamese call him Nai song chóm.]

Narrative of a Journey to Cho Lagan (Râkas Tal), Cho Mapan (Mánasarówar), and the valley of Pruang in Gnari, Húndés, in September and October 1846. By HENRY STRACHEY, Lieut. 66th Regt. Bengal N. I.

Askot—10th September 1846.—At this place I met two fakirs late from Mánasarówar. No. 1, a surkhi-colored *Sunyási*, deponeth that walking over Lípu-Dhúra into Taklákot, he was forthwith apprehended, abused, beaten, and put in confinement for that night: the next morning he was brought up and scrutinized before the Sirdar of the place, who at last allowed him to proceed on his pilgrimage, but under the surveillance of a *Hunia*,* who accompanied him to the lake, whence he was marched straight back again after performing his ablutions, permission to make the *Parkarma* (religious circuit), or to go on to Kailás, being steadily refused. The *Sunyási* was rather an intelligent, smart and decent looking person; which qualities, I presume, rendered him the more obnoxious to the “suspicion of being suspected” for a Sikh or Feringí spy; he was also guilty of a fine black beard—a distinctive mark of the “out-side Barbarian,” which the Hunias of Gnari have held in great fear and aversion ever since the invasion of

* An inhabitant of Húndés.

their country by the bearded Sikhs in 1841. The hurried way in which deponent was hustled through Pruang prevented his observing anything worth record.

Fakir No. 2.—A *Jogi*, black with dirt, and half fool; he accordingly met a better reception than the *Sunyási*, and was allowed to extend his pilgrimage to *Kailás* without hindrance; yet he was a year in *Byáns* before he could effect his entrance into *Pruang*; for last season there was an absolute interdict against all *Fakirs*, and a companion of the *Jogi* then returned in despair, without accomplishing the object for which he had come from the uttermost parts of India. Deponent says that *Hundes* is a "*Bahut sundar jagah; per nahín,—ghús nahín,—síwá pathar aur baraf kuchh nahín!*"* beyond which he can give no lucid information.

These pilgrims are said to be the only two who have succeeded in reaching *Mánasarówar*, viá *Byáns*, during the last two years;—encouraging for me, the third!

Kela, 15th Sept.—15 days from *Almora*, might have been done in 10, but for the great heat in the low vallies and a touch of sickness (partly caused by that) which precluded much exertion, detaining me also three days at *Petoraragh*. The valley of the *Káli* proved not quite so bad as my apprehensions; the first part is certainly low and hot enough, the jungle dense and rank in the extreme, grass and wild hemp ten feet high, through which we had to butt, heads down, in places where the path had not been cleared; *Sal*, *Sissoo* and *Toon* trees, with wild *Plantains* and *Cucumbers*, denoting a very tropical climate. But this does not extend much beyond the middle of the second stage; at *Dhárchula*, (2750 feet above the sea, b. t.), the valley expands into a pleasant level, well cleared of jungle, and cultivated with rice. The scenery hereabouts is fine, the valley flanked by noble hills, on the west side by the base of *Chipulá*. Thence on to *Kela* is not quite so clear and open, but the ground rises gradually into a cooler climate; the road all the way easy. *Relagárh*, a ravine with a small stream, forms the boundary between the *Rájbári* of *Askot* and the district of *Kela*.

The village of *Kela* comprises a good extent of well cultivated land, terraced out of a huge hill side that rises in a steep uniform slope for

* i. e. very beautiful place, no trees, no grass, nothing but rock and snow.

thousands of feet above the confluence of the Dhauli or Gori (the river of the Dárma valley), with the Káli; the houses, or huts rather, seem very few and mean. The opposite side of the valley in Dóti,* is of the same character.

Here I find Durgá Datt Patwári,† (Governor, that is,) of Kela, Dárma, Chaudáns and Byáns; one *Khasia*‡ and three *Bhótia* districts, containing altogether some fifty villages—on a salary of five rupees per month; an *erratum*, one would suppose, for fifty.

The Patwári informs me that there has been a murrain among the cattle in Dárma this year, which has carried off all the kine, and half the goats and sheep; from the reports which have reached him, he judges that there are not a dozen *Zhobus*§ left in the whole of Dárma, and that I should probably be unable to get half that number for my expedition across the snow. Láta, Budka|| of Baund, a village of Dárma, reported that they had 52 head of cattle in his village last year, and the murrain has destroyed every one of them. The danger of infection still lurking in the villages precludes the introduction of fresh stock from Húndés this year. Under these circumstances I must abandon my intention of going through Dárma, as a few baggage cattle are absolutely indispensable for a prolonged expedition across the passes, in which, as we have to avoid villages and inhabited places, myself and party must subsist solely on what provisions, &c. we can take with us. They say also that the road up to Dárma is in a very bad state, and in one or two places rendered all but impassable by landslips; not that it becomes me to be particular in that respect; my difficulties lie the other side of the snow.

I had expected to get a tent from the Bhótias here, but I am now told that the people of Dárma and Byáns have no such luxuries, being content with what shelter they can extemporize with blankets amongst their *Karpach* (sheep saddle bags).

* The Province of Nipál which borders on Kumáon.

† Superintendent of a district in Kumáon.

‡ The Hill-people of the lower Himálaya.

§ The cross-bred kine between the *Yak* of Tibet and the Indian cow.

|| Commonly pronounced Búrba, the Headman of a village, or more frequently, a set of villages. This term is equivalent to Kumin, Syána, and Tokdar, and is chiefly used in the eastern Pergunnahs of Kumáon. The tenure connected with these titles is called Búrba chári, Kumin-chári, &c.

The *Jwáris** have very fair tents, of cow-hair cloth, in one of which I found good accommodation (for myself and half a dozen *Bhótias*) in my expedition across the *Jwár Pass*, last June. The *Byánsis* certainly have less need of these things, as their traffic lies mostly among the villages of *Pruang*, and but a short distance from their own homes. Tent, or no tent, I now proceed through *Byáns*, going by *Kunti* and the western pass, thence making the lakes (if nothing go wrong), and returning through *Pruang*, by *Lípu Dhúra*, the eastern pass, into Lower *Byáns*. My first plan had been to go by *Dárma* and return by western *Byáns*, in order to see both of the *Bhótia* valleys; but the season is now so far advanced, that unless my journey on the other side were curtailed of its fair proportions, there would be an even chance of my finding the Western Ghat of *Byáns* impassable from snow, by the time of my return, whereas *Lípu Dhúra* will be safe probably, for the next month or two.

Patwári says that the remnant of the Sikh invaders of *Gnari*, who made their escape into *Kumáon*, came over *Lípu Dhúra* in the month of December 1841. All the other *Gháts* would have been absolutely impassable at that time of year.

Receive a letter from *Hirdu Budha*, *Thokdár†* of *Chaudáns*, to the effect, that hearing I am going to *Dárma*, he requests that I will abandon that route and come his way instead; no reason whatever is offered for the said request. But the *Patwári* explains that the *Bhótias* of *Dárma*, *Chaudáns*, and *Byáns* have heard that the *Sáhib Lóg* frequently drop a good deal of money in visits to *Jwár* and *Niti,‡* and often ask him why he does not exert his influence to bring part of this lucrative traffic their way.

16th September.—Descend from *Kela*, cross the *Dhauri* (now unfordable) by a *Sánga,§* and enter *Chaudáns*, up a long and steep ascent, the distance from *Kela* to *Titila*, though no more than 4½ miles by the Map, occupying me 5½ hours, of which half an hour may have been rest. The hill enveloped in clouds, and myself drenched with mist and rain, I could see little or nothing of the coun-

* Inhabitants of *Jwár*, the Alpine valley of the *Góri*.

† Head of a hill district.

‡ A village of *Garhwál* giving its name to one of the passes into *Tibet*.

§ A timber-bridge of a construction common in these mountains.

try, but an entire change of climate and botany indicates a much higher elevation than Kela, and to my great relief, rice cultivation has disappeared. Hirdu Budha tells me that nothing now remains of the old Fort, if ever there was one, (the Titlakot of the map) on the top of the hill, one or two hundred feet above the village of Titila.

The people of Chaudáns are all Bhótia, carrying on a limited traffic with Pruang viá Eastern Byáns.

On the road to-day I met many Dunáls, men of Dúng, a *pati* or subdivision of Dóti opposite this, bringing salt and borax from Byáns. They are not Bhótia, but Khasia, i. e. people of *Kias-des*, which in days of yore included all the hill country of which the inhabitants were of mixed caste, and impure to the genuine Hindus of Lower India; but the Khasias themselves now rather affect to reject the name, and pass it on to the Bhótias, who bear much the same relation to them, that they do to the pure Hindus, the Bhótias being a cross-breed, probably, between the Khasias and the Hunias of Húndés.

Thermometer at 5½ P. M. 58°, boiled at 198°. Elevation of Titila 8000 feet above the sea. The village of Sosa is some 250 feet lower. Rain at night.

17th September.—Leave Titila, and after a march of 4½ miles by the map, occupying near 6 hours, encamp on the Syankwangárh, now a considerable stream, under the village of Bunbun, at the foot of Rholing-Dhúra, the crossing of which constitutes the greater part of this march. The ascent is long but easy, probably three thousand feet in perpendicular elevation, though the summit of the pass may not be more than 2000 feet higher than Titila (owing to some intermediate descent of the road), or 10,000 feet of absolute elevation. The whole hill is clothed with very fine forest, mostly Horse-chestnut trees, with undergrowth of *Ningála* (*Arundinaria falcata*?) much resembling that on the Munshári side of Kálámundi,* on the road from Girgáon, (the summit of which is 9200 feet above the sea,) and these two are by far the finest specimens of forest that I have met with in these hills; the Horse-chestnuts being tall, straight and clean timbers of considerable size. The north side of Rholing-Dhúra is of the same character as the south, with a descent of some three thousand feet to Syankwangárh. My encampment here may be 750 feet lower than Titila, i. e. 7250

* A pass and range between the valleys of the Gori and Rámangá.

feet above the sea, and the village of Bunbun a little above the Gárh, 7500 feet.

Thermometer 60° at sunset. Thick clouds and mist all day, rain at night.

18th September.—Morning so rainy that my companions advise a halt, to which I object; leave Syankwang, and in three quarters of an hour reach the village or hamlet of Gala, 1½ miles distant, where, after all we are stopped by the rain, which increases with promise of continuance, and the Nirpania-Dhúra ahead is said to be steep and very troublesome in foul weather.

Gala is a mere hamlet with two or three houses, at present uninhabited, and a few fields cultivated by the Zemindars of Rúng, a neighbouring village. The vacant cottages accommodate myself and party much better than the *cutcha* hunting run up for me at Syankwang, which would have been miserable quarters indeed in this weather. It is fortunate that I would not take the advice of my friends to stay there this morning.

Thermometer outside at 4 P. M. 55°. I judge the elevation of this place to be about the same as Bunbun, 7500 feet.

The rain continues all day and all night without intermission.

19th September.—Still raining and the whole hillside completely enveloped in cloud.

Sumhyáki, son of Hirdu, the Tokdar, who has accompanied us from Titila, with laden sheep, &c. for Pruang, objects to proceed in such weather as this; so do I. We heard the sound of a considerable landslip somewhere in the vicinity this morning. In heavy rain the passage of Nirpania-Dhúra is rendered unsafe by showers of stone, which it is difficult to see and avoid when the air is obscured by mist.

Patwári Durgá, a well educated man in the Hindu fashion assures me that *Hiúndés*, the “snow country,” is a mistake, originated if I remember rightly, by Professor Wilson, and since currently adopted.

The true name is *Húndés*, हुन्देस, from हु, the “*Hun*,” aboriginal inhabitants of the country north of the Himálaya, and not derived in any way from हिम, *Him*, snow. Mention of the country and people is to be found in the *Mahábhárat*, *Márkandía Purána*, and other of the Sanskrit books which treat of the mythological history of this part of the world: both *Hun* and *Tátár* appear as allies of the “*Rákhasa*,”

(now *Bákas*) in their battles with the gods or demigods, about the Indian Olympus, Kailás. The great Hungarian scholar, Csoma de Kőrös, I have heard was endeavouring to trace the origin of his own nation, the European Huns, in this quarter.

Our word *Tibet* (of which *Thibet* is a gratuitous corruption) was introduced to Europe I believe by Marco Polo, and to India probably by the Mahomedan invaders and rulers from the North; it appears more than once in the Geographical statements of Abul Fazl, Ayin Akbary; and the word is probably of Turki origin, "*Tibbit*," being the term now in use with the Usbeks of Yárkand for *Pashm*, the wool of the shawl goat. I am not aware of any authentic instance of the acknowledgment of the name Tibet by the natives of the country. Turner says distinctly that it is called by the inhabitants "*Pue*," or "*Pue-Koachini*," i. e. snowy region of the North. "The land of Tiburat," in the letter of Soopoon Choomboo to Warren Hastings, dated 16th November 1781, (Turner, Appendix III.) is clearly the work of the Persian translator, whose style is conspicuous throughout that composition; and Turner's allusion (in a note to his introduction) to "the pronunciation of this name in Bengal, *as well as Tibet*," though seeming to imply the use of the word by the nations of the latter country, may with probability be ascribed to the same origin as Soopoon Choomboo's expression, as it may be observed that Turner frequently applies to persons and things of Tibet Hindustani names which must have been derived from his interpreters. Continued rain all day and night.

20th September.—This morning looking a little clearer, or not quite so foul, I prepared to start, but by the time we were ready the rain had set in again as hard as before, and put a stopper on the intended move.

Weather continued bad all day, but towards sunset, the dense envelope of cloud and mist began to break a little, disclosing glimpses of blue sky, also of a very dismal looking snowy ridge to the east, Namjung and Lingara, inferior spurs of the great mountain Ápi, on the opposite side of the river. A fine starlight night succeeded, with unclouded sky, inspiring hopes for the morrow.

21st September.—Fair weather at last, and we resume our journey. I did not find the passage of Nirpania-Dhúra quite so troublesome as the accounts of my native guides had led me to anticipate, but a little experience of this part of the Himálaya soon accustoms one to very

queer places. The ascent is tolerably steep, the path mostly in steps, but in good order. The proper name of this ridge appears to be Gala, a base-spur from the snowy mountain, which the map (incorrectly I believe) calls Gula-Ghat; the eastern extremity of it where crossed by the road, is subdivided by two shallow ravines into three minor ridges, the first from Chaudáns, called Yergnáchim; the second Birdong, thence is a good view into the valley of the Káli up to Budhi; and the Bird Tyungwe-Binaik, which is the boundary between Chaudáns and byáns: these differ little in height, and may average 3000 feet perhaps above the village of Gala, i. e. 10,500 feet absolute elevation above sea level. The name Nirpania*-Dhúra has been applied to this hill by the Khasias, because, in dry weather, no water is to be found on it, and the ascent is rather thirsty work. The ascent of Nirpania from the south merely leads to an equal descent on the north side, some 3000 feet down to Golám-Lá, this side of the Najangár; and the path here is, if any thing, steeper, in narrow steps all the way, looking rather precipitously into the bed of the Káli, which is many thousand feet below. The summit of the pass must be near a mile in perpendicular height above the river. Half way down to Golám-Lá is a small resting-place for goats, &c., called Dandanhyár, a miserable little ledge on the hillside, in a jungle of wild hemp, dock, and nettles. The hill is too steep and rocky to be very well wooded, though it is not deficient in vegetation. I observed some indifferent specimens of Silver Fir, (*Picea Pindrow?* or *Webbiana?*),† by the Bhóteas called *Woman*, with the exact pronunciation of that English word.

Cypress (*Cupressus torulosa*), by the Khasias called *Saro*, by the Bhóteas *Tangshin*, a name which in other districts I understand they apply indiscriminately to any tree of the Fir or Pine species.

Yew, (*Taxus baccata*), Khas: *Thunir*, Bhot: *Nhárey*.

Birch, (*Betula bhojpatra*), Bhot: *Shak-shin*.

Rhododendron, (*R. campanulatum*.) Khas: *Buronj* or *Buráns*, Bhot: *Tek-shin*.

Bamboo-cane, (*Arundinaria falcata?* Khas: *Ningála*, Bhot: *Kwey*.

* "Nir," without; "pani," water.

† For the few Botanical names mentioned in my Journal, I am indebted to Major Madden, of the Artillery, at Almora; but mistakes in the application of them (if any) are entirely my own.

Sycamore, (*Acer Sterculiaceum*,) Khas : *Kamiah*, Bhot : *Kan-shin*. From the knotty parts of this tree, they make the coarser sort of tea-cups used in Hundes and Bhot,* termed *Lahauri Doba* ; the better sort, *Talua Doba*, are made from the *Patgnalia*, another of the maple tribe (*Acer oblongum*), which grows on the Southern hill ranges, such as the Gágar,† &c., and is very abundant at Naini Tál.

White Dog-rose, (*Rosa sericea*,) Khas : and Bhot : *Sephala*, the leaves of which are rather fragrant, like sweet Briar, the fruit a large round Hip, edible, (but not worth eating.)

A ground-Raspberry (*Rubus nutans*) Bhot : *Sinjang*, and the fruit *Sinjang Lo*, orange-coloured, with a pleasant acid flavor ; the plants I saw grew on the ground like strawberries.

An Orchis (*Satyrium Nepalense*) Bhot ; *Phung*, with small rose-coloured flowers rather fragrant ; the Bhotias sometimes eat the root, raw or cooked.

On the descent of Nirpania, I saw some monkeys which the Khasia Hindustanis of my party asserted to be the same as the *Langúr* of the plains. I venture to doubt this, as these animals, (Bhot : *Kholi*) appear to have tufts at the end of their tails, and make a grunting noise, unlike what I remember of the *Langúr*, though otherwise they are much the same.

The march from Gala to Golám Lá, not more than 5 miles on the map, took us near 6 hours, exclusive of stoppages for rest, &c.

Golám Lá, a mere encamping-ground, marked by a large (Gneiss) rock standing out of the hillside, overhangs the confluence of the Nájan-gár with the Káli, which is from 1,500 to 2000 feet below ; the declivity almost precipitous. The Nájan-gár comes from a great snowy mountain visible through the head of the glen ; this is marked Gula-ghat on the map, but Sumhyaki, Sayána‡ of the Titil-sosa, calls it Yirgnajang, which has some affinity to the name of the river rising from its base. The Nájan-gár is a most impetuous torrent, falling in cascades rather than rapids, over a very steep rocky bed, through a deep ravine flanked with precipitous mountains.

Steep and lofty mountains rise immediately on the East side of the

* Cis-alpine Himálaya, inhabited by Bhótias.

† The outer high range in Kumáon proper, overlooking the plains.

‡ (Sage.) Head-man of a hill village.

Káli, reducing the valley to a mere gigantic ravine; which is the character of it, in fact all the way from Relagar. Opposite to the Nájan-gár, an inferior spur with a little comparatively level ground on its top, affords a site to the village of Thin, now apparently deserted. Behind this rises the ridge of snow seen from Gala; Namjung, on the left, close over the Káli, and Lingaru to the right, some 18,500 feet high. The great Peak of Ápi behind, though 22,799 feet in height, is quite concealed by the proximity of its lofty base. The Thampagár, immediately south of the hill of Thin, rises from a glacier under Lingaru, plainly distinguishable from Golám Lá, by its form, dirty color, and situation below the lowest limit of the snow which lies on the ridge above.* These glaciers are well known to the Bhotias, under the term *Gal*, a *non gal-endo*, perhaps, as they never melt like the superior snow.

The Peaks of Byáns-Rikhi I think, are visible up the valley of Byáns: only partially snowed though near 20,000 feet in height, which is owing to the steepness of their rocky summits, I imagine.

Clouds and a little rain in the evening; Thermometer at sunset 60°; night fine.

22d September.—Morning fair, Thermometer at 7½ A. M. 52¼°; boiled to 198°; elevation of Golám Lá 8000 feet. The village of Thin, on the other side of the river, is about the same height.

Leaving Golám Lá, we descend a thousand feet or so, by a steep path, and cross the Nájan-gár, by a small Sánga, a mile above its confluence with the Káli. The stream is unfordable at present, rather on account of its great fall and rapidity of current, than for the volume of water; in the mile between the bridge and the confluence the fall must be 500 feet. The path continues, often in steps, and rather precipitously, round the shoulder of Pomayyar, a base-spur from Yirgnajung, thence descends and crosses the Málpagár, a small fordable rapid, close to its confluence with the Káli. Just above this point, on the side of Pamayyar, is Jambe-Odyár, a large cave, said to be capa-

* It is surprising that the existence of these Himalayan Glaciers, with which the snowy range here *abounds* in all directions, should be questioned or doubted even now, in the 30th year of British possession of Kumáon; it is equalled only by the perpetual snow line on the southern face of these mountains being fixed by Humboldt at 11,700 feet, an elevation at and above which we have luxuriant vegetation, and flourishing agricultural villages.

ble of giving shelter to five hundred laden sheep and men in proportion ; being out of the way I did not see it. Another great ascent from Málpagár ; the path still precipitous and in steep steps, along the side of Chantirong : the summit, Umdognyir, a minor rocky projection not half way up the mountain side, reaches an elevation of 9,500 feet perhaps, some half a mile vertically above the river. Thence a descent again, not over easy, to the bank of the Káli, a mile or two along which brings us to Lámáre, a small level encamping-ground, close on the river side, with boulders of rock, (*Lá ?*)

The Káli here may be 100 feet across and looks as though it would be fordable but for the violence of the current.

A man from Kunti says that snow has fallen in his village lately, and that the Kunti passes have probably got more than enough of the same.

This day's march, about 5 miles by the map, occupied me $6\frac{1}{2}$ hours, besides half an hour for rest, &c. In the lower parts of the ground, near the bed of the river, I found the sun very hot.

Thermometer at sunset $61\frac{1}{2}^{\circ}$, boiled at 198° , (same as Golám Lá) elevation 8000 feet ; evening cloudy with a little rain.

23d September.—Leave Lámáre, path easy, ascends a little, and continues above the river bank under the side of Yirtáshin ; a mile on crosses a small gár,* the Tákti, and at two miles descends to the Palangár, a considerable rapid crossed by a Sánga near its confluence with the Káli. This gár comes through a deep ravine from Tokong, a snowy ridge, of which the opposite side gives rise to the gár of Shela in Dárma, and there was once a pass this way, but dangerous, and disused since lives were lost there some years ago. This Tokong must be a secondary spur from Yirgnajang, the Gula Ghat of the map.

The valley of the Káli now expands a little and gives site to the village of Budhi, (the first and lowest of Byáns, and the single village of Sub-Alpine Byáns, as it might be termed) on the right bank, above the confluence of the Palangar. Here I see a good-sized Walnut tree (*Juglans regia*) by the Bhotias called *Kás-shin* ; a large Barberry, Khas : *Chotra*, Bhot : *Náchi-shin* (*Berberis aristata*), fruit worthless ; sweet red-flowered Buckwheat (*Fagopyrum vulgare ?*) Khas : *Ogal*, Bhot, *Palti*, and the bitter white (or yellow) flowered sort

* Mountain-stream.

(*F. esculentum* ?) Khas: *Phápar*, Bhot: *Bhey*; Turnips, Khas: *Salgam*, Bhot: *Chankan*; Amaranth, red and white; and Tobacco in flower. The above crops are well advanced but not quite ripe yet: the two last (Amaranth and Tobacco) do not grow above this.

The people of Budhi are all Bhotias, but in site and climate the village belongs rather to the Sub-Alpine regions, like Chaudans, though it lies north of the great snowy mountain Ápi. Its elevation is 8750 feet.

Immediately above Budhi a steep hill ridge advances from the mountain side on our left (N. W.) and extends across the width of the valley, leaving but a narrow passage for the river, close under the mountains on the opposite bank. The ascent, though considerable (some 1750 feet) is tolerably easy, by a fair smooth path, much better than any part of the road this side of the Dhauli, the lower boundary of Bhot, in this quarter. The summit, Cheto Binaik, at an elevation of about 10,500 feet, is the entrance to upper Byáns.

On the ascent of the hill some alteration is apparent in the style of vegetation; new species of Fir and Pine take the place of other trees, and the undergrowth of weeds, &c. diminishes. At the top the change of scenery and climate is complete, sudden and most agreeable, from the narrow dark ravine of the lower Káli, with its damp and stagnant atmosphere, to an open sunny Alpine valley, with a fair expanse of comparative level. The lower parts of the valley towards the river are occupied with villages and cultivation; thence forests of Fir, Pine, and Birch, slope up to the base of the surrounding mountains, which rise on all sides in noble castellated walls of rock crowned with snow, and towering into the clouds; the extreme snowy summits are hidden by the prominence of their lofty outworks. If perfection of climate and scenery could compensate for inconvenient seclusion and uncivilized condition of its people, this place would afford a most delightful summer residence; the top of the hill, or the northren slope of it facing the Bhótia valley, would give many fine sites for a house or standing camp.

A gradual descent leads over sloping upland clothed with fine close turf, on which Chanwrs* and Zhobus are grazing; then through clean open forest of silver Fir (*Picea Pindrow* or *Webbiana*, Bhot: *Woman*, and Pine (*Pinus excelsa*) Khas: *Raisalla*, Bhot: "*Lam-shin*."

* Indian name for the Yak of Tibet.

Weeds and jungle give place to flowers and neat shrubs; a fine Larkspur; Juniper (*Juniperus squamosa*) Khas: *Padbank*, Bhot: *Pámá* (in *Jwár* they call this *Bil*); another sort of Juniper with sharp thorny leaves exuding rank turpentine, (*J. religiosa*) Bhot: *Lhdlá*, a willow-leaved shrub, the branches covered with small round yellow berries, a strong (edible) acid, (*Hippophaë salicifolia*) Bhot: *Tárwa-chuk*.

The road passes through *Gárbia*, the first village of Upper *Byáns*; the houses are mostly two-storied but ill-built affairs, and disfigured with a quantity of poles stuck about them (for ornament or superstition?) in all directions; they are flat-roofed. The elevation of *Gárbia* is, according to *Webb*, 10,272 feet.

The fields here contain Barley (*Hordeum cœleste*) Khas: *Ua-jo*; Bhot: *Chámá*; Wheat, Bhot: *Náphal*; Turnips, and the two Buckwheats, all ripe or ripening.

A little beyond *Gárbia* stands the remnant of what was once the village of *Chindu*, now one or two houses, and a few fields, standing on the top of a narrow shelf of ground which the encroachment of the river is fast driving to the wall of rock behind. The base of this valley (like that of upper *Jwár*) is formed by an accumulation of old alluvium and debris from the surrounding mountain-sides, in strata of considerable aggregate thickness and loose consistency; through which the river appears to have cut its present channel, three or four hundred feet below the site of the villages, and to the great danger of those which are too near its bank. The *Cheto* hill above *Budhi* is in fact the abrupt termination of this elevated bed of detritus, forming southward an acclivity of 2000 feet or more (in vertical height); to the east and north-east, where the river breaks through, it appears in cliffs and landslips many hundred feet high.

From *Gárbia* the road descends to the bed of the river, and crosses by a substantial *Sánga*, a little above the confluence of the *Tinkar*, which is a large stream (not much inferior to the main body of the *Káli*) coming in two branches from the east and north-east.

We encamped on level ground by the river side, a little above the bridge and under a steep bank, on the top of which is the village of *Changrew*.

The *Káli* now turns abruptly to our left (N. W.), through a defile of steep rocky mountains, the natural grandeur of which is raised to sub-

limity by the veil of clouds that obscures the more distant and lofty parts, and so increases the apparent magnitude of the whole.

Thermometer at 4 P. M. 60°, boiled at 194½°; elevation 10,000 feet. Changrew perhaps may be at the same height as the summit of Cheto Benaik, 10,500 feet.

The Bhótias of Chaudáns, who accompanied me thus far, here took their leave. I found them a civil and cheerfully working set of people, and had no trouble whatever from them. Sumhyaki is a stout, amiable and modest youth, deserving of more encouragement than the bottle of rum and handful of tea which I was able to give him. The men of upper Byáns were assembled to relieve the Chaudánsis, and equally ready to give every assistance, with Zhobus, ponies, and porters for my baggage.

Patwari Durga Datt having inducted the *Buddhas* and *Saydnas*, old and wise, into some idea of my designs on the lakes, they volunteered assistance, but also their own plan of operations, which after much discussion, I was obliged to reject as incomplete and unsatisfactory, their idea being to smuggle me past Taklakhar to Mánasarówar, and thence straight back again, which would involve much risk of stoppage on the way out, before reaching the Lakes at all, and leave Rákas Tál, and its communication with the Sutlej (if any) unexplored. Not till late in the evening, I got hold of the right man, Rechung or Rechu, Padhán of Kunti, from whom I derived information which decided me in adhering to my original intention of going his way. According to Rechu, there are two Passes at the end of the Kunti valley; Lánkpya Dhára, on the extreme North West, and Mankshang, a little lower down and more easterly; both of them affording direct communication to the South and West shores of Rákas Tál, and round that lake, either way, to Mánasarówar, without passing through such populous places as Pruang. The Lánkpya Pass, in Rechu's opinion, is not stiffer than the "Lípu Lék" of eastern Byáns; though he can't speak to the state of the snow upon it at present, as none of his people have crossed the pass since the bad weather, in which snow fell in the village of Kunti, and which proves to have been identical with the continuous rain which detained us at Gala on the 18th, 19th and 20th instant. The Kuntiyáls are the only people here who know any thing at all about the passes of western Byáns; all the other Byánsis are

absolutely ignorant, even of the names of the Dhúras,* their traffic lying almost exclusively with Pruang viá the Lípu Pass, which is a more convenient route for all the lower villages.

Thermometer at sunset 56° ; clouds and a little rain at night.

24th September.—Thermometer at sunrise 47° (water the same temperature) ; weather fair.

The Bhótias being rather dilatory in mustering one or two requisites that I want for the Passes and Húndés, I have to halt this day.

In the morning I paid a visit to Changrew, up a steep hill, which forms a sort of elevated terrace at the foot of the great rocky mountain Kelirong, within the angle made by the confluence of the Tinkar with the Káli. The acclivity is clothed with Pine, Juniper, Dogrose, &c. &c. Changrew is much the same sort of village as Gárbia ; its elevation, according to yesterday's estimate (500 feet above my camp on the river bank) 10,500 feet ; it is unfortunately situated on the top of very unsafe ground, which is gradually descending by a huge landslide into the bed of the Tinkar, every year carrying away some yards of the village lands. The Tinkar below, is a good sized stream, at this time of year requiring a sánga for the passage of it. Six or seven miles up this river, and under Kelirong, is the village of Tinkar, and beyond that a pass of the same name (here at least,—the Dhúra probably has a proper name of its own), which communicates with Jidikhar, one of the villages (and as the "*Khar*" imports, once a fort) of Pruang, on the Karnáli, a few miles below Taklakhar. A mile or so above its termination in the Káli the Tinkar receives a tributary of some size, the Nampa-gár, which comes from the East and South-East out of two glaciers, the Southern one visible from Changrew, at the base of the snowy mountains Nampa and Ápi. Changrew and Tinkar belong geographically to Byáns, and are inhabited by Bhotias, the same in every respect as the other Byánsis, and sharing in the traffic with Pruang by the Lípu Pass. It was a mistake leaving this little valley to the Gorkhas, when the rest of the district was brought under British rule ; the true frontier line was the range of snowy mountains on the East, Tinkar, Nampa, and Ápi, on the other side of which lies the district of Márma, the northernmost division of Dóti, and the inhabitants of which, like those of Dúng, next south, are Khasia and not

* Dhúra—a high mountain-pass.

Bhótia. A case occurs on the opposite frontier of northern Garhwál, not unlike this of the Tinkar valley, but otherwise disposed of. "Nag-poor occupies the Dooab between the Mundakhnee and Alaknunda, branches of the Ganges uniting at Roodur-Pryág. From Tirjoo-ke-Narain near Kedarnath, however, there stretches down from North to South a high range of mountains lying a few miles to the west of the Mundakhnee, and the intervening space is occupied by two or three Khalsa villages of Nagpoor, but chiefly by the Suda-burt puttees of Purkundee, Bamsoo and Mykhunda, rent-free endowments of the Kedarnath ahrine. In former years of the British rule, there arose some doubt whether this tract of country, being west of the river, did not properly belong to the Raja of Gurhwál's reserved territory, but as it was proved always to have formed a constituent part of Pergunnah Nagpoor, the claim of the Raja was disallowed." (Batten's Report on the Revenue settlement of Gurhwál, Appendix, para. II.)

Jashpál Budha of Changrew appears to be one of the most decent and intelligent of the Byánsis. He considers it the misfortune of his village that it was excluded from the British territory, though their condition has been a good deal improved, he says, since they have been allowed to pay their revenue dues to the Gorkháli Vakíl at the Báges-war Fair (an arrangement suggested by the late Commissioner Traill I believe), instead of suffering the visitations of a Tehsildár; but he complains that no abatement of the Government demands has been made for the loss of whole fields of their village by landslips.

The district of Márma lies to the south (by east) of Byáns, as Dúng does from Chaudáns. There was formerly a pass from the top of the Márma valley into the valley of the Tinkar by the Nampa Dhúra and Gár; but this has become impracticable, and the Márma people going to Pruang (with which they have some little traffic) have now to come round through Dúng and Chaudáns, for they are also snowed up on the north and north-east, having no practicable passes that way into Pruang. Márma has iron and productive copper mines: the people bring copper pots, &c. to Dharchula for barter with the Chaudánsis and Byánsis: they have a Rájbar; his son, Amar Sing, has come to Dharchula occasionally.

Beyond Márma again, eastward and separated by snowy mountains (which are also impassable, I suppose, else the Márma people would go

that way, as being the more direct into Pruang) lies the district of Dhúli, which is the Alpine part of Bázingia, having direct communication and considerable traffic with Pruang viâ Jidi-khar.

Dhúli, is said to have but one single village of Bhótias, all the rest of the people being Khasia.

Bázingia is ruled by a Raja, now Gajráj Sing, who married a daughter of the Maháráj Ráj Rájindra s(h)áh Bikram of Nipál.

Beyond Bázingia, still further east, are Humla (north) and Jumla (south) through which flows the Karnáli after leaving Pruang; and in Jumla it receives another branch, the Beri (or Bheri) whence the united river goes by the name of Beri-karnáli.

Dense clouds and rain all this afternoon; the hut of bare mats which the Bhótias have made for me (very clumsily) is by no means comfortable in this weather. Rain continues all night.

25th September.—Morning still cloudy, but rain stopped. We continue our journey towards Kunti. The road turns off to our left (N. W.) following the course of the Káli, and passing over some very rough and steep ground, a ruinous bank of landslip formed by the channel which the river has excavated through the loose strata of the valley bottom. The mountains rise close on either side in fine precipitous walls of rock, the clay slate formation common to these Alpine regions, the stratification of which has been violently disturbed, contorted, and broken into thousands of castellated crags, the variety of the colors, many shades of red, grey and purple, adding to the picturesque effect. The mountain to our right is Kelirong; in the map its upper part is called Byáns Rikhi, and the lower part Kourtekh. Byáns Rikhi is the proper name, not of the mountain, but of the gentleman supposed to dwell on the top of it, who appears to be identical with the great *Rishi* or sage Vyása or Vyás-deva, reputed author of the Mahábhárat, and sundry Puráns, &c., and *Byáns* seems to be nothing else than the modern form of the old Sanskrit name *Vyása*.

Hirkun (or Hurkun) Budha of Gárbia, Tokdár of Byáns, who accompanies me as Cicerone, &c. asserts that some of the Bhótias have climbed up this mountain for three days and not got to the top (the elevation of which is near 20,000 feet.)

Hereabouts are Jákti on the N. East, and Siti on the S. West bank of the river, hamlets cultivated by the Garbiáls; they have suffered much from landslip, and are not permanently inhabited.

Crossing a small Gárh, Hangchu, which rises from the base of Kelirong, we pass through Tala-Kawa, a hamlet of one or two houses, the land cultivated by the Gunjials, for which they pay *rakam** to the Gurkháli government. It is a very picturesque place, with a pretty expanse of open fields bordered by copices of Pine, but the corn, now under the sickle, is very poor looking stuff. Here the gooseberry makes its appearance, by the Byánsi Bhótias called *Guldum*, which is also the Hunia name for the Bisehir grapes (and the Apricot too); the Jwári name for the gooseberry is *Sirgochi*: also the wild Apple Tree (*Pyrus baccata*)⁹ bearing a very small red crab, no bigger than a wild cherry. Both of these fruits are quite worthless.

The hamlet of Tala-Kawa, is a mile or two higher up, round the corner, on the road to Lípu-Lekh, which here turns off to the right.

Hereabouts we met a nondescript sort of person, late from Pruang, a native of Lamjung, in western Nipal on the river Gandaki, called also the Káli and the Sáligrámi. Below Lamjung is Betia, above it is Shámá, an Alpine district inhabited by Buddhist Bhótias, and communicating by snowy Passes with Húndés, which is there, as here, level table-land. This gentleman was not wanting in assurance, but could give no very clear account of himself, or of the countries through which he had travelled. He called himself a pilgrim, but looked more like a "Chevalier d'industrie." With difficulty I extracted a few particles of information from him; he says that the two principal communications between Nipal and Húndés are by Kirong in the western, and Nyánám in the eastern quarter, the former of which (also written Keeroo) is known to Indian Geography and is about north of Khátmándu; and the latter should be either another name of Kuti, which is the Lhassam frontier village on the road from Khátmándu to Digarcha, &c. or else some place close beyond, that though I cannot find such a name in any other authorities. From the "Geographical Notice of Tibet" (J. A. S. No. 4, 1832) by Csoma de Kőrös, I afterwards found that *Myánam* is the name of the district. These are frontier posts, commanding the Passes of Nipal, each in charge of two *Zungpun* appointed from Lhassa, and acting jointly like the *Grapan* of Gnari. Deba Phundu, the late Zungpun of Pruang, is now gone to Kirong in the joint office. Kirong must be lower than Pruang, as it has trees and other signs of a

* Revenue.

more temperate climate. *Kham* is a country of great extent, north and east of Lhasa ; the present Zungpun of Pruang is a *Khampa* (a man of Kham) from some place 20 days north of the capital, south of Digarchá, and Lhasa is the country of *Lho*, the people (*Lhopa* or *Lhoba*) Buddhist Bhótias, of Tibetan character, ruled by their own Lamas. This is the country, which, after the Hindus, we call Bootan, Bhutan, the country of the Daeb or Deb Raja, or the Deba Dharmma, the same visited and described by Turner, who unaccountably omits to give the proper name of it. "Lulumba," as Kishen Kant Bhowse has it, Asiatic Researches, 1825, Vol. 15, Art. III, is merely "Lho-lungba," i. e. "the country of Lho, and the "Lobath" mentioned in Soopoon Choomboo's letter to Warren Hastings, 16th November 1781. Turner, Appendix III. is probably a corruption of the same by the Persian translator. The "Kumbauk" there mentioned along with "Lobah," and alluded to by the same name, in other parts of Turner's account, is also, in my opinion, a similar confusion of the country, "*Kam*," with its inhabitants, "*Kham-pa* (the latter corrupted to "Kumbák.)

By the valley of the Karnáli, there are no great snowy ridges to be crossed between Humla and Pruang ; so that the route is much easier and practicable, longer than the other in the range of the Nepalese and British Himálaya ; nevertheless, in the height of winter the Humla Pass gets snowed up and becomes difficult or dangerous.

Descending from Tala-Kawa, the Kunti road crosses the Káli, the smaller branch of the river from the N. East, by a small Sanga 150 yards above its confluence with the Kunti-Yánkti, which is the larger branch from the north-west. The Káli at this point has a bed 150 yards wide, but contracting into much narrower limits a mile further up, and the stream is now all but fordable, though in the height of the rains it swells so much as to carry away the bridge here, and the road then has to cross higher up. The Kunti-Yánkti is a third larger than the Káli, both in size of channel and volume of water, and nearly four times the length from source to confluence ; notwithstanding which the eastern and smaller branch has given its name to the united river. The name of the Káli is said to be derived from the Kálápáni springs, erroneously reputed the source of the river, but in fact unimportant tributaries merely ; and both are so called from the dark color of the water ; but even in this respect the Káli is exceeded by the Kun-

ti-Yánkti; such are the foolish contradictions of Hindu Geography. This eastern Káli, however, is now the actual boundary between the British and Nepalese territories, and according to the Bhótias of the place, has always been so; therefore the map also, though theoretically right, is practically wrong in giving the name of Káli to the western river, the Kunti-Yánkti, and drawing the red boundary line along it.

Having crossed the Káli, the road now enters on a fine expanded valley of considerable length. At this end the flat and habitable, if not culturable ground at the bottom must exceed half a mile in breadth; it consists of the same accumulated alluvium and débris that I noticed at the entrance of the valley between Budhi and Gárbia, through which the river cuts a deep and modern-looking channel, leaving, mostly on the east bank, pretty extensive levels for villages and cultivation, but the fields do not appear thriving; the surface of the ground is very stony and the soil probably not so fertile as to compensate for the backwardness of climate and lazy slovenly tillage of the Bhotias.

The first village here is Gungi; the houses, as usual here, ill-built, fat-roofed, two (and some three) storied.

In the fields are Pháphar cut, and wheat ripe; wild plum trees, *Bongbale*, with fruit like that of the English sloe, and apple trees, covered with miserable little crabs. The north-east end of the village had has been devastated by a great landslip which came from the neighbouring mountain, Tipai, 3 years ago, covering the fields with a flood of stony débris.

On the opposite side of the river is the village of Napalchu, situated on the Per-Yánkti, a deep gár coming from Namjung (the 2nd of that name) a snowy mountain to the south-west.

From Kelirong we hear the sound of an avalanche, *Hiunra*, which the Byansis call *Ráti*.

Two miles further on is Nabhi, a village like the others, with a good expanse of ripe wheat in the fields; and opposite to Nabhi, Ronkali, on the Danguung-Yankti, which comes from a snowy ridge on the south-west, Ronkongper, through a deep ravine, dividing the mountain side. A pass across the Ronkongper, now dangerous and disused, once led into the Pelangár below Budhi; it was by this route that Byáns was entered by Rudurpál, former Rájbar of Ascot, and by him.

subdued and annexed to the Báj of Kumáon under the Gorkhas. The Dangnung is a good sized Yánkti, with several Sángas thrown across it for the intercommunications of the village, which lies on both sides of the stream; and a bridge over the Kunti river connects Nabhi with Ronkali. An immense flood of débris brought down by the Dangnung, and by a huge landslip from Sildu, the mountain immediately north of it, has driven the Kunti river close under an advancing spur of the opposite mountain, here a wall of bare rock, the passage round which is rather precipitous, but not particularly difficult or dangerous, the road being built up with some care. Indeed it has appeared to me all along that the Chaudans and Byáns Bhótias have their roads and bridges in much better order than the Jwáris, and the natural difficulties of Upper Chaudans are perhaps greater than those of Jwár, always excepting the road from Milam to Dúng, an impracticable landslip, than which nothing can be worse.

Two miles more along the river bank lead to our encampment on Mangdang, a small level under the mountain Chachala, cultivated by the people of Bongkoli; opposite is Relákáng, a similar hamlet of the Nadhiyál, at the foot of a low hill spur which advances into the valley from the mountain Shángdoli, well wooded with Pine and Birch. This hill and a huge rocky mountain Nahl, on the right hand, intercept further view up the Kunti valley north-west.

This day was cloudy, but without rain. Thermometer at 4½ P. M. 56°; boiled at 192°, elevation of Mangdang 11,750 feet.

26th September.—Morning fair, Thermometer at sunrise 47°.

Down the valley is a very fine view of the great snowy mountain Ápi, and as we ascend towards Kunti, the Peak of Nampa is disclosed adjoining Ápi on the north-east, the whole an immense mass of pure snow, without-flaw for a mile of vertical height, and now beautifully illumined by the rising sun. I have not yet seen such a fine specimen of perfect snow on the face of the Himálaya. Half a mile from Mangdang the road crosses the Nahl Yankti, a small stream from the mountain of that name; on the opposite side of the river is Ganka, a stream rising in a glacier under a snowy mountain. The valley of the Kunti now contracts in width, the lower slopes of the mountains on both sides leaving little or no level ground at the bottom. The road goes along the east bank of the river, over steep and rough accumula-

tions of débris from the hill side above ; the Kunti here is shallow, but rapid, and 50 or 60 feet wide ; the water much discoloured, either in fact or in appearance, from the dark slate or limestone rocks over which it rushes.

We cross the remains of an old snow bank in the bed of the river, the first met in this journey.

The Pine trees are now getting scarce ; Birch continues and other shrubs ; Red Currant (*Ribes glaciale*), Bhot : *Mángle*, fruits small and insipid ; Black Currant (*B. acuminatum*), Bhot : *Dongole*, fruit equally worthless, said to be very abundant under Kpi and Nampa ; Terwa-Chak (*Hippophæ salicifolia*) the berries of which are a palatable acid when quite ripe, otherwise disagreeably sour ; Dog-rose, white and red (*Rosa sericea* and *Webbiana*), *Sephala* and *Gor-Sephala* ; the Viburnum (*V. cotinifolium*), Khas : *Gáiyah*, Bhot : *Kotoble*, with purple berry, which grows in the lower hills also at considerable elevation ; and Wormwood (*Artemisia*), Bhot : *Pankima*, scenting the air with its fragrance.

Cross Nampa (the 2d) a small gárh from glacier, and snowy mountain of the same name ; see marks of the Brown Bear, *Barji*. Further on cross two or three small streams coming from the mountain Shakshiram, and on the opposite side of the river are two larger Gárh's, *Selasiti* and *Khárkulum*," from mountains of the same names.

Here we are met by some of the men of Kunti come out for *Istik-bai*, Kiti joint-Pudhán, with Rechu (who has accompanied us from Chingrew), Tanjan, brother, and Tashigal, son of Rechu, the two last young men and boy, clean, well dressed and smart looking, with a pony gaily equipped in embroidered saddle cloth and bell-collar ; they are as decent looking as the best of Jwári Bhótias, and a marked exception to all the rest of the Byánsis that I have seen, who are shabby and dirty, "usque ad nauseam ;" but they are merely got up for occasion I suppose, and will soon relapse into the general degradation of dirt.

The valley now opens again ; the mountains on our right hand recede a little and then come round with a fine theatrical sweep to the northward, enclosing a good expanse of tolerably level ground around the village of Kunti. On the other side of the river, the Pechko comes through a deep ravine from a glacier, under Gyúe Dhúra, by which

there is a pass into Sela of Dárma ; this route is practicable and still in use ; cross Hikong, a stream coming from a glacier under the snowy mountain Kariye, through a very deep channel in the low ground of the valley bottom, which, the same here as lower down, consists of deep accumulations of débris from the surrounding hill sides.

The Kunti crops, Ua-jo and Phápar, are just reaped : the barley was somewhat damaged by the snow which fell here for three days, the 18th to 20th instant, and yet they say the injury has been less than what they usually experience from frost, which most years sets in, at this village, before the harvest is reaped. Pass through the village of Kunti, the houses ill built, in 2 or 3 wretched stories, resting against the slope of the hill side, and cross the Hiánre, which is a stream like the Hikong, coming from the mountain Gúnye through a deep ravine in the lower ground ; it drives several watermills, Gháto, erected along the bank, the machinery consisting of a single horizontal wheel with oblique floats, or vanes, against which the stream is directed through a small wooden trough, and this construction is probably preferable to that of two movements, vertical and horizontal ; the loss of power in the oblique action being no worse than the excessive friction in the others, and the single wheel more economical and lasting ; the whole concern is contained in a mill house (Ghato-chim) some 6 feet cube.

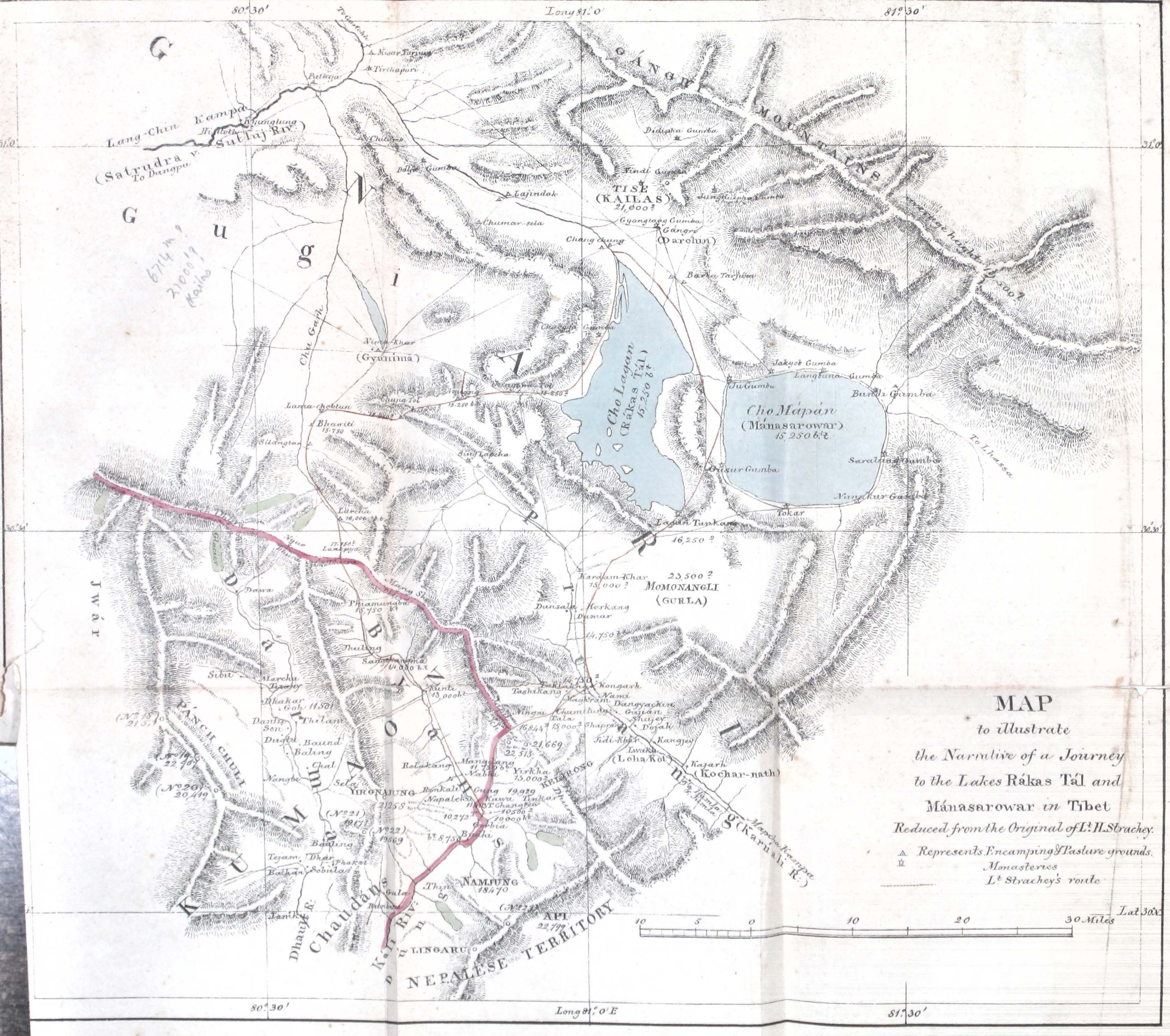
The proprietors of these mills take 2 seers of flour from each 20 Náli (about 30 seers) of grain ground for their neighbours.

Thermometer at 4 P. M. 57° ; boiled at 190° ; elevation 13,000 feet, which probably exceeds that of any other village in the British Himálaya.

The appearance of Kunti agrees with my estimate of its elevation ; the mountain sides round about have a scanty covering of brown ill looking grass with a little Juniper and Dáma, the height of a thousand feet or so, above which is bare rock and thin snow. On the other side of the river the mountains throw out some inferior spurs of hill, on which are scanty Birch trees, degenerating to mere shrubs, and the highest of them not 500 feet above the level of the village.

Evening cloudy, with a little rain ; Thermometer at sunset 47° ; not particularly comfortable in my hut of bare mats.

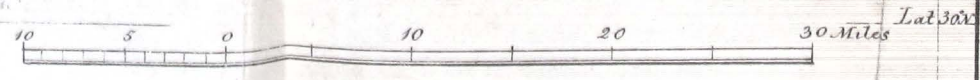
(To be continued.)



MAP

to illustrate
 the Narrative of a Journey
 to the Lakes Rákas Tál and
 Mánasarowar in Tibet
 Reduced from the Original of L^t H. Strachey.

▲ Represents Encamping/Pasture grounds.
 ■ Monasteries
 ——— L^t Strachey's route



6714 m
 21000 m
 Mails

80°30' Long 81°0' 81°30'

Lang-Chan Kampa
 (Satrudra v. To Dangpu)

G U G I P B A N O S

Cho Lagon (Rákas Tál) 15,250 ft.
 Cho Mápán (Mánasarowar) 15,250 ft.

TISE (KAILAS) 21,000?
 MOMONANGLI (GURLA) 23,500?
 13,000?

YIRONGNAUNG 2125
 NAMFUNG 18470

NEPALESE TERRITORY

30 Miles

80°30' Long 81°0'E 81°30'

JOURNAL
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AUGUST, 1848.

Narrative of a Journey to Cho Lagan (Rákas Tal), Cho Mapan (Mánasarówar), and the valley of Pruang in Gnari, Húndés, in September and October 1846. By HENRY STRACHEY, Lieut. 66th Regt. Bengal N. I.

(Continued from page 120.)

27th September.—Morning pretty fine but clouds still hanging about the mountain tops. Thermometer at 8 A. M. 38°; must have been freezing at night. This valley is so shut in by lofty mountains that the sun does not show his face for some two hours after the proper time of his rising, and apparent sunset is premature in the same degree, so that the day is much curtailed of its fair proportions, which the climate of the place can ill afford.

Here I make my last halt to-day in order to sort my baggage, getting rid of the greater part of it, and to muster my Bhótias with cattle and all other requisites for progress across the snow. I leave all my domestic servants, with the impedimenta; the Hindus, including two Paháris, are already hors-de-combat, as much I believe from the after effects of the heat to which they were exposed in the lower part of the journey, as from the present cold, which is not very severe. My Musulmen are still pretty lively, but they probably would become unserviceable to me, if not to themselves at 14,000 feet, so they may keep the Hindus company.

I consider it advisable also to reduce the bulk of my Káfila as much as possible, the better to avoid notice, though my Bhótia companions

seem inclined to multiply themselves and their beasts for mutual protection against the dangers of our expedition. Hirkun Budha considers that one of the greatest risks we have to encounter is the Khampa, who he says are little better than organised gangs of robbers infesting the vicinity of Darchin and plundering all parties they may meet not strong enough to protect themselves; they are in greater force than usual this season, attracted by the concourse of people and concomitant opportunities of plunder, attending the twelfth year religious fair at Gángri. This year the Byánsi Bhótias thought it necessary for their own safety to enter Húndés in armed parties, to which precaution they ascribe their escape from a considerable "*luting*" and "*máring*." The Khampa are so called from their native country, "Kham," which is probably identical with the "Kumbák" of Turner; and pending more certain information about them they may be set down as an extensive horde of what we call Tatars (vulgo Tartars) occupying a large tract of country on the north-east of Tibet between latitudes 30° and 40° and longitude 85° and 95°, and filling up the blank in our maps, between the Huns of south-western Tibet and the hordes of "Kilmák," "Cal-mucs," "Eleuths" or "Tatars of Koko-Nor," towards the frontier of China Proper. These people frequent the province of Gnari in considerable numbers under the color of trade and pilgrimage; and they bear a general bad character, both Hunias and Bhótias regarding them with fear and distrust, particularly in unprotected situations where their thievish propensities are said to break into open robbery. On some occasions when unusually mild weather rendered the passes of the Himálaya practicable during the winter months, they are reported to have extended their depredations across the snow, and rifled the houses of the upper villages whilst the Bhótias were absent in their winter quarters below. The Khampa however are not exclusively of this sort; one of the tribe, by name Lochambel, who come from a distance of 1½ month's journey with salt, Borax and Pashm to Gartokh and Pruang, is a wealthy and respectable person, well known and esteemed by our Bhótias who have dealings with him. He once, at short notice, lent Chakwa Garpun 62 *Nega* of gold, some 20,000 Rs. worth. The country of Kham is said to be under the dominion of the Lhassa Pontificate, but the extent and nature of the authority exercised is very questionable. I doubt whether the Lhassan Court have any regular

system of government established in Kham under their own officers, as they have in the province of Gnari.

I must now introduce my assistant, Bhauna Hatwál Khasiah, Bráhmañ, Kumáoni, of Jhirkuni, a village near Lohu-ghát. I believe he is the only native of British Kumáon or Garhwál not a Bhótia, that has any personal intercourse with Húndés. For many years past he has been engaged in a small trade chiefly with Pruang, either on his own account or as agent for some of the Almora merchants. The commencement of his intercourse with Gnari was characteristic: making his first appearance at Dába (viá Jwár) he was forthwith arrested as a "Nia Admi," and brought before the *Zungpu* for examination; he pleaded that "in the days of Chand" some of his ancestors had been in the habit of visiting the Jang-Tang* for purposes of trade, and he hoped for a renewal of the privilege to himself, on which the Deba directed the Clerks to make search in the archives of Dába, where sure enough, they found mention of one Bhauna Hatwál, an authorised trader from Kumáon some 100 years ago, and the present Bhauna was then admitted to free intercourse with all parts of Gnari. For the first year or two he went through Jwár to Dúngpu, Dába, and the Gartokh Fair, but the avaricious interference of certain influential Jwári Bhótias, jealous of the competition with their own trade, threw such impediments and annoyances in his way that he abandoned that route and took to a more limited traffic with Pruang, through Byáns; he met no opposition from the Bhótias of this district, who if less civilized than their brethren of Jwár, are less sophisticated, and as their own trade is chiefly confined to the barter of grain for salt and Borax, Bhauna's dealings in Europe cloths, Pearls and Corals gave them no offence. In quest of Pearls and Coral and other merchandise for Húndés, Bhauna has been often to Jaipúr and sometimes as far as Calcutta and Bombay, and he is probably the only man now living who has visited those places and Gartokh. He is proficient, colloquially, in the Gnari dialect of Tibetan and his ideas generally have been somewhat expanded by travel. He was introduced to me, unexpectedly only the day before I left Almora (31st October, ultimo): but having heard previously of his qualifications, I engaged him to accompany me on this expedition; never having been to the lakes by the out-of-the-way route I am now taking, he is nothing of a guide, but promises to be useful as informant general-

* i. e. Uplands of Tibet.

ly, and negotiator in case of any untoward collision with the Hunias ; also as interpreter, for I can scarcely understand these Byánsi Bhótias, who have a language of their own (a dialect of the general Bhótia language with little affinity to the Hindi,) and their Hindustani is hardly more intelligible ; they have some imperfect acquaintance with the Khasia-Hindi of the lower hills, but speak it like a foreign language. It is a curious circumstance that the Bhótias of Jwár do not speak the Bhótia language, but a dialect of Hindi like that prevailing in the lower hills ; all the respectable people among them communicate fluently in ordinary Hindustani, and a few are literati in a small way.

The case of Bhauna is one instance to show that the Bhótia monopoly of the trade between Kumáon and Gnari is ascribable not solely to the jealousy of the Lhassan Government but something also to the avaricious spirit of the Jwári Bhótias, which seems to have its own way notwithstanding the British administration of the Province ; the difficulties of the Alpine route and snowy passes, the inhospitable climate of Húndés, together with the poverty of the markets, and actual insignificance of the trade, and much of course to the moral hindrances. Any possible extension or participation of the trade, such as it is, by the Almora merchants should be sought, I think by the way of Byáus, where the Bhótias are more tractable to strangers and the snowy passes less formidable to lowlanders.

As I have before mentioned, there is already some traffic of the Khasias from Dúng of Doti, which passes through Byáns without molestation. The Nítí pass, next in facility to Lípu Lekh, should be similarly open to adventurers from lower Garhwál. But to tell the truth, there seems little scope for material improvement of the Hunia trade so long as the Province of Gnari labours under the political depressions and restrictions that emanate from Lhassan tyranny and Chinese influence, nor is that system likely to be changed at the mere request, or demand even of the British Government. The abolition of the Ládák monopoly of shawl wool, when effected, may perhaps add to the trade of Bisehir and our newly acquired Trans-Sutlej hill districts, but it can do little for Kumáon and British Garhwál under present circumstances. It is to be regretted that none of the Káshmiri refugees have settled in these provinces, where their manufactories could be carried on to great advantage from the proximity of the raw material, and now particularly that the supply of it promises to be unrestricted.

A Káshmiri colony and shawl factory in some part of Kumáon or Garhwál, is still a feasible and promising project ; but it would require encouragement and good management at the outset ; such I believe, were bestowed by the local authorities at Ludhiána when the immigration of the Káshmiris naturally passed that way.

Maximum Thermometer in the sun this afternoon, 62° ; evening cloudy, Thermometer at 9 P. M. 42°.

28th September.—Thermometer at sunrise 34° ; morning fine. After some delay, on the part of myself as well as the Bhótias, with packing and loading baggage, &c., we start soon after noon ; the party consisting of myself, Bhauna, Anand, a young relation whom Bhauna has thought proper to bring with him, to assist in cooking dinner, etc : though as this is Anand's first visit to Hundes, or southern Bhote even, he is likely to be of small use in manual service : Rechu (Pudhán of Kunti) and five other Bhótias, two of whom are supernumeraries intended to return to Kunti when the rest of the party get well over the pass. I begin to have misgivings about Rechu, who I fear is no better than a demi-savage, and I rather regret that I have not taken Hirkun, the Thokdar, in his stead, as in fact Bhauna from the first advised, but in such a sneaking suspicious way that I rejected his suggestion in disgust. The other Bhótias are, if any thing more uncivilized than Rechu. When first asked who were to accompany me, I said that I left Rechu to bring whom he chose from his own village, (as I thought the most simple and convenient plan) but the men of Kunti raised objections, and after much discussion, it was settled coram Patwari and Thokdar, that the service should be equally distributed (like the supply of baggage cattle, provisions, &c.) each village furnishing one man, and then the separate villagers began to assert their independence of one another, and of Rechu, who was mere Pudhán of Kunti they said, and of no authority out of his own village. They will cool down a bit I hope, when I get them well into the snow. Notwithstanding these bêtises and their general rudeness I have had reason as yet to be well satisfied with the readiness which the Byánsis have shown in meeting all my requisitions, whatever part of that alacrity may have arisen from their inability to distinguish between the Government official and the mere private adventurer.

Our baggage goes upon six Zhobus, four of which are however

Chanwr (the Yak) which latter appear to be more numerous in Byáns than the mule breed; and two more of these cattle go as far as the pass to take fuel and assist in relieving the loads of the others in case of difficulties in the snow. We have also a couple of saddle ponies, which may be of use beyond the pass; these are indifferent, long-legged animals, bred in Pruang, whence the Byánsis get the few horses that they have. The only things in the shape of tents that I have been able to get from the Byánsis are half a dozen "Chera," which are blankets, perhaps four yards by two, furnished with loops at the corners and sides by means of which with two sticks and a few pegs of Birch tree a quasi tent is rigged out in a few minutes to any required size and shape, and if necessary the several Cheras are tacked together with the large needles and woollen yarn which every Bhótia carries with him. We have taken provisions enough to subsist us all for near a fortnight, so that we may be independent of intercourse with Hunia villages and *Dóng*, in which lie risks of an untimely end to our travels.

To obviate the questionable appearance of English bottles, as well as their fragility, I have filled a lot of Port wine into a pair of the Bhótia wooden surais, and some rum, &c. into another pair. The spirits should do well enough in this style of decanting, but it is a very doubtful experiment with the Port already deteriorated to the usual Indian quality.

I have of course adopted the Hindustani "*Dhab*" of costume, just enough to pass muster in the distance, and nothing more, as I have not attempted to disguise the Feringi complexion of my face and hair, and my clothes are so much cleaner than the cleanest of my companions that the contrast entails some risk of attracting notice and marking me for a "Nya ádmi," in a country whose native inhabitants vie with their authorized visitors from our side of the snow in the personification of filth. I perceive now that I should have had my clothes dyed of a dirt colour as the only possible way of getting up a passable resemblance to the Byánsi Bhotias, or even to my Kumáonis, who are also villainously dirty. In Jwár I found some of the head people tolerably clean and decent.

For food, &c. having laid in a good stock of materials, I depend for cookery on Bhauna, Anand and the Bhótias.

All my Hindustani servants, with the bulk of my baggage, &c. re-

main at Kunti, till they get notice of our having crossed the pass, when they go down to Gárba or Budhi, and there wait my return to lower Byáns by Lipu-Lekh.

I have instructed the Patwári to apprehend nothing particular for a fortnight or so ; if our absence exceed that time to send out scouts in the direction of Taklakhár, and in event of our being imprisoned or otherwise coerced or maltreated by the Hunias to do what he can for our rescue and report the state of affairs to Batten. Thokdár Hirkun, the best of the Byáns Bhotias, takes his leave, with repeated warning to me against the "Khampa," whom he seems to think worse enemies to progress than the Pruang Zungpun and his satellites.

Leaving Kunti at length we descend and cross the river (though here easily fordable I should think) by a small Sánga, and a mile or two on cross a small rivulet, Mangdang ; the valley now narrows to a mere open glen, the river and the road one or two hundred feet above it, gradually rising, and the mountains on both sides decreasing in relative (if not absolute) height. A considerable stream, the Toshi-Yánkti, nearly as large as the western branch of the Kunti River, comes through a large ravine, entering the main valley from the northward. The top of the opposite ridge of no great height apparently, and only just tipped with snow, is said to look into the table-land of Hundes (the western branch of the valley of Pruang) but there is no pass this way, the mountain being steep and rocky ; and yet some one must have been to the top to have seen the said view into Hundes. The Surveyor's Map calls this stream Kembelchoo. The road continues over a tolerably level shelf in the hill side, affording a pretty smooth and easy path a few hundred feet above the river. The only vegetation here is grass and a few herbs reaching one or two hundred feet above us, and on the northern exposure of the hills to our left the snow has descended nearly to the limit of vegetation. Having started so late in the day we make but a short march to Sangchúngma, a mere encamping ground near a small stream on the shelf in the mountain side ; the river is one or two hundred feet below us and not visible from this owing to the depth and narrowness of its channel.

Thermometer at 5 P. M. 41° ; boiled at 188° ; elevation of Sangchúngma 14,000 feet.

Evening cloudy, with slight symptoms of rain or snow.

My share of our camp equipage turns out to be two "Chera," one stretched tent-wise over a rope between two sticks, and the other closing one of the gable ends; which covers altogether an available area for lying and squatting of six feet square or thereabouts.

Night cloudy and cold. Thermometer at 10 P. M. 34°.

29th September.—Morning clear; at sunrise Thermometer 31°. Ice on the still parts of the neighbouring stream and in lotas of water left outside at night.

Leaving Sangchúngma, we continue our journey by a very easy ascent over the same sort of undulating berm on the hill side that prevailed in yesterday's march. The ground is covered scantily with grass and a few herbs, among which is *Poh* (*Rhododendron anthopogon*) now in seed; I saw it in flower in Jwár last June, the whole plant is very fragrant, and exported to Hundes for the benefit of the Lámas, who use it for incense.

Monks-hood, or Wolf's-bane, *Atis*, (*Aconitum heterophyllum*) the root of which is exported to the plains of India as a medicinal drug.

A few scraps of Juniper, and Potentillas not in flower.

Cross a rivulet, Nikúrch, and further on we come to the new snow which fell on the 18th, 19th and 20th of this month (when we were imprisoned by the rain at Gala in Chaudáns) and still lies on the northern slopes and other sheltered spots of the ground over which our road passes. Cross the Jhúling-Yáukti, up which is the Pass into Dárma over Lebun-Dhúra, and we here meet two Sipáls* of Dárma, who have just come this way, with infinite trouble they say, 3 cos in 6 days, through deep snow, which however I do not believe any more than the height of the pass marked on the map 18,942 feet. This Jhuling is the usual halting-place half way between Kunti and the foot of Lánkpya. Cross another stream coming through Byank-shiti, a small pool which must be a permanency (though it would hardly be expected from the loose moraine-like appearance of the ground) as there are traditions that some Raja of Byáns in days of yore indulged his fancy by calling the puddle Mántaláv, and one of the neighbouring snowy peaks (of no remarkable figure) Kailás, after the great originals of those names in Húndés.

The snow now increases and our path lies over it constantly.

* Men of Síbu, in Dárma.

Cross the Rárub-Yánkti, which consists of one or two rivulets flowing through a remarkably wide and level bed, that looks much like an extinct Taláo, with a single small exit into the Kunti river.

Beyond this, the snow entirely covers the ground, wherever that is level enough to retain it; it is tolerably deep in the hollows, and on the northern slopes, but well frozen and hard enough to afford fair footing to man and beast; the ascent too is very gradual, over easy undulating ground; so that we have got on without much trouble; but I have suffered something from the excessive glare, my hands and neck being already severely scorched. I found a pair of the Bhotia hair shades sufficient protection for my eyes, though not equal to the wire-gauze of English make.

After a march of 7 hours, and which strange to say, measures only 8 miles on the map, we encamp at Phámangbu, (a mere name) the "Dakhna" (as the Bhótias call the hill-foot) of the two passes. To the northward, in front of us is Lánkpya, which we cross to-morrow weather permitting, and to our right, Mankshang, the direction of which is almost eastward from this, and it is said to be rather more difficult than the other; neither of them look very steep or lofty. The Kunti river here consists of a small divided stream winding through a wide and level bed, now so full of snow that we had some difficulty in finding a few feet of bare stones for our encampment.

Afternoon and evening cloudy with slight indications of snow, or particles of frozen mist not enough to whiten the ground, which Bhauna says are signs of safe weather, precluding the likelihood of actual snow-fall.

Thermometer at 5 P. M. 33° ; boiled at 185° ; elevation 15,750 feet.

The rarefaction of the air is very sensible here; what I feel is a mere shortness of breath in any bodily exertion whatever; and in drinking, and even in talking, the same symptom is very decided.

30th September.—I found it rather cold last night, and the thermometer at sunrise this morning 18° ; a temperature at which it is not easy or agreeable turning out of bed. We start accordingly at $9\frac{1}{2}$ A. M., rather later than is proper with a snowy pass in front.

Crossing the Kunti Yánkti, which rises not far off to the westward in deep beds of snow, the stream here shallow and half frozen, we ascend the mountain side to the northward; the valley here comes to

an end, and no further progress could be made but by scaling the hills in one direction or other; the head of the river appears quite impracticable from depth and steepness of snow. Our road lies over a moderate acclivity, but completely covered with snow, which goes on increasing to an unpleasant depth; the pure unsullied surface without the vestige of a track upon it, indicates a recent and heavy fall, since which the pass has not been crossed. The glare is intense: the surface of the snow is frozen and hard enough to afford tolerable footing to a man on his own feet, but the cattle sink deep at every step; when only knee-deep they get on, though slowly, but where the snow meets their chests it is with the utmost difficulty that they can gain a step; being also exhausted by the rarity of the air which here affects both man and beast. I found it useless to attempt riding through this snow, for the sudden sinking, plunging, and floundering of the horses was such as to knock the breath out of me at every step. The Zhobus would have been better for riding here, but it was necessary to have our two spare cattle unladen in the front, so as to tread down a passage through the snow by which the rest followed with the baggage. At 1 P. M. the cattle came to a stand-still, yet a long way below the top of the pass, and the Bhótias seemed inclined to follow the example of the beasts, and began to talk of the impossibility of getting further, but as the difficulty did not appear to me to be insurmountable, with the two Kumsonia I went on ahead to a small heap of stones or projecting rock free from snow, where we sat down, determined, or pretending a determination, to pass the night there rather than go back, and in hopes of so shaming or alarming the Bhótias into better exertion to join, I began to read a newspaper (which I had got at Kunti), but soon found it intolerably cool work in such a situation.* In the course of an hour and a half

* On the ascent of this pass I observed that where holes were sunk in the snow by the foot of man or beast, or by a walking-staff or otherwise, the snow inside assumed a very fine deep colour between azure and sea-green (like Turquoise colour), and I remember to have seen the same appearance in the deep fissures at the top of the Gori Glacier (above Milam in Jwár), near its origin at the head of the valley, many miles up where the substance of the Glacier seemed to be half ice half snow; this must be the inherent colour of the pure rain or snow water, I imagine, (as azure blue is supposed to be of the air) for I saw it when the sky was dull and dark with clouds and incapable of reflecting any such colour, nor did I ever notice it in the old and dirty snow on the Jwár passes in the end of June.

the Bhótias managed some how or other to get the cattle through the deep snow which had promised to stop them altogether; they came up to us at 2½ P. M. and we proceeded again towards the top. This stage of the ascent fortunately proved easier than the preceding, or we should never have got over it in the day. Though the acclivity was steeper (and for that reason, I suppose) the snow decreased, and occasionally patches of bare rock afforded much relief, which was the more needed as the rarefaction of the air became more decided; the Zhobus, Bhótias, and Bhanna were not much exhausted, but Anand, the young Kumáoni, a novice at this work, was quite ill. I felt passing heavy in the head, as though a ~~mass~~ weight were hung over my neck, and the ponies were grunting and groaning in sore distress; I again attempted to relieve myself by riding, but one of the beasts staggered back under my weight absolutely unable to carry me one step upwards, and I found the struggles of the other more intolerable than my own exertions, so I was fain to dismount again and get on the best way I could on my own legs. We reached the top of the pass, at length, by 4½ P. M. Two thousand feet is I think sufficient allowance for the vertical ascent from our last encampment, Phímangbu, at the bottom of the pass, and the horizontal distance is only 4 miles, which has taken us seven hours, however, the time and trouble being doubled I suppose, by the depth of new snow; absolute elevation of Lánkpya Dhúra, according to this estimate, 17,750 feet, and it seemed to me something inferior to Unta Dhúra and Jainti of the Jwár pass, in the ascent of which, last June, I felt still more exhaustion from want of air, and when those ghauts had not half so much snow on them as now covered Lánkpya. The afternoon had brought with it the usual clouds which obscured the prospect from the top of the pass, if ever there is any; beyond a dull monotonous chaos of snow on all sides, I could see nothing worth notice in any direction. The imagination of the novice in these scenes usually anticipates wonderful prospects from the lofty summits of the Himálayan passes, the natural and political barrier-wall dividing two great kingdoms, from which the eye hopes to range one way over terraces of mountains descending to the plains of India, the other over vast expanses of Tartarian table-lands. Such views are hardly to be realized from the passable gorges of the Himálayan crevices whence the prospect is intercepted by obtruding shoulders of higher

mountains. What nature can afford of panoramic sublimity, the traveller may see from the heights above Sákh on the road from Laptel to Dungpu, and the most exacting imagination might hardly be disappointed with that glorious view ; some part of that is to be seen from the Níti Pass, the only one I believe that admits of any tolerable prospect into Húndés ; from the top of the Lákhúr over Chirchun, I had some faint and narrow glimpse of the distant Gángri mountains.

The possibility of a fall of snow, which might prove dangerous to us in this situation at this late hour of the day, hurried our movements down the north side of the pass. We descended forthwith, after hastily dismissing one of the Bhótias, with the two spare Zhobus, who returned toward Kunti with a message of our having crossed the pass in safety thus far.

The first few hundred feet of the descent was extremely steep, the slope and quantity of snow very suitable for glissading, but I was not in the humour for trying it that way. At the foot of this declivity was a shelf of comparative level, beyond which I was unable to see any thing clearly for the fall of the ground and the obscurity of the weather, and I erroneously imagined that our labours would soon be terminated by reaching terra-firma. The descent began again in a succession of steep slopes on which the snow lay deeper than ever, and in many places it was of very unpleasant consistency, being superficially hardened by frost at top, and soft below, so that it afforded firm footing for an instant, and then suddenly gave away plunging us knee-deep at every other step. I much admired the style in which the laden Chanwrs came down the snowy declivity ; they looked like ships driving before a gale in a heavy sea, the snow flying in spray before them, as they tumbled through it breast-deep ; what a pleasant contrast to the slow toilsome efforts with which they ascended the other side. Half way down we crossed great mounds of broken rock that looked very much like the moraine of a glacier, and the Bhótias called it Gal, though I could not make it out clearly for the quantity of snow with which it was covered in most places. I was now much exhausted with the fatigue of eight hours wading through snow, and from the want of air which made me gasp for breath at the sudden plunges into soft snow ; half stupified and tumbling over at every step, I was at last glad to avail myself of the support of Bhauna and Rechu, who were themselves

still strong and lively. It was past sunset before we three reached the bottom of the pass, and we then had the miserable prospect of an expanse of pure snow covering the whole mountain sides around us, and the valley which extended at our feet as far as could be seen through the obscurity of the cloudy weather and approaching night, and no sign of the rest of our party with the cattle, who had fallen far in the rear, unable to tumble through the snow so fast as ourselves. At the bottom of the hill, a small ledge of bare rock, protruded through the snow, and on this we came to anchor, Bhauna and Rechu attempting to clear a space big enough to lie upon, for we expected that we should have to bivouac there for the night, and were doubting whether we could get one or two *Bakus** and *Cheras*† from the baggage in the rear. But in the course of half an hour or so I was most agreeably surprised by the appearance of the *Bhótias* with the cattle floundering down the last steep of the snowy descent; and one of the party going a little way down the valley found in the wilderness of snow a small oasis of bare stones, a ridge some 100 feet long and ten wide, on which we were right glad to fix our encampment. Verdant meadows, shady groves and hospitable roofs have afforded less welcome resting places to the weary traveller than this little ridge of bare cold ground open to the freezing air. It was night by the time we got the *Cheras* over our heads, and past nine before Bhauna, with a few remaining scraps of the fuel we had brought with us from Kunti, could accomplish a *lots* full of greasy tea, on which we consigned ourselves to sleep, too fatigued to miss better refection.

Thermometer at 9½ P. M. 20°; night very cold.

1st October.—Thermometer at sunrise (or an hour after it, more likely) 14° outside; and inside my tent (so to call the two blankets) 15°; I have now experienced what Moorcroft relates on one of his mountain passages in Ladak, the moisture of the breath freezing on to the pillow at night, which has also taken some of the skin off my blistered face. At 9 A. M. the Thermometer was 29°; at this time I was attempting to write my diary, when the first dip of ink at once froze in my pen, and on looking into the Inkstand I saw the contents of it all suddenly congealed in the same way. I found my hands so benumbed with cold and encumbered with gloves that I could hardly use a

* A kind of hill-cloak.

† Small blanket-tent.

pencil. We are all of us something the worse for yesterday's work : the Bhótias not much, nor Bhauna, who seems as strong as a Yak. I still feel great oppression in the head, or rather in the neck, as though a heavy weight were slung over it, and every part of my face not protected with beard is as perfectly blistered as though it had been treated with cantharides, which signifies little however, as my eyes (always strong) have escaped without damage ; the glare from the fresh snow has been intense, but I found a pair of gauze wire shades sufficient protection. It is this glare, I suppose, alternating with the keen dry cold of the air, that plays such havoc with a white skin, for the blacks are hardly affected by it. I have heard some people talk of darkening the face in order to complete a disguise, for entering Húndés, but there would be an even chance of the color coming off along with the skin, I apprehend. I found my Hindustáni clothes troublesome enough ; two *Paijáma* and three *Chapkan*, one over the other, with a slouching cap, *Pagri* and *Kamarband*, all abominably uncomfortable. Anand, the young Kumáoni, is very unwell indeed, both sick and heavy in the head.

The place of our encampment here is called by the Bhótias Lánkpya-Dakhna or Welshia ; by the Hunias, Larcha ; it is near the head of a valley which rises from the Byáns Himálaya to the South-Eastward, and running for a few miles north-westward, turns east of north into the valley of the Sutlej. Upwards nothing but pure snow is visible, downwards, a few symptoms of bare rock, as the valley expands and the mountains on either side subside into hill, and through the opening northward is a glimpse of distant blue mountains, part of the Gángri range perhaps, on the north side of the Sutlej. The descent from Lánkpya Dhúra opens into this valley from the southward ; the top of the pass is not visible from the Dakhna, being hidden by the lower declivities, which are rather steep ; the way by which we descended yesterday looks very formidable ; heaps of driven snow rising one above the other, in which our track appears as a thin faint streak. We tumbled down this somehow or other in two hours, but all of us agree that to ascend by the same way with cattle and baggage would be an absolute impossibility ; Rechu says that he has never before crossed the Ghát in such a state.

Thermometer at 9 A. M. 29° ; boiled at 184°, but fuel was wet, fire slow and ebullition imperfect, so that the proper boiling point is 184½

probably, and elevation 16,000 feet, and I cannot suppose the place to be much higher than the Dakhna of the Byáns side, (which is 15,750 feet for a boiling point of 185°) the descent this side appearing nearly equal to the ascent on the other.

From Larcha our road lay north-westward, down the valley of the Dárma-Yánkti, the name of the river which flows into the Sutlej; the stream winds quietly through a flat bed a furlong wide, stream with rough fragments of broken stone, now mostly covered with snow, and there was a great deal of ice on all the stiller parts of the water; the declivity is very gentle. We travelled in the bed of the stream for the first mile or two, and then over the foot of sloping ground on the right bank. Two or three miles down we passed an opening from the south-westward through the mountain on the left, coming in two branches from the Dárma passes, Nyue and Kach, which communicate this way with Húndés. The Dárma-Yánkti has derived its name from its alleged origin in this quarter, though as far as I could see, by far the principal body of the river is that by which we have descended from the base of the Byáns, and not the Dárma, Himáchal; I could distinguish nothing in the direction of the Kach and Nyue Dhúras but confused heaps of continuous snow, like the northern side of Lánkpya. Two or three miles further down at the point where the river turns northward by east, the left bank assumes the remarkable straight and regular form which is one of the characteristics of the ravines on the northern side of the Himálaya in this part of Húndés; it resembles a huge artificial dyke running for several miles in a straight line, in a steep slope which at this end is I suppose 500 feet in vertical height, the top of it being covered with snow. Our path along the right bank of the river now lay over undulating ground intersected with a multitude of ridges and hollows which proved extremely troublesome to us, fatigued as we were still from yesterday's work; the ridges were all of bare sharp stones, and the hollows between them filled with deep accumulations of snow, recurring one after the other at every fifty paces, for one or two miles; over which abominable ground I found it a choice of evils to ride or walk, my pony being as jaded as myself. Below this we came to Silangtar, a stream flowing into the Dárma-Yánkti from the eastward in a bed of great width and depth, through a considerable opening in the mountains on our right hand, a mere ravine apparently leading to

nothing but Himálayan chaos. Notwithstanding the difficulty of my own progress, I had got so far ahead of the Bhótias with the cattle and baggage, that I was obliged to wait an hour here before they rejoined me. We then crossed Silangtar, and came to easier ground; the snow decreasing as we continued down the valley, then altogether receding to the adjacent hill-sides giving place to stunted herbage, and lastly to a few scraps of *Dáma*, the "Goat-thorn" of Tibet (a sort of *Astragalus*) and the only firewood for the traveller in Húndés. Late in the afternoon we reached a halting-place called Bháwiti, close under the hill-side on our right. The Dárma-Yánkti is a quarter of a mile to the westward of this, flowing through a level bed a furlong wide, with the great dyke-like bank rising high on the opposite side; on this side the mountains have subsided into steep hills, still abundantly covered with snow, between the base of which and the river bed intervenes an open bank of undulating ground.

Our halting-place here is eligible only by comparison with those of the last two days; there is just enough *Dama* for a few fires, some shelter under a small precipice in the hill-side and one or two boulders of rock, and a most ridiculous Dharmshála consisting of a stone built hovel four or five feet cube, just big enough to admit of one Hindu squattant.

Thermometer at 8½ P. M. 30°, but this was on the top of the Dharmshála, inside of which I afterwards found that Bhauna had established his kitchen, and no doubt the temperature was thus much raised above that of the open air. At this time, when attempting to empty a mug of water from which I had been drinking not long before, I found the contents retained so firmly by a coating of ice that they could not be dislodged by the most sudden and forcible inversion.

2d October.—Thermometer at 7 A. M. 20°, boiled at 185°; elevation of Bháwiti 15,750 feet, which agrees pretty well with my estimate for Larcha, as we were there encamped in the bed of the river and are now two or three hundred feet above it; the fall of the stream between the two places appears very moderate, and I did not observe any very decided descent in our road over the left bank. The diminution of snow here naturally follows the greater openness of the country and the distance northward from the crest of the Himálayan range, beyond which the formation and fall of snow makes little progress. There are

still a few patches of snow lying on the ground about our encampment.

Our road from Bháwiti turned somewhat to our right, north-eastward away from the river, over easy undulating ground, a great relief from the troubles of snow and sharp stones that beset our journey for the last three days. A mile or two on, we reached an eminence on the shoulder of the hill, perhaps 250 feet higher than Bháwiti, and 500 feet above the bed of the Dárma-Yánkti, which passes a mile or so to the westward; this spot commands a fine view of the country, and as usual in such situations, is studded with the religious structures called *Choktan* or *Mánepáne*, little towers of stones, stuck about with dirty ragged flags.

There is an unusual number of these here, erected by some Láma they say, after whom the place is called *Láma Choktan*. Before us extended a low plain, which on the left, northward, expanded to a considerable size (many square miles), but to our right, eastward, contracted to a mere valley a mile wide, receding south-eastward behind the shoulder of hill on which we stood: beyond this valley north-eastward, the ground is occupied by lofty hills or low mountains not easily reducible to a regular plan, but the general tendency of them seems to be in parallel ranges running N. W. and S. E., the most distant of them, the highest, slightly tipped with snow in streaks here and there, and beyond these lie the lakes, entirely shut out from view. The north-western horizon is bounded by the Gángri range of mountains moderately tipped with snow, and remarkable for the deep purple-blue color of their inferior rocky parts; and about the middle of this range rises the snow-capped Peak of Kailás, somewhat higher than the rest of the line. I do not believe these mountains are nearly so lofty as the main ranges of the Indian Himálaya. On our left, westward, the view is closed by the high bank of the Dárma-Yánkti, which to the northward however, gradually subsides into the lower level of the plain first noticed. From what I saw in June last on the road between Laptel and Dúngpu, and Dúngpu to Chirchun, I know that a tract of elevated plain lies on the top of this bank extending westward a great distance, near 120 miles perhaps, up to the mountains of northern Bisehir, with no other interruption than occasional clusters of hills, and deep ravines draining into the Sutlej. The Dárma-Yánkti, after running northwards

a few miles receives another stream, the Gúnda-Yánkti, rising from the Dárma Himálaya, after which the united river takes the name of Chu-gárh (?) (or Chu-gák?), and lower down receives another tributary that springs from high ground near Ligchepu, a day south of Kyunglung, on the Chirchun road. It thence runs nearly parallel to the course of the Sutlej, but in a contrary direction (*viz.* from west to east), from which circumstance it derives its name Biphu-kula, *Biphu* signifying *contrary*. This Biphu-kula, I believe, before entering the Chugárh, receives the Chúnagu, a stream which rises from the northern foot of the Dárma Himálaya, a few miles west of the Gúnda-Yánkti, and flows nearly parallel to it past Gumpáchin, which is half way between Chirchun and Kyunglung, and a short journey south of Ligchepu. One of the sources of the Indus half way between Misar and Gartokh bears the same name, Biphu-kula, apparently for the same reason, that its course is *opposite* to that of the sources of the Sutlej, which flow southward from the other side of the same height. The Chugárh falls into the Tirthápúri branch of the Sutlej, half way between Kyunglung and Tirthápúri. Moorcroft noticed the debouchment east from the route on the opposite bank of the Sutlej, (15th August, 1812) but erroneously supposed the stream to come from Rákas Tál, and Hearsay's map has made the same mistake, inconsistently with Moorcroft's own previous observation at Tirthápúri, (31st July,) to the effect that the Tirthápúri branch of the river came from Rákas Tál, which it does to some partial extent.

In the low plain to the north-eastward, 10 or 12 miles off, rises a small isolated hill, on the top of which was once a fort, called Nima-Khar; Bhotias call it, Gyánima; there is no village or fixed habitation here, but a considerable resort in the summer for the salt and grain traffic of the Bhotias from Dárma and western Byáns; it lies in the road from Pruang to Gugi, and one way to Gartokh, and on the road from Chirchun to Gángri. They say that the Sikhs had a fight with the Hunias somewhere hereabouts. Immediately beyond Gyánima a long narrow sheet of water is visible; it is a sort of lake receiving the drainage of the low plain and the adjacent hill, on the east, and giving off its surplus water occasionally into the Chugárh westward. Beyond this again rises a range of hills concealing the bed of the Tirthápúri Sutlej. Gyánima belongs to Kyunglung. Wild geese and ducks breed

upon the lakes during the summer, and the people of Kyunglung take the eggs.

In the season of heat and rain the Chugárh is a very considerable stream, sometimes unfordable, and perhaps equal to the Tírhápúri river; it is the furthest eastward of the large feeders which the Sutlej receives from the Indian Himálaya, and may be considered as one of the main sources of that river.

From Lámá-Choktán we descended into the plain by a long, but easy declivity, and crossed the flat where it is about a mile and a half wide; reaching the middle of which, we saw it extending many miles in a long valley confined between the base of the Byáns Himálaya, and the ranges of the lofty hill which I noticed from Lámá-Choktán. The origin of the Karnáli is close upon this valley; the river enters it a few miles further down (south-westward) coming out of ravines in the North-eastern face of the Byáns Himálaya, its principal source probably from the north slope of the Mankshang pass, though I could get no accurate information on this point. It is a curious fact that the sources of the Sutlej and Karnáli, main branches respectively of the Indus and Ganges, should lie so close together and divided by an almost level plain, across which a man might walk from one river to the other in an hour or two, without vertical ascent or descent of 500 feet. The case is much the same with the south-eastern source of the Gartokh Indus (the Bíphu-kula) and the north-western branch of the Misar Sutlej, which are separated by a mile only of mere rising ground (Jilkwá-Lá), and it would probably be found the same with the Jáhnví above Nilang, *the main source of the Ganges, yet unexplored by Englishmen!*

The end of this valley appeared to turn southward where it entered the head of the Pruang valley, and the view in this direction was terminated by a huge snowy mountain, the last and greatest of a chain which comes from the south-eastward along the left bank of the Karnáli. I immediately recognized this remarkable mountain as the same that I had seen from the high plain between Dungpu and Chirchun, and of which the Jwáris who were with me could give no account; according to Rechu, the Hunia name of it is Momonangli, and the Bhotias call it Gurla. It is one of the grandest objects I ever saw; from this point of view, the huge towering mass of snow that forms

the upper part of the mountain is wonderfully contrasted with the dark shadows which the height and steepness of the surrounding hills throw upon the corner of the valley at its base. To avoid the possibility of exaggerating, I reckon Momonangli to be as high as the second-rate peaks of the Indian Himálaya, or 23,500 feet, of which 8000 rise above the level of the valley, and the uppermost 5000 is all pure snow.

I was about to take bearings of this and other points when the alarm was given of a horseman ahead, which obliged me to pocket my compass and assume as much as possible of the *Chal* of a Bhotia, depriving me as I afterwards found of a most valuable observation for my survey. The horseman who was coming up the valley from the direction of Pruang, fortunately took no notice of us, but crossing our path entered the hills in front and was soon out of sight; we also saw one or two *Dúng*, i. e. encampments of herdsmen and shepherds, under the hills on both sides of the valley, but at tolerably safe distance.

My Bhotia companions were not a little alarmed at the horseman and the *Dúng*, and we edged off to the right in order to give them a wide berth, and then ascended the hills on the north-east, throwing out an advanced guard of two men to feel the way. This precaution proved useful, for soon after on gaining the crest of the hill and looking down the other side our videttes found a valley full of *Dúng*; we then skirted along the ridge eastward (or south-eastward) for a mile or two in hopes of finding some place to cross safe from observation, but the *Dúng* appearing rather to thicken as we proceeded, we gave it up and encamped under cover of the hill side, with the intention of effecting our transit before daylight next morning. This valley proved to be Chujia-Tol, a favourite resort of herdsmen and shepherds from Pruang; and all the best pasture grounds in this country are similarly situated in low hollows sheltered between lofty hills. This Chujia-Tol is a side ravine running from north-west to south-east, into the main valley; the springs of water that rise in it form but a meagre rivulet, which I believe is absorbed again before it can reach the Karnáli.

In the afternoon some of our party went into the Tol and had a conference with the shepherds, who were after all not over-dangerous enemies, for they evinced no curiosity at all regarding their visitors from the encampment of Byánsis on the other side of the hill; they reported

that the horseman we saw was a Government chaprassy (or whatever may be the Hunia equivalent to that functionary) come to collect men from the Tols for the conveyance of provisions, &c. from Pruang to Barka, for the use of a Garpun then encamped at the latter place; who this Garpun was and what he was doing at Barka did not appear; the regular Garpun being usually fixtures at Gortokh, or in the winter at Gargunsa, which is one or two days further down the river northward.

Fuel being scarce and Bhotias dilatory, I was unable to boil the thermometer here; but the elevations of the bottom of Chujia-Tol may be estimated, I think, at 15,250 feet, 750 below our last camp at Bháwiti, and 1000 feet of descent from Láma-Choktán. Our camp here was on low hills not more than 150 feet above the bottom, being only a mile or so from their termination, where the Tol enters the main valley.

Thermometer at 9 P. M. 25°.

3rd October.—Thermometer at 3 A. M. 24°. We started early at 4 A. M. with moonlight just sufficient for our purpose; descended the hilly bank, crossed Chujia-Tol, in which I could see nothing, but the flat bottom of the valley appeared to be a furlong or two in width, and the stream of water very small; we then ascended again a very considerable hill, part of which was very steep and stony, and the rarefaction of air so sensible as to give some trouble to myself and my pony. We reached the summit a little before sunrise; the elevation of it must be about 1,750 feet above Chujia-Tol, i. e. 17,000 feet, yet there was very little snow on the top, only a few patches lying in hollow and sheltered parts of the north side. The most remarkable part of the prospect from this eminence was the Indian Himálaya, the view of which extended from Momonangli on the extreme east, as far westwards perhaps as Laptel, including all the outer part at least of the snowy range of Byáns, Dárma and Jwár, and from our elevated station we seemed almost to be looking down upon the top of the snowy range, which had now lost much of its apparent height, but with an increase of visible breadth in the same proportions, so that the range assumed something of the appearance of a wide field or sea of snow tossed into a thousand heaps in the most gigantic confusion. It was only at the base of the Byáns mountains close opposite that I could distinguish any thing like a regular arrangement

of ridges and ravines which tended northward into the head valley of the Karnáli, and among which lie the ultimate sources of that river; and to the eastward I could see the Byáns Himálaya receding some way south-eastward, and close opposite to it a parallel snowy range of equal height terminating in the great peak of Momonangli, which seemed to be the loftiest of any in sight. The bed of the Karnáli that lies in the deep valley between these two ranges was concealed by deep shadows and obtruding shoulders of mountain. On the extreme west I noticed some distant and very lofty looking peaks and ridges of snow, but I attempted in vain to identify these and others in eastern Byáns with any of the known points of the snowy range as seen from the southward, nor could my companions help me. The northern face of the Himálaya thus seen from a commanding station, though still much broken into ravines, peaks and ridges, exhibits a much more gradual and flatter general declivity, with smoother and rounder slopes than the vast rocky walls of the southern face, and a much greater expanse of snow, which extends down to the limit of congelation in a regular line, scarcely broken here and there by a few more rocky prominences. The snow line was now, I suppose, between fifteen and sixteen thousand feet, much about the same as on the south side; a zone of one thousand feet or so must be allowed for the variation of the line according to the nature of the subordinate slopes, their individual exposures, and degree of proximity to the open country northward, in which direction the snow line appeared to me to be somewhat higher, as I before noticed at Bháwiti. The termination of the Himálaya in the table-land is generally abrupt, and well defined, and the transition to a new climate seems to be similarly well marked and sudden. The great bulk and height of the mountainous range appears to arrest the progress of the Indian rainy season, and to the northward consequently, there is so little free moisture in the upper air, that snow does not fall in sufficient quantities to withstand the heat of the sun for many days together, at very considerable elevations: hence the line of snow on the mountains that rise from the northern table-land is on an average perhaps two or three thousand feet higher than on the Indian Himálaya, though the atmospheric temperature on the former may possibly be colder at equal heights. The lower plains of the table-land which enjoy a good deal of bright sunshine are thus exempt from

lying snow except in the occasional severity of winter; otherwise the country would be quite uninhabitable. A heavy fall of snow which occurred at Gartokh this summer in September (the same three days I believe of universal rain on the south side of the Himálaya, or of snow on the higher elevations), was considered a most unusual circumstance.

I expected some view of the lakes from this lofty ridge, but they were still hidden by intervening hills, some of which also rose high enough to shut out Kailás, and there was no good prospect of the country northwards.

From this pass we descended again as much as we had come up from Chujia-Tol, but more gradually, into a level valley with flat bottom, varying from one to three furlongs in width, winding between steep rounded hills for many miles together, along which we continued till $10\frac{1}{2}$ A. M. when a small stream of water made its appearance, and we halted for breakfast, &c. The name of this valley is Amlang; a little further on it turns northward, and drains into the Gyánima water, which I noticed from Láma-Choktán. We were fortunate in finding no *Dáng* here, for the place is well adapted for pasturage, and occasionally frequented by shepherds. I thought it a very pleasant spot—for Húndés. The bottom was well covered with green herbage, and the surrounding hills sheltered the valley from wind without excluding sunshine. Here we saw some of the wild animals peculiar to Tibet; the *Kyáng* (*Equus hemionus*?) which I shall call the wild mule, for in appearance it is half way between horse and ass. The hares, *Rekong*, differed much from any that I had seen elsewhere; the upper part of the body, head, ears, &c. being of an iron-grey color; belly, breast, and inside of legs and ears white; rump (and perhaps origin of tail) slaty blue, and a long furry white tail. Ramsay (of Gurhwal) has seen hares between the Nítí pass and Dungpu answering to this description, save the long white tails, which he does not acknowledge. I don't think I could have been mistaken in these observations, for I had many good views of these animals, who sat upright with reverted ears waiting my approach within a few yards; yet in June last I saw many hares in the vicinity of Dungpu, which were probably the same sort as described by Moorcroft, (July 13th,) near Dam, somewhat different from the English or Indian hare, but without the remarkable peculiarities "a posteriori" noticed in these of Amlang. There appears to be some contrariety

in the matter of the tails here, for the field rats have none that I could see; the ground was intersected in all directions with the burrows of these animals, and I saw numbers of them, looking like diminutive Guinea pigs, but of the ordinary mouse colour.

Thermometer at noon 45° ; boiled at 186° ; elevation of Amlang 15,250 feet (about the same as Chujia-Tol). In the sun at noon the thermometer rose to 68° .

Our course from Chujia-Tol to this had been somewhere about east north-east. We now turned eastward, leaving Amlang over the low hills on the right side of the valley. A mile or two of undulating ground brought us into another valley similar to Amlang, through the opening of which, north-westward, was seen an isolated cluster of remarkably bare red-colored hills, *Chulda*, not far east of Gyánima, and the road thence to Gángri passes under them. In the opposite direction the valley was closed by hills over which the top of Momonangli came in sight again. A mile further on we entered a third valley or a second branch of the last, like the others, but open at both ends and I observed a slight rise across the flat bottom dividing the drainage into Gyánima water north-westward, from that into Rákas Tál eastward. We here came upon the western high road leading from Pruang to Gartokh, a well beaten track of men and cattle 30 feet wide. The eastern road goes between the Lakes, viâ Barka, Gángri, &c. A mile down, the valley divided into two branches going eastward and south-eastward, the road following the former, and we were proceeding that way when on turning the corner of a hill that separated the two vallies, we found ourselves entering suddenly into a large Tol full of sheep and cattle with encampments of shepherds. The Bhótias recoiled in alarm, and we turned back into the other branch of the valley to the south-east, but finding this to end in nothing, except hills, a mile up, we endeavoured to regain the proper road by crossing the hill side if possible ahead of the *Dúng*. On gaining the ridge, however, we saw the Tol still occupied by the shepherds, as far as could be traced, so we continued skirting along the top, till we were brought up by the sudden termination of the ridge, in a passage that communicated with another valley, also full of flocks and shepherds, close under our right. We were in rather a critical position here, between two fires, and the Bhótias vented their disgust in loud complaints against me for bringing

them into it, so I resolved to push through it at once, rather than waste time in indecision or retrograde movements. We descended accordingly, into the hollow connecting the two valleys, whence we perceived the southern Tol to be more extensive than the other, with a number of black tents, some of them of good size. There was a fine expanse of verdant pasturage in a flat bottom enclosed by steep hills, and a deep rivulet came out of the southern valley through the narrow passage into the northern, thence turning east, towards Rákas Tál. We crossed this and immediately ascended the hills, which began again on the other side, without hindrance from the enemy, who kept their camp at tolerably safe distance. Continuing along this ridge of hill till sunset, we had the northern Tol with the *Dáng* in it, still close under our left. The Bhótias were so paralyzed with fear that I had to take the lead myself, though ignorant of the ground, and show the way to what I thought a safe corner for our encampment during the night, but the want of water obliged us to keep close to the Tol. Thus dodging about the hills we were 3 hours in reaching a point not more than 2 miles up the eastern valley, at the entrance of which we were diverted from our proper course. The shepherds here when visited by some of my Bhótias, proved to be as harmless neighbours as those of Chujia-Tol, being quite uninquisitive about us, though our parade along the top of the hill over their heads might well have attracted their notice and suspicions. It would have been as safe probably and much easier, to have walked straight through the *Dáng* by the proper road, as my imitation of the Bhótia costume, &c. was good enough to pass muster at a little distance, and it is not the vocation of shepherds to stop and question travellers on the high road. The timidity of the Bhótias to-day was little short of rank cowardice, and rather disgusted me, as promising to increase difficulties. Bhauna evinced much better sense and spirit.

Near this I saw some deer, "*Riddkkh*," i. e. "*Banbáshi*," "Jungle squatters." They were in herd, of a dozen or so, small-sized (as big as Kákar perhaps) of very pale fawn color, approaching to white, and, as well as I could make out, with stag-antlers.

Thermometer at 9 A. M. 30°. I had no opportunity of boiling here, but the elevation must be much the same as that of Amlang, 15,250 feet. The Byánsis could not give me any name for this place, but

from the Jwáris I afterwards learned that it is called Jungbwa-Tol.

In the middle of the night one of the ponies amused himself by walking over the ropes of my tent, which brought the whole concern down upon me: but as it was not very onerous, consisting of two blankets, and I still found breathing room, I thought it better to lie still and let matters rest as they were till morning, rather than turn out into the miserable cold of the night air, till I could rouse my companions and so get the hut set up again.

4th October.—Thermometer at 6 A. M. 20°. Up to this time I had been somewhat in the dark as to the true position of the Lakes, and my best route for a good inspection of them, depending on the map, which was uncertain, and the clumsy accounts of Bhótia and other informants equally vague and doubtful; nor had I much confidence in the guidance of Rechu: but I now began to understand the anxiety he had shown at the Dakhna to take me by Mankshang instead of Lánkpya-Dhúra, for the great easting we had now made from Laukpya, without attaining Rákas Tál, proved the Map to be wrong in bringing that Lake too far westward, and Rechu to have been right in asserting that the direct route to the nearest point of the Tál was by Mankshang, and his object was evidently to cut the expedition as short as possible. I had determined to begin with Rákas Tál,* because it was less known than Mánasarowar, though geographically more interesting, as being suspected of communication with the Sutlej; being no resort either for pilgrimage or for Bhótia traffic, the western Lake has been less observed by Hindustáni visitors, and from its intricate outline less easily comprehended and described by them; nor did Moorcroft's imperfect view and accounts of it add much to our information. Rechu now affirmed that we were close upon the south-western quarter of the Tál, and a debate arose as to which way we should proceed so as to have a good view of both the Lakes and of the channels connecting the two together and Rákas Tál with the Sutlej, all of which I insisted on as essential. The Bhótias were rather inclined to make for Mánasarowar along the southern bank of Rákas Tál, but as I had little confidence in their intentions, and there was constant risk of an untimely end to our expedition, should we be detected, by the intervention of

* Ráwanhrad of Moorcroft.

the Lhassan authorities, I resolved first to secure the north-west point of Rákas Tál, said to communicate with the Sutlej, and thence return by Mánasarowar along the isthmus between the two Lakes. My orders were accordingly for the *Nikás* (outlet) of Rákas Tál; all the Bhótias seemed well acquainted with it, and saving the presence of the enemy, Rechu promised to bring us to the spot by evening.

Finding no harm to have come from yesterday's dangers, the Bhótias had screwed up their courage a peg or two this morning, and allowed me to lie in bed till daylight, though we had to begin our march by crossing the Tol. We started at sunrise, course about north of east, descending, crossed the stream, the same that we had passed yesterday afternoon, which runs into Rákas Tál, and ascended rising ground at the foot of lofty hills on the other side. The shepherds of the Tol were asleep in their tents, I suppose, for I saw none of them. We were now again on a frequented road, leading from Gángri to the large Tols near our last encampment and thence on to Pruang, and a *Rah-gir* (traveller) suddenly made his appearance over one of the ridges of high ground; he was horsed and armed, and the Bhotias in great alarm declared that he must be either a *Khampa*, come to rob us, or a Government messenger to arrest us. As we were edging off to the right to avoid the man, he seemed to be doing much the same on his part, apparently in equal apprehension of us, which emboldened the Bhotias to accost him, and he turned out to be a humble shepherd coming from his master's house at Gángri to one of the Tols, where he had flocks at graze; he possibly took us for *Khampa* and was glad to pass us so quietly. We now came in sight of a corner of Rákas Tál, a mile or two south-east, and apparently an inlet advancing further west than the body of the lake towards the low ground of the Tol, and thence receiving the rivulet before noticed. The view of the lake enlarged and improved as we proceeded. At 10 A. M., we reached a point that seemed to lie about the middle of the eastern side, a mile from the shore, and well elevated above it, whence the lake swept before us in a long irregular crescent some seven miles wide, east and west, and twenty long, north and south. The snowy mass of Momonangli, was again conspicuous to the south-east, and from the base of the mountain a lofty range of hills, partially tipped with snow, stretched north-westward, separating the lake from the head valley of the Karnáli, and forming its south-western banks nearly par-

allel to the course of the river. These hills rose abruptly out of the water in bold rocky banks with many deep inlets, promontories, and one or two small islands of the same character. This part of the lake is altogether so irregular in outline that it could hardly be defined without detail-survey and close inspection of every point. The eastern shore was bounded by shelving ground and low hills, the south end being a good deal recessed, eastward, into a deep bay, the middle part advancing, further westward, in a rocky bank of moderate height, and the north end sweeping round to the westward, as far as could be seen, with a margin of green grassy plain from the back of which the Gángri mountains rose in dark steep slopes. The main peak of Kailás, now beautifully developed to its very base, was seen on the extreme left of the range, (so far as visible to us), and over the low hills in the middle of the eastern shore, a streak of bright blue showed a distant glimpse of Mánasarowar. The western shore of the lake was undulating ground or low hills, over which we had been travelling this morning, at the foot of steep and lofty hills here and there streaked with snow. The water of the lake was of the clearest brightest blue, reflecting with double intensity the colour of the sky above, and the northern horn of the water overshadowed by the wall of mountain rising above it, was darkened into a deeper hue, partaking of the fine purple colour that distinguishes the rocks of Gangri. Fresh breezes broke the surface of the water into waves that rolled upon the shore. The surrounding hill sides, though very bare of vegetation, were tinted with many shades of red, brown or yellow, happily varied with the margins of verdant grass in other parts of the shore, and bright sunshine spread a warm glow over the whole landscape, entirely divesting it of the cold barren aspect that might be supposed inseparable from these intemperate regions. The beauty of this novel scene appeared to me to surpass any thing that I had seen on the south side of the Himálaya; it certainly far exceeded my expectations, and I felt already repaid for the trouble of my expedition.

Our course now inclined to the northward, and as we proceeded, the hilly bank on which we had been travelling subsided into level shore sloping down to the water's edge. Our road lay over this for two or three miles, the water half a mile to our right; and as far to our left we passed Chabgía Gumba somewhere, not visible under the steep hill-side; this I believe is the only *Gumba** on the banks of Rákas Tál.

* *Gumba*, Monastery.

We met an orange colored *Dába*, (inferior monk,) coming from it, who passed by without taking particular notice of us. At noon we came to the end of this plain under a low spur of hill that advances to meet a small bay of the lake, and here halted for rest, breakfast, &c.

Thermometer at 2 P. M. 54°; boiled at 186°; elevation of the lake 15,250 feet; we were close upon the water. In the sun the thermometer rose to 70°.

The native name of Rákas Tál is *Cho Lagan*, “*Cho*” or “*Tsho*”, signifying lake.

The shore of the lake here shewed marks of variation in the water-level to the extent of a few feet; ground which appeared to have been lately inundated, now half dry and swampy, was covered with a very thick efflorescence of soda (or some such salt), which must arise from the soil, as the water was quite pure and sweet.

I found this a most delightful place: the lake was beautiful; quite a little sea; long rolling waves broke upon the shore close under our feet, and as far out as could be seen the whole face of the water was freshened into the “*ἀριθμον γελασμα*” of old ocean. There might be glorious sailing here, if the Láma of Gángri would keep a boat, which might be made with Pine or Fir imported from Byáns.

At 3 P. M. we continued our journey; course about northward; passed under the small rocky headland, which advanced close to the water edge, and then entered on another low flat, bearing marks of occasional inundation in places; here two promontories of low clear land appeared stretching into the lake for a mile or two, one from the south, and the other from the north, covered with green grass, and I think I saw *Kyáng* on one of them; they enclosed a large bay, the middle of which came close up to our road. High hills were still on our left.

I saw a few wild ducks on the lake here, coarse ill looking birds, about the size of the domestic; color dirty grey and fulvous red; specimens of the same sort are occasionally to be met on the south side of the snow, I believe; I saw one myself, last June, on the *Sángas-kánd*, a pool in the Gori Glacier above Milam in Jwár; and there were other white-looking birds, still more ill-favored than the ducks. I saw no signs whatever of the grey goose said to frequent these lakes in the rainy season, and according to Moorcroft (August 10th and 12th) “bred on

the banks of Rákas Tál" "in vast numbers;" they had all migrated to India I suppose. Nor could I see any thing of the fish, though I do not doubt the assertions of the Bhótias that there are plenty of them. In the winter when the lakes are frozen over, numbers of the fish, they say, are cast up dead along the banks where the ice is broken, and in this state the Hunias present them to their Gods as *prasád*, but they have not the sense to take the fish alive for their own eating.

The northern horn of the lake was now rapidly narrowing and we continued skirting its western edge till sunset, when we reached the extreme north-western point, where the lake ended in swampy ground interspersed with puddles of water. This is, or ought to be, the *Nikás*. The ground evidently slopes down to Changchung, a verdant hollow with pasturage, *Dúng*, &c., a mile or two to the north-westward, but there is no visible channel from the lake, and the only effluence is by filtration through the porous soil of the intermediate ground, unless it be at times of extreme flood, when the level of the lake may possibly rise high enough to overflow the margin at this corner. The stream so formed flows westward, through an open valley; below Changchung it receives the Sar-chu (gold river), a rivulet from the deep ravine immediately west of Kailás; the united stream then takes the name of Lajandák, which is also an encamping ground on its banks about a day's journey from Gángri: below this the river receives three other feeders from the Gángri mountains, viz. the Kyuktwa; the Dokpa-chu, (i. e. the river of the Dokpa), by the ravine of which a road crosses into Bongwa-Tol, a valley on the north side of the Gángri hills, inhabited by a tribe of people called *Dokpa*, who are the chief carriers of the salt from the north country; and the Yarmigu; the united river then flows under Tirthapuri. Dulju is a *Gumba* on the left bank, half a day west of Lajandák, as far south-east of Tirthápúri, and a day and a half east of Kyunglung; the most direct road from the last named place to Gángri running through the valley by Dulju and Lajandák. Moorcroft's statement regarding the Tirthapuri river, (12th August,) agrees with this account of mine, though not with his own of the 15th, when he made the Chugárh come from Rákas Tál. Hearsay's map makes the same mistake, and on the 13th idem, he describes two of the four tributary streams from the Gángri mountains large enough to be bridged with Sángas, though he did not notice them on his way

out to Mánasarowar, 1st and 2d August. The effluence of Rákas Tál probably contributes less to the Sutlej than others of its numerous sources in the Gángri mountains, or the Indian Himálaya, for the Bhotias say, that the stream at Lajandák, even after it has received the Sarchu, is very inconsiderable. It is a question that can be decided only by actual measurement perhaps, whether the main source of the Sutlej be not in the Dárma-Yánkti, for the discharge of the Chúgarh sometimes, though not constantly, exceeds that of the joint Tirthapúri and Misar river, as the Bhotias testify, who are in the habit of fording both streams close above their confluence at Pálkia. The former is liable to great floods in the summer, the discharge of the latter being more equable throughout the year.

The mountains which had run along the left flank of our march to-day had here subsided into moderate hills and circled round to the westward, leaving the open valley of Lajandák, perhaps three miles wide, running in that direction as far as could be seen; on the other side the Gángri mountains stretched north-westward, their snowy summits visible for many miles, (up to Misar perhaps, 30 miles distant), and the road to Misar and Gartokh lies along their base, which merges into the Lajandák valley by inferior hills. The Gángri range continued also far to the eastward, rising out of a wide green plain, which extended between the base of the mountains, and the northern shore of both lakes being visible from this as far as the low hills on the north-western corner of Mánasarowar. The Lhássa road lies along this plain. The most remarkable object here was Kailás, now revealed in full proportion to its very base, rising opposite (northward) straight out of the plain only two or three miles distant. The southwest front of Kailás is in a line with the adjacent range, but separated on either side by a deep ravine; the base of the mass thus isolated is two or three miles in length perhaps; the general height of it, I estimate to be 4250 feet above the plain, but from the west end the peak rises some 1500 feet higher, in a cone or dome rather, of paraboloidal shape; the general figure is not unlike that of Nanda Devi, as seen from Almora. The peak and the upper part of the eastern ridge were well covered with snow, which contrasted beautifully with the deep purple color of the mass of mountain below: the stratification of the rock is strongly marked in successive ledges that catch the snow falling from above, forming irregular

bands of alternate white and purple : one of these bands more marked than the rest encircles the base of the peak, and this, according to the Hindu tradition, is the mark of the cable with which the Rákshasa attempted to drag the throne of Siva from its place. Fragments of a dark purple stone strongly resembling in color the rock of Kailás, which I found on the shores of the lake, were a sort of rough jasper. The openings on both sides of Kailás disclose only more mountains in the rear ; the western ravine appears to be two or three miles deep ; the back of the eastern recess is occupied by a fine pyramidal mass rising in steps of rock and snow, with a curious slant caused by the dip of stratification (to the eastward). I conjecture the average height of the Gángri mountains to be about the same as the eastern ridge of Kailás, 4250 feet above the plain, i. e., 19,500 feet of absolute elevation above the sea, of which only the uppermost 1000 feet, or so, was now tolerably well snowed, and the eastern summit of the peak of Kailás, may be 1,500 feet higher, i. e. 21,000 feet ; at sunset I had a proof of its inferiority to Momonangli, the snowy top of which was illuminated a minute or two longer than Kailás. But in picturesque beauty Kailás far surpasses the big Gurla, or any other of the Indian Himálaya that I have seen ; it is full of majesty, a King of mountains.

On a ledge in the base of Kailás, about the middle of the south side, is Gangri, by the Hindustánis called Darchin. I could distinguish nothing in the site pointed out to me : the buildings are few and mean, I believe, and the place of no note except in the way of religious resort, the concourse of pilgrims also attracting a little peddling trade in the summer.

Moorcroft, 3rd August 1812, found here "four houses of unburnt brick or stones, and about 28 tents," to which may be added the Gumba of Gyangtang.

Through the ravines on either side of the mountain is the passage by which the pilgrims make the *parkarma* ; the circuit is performed in two days by those who take it easily, but with more exertion it may be done in one day. There are four *Gumba* on the road, viz. 1st, *Nindí*, in the western ravine, on the right bank of the Sarchu, and immediately opposite the Peak of Kailás ; this is the principal shrine and the head-quarters of the Lho-ba Láma. 2nd, *Didiphu*, which is further up the ravine of the Sarcho : thence the pilgrim road crosses

Dolmala, the ridge of the mountain behind the Peak, on which is a small pond which the Hindustanis call *Gauri-Kúnd*; the ridge is high enough to have snow upon it early in the summer. Thence the road descends to the 3rd Gumba, *Jungdulphu*, in the eastern ravine. The 4th is *Gyantang*, in Gángri, already mentioned. The Sarchu, which comes from the western ravine as before observed, flows past Changchung into the channel of Lajandák, contributing to the Tírhápúri Satlej. This was not noticed by Moorcroft, apparently, on his way to Gángri, 3rd August, but it may be the "small river" at which he encamped on his return, 11th idem.

From the south face of Kailás, close above Gángri, rises a considerable stream, which the Bhotias called *Lá-chu* (i. e. the mountain river), falling into Cho Lagan, 3 or 4 miles to the south-east of its northern extremity. Moorcroft describes this stream, 3rd August, as crossed by a Sánga just below Gángri, and originating in a cascade close above; and 11th idem, he calls it the Darchan-gadrah, a mere Hindustani generality. From the ravine east of Kailás comes another considerable stream also debouching into the lake a mile or two east of the Lá-chu; I could get no other name for this than *Barka*, which is on the right bank of it somewhere in the plain between the mountain and lake. This Barka is the third "*Tarjum*," i. e. mail station, on the Lhasa road from Gartokh. There is no village, but a standing camp of a tent or two, for the couriers. On Moorcroft's return from Mánasarowar, 8th August, he encamped "near 7 or 8 tents;" 3000 paces further east he noticed "tents of Tartars and Jwaris;" and somewhere between the two encampments, "a watercourse, dry when he went towards Mánasarowar, but now two feet deep;" one or other of these possibly was Barka.

These two streams, La-Chu and Barka are the only permanent affluents of Cho Lagan from the Gángri mountains. Moorcroft, 10th August, makes many more, with Hindi names, but that enumeration of his must be set aside, being derived apparently from the report of his Hindustani companions, and not agreeing with his own account of the streams actually crossed on his route along the northern shore of the lake: nor indeed do his accounts of streams crossed going and returning by the same route, agree, inter se.

In attempting to find a channel of effluence from Cho Lagan, Rechu

and I, following two of the Bhotias who were equally ignorant of the place, went a good way westward towards Changchung and were floundering about the swampy ground for a long while seeking in vain for the channel that did not exist, till at last we perceived that the rest of our party, with the baggage, &c. had already turned the northern extremity of the lake far behind us, and were now proceeding eastward along the northern shore: we followed, and joined them by dark. The Bhotias affirmed that Barka Tarjum was too close to the bank of the lake to be passed by daylight without risk of detection, particularly if the Garpun should be encamped there with a concourse of people, as we had been informed by the shepherds of Chujia Tol on the 2nd instant. It was resolved therefore to pass Barka by night; and in order to make it later and safer, we halted for an hour, a mile or so east from the northern point of the lake. We were then so far north of the shore that water was not accessible; fuel also was very scarce; so instead of dinner or tea, I had to content myself with biscuits, port-wine (both very bad), and a cheroot. My port-wine in the wooden decanters had got sour enough by this time, and nastier than ever.

At 8½ P. M. we resumed our journey, course somewhere about south-eastward, as well as I could judge from the moon, and the great land marks Kailás and Gurla. The ground became very sandy, and undulated into ridges and hollows which reminded me of the bank of the Ganges. Three or four miles of this brought us to the La-Chu, which we found a very large stream, in the aggregate I suppose 150 feet wide and at deepest 3 feet, running through a sandy bed here a furlong broad, but expanding with much subdivision of the stream towards the lake. The passage proved extremely troublesome and occupied us near half an hour: the sandy bottom was soft under the main streams of running water, and frozen in the shallows, so as to afford footing for an instant, then breaking suddenly under the feet of the cattle and plunging them knee-deep at each step; it was without exception the worst ford I ever crossed. Two miles further on, in the same direction and over the same sort of ground, we reached the Barka river, which was like the other, but a third smaller in width and depth. The ford was not quite so troublesome as the Lá-Chu but the cattle showed the greatest reluctance to attempt it. We could neither see nor hear any thing at all of the Tarjum, being in all probability a mile or two below it, and

as the lake was also out of sight, perhaps a mile off, Barka must be two or three miles above the shore, instead of close upon it, as the foolish Byánsis had asserted, and the same might be inferred from the relative direction of the Lhassa road and the north-east shore of the lake. Crossing the Barka river we continued, rather more southerly perhaps, over ground still sandy but now remarkably flat and level, with a straight dyke-like ridge some 100 feet high close above our left, and the lake visible again on our right, perhaps $\frac{1}{2}$ mile distant. This continues without any variation whatever that I could see for six or seven miles.

5th October.—At $1\frac{1}{2}$ A. M. being at a safe distance from Barka and all of us pretty well tired, we bivouacked for the rest of the night. With a *Baku* and *Chera* for bedding I found it miserably cold, and suffered great pain from my *Lam* (snow-boots) which were damp from walking over wet ground and seemed to be nearly freezing on my feet. I had kept them on, as I thought for warmth, but got no rest till I divested myself of them. At sunrise, finding ourselves on very bare ground with water distant and fuel scarce, we started again, in quest of a better encamping place further on, and one that would command a full and close view of Mánasarowar. The margin of Rákas Tál was now a mile from our road, circling off to a headland, the north end of the projecting rocky bank, which occupies the middle of the eastern shore, as noticed from the opposite side. The ridge of high ground on our left began to break into irregular hillocks. A mile on, we came to a large stream 100 feet wide and 3 deep, running rapidly from east to west through a well-defined channel: this was the outlet of Mánasarowar. It leaves that lake from the northern quarter of its western shore, and winding through the isthmus of low undulating ground, for four miles perhaps, falls into Rákas Tál in the bight formed by the projecting headland above mentioned. Two or three miles to the eastward, we saw the back of an odd looking eminence, in the face of which was Ju Gumba, a Láma-shrine on the west bank of Mánasarowar, and on the north bank of the *Nikás*. I could see nothing of the Gumba itself. Having forded the river, the deepest we had yet crossed, we ascended a little on to higher ground broken into easy undulations; course still south-easterly. Here we passed sundry pits said to be the remains of extinct gold mines, the working of which was stopped

by some sage auguries of the Lamas, an interference that is often exercised by the priests in this country, where superstition is at a premium and gold at a discount. I saw a few Kyang hereabouts.

On the top of the high ground, we came in sight of the further part of Mánasarowar, and thence descending a little, reached the middle of its western shore, five or six miles from the point where we had crossed its outlet. At 9 A. M., we encamped under cover of a steep bank, close above the edge of the lake, and halted here for the rest of the day, man and beast being somewhat fatigued with the long march of the preceding day and night.

The Hunia name of Mánasarowar is *Cho Mápán*. In general characteristics this lake is very like Lagan, but so much more compact in form that our position in the middle of the western shore commanded (what we could not get, from any point as yet visited, on the shore of Rákas Tál), a complete view of the entire lake, excepting only the extreme western edge of the water which was concealed by the declivity of the high bank on which we were stationed. The figure of Mápán is, as stated by Moorcroft, an oblong with the corners so much rounded off as to approach an oval; the longer diameter lying east and west. To avoid the possibility of exaggeration I assent to Moorcroft's estimate of its size, viz. 15 miles in length (E. and W.) by 11 in width (N. and S.) though it appeared to me somewhat larger; I think this would give a circumference of some 45 miles, at the water's edge; divided by the eye into four quadrants, each of them seemed, as well as I could judge, a moderate day's journey of 11 or 12 miles, which agree with the accounts of pilgrims who make the *parkarma* usually in 4, 5, or 6 days, according to their stay at the several Gumba and other circumstances. Bhauna tells me that Chakwa, ex-Garpun, made the *parkarma*, (as he himself informed Bhauna) in six days, on foot, as all pilgrims do, by way of *Dharm*. As the Garpun could have been little used to walking, it is not improbable that he was content with a daily march of 7 or 8 miles, 6 of which would make the circuit, as estimated, about 45 miles. Mápán is bounded thus; westward by the hilly ground that separates it from Lagan, of no great height (averaging 250 feet perhaps), but rather steep towards the lake, and apparently leaving little level shore on the margin excepting at small bays here and there. The northern bank begins in a ridge of high ground rising precipitously

from the water's edge, and extending along four or five miles of the west end, the "face of the rock," noticed by Moorcroft in his walk round the north-west corner of the lake, "in many places near 300 feet perpendicular." Thence eastward the shore is a plain three or four miles wide, sloping down from the base of the Gángri mountains, which rise behind in a continuous wall. This ground appears to be a continuation of the plain on the northern shore of Lagan under Kailás, passing without interruption, or with a slight rise perhaps, behind the ridge of hills above mentioned. Moorcroft, 8th August, estimates the valley of Gángri to be 12 miles broad and near 24 long: that length may be right, but the breadth is not clear; if the 12 miles be intended to include the whole basin of the two lakes it is considerably under the mark; and the mere plain between the Gángri mountains and the northern shore of the lakes cannot average any thing like that width. Moorcroft was then encamped (as I conjecture) in the vicinity of Barka, and he possibly estimated the breadth of the plain from its appearance at that point, where it is certainly very much widened by the southing of the eastern shore of Rákas Tál. At the north-east corner of Mápán the level ground is widened by the rounding of the lake; it looked greener than the rest, as though irrigated by streams of water, and is said to be pasturage occupied by *Déng*, &c. This was noticed by Moorcroft as "a plain at the foot of elevated land . . . to the north-east." On the east side of the lake rise hills and mountains sloping down to the water's edge with more or less margin of level ground at the bottom. The northern half of this range is mere hill of no great height, connected at the north end with the base of the Gángri mountains, and on the south joining a cluster of mountain, that occupies the southern half of the lake's eastern shore: the latter was well topped with snow and seemed as lofty as the lower parts of the Gángri range. The south end of this mountain was connected with the base of the Nipál snowy range by a ridge of inferior hills, behind which rose another mountain very similar to the first, but not so far detached from the Himálaya. These hills preclude any distant prospect to the east of the lake, in which direction nothing more is to be seen than the crest of the Gángri range on the north, and of the Nipál Himálaya to the south; both appear to make a good deal of southing; and the Gángri range, is terminated twenty or thirty miles off either by actual subsidence in height,

or by change of direction to the northward, or by both of those causes perhaps. On the south side of the lake, (which Moorcroft observes to be "bounded by immense mountains,") in its eastern half, rises sloping ground, then hills, and behind all the Indian snowy mountains, a blank dismal chaos, in appearance rather broad than lofty, the further end receding southward, and the nearer advancing towards the lake, till it terminates in Momonangli. This great mountain occupies all the western half of the lake's south bank; its upper and greater part a vast towering mass of pure snow, the base in earthly mounds, almost bare of verdure, sloping right down to the water's edge. The isthmus of low hilly ground that forms the western boundary of the lake joins the foot of Momonangli. The view which I here obtained of Mánasarowar confirmed my belief of the accounts of native informants, which all agree in stating that the lake has no other affluents than a few unimportant streams rising close by in the surrounding mountains, and but one effluent, that communicating with Rákas Tál, which we crossed this morning. The two lakes are placed together in a basin, girt about by an enceinte of hill and mountain, from which the only exit appears to be at the north-western extremity opening into the valley of Lajandák.

The outlet (Nikás) of Mápán leaves the lake from the northern quarter of its west side. I was much puzzled to account for Moorcroft's failure to find the mouth of so large a stream as that we forded this morning, till at last I heard on good authority, that the entrance of the channel is completely closed by a large bar of sand and gravel, continuous with the shore of the lake, and the effluent water runs through this in a copious stream. He thus describes the very point he was in search of, and passed without knowing it: "As the bank approached this angle (i. e. the north-west), it declined to gentle elevations leading to interrupted table-land, and at its base was a large bay, from the bottom of which rose a pyramidal red rock connected with a ridge of high land to the higher flats on the north and steep towards the south: upon this was the house of a Lama and many Gelums, &c. &c." That was Ju-Gumba, with the outlet immediately under the south-west side of it concealed merely by the bank upon the edge of the bay.

It is a pity that Moorcroft did not get the company of some intelligent Hunia (as he might easily have done), who would have explained

all such matters as this, and have removed many other doubts and errors in the course of his explorations.

The permanent affluents of Mápán are three or four. First, a stream rising in two branches from the Gángri mountains, and falling into the lake at the eastern quarter of its north side; the second also from the Gángri range, a few miles further east, entering the lake at the north-east corner: at the very same point is the mouth of the third stream, which rises in Hortol, behind the mountain which I noticed at the east end of the lake, and flows round its northern base. The presence of these three streams accounts for the greater verdure which I observed in the ground above the north-east corner of the lake. Sítáling is the name of the pasture ground on the bank of the second river, through which the Lhássa road passes, and thence along the north bank of the third. The fourth affluent is doubtful: a stream possibly comes from the Nipál Himálaya into the south-east corner of the lake, but of this I could get no certain account. In the summer season there are many temporary streams from rain and melted snow, and it was probably one of these that Moorcroft saw, and called the "Krishna river," on the south-west corner of the lake.

There are eight *Gumba* on the banks of Mápán, viz. 1st, Tokar, somewhere about the middle of the south side; this is sometimes called a village, but it is a mere monastery somewhat larger than the others.

2d, Gusur, at the southern quarter of the east end.

3d, Ju, at the northern quarter of the east end, on the north bank of the Nikás.

4th, Jakyab, at the western quarter of the north side, where the high bank terminates; this probably is the "house inhabited by Gehums," with "terraces of stone with the usual inscriptions," near which Moorcroft encamped 5th to 7th August, 1812, and which figures in the old maps (after Hearsay?) most unduly and exclusively, as *the* "Lama's house."

5th, Langbuna (i. e. elephant's trunk), in the middle of the north side.

6th, Bundi; at the north-east corner, between the 1st and 2d affluents.

7th, Sárálung, in the middle of the east end; and 8th, Nunukur, at the south-east corner of the lake.

I could see none of these from our camp, nor did I think it prudent

to visit the nearest. The exterior view of those which Moorcroft saw (Jakyab and Ju), exhibited nothing but huts pitched on steep banks, and their main interest, I imagine, consists in our ignorance of them.

The water of Mápán is quite clear and sweet, and in mass of the same fine blue color as Lagan. In picturesque beauty the eastern lake is hardly equal to the other; its uniform outline being comparatively dull and monotonous, the surrounding hills blank and dreary, and the gigantic grandeur of Gurla less pleasing perhaps than the majestic beauty of Kailás. The Rákshasa have got, in my opinion, the better quarters of the two.

The depth of these lakes is possibly an average of 100 feet or so, and double that in the deepest places.

I saw no signs of animal life on Mápán, the *Mánasaucas* must have taken their departure for their winter quarters in India; Moorcroft saw numbers of them here in August (1812).

Thermometer in the sun at noon rose to 120°, part of which must have been caused by reflection from a *Baku* (of white woollen stuff), against which the instrument was placed, but in the course of this expedition, I had often found the noon-day sun unpleasantly intense.

At 3 P. M. Thermometer in shade 46°, boiled at 186°; elevation of the lake, which was some 175 feet below our camp, 15,250 feet.

Bhauna and Anand bathed in the lake, by way of *Dharm*, and not at all for cleanliness, which, as good Kumáonis, they duly set at nought.

In the afternoon I began to moot the *Parkama* of Mánasarowar; and suggested the feasibility of doing it in 3 or 4 days, myself with Bhauna and one Bhótia, taking only two of the Zhobus, without tents, bedding, or kitchen, leaving all the rest of the party and baggage to wait our return. Bhauna made sundry hollow professions of readiness to accompany me to Lhássa, or Peking, if I wished to go so far, but I observed him in fact putting excuses into the mouths of the Bhótias, who were all quite aghast at the idea of thus wantonly adding to aimless risk and trouble, as they considered my expedition from beginning to end. Rechu declared that they had already "*Margaye*" to a greater degree than on any former occasion of their many visits to Húndés, and that the execution of my plan alone was wanting to make a calamitous end of them altogether.

My estimate of the risk of detection was not a tenth part of what

they made it, and of the consequences, if we were detected, not a hundredth (for they talked of getting hanged!); but with such discontented and dispirited companions, I had little inducement to incur the further hardships which the proposed digression would have entailed upon myself; and the circuit of the lake after all promised no other result than a little nearer approximation to the true figure and size of its outline, and to the exact position of the few unimportant affluent mountain streams, and of the several *Gumba* round the bank. Putting together Moorcroft's observations, my own, and the reports of native informants (the best of which I have embodied in my account), I think the geography of the lakes is fixed in the rough, beyond all reasonable doubt, though my map cannot pretend to topographical accuracy.

In the evening, Rechu, with a well assumed air of distress, reported that both the ponies had strayed from our camp, and one of the *Bhótias* in search of them for the last hour not yet returned. I have a strong persuasion that this was a contrivance of my worthy companions to put a spoke in the wheel of my *parkarma*; for being rather sulky, I had not yet informed them of my consent to abandon that design: their clumsy artifice would certainly not have stopped me, if I had resolved upon it, as my own plan had been to go without the horses, riding one of the *Zhobus* when I could not walk.

Thermometer at 9 P. M. 30°.

6th October.—The ponies not yet found, reported Rechu this morning, either to make sure (as he might think) of me and my *Parkarma*, or to preserve the vraisemblance of his own stratagem; and besides the *Bhótia* already detached two others had walked off, as they pretended to enquire for mutton at Tokar, but in fact more probably straight back to *Byáns*, for they never showed themselves again to the end of our journey. Rechu also stayed behind to make further search for the horses, according to his own story. We saddled two of the *Zhobus*, distributing their loads among the other four, and the rest of us then started for *Pruang* at 8:20 A. M.; course west of south. Descending from the high bank we entered on a small bay of the lake, now half dry, with great quantities of efflorescent salt (carbonate of soda, I think,) about the swampy grounds. There were two unfortunate *Hunias* here who seemed to avoid us with alarm as though they expected some maltreatment; they took us for *Khampa*, perhaps. Crossing this bay we

ascended on the high bank again, and then fell into the high road between Pruang and Gángri, which is nothing more than a wide and well beaten track over hill and dale. Four or five miles brought us in view of what appeared to be the south-western corner of Mápán, which was rounded off with shallow water; a concentric bar of shingle-sloping beach, and then steep hills, connecting the ground on which we were travelling with the base of Gurla. There was no sign of any affluent stream in this quarter, and the nature of the ground precludes an effluent. Continuing along the ridge, and inclining gradually from the east to the west side of it, we came in sight of Cho-Lagan again, viz. the south-eastern quarter of it which forms a large bay under the foot of Momonangli. By an easy descent we reached the shore, and 1½ p. m. halted at Lagan-Tunkang, which is, or was, a Dharmshála close upon the water at the south-east corner of the lake; it now consists of some roofless and ruinous walls built of shingle stones embedded in mud; the roof is said to have been burnt by the Sikhs under Zoráwar Sing, who passed this way during winter and were hard up for firewood. There is rather a marine looking beach here with concentric ridges and shingle showing variations in the water level to the extent of six feet perhaps, above the present surface: the shingle and sand are mostly granitic, and the former partially rolled; only the southern half of Lagan is visible from the Tunkang, the northern part being hidden by the projecting hilly banks which I noticed from the other side occupying the middle part of the lake's eastern shore. The extreme breadth of the lake at this its widest, may be eleven miles or thereabouts, equal to the middle breadth of Mápán. The south-western bank had the same steep profile and irregular indented outline, as viewed from the other side, and the little islands were visible again. Gerard was misinformed about the island in Rákas Tál with a monastery on it: there is nothing of that sort I believe: as the Hunias have no such things as boats here, the only access to these islands, is by the ice when the lake is frozen over in winter, and they are then sometimes visited by shepherds in quest of fresh pasturage. There is a story, true or not I cannot say, of a shepherd having thus taken up his quarters on one of the islands, and not being alert enough on the approach of spring and thawing of the ice, his communication was interrupted before he could effect his retreat to the shore; he was thus

imprisoned for some nine months, and had to live the best way he could upon his sheep, till released by the formation of ice again next winter ; a miserable and dangerous situation, comparable to that of the Jwári Bhótia, who was snowed up for a whole winter at Topi Dúnga, a dismal pit between the two formidable passes of Kyúngar and Unta-Dhúra.

At 2 P. M. we left Tungkang ; course south-westerly, crossing a mile of flat ground upon the south-east corner of the Tál, with a large ravine running through it from the foot of mount Gurla, full of granitic shingle, but without water. We thence ascended high ground connecting the base of Momonangli with the range of hills that forms the south-western boundary of Lagan. The eminence is many miles in breadth, undulated into a number of ridges and hollows, and attaining an elevation of 100 feet perhaps above the level of the lake, at the highest part crossed by the road ; but further west the hills are higher than that, and partially tipped with snow. We were nearly 4 hours crossing this hilly ground, something impeded by a very strong south wind blowing in our teeth ; towards sunset, we descended into a sloping plain, the head of the Pruang valley.

Gurla rose close upon our left, on our right and rear was the southern face of the hills of Lagan, which here range east and west for a few miles ; in front rose the Byáns Himálaya in dark steep slopes with the snowy summits towering behind, and close below ran the Karnáli, hidden in a deep ravine. Projections of the mountainous enclosure concealed the opening of the valley from Chujia Tol on the north-west and to central Pruang on the south-east. This valley of northern Pruang forms an acute triangle, of which the base and smallest side, is marked by the hills of Lagan on the north ; the two longer sides by the base of Momonangli on the east, and the Karnáli at the foot of the Byáns Himálaya on the west ; the apex of the triangle being southward at the entrance of middle Pruang. All this ground, though flat in the gross, has a sharp slope towards the Karnáli, and drains into the river by a multitude of deep ravines rising from the base of mount Gurla, and one or two from the Lagan hills. In the middle of the valley, a mile or two from its north end, a singular little isolated hill rises from the plain ; apparently the same that I saw from the valley between Lámá Choktán and Chujia Tol on the 2nd instant.

We had to cross a mile of very rugged ground covered with a flood

of granite shingle from the foot of Momonangli; the road said to have been made over this by a certain Láma, being nothing better than a width of a few feet, very indifferently cleared of the larger stones, which have been thrown to the sides of the path; numerous large water courses, which in the summer contribute streams to the Karnáli, were now all dry. We encamped in one of these at 6½ P. M.; night and fatigue obliging us to halt notwithstanding the want of water, I had to dine again off biscuits and cheeroots.

7th October.—Thermometer at sunrise 16°; ground and tents covered with hoar-frost; hitherto I had seen little or no dew in the mornings; the increase of moisture in the air here is brought perhaps by the south wind blowing up the valley of the Karnáli from the Indian side of the Himálaya. This place is probably about the same elevation as the lake, i. e. 15,250 feet.

Rechu and the other Bhotia made their appearance early this morning, bringing the ponies with them. Yesterday, Anand lagging behind the rest of us on the march, saw two horsemen in the distance, probably these very worthies of our own party following at our heels as near as they durst.

We started at 7¼ A. M., course south-westerly; 3 miles on crossed a very wide ravine full of granite shingle and large enough for a considerable river, but at present there was a small stream only: on the left bank is a ruined Dharmshála hight Baldak, like Lagan Tunkang, and strewd about with bones said to be the remains of the cattle which perished here in the flight of Zoráwar Sing's party from Gángri to Pruang. Three or four miles down, and little above its entrance into the Karnáli, this ravine is joined by another from the northward, (one of those we crossed yesterday evening), and in the angle of ground between them stands Kardam, one of the three *Khar* or Forts of Pruang, and a large village, the highest up the valley; the fort is said to be in a ruinous, or at best neglected condition, without garrison, though nominally kept by a "*Zungpun*" of inferior rank (a *Kharpun* probably). Our route continued with very little variety over ridges of high ground, alternating with stony ravines, for the most part dry. We could now see many miles up the valley to the north-westward, the head of which under Chujia Tol we had crossed on the 2nd instant; but there were no points of particular note about it. Five or six miles

below Baldak, the narrowing of the Pruang valley brought our road within a mile and a half of the Karnáli. On the top of the opposite bank stood a small village, Dunsála, on a ledge of flat ground under the Byáns mountains; the depth of the channel concealed the river and two other villages on its left bank, Dumar and Hárkáng, through the former of which passes the road from Taklakhar to Kardam, &c. Three miles further down we entered a ravine with a small stream falling into the Karnáli not a mile below. The river here seemed to take a turn to the south-eastward after receiving a western branch through a deep ravine from the Byáns Himálaya. We were still close under the base of the huge Momonangli, the snowy top of which was almost hidden by the lower outworks that rise in steep earthy mounds with little precipitous rock, which is very much the character of all the mountains hereabouts on the north side of the Himálaya. Pruang has got a reputation, amongst our Bhotias, for great fertility; and with diligent cultivation it doubtless may produce some scanty crops of barley and peas, but its advantages in this way can only be by comparison with other places still more sterile than itself, for I can assert that the upper part of the valley, at least thus far, is barren in the extreme; indeed it seemed more destitute of vegetation than any of the low ground I had yet passed over, and the "Dámá," goat-thorn, still the sole shrub, was certainly much scarcer, though perhaps from the consumption of it for fuel by a dense population. At the best however, upper Pruang cannot compare in natural fertility with the most sterile of the inhabited parts of our Cis-Himálayan Alpine valleys, such as the vicinity of Kúnti in western Byáns, or of Milam in upper Jwár.

We now halted at 1 p. m. and encamped for the rest of the day, having approached as near as was safe (or according to the Bhotias, much nearer) to the large village of Toiyon. The road to Lípú-Lekh, the eastern Byáns pass, lay through the very middle of this, and other thickly inhabited ground beyond under Taklakhar, which we thought it advisable to pass by night.

In the course of this morning's march we had passed some native travellers on pilgrimages from Kajarh, with whom we exchanged salutations, and shepherds grazing their flocks in the hollows along our road. Our present encampment too was close below a *Dáng* in the same ravine; but we were not troubled with particular notice from any of these quarters.

Thermometer at 2 P. M. 56°, boiled at 187°; elevation 14,750 feet. Kardam-khar is probably about 15,000 feet. Thermometer in the sun rose to 76°. The south wind blowing up the valley of the Karnáli was disagreeably strong, though I am not sure that the temperature of the air was depressed thereby.

Our Bhotias went to the *Dúng* for milk and mutton: the shepherd was very stingy with his milk, but I got just enough to qualify half a lota of tea, which was the most, and perhaps the only, refreshing draught that I had enjoyed since leaving Kúnti: hitherto I had subsisted on Bhauna's decoction, which was made with a liberal mixture of ghee. The Bhotias make their tea with soda (*Bal*), which extracts the color, and, as they fancy, the taste of the trash they get from the Lhássa merchants at Gartokh; the decoction, which is boiled for a long time, with plenty of ghee also, tastes more like broth than tea. In the matter of mutton, the Bhotias insisted on bringing goat, which I rejected. The Tibet goat is the most elegant of his tribe, small and handsome as a deer; but his virtues reside rather in the fleece than in the flesh.

We resumed our journey at 7-40 P. M., course east of south; a bright moon little past the full rising soon after, gave me a fair view of the principal objects in the vicinity of our route.

Leaving the ravine in which we had been encamped, we crossed a mile of high ground, and then entered another ravine wider and deeper than any we had yet crossed in the Pruang valley: a steep descent of some 500 vertical feet, brought us into a flat bottom half a mile broad covered with a profusion of rough granite shingle, of which a very indifferent clearance had been made for the road. The length of the ravines was inconsiderable, the foot of the mountain being hardly a mile from our left, and the Karnáli a furlong below our right. For want of light perhaps, I did not see the houses said to stand on the river bank, but our road passed through fields belonging to the village, and channels for the irrigation of them.

It was on this ground, the ravine of Toiyon, that the Sikh invaders of Gnari under Zoráwar Sing met their well deserved end. After having mastered the whole province, and established himself in Pruang, Zoráwar took it into his head to go to Gángri with the greater part of his men: when there they were surprised by the arrival of the relieving army of Hunias from Lhássa, and attempting to effect a retreat, a

flight rather, to their position in Pruang, they were here overtaken and destroyed, but more by want and cold, for it was the middle of winter, than by the prowess of the Lhássa army, who were probably a viler rabble, though far more numerous, than these bastard Sikhs, the refuse of the Jamu hill districts. The Sings well earned their fate by the indiscriminate robbery and violence which they perpetrated on the unoffending Hunias of Gnari: ruined villages and impoverished people still shew the brand of their devastations throughout the country.

On the south side of the ravine ran a good sized rivulet, crossing which we ascended the left bank, here not more than 100 feet high, but rising to double or treble that elevation by high ground close upon our left, (eastward). On the corner of level ground, some half a mile wide, between this hill and the Karnáli, stands the village of Toiyon, straggling loosely over the next mile of the road: there are houses also on the eastern eminence, besides the hamlet, which we passed on the other side of the rivulet. The greater part of the area I have assigned to the village is occupied by the fields, amongst which the houses are scattered here and there, singly or in small groups: I could see nothing in the shape of a street excepting the rows of Choktán walls and towers, ruinous inelegant structures of stone and mud, that lined the road in considerable numbers: none of the houses were within a hundred yards of our road and most of them further, so that I could see little of their construction, but they seemed to be rather long than lofty, with very few doors or windows, the walls whitewashed, and crowned with dark lines, which from their low shallow appearance could be coverings to the walls concealing a flat roof to the interior body of the house. Bhauna explains that the houses are built in hollow squares, two-storied, with a flat terrace roof above, which is dignified with the name of a third story: the apartments are ranged round an open court in the centre, to which all the windows are directed, a single doorway in the middle of one side, being the only aperture in the outer walls. This construction, however, is by no means universal in Hundes, for at Dúngpú in Gugi, I myself saw numbers of houses quite open to the front, though otherwise as above described, and very like the dwellings of the Byánsi Bhotias. The dark summits of the walls, are the copings formed by layers of *Dámá*, *Hompu*, or other brushwood laid upon the top of the parapets and weighed down by stones.

Turner (Chapter VII. Teshoo Loomboo) was at a loss to understand the object of this crowning to the house walls which he found equally prevalent in the province of Chang; in Gnari it is intended merely as a coping to protect the walls from rain and snow, flag-stones suitable to that purpose being rarely procurable. The annual renewal of these cornices, together with a general repair and ornamenting of houses, forms one of the observances of the "*Lo-sar*" festival, the Tibetan new-year's day, which many possibly have some affinity to the new year's day of China, the principal festival of that nation. The ground-floors of the houses here are appropriated chiefly to cattle and whatever else cannot find room in the dwelling apartments of the family in the upper - story.

We heard and saw some signs of life indoors; musical noises and voices, lights and shadows; but ourselves passed unnoticed except by the dogs, who did their best to give the alarm.

The harvest here, which is mostly barley and peas, had been all reaped and carried; the fields were quite bare, but showed marks of careful tillage, being intersected with a multitude of artificial watercourses for irrigation. Pruang is in advance of Byáns with its harvest: this must not be attributed to superior temperature of climate, but rather to the greater amount of sunshine enjoyed by the former, the valley being more open, and the far smaller quantity of rain and snow on the north side of the Himálaya, and something I believe to the palpable neglect of the Bhotias in their agriculture, which they postpone to their trading affairs, leaving the tillage of their fields almost entirely to their women.

The elevation of Toiyon may be estimated at 14,500 feet, viz. 250 feet below our last encampment.

This village is the head-quarters of one of the three *Makhpun* of Pruang, who are the hereditary superiors of as many small circles of villages, responsible for collection of revenue and keeping of the public peace, but entirely subordinate to the Zungpun of Taklakhar.

Beyond the village was an easy descent for a mile, but the road very stony, by which, after crossing a small rivulet, we reached the left bank of the Karnáli.

The river here appeared to be about as rapid as the Káli in the middle of Byáns, and in width such as to be spanned by a Sánga, 50 feet long from pier to pier, and of the construction common on the

south side of the Himálaya, but more carefully built than any I have seen in Kumáon. Probable elevation of the bridge (200 feet below Toiyon) 14,300 feet.

The right bank of the river rises abruptly to the height of two or three hundred feet; above the bridge in cliffs of conglomerated earth and shingle, with Láma caves in them, overhanging the river; and close below in steep slopes and landslips up which we ascended. The top was some 250 feet above the river, and for a mile in length an open level with higher ground rising on our right (westward). Here on the roadside occurred a line of Choktán wall and towers, remarkable chiefly for its extreme length, which was not short of a furlong I suppose, and exceeding any I had yet met with. At the end of this elevated level we crossed a very deep ravine connected with the bed of the Karnáli, beyond that a ridge of high ground, and half a mile further on a second ravine like the first, ascending from which we wound over the shoulder of a steep rounded hill which sloped down to the river on our left (eastward) to the depth of 250 feet below the road, rising as much above it on our right (westward). The hill side was here and there broken into small cliffs and prominences; the top was studded with a moderate assemblage of houses like those of Toiyon. This is Takla-khar, by the Hindustanis called Takla-kot, which is a fair equivalent, as "*Khar*" signifies a fortress: the fort however was not visible to us. Half a mile from the last ravine brought us to the south side of the hill, which is formed by the Tidya-Chu, a very deep and wide ravine with a river coming from the westward out of the mountainous base of the Byáns Himálaya. On the northern corner of its confluence with the Karnáli, is the village of Beli, whence the inhabitants of Takla-khar have to fetch their water, the hill above being destitute of it. The south side of the hill is very steep and ruinous, being little better than a great landslip strewed with fallen masses of the conglomerate (earth and shingle) that forms the more solid parts of the soil. We descended by this and forded the Tidya-Chu, a very considerable stream not far inferior I suppose to the main branch of the Karnáli.

Ascending the right bank, which was steep and some 200 feet in height, we found a pretty extensive level on the top, entirely occupied by fields, like those of Toiyon, quite fallow and scored all over with channels for irrigation. These marks of irrigation point to the fact of

the great dryness of the climate in Pruang, compared with that of the neighbouring Cis-Himálayan Alpine valley, in which the natural rains during the summer supply abundance of water for all cultivation. The crops of Pruang are raised by artificial irrigation during the height of the Indian rainy season. From this ground we had a good, (moon-light) view of Takla-khar, which extended along the top of the opposite bank: the principal development of the place appears to be east and west, the extreme length in which direction may be a quarter of a mile; and to judge from what we saw of the east end, and from the descent of the buildings in parrallel terraces this side, its breadth must be inconsiderable; a mere strip along the top of a narrow ridge. I could see nothing of the Khar or the Gumba, which are the principal edifices; the former is said to be well built, with lofty walls and numerous apartments, capable of holding a thousand men; but the fortress has the fatal defect of being without water, the nearest supply of which is, as above mentioned, in the village of Beli at the bottom of the hill: there was once a walled passage communicating with this, but it is now ruined, and so far obliterated that I saw no vestige of it, as we crossed the east end of the hill. The Pruang Zungpun resides in the Khar, but without any garrison whatever. The Gumba is a large building adjoining to the fort, and stocked, they say, with some 300 of the monkish order. Many of the houses of the place belong to people of the neighbouring villages, and are used chiefly as depôts for their salt and grain, the traffic in which with the Bhótias of Byáns, and the people of Dhúli, Humla, &c constitutes the main resort to Takla-khar. The village, with its Khar and Gumba, may perhaps equal in extent the north-eastern suburb and bazar with the town fort of Almora. I estimate the elevation of the summit of Takla-khar to be 14,750 feet, viz. 500 feet higher than the confluence of the Tidyá-chu with the Karnáli.

Námi is a small village on the south bank of the Tidyá Pryág, where there are the remains of field-works made by the Sikhs under Zoráwar Sing, who (to command water I suppose) took up his position here in preference to occupying the fort above.

When he went on his fatal pilgrimage to Gángri, his Lieutenant, Basti Sing, with the remaining party, went over to Kirow, the district of the third Makhpun on the other side of the Karnáli, and thence after the

destruction of their commander and comrades, effected their escape by Lipu-Lekh into Byáns and Kumáon.

Our road now turned to the westward ; half a mile up the right bank of the Tidya-chu stood Maghram, a small village, of note only as being the residence of the second Makhpun, whose district, "Tidya," lies on the south side of the Chu. The elevation of Maghram is about 14,500 feet, being 250 above the bottom of the Tidya-chu.

"There was a sound of revelry by night," a noisy concert of singing and instrumental music, very like the oratoris of the Hindus, proceeding from the Haweli of the Makhpun ; perhaps, as Bhauna suggested, on the occasion of his son's marriage, which promised to come off about this time, and Pruang Zungpun might possibly be among the wedding guests. We saw dark shadows of men flitting across the lights through the open door. I longed to approach and look in upon the strange scene, which would have been rendered doubly strange by the sudden apparition of a "Feeling"* visitor, but the diversion was not worth the possible cost to my companions, if not myself. The Bhotias indeed, thought it unsafe to keep the road which passes close to the village, and we struck across the fields to the left under a range of hills, bounding the cultivated flat of Maghram on the southward. Two miles from the Tidya-chu, brought us to another ravine with a small stream coming from the south-westward, and entering the Tidya-chu a little above Maghram. Tashikang, is a hamlet on the west bank of the confluence. Three or four miles up the ravine we came to Pála, a *Dúng*, in which I observed a good collection of cattle and a few shepherds' tents, &c. Here the ravine divided into two branches from the south and from the west ; our road turned up the latter, called Ningri, where a mile further, on we halted at 3-40 A. M. 8th October, and being now close to the foot of the pass we bivouacked till morning.

This night I had fortified myself with an extra Chapkan and Pajáma, which with the excitement of the stolen march through the thick of the "Chinese Tartars," had kept me warm and comfortable enough : the first time I may say since leaving Kúnti, that I had felt any thing of the sort at night. The worst inconvenience I experienced this night was the difficulty of opening my watch to time distances, and of writing a

* The Tibetan form of "Feringi."

few pencil notes for my field book, &c., my hands being nearly disabled between cold and gloves.

This place, Ningri, is but a narrow ravine far recessed in the Byáns Himálaya, with little to be seen but bare walls of rock with glimpses of snowy summits behind. There was so little fuel forthcoming that I could not boil my Thermometer here, but the elevation may be estimated at 15,000 feet, 100 feet above Pála, which I reckon to be 500 feet higher than Maghram, the ascent up the ravines from that place being very moderate.

Bhauna, with Anand, now returned to Pruang to visit his friend Tidya-Makhpun, realize some debts and pick up the news. With the Bhotias I started for Byáns at 8.25 A. M. course westward (by south) up the Ningri ravine. We met several Hunias on the road with laden sheep, &c. and they stared at me with no little astonishment, as I now showed my face without reserve, but none of them presumed to ask questions, which were rather defied by the confident air of the Bhótias who had regained their courage now that the danger (such as it was) was over; among a party of Hunias I met "the man of Lamjung" again, who also recognized me with some surprise; he appeared to be doing a little in the salt and grain line in partnership with some Kham-pa. They asked three rupees for a puppy worth a timashi, for which I had offered a rupee.

Three or four miles of straight and tolerably easy ascent by a fair road (for these parts), brought us to the top of Lípú-Lekh by noon. Seven or eight hundred vertical feet of the summit was pretty well covered with snow, but this was for the most shallow and well frozen, or when otherwise, so beaten down by the traffic of men and cattle, as to make a very good path, over which we travelled without any difficulty. The sun was shining bright, but the passage of snow was not long enough to entail any injury from the glare, though that was of course considerable over the snow. The rarefaction of the air was sensible but no way distressing to any of us except the ponies, who seem to have very little endurance in this matter. Altogether, I found the ascent nothing more than a pleasant morning's walk, and that after an 8 hour's march through the preceding night. A Barometric measurement of this pass made by Manson, 14th October 1828, made the elevation

16,844 feet (Calcutta Gleanings of Science, April 1829), which appears to me rather in excess.

Lípú-Lekh, like most of the other passes, does not command any extensive prospect ; I saw nothing but low ugly looking snowy ridges on all sides, a partial glimpse of Gurla, and a spur of bare hills down below in the direction of Takhlakhar.

We met with several cut Pine trees near the top of the pass, in process of transport from Byáns to Pruang. Wood, both for carpentry and fuel is an article of regular traffic this way ; for Pruang, the upper part of it at least, is utterly destitute of trees ; as far as I could see down to Taklakhar the vegetation was of the scantiest sort, even Dáma bushes being rather scarce.

The descent down the south-west side of Lípú was long but not steep, and I found much the same quantity of snow on the north-east side. The road fairly made or naturally good, follows the right bank of the Káli, which rises in water courses under the pass. The spot marked on the map "Mandarin's Camp," I suppose to be the delta of level ground at the entrance of a ravine, with a stream coming from the eastward, which opens through the left side of the main valley three or four miles below the top of the pass ; this ravine had a wide level bottom near a mile long, terminated rather suddenly by steep snow-topped mountains, said to be impassable : its elevation, according to Webb's map, is 14,506 feet ; there is no vegetation here except grass and small herbs. The origin of the absurd name "Mandarin's Camp," may have been in the circumstance of a former Zungpun of Pruang having come here to visit Captain Webb, when that officer was surveying in Byáns (in 1816?) Deba Phúndu, the Pruang Zungpun who was relieved last year (1845) was the son of Captain Webb's visitor, and then a mere boy, accompanied his father on this occasion. He appeared to have derived a favourable impression from the interview, or the present of a fowling piece which terminated it, and when last in Pruang, in the office formerly held by his father, is said to have expressed his desire to renew the intercourse with any English gentleman who might visit Byáns. It is well for himself that he had not an opportunity of doing so, for any proceeding of the sort if known to his superiors would certainly have lost him his "*Zung*" at the very least.

I looked in vain for the great snowy mountain, which rises close above the left bank of the Káli between Lípú-Lekh, and the "Mandarins" ravine, as marked on the map under the name of "Koonlus," nor could the Bhotias tell me any thing about it. I have seen it, however, from the Deo Dhura, between Lohu-ghát and Almora, and its position must have been fixed by observation from some such distant points of view. The snowy summits, though towering to the height of 22,513, and 21,669 feet, are here quite hidden by the nearness of the steep and rocky base.

Below the "Mandarin's Camp," vegetation began to increase, first Dama and Juniper shrubs, then birch trees, and at last gooseberry bushes and the upper limits of Pine forest. At 3-20 P. M. having walked rather quick down the hill far ahead of the cattle, &c., I reached Yirkha, which is a small hamlet with one house and a few fields, on the right bank of the Káli, just above the confluence of a large stream coming through a deep ravine from the westward. The elevation of this place is near 13,000 feet, (I suppose that is), according to Webb's survey, which makes the Kálápání bridge some way lower down 12,742; but the vegetation appeared to me very luxuriant for such an elevation, and the village of Kúnti, which I made 13,000 feet, is more cold and sterile than Yirkha, and it must be 10 miles road distance from the top of the pass, though less in a straight horizontal line. Here I found quarters in the vacant cottage which, though low, dark, and dirty, felt absolutely luxurious after the miserable discomforts of my quarters in Hundes; and the change of climate was no less agreeably marked.

The pass which we had crossed to-day was a wonderful contrast to all the others that I have seen. A march of 7 or 8 hours had brought us, with nothing beyond a wholesome fatigue, from a passable encamping-place close above a pasture ground on the Húndés side, into a pleasant smiling hamlet, green with shrubs and yellow with harvest, in a sheltered Alpine valley, the bottom terraced for cultivation (here and there) along the river bank below.

Lípú-Lekh must be passable for the next month or two, if no fresh snow should fall in the interim, indeed, I can readily believe the passage might be effected safely even in the middle of winter, if not over-

severe, only with proper arrangements and precaution. It was rather from the want of such arrangements than from absolute extremity of climate, that the Sikhs under Bashti Sing suffered so much damage to life and limb in their winter-retreat from Pruang by this pass. The commander, obliging his men to carry him in a Dooly, escaped unhurt, and those who were maimed by the frost accused him, perhaps justly, of imposing on them more than a fair share of exposure.

The cattle came in 2 or 3 hours after me, all foot sore, I suppose from the abominable stony ground of Pruang; the ponies, as usual the least enduring, were dead lame.

In the absence of Kumáonis, who had hitherto cooked my dinner for me, when I had any, I was obliged to divide the kitchen operations between Rechu and myself, and the result was not much worse than the average of the last 10 days from the hands of Bhauna and Anand. I regaled the Bhótias with all that remained, which was nineteen-twentieths, of my wine and spirits in the wooden bottles; Rechu had prudently declined my offers of it in Húndés, because "when the wine is in, the wit is out," and they had then great need to keep their wits, (such as they were) well about them.

9th October.—I enjoyed such luxurious rest in the little mansion of Yirkha, that I was not on foot till 10 A. M., after my last breakfast of greased tea and biscuits.

We crossed over to the left bank of the Káli under Yirkha, a mile below which is a good-sized stream coming through a deep ravine from the eastward, with plots of cultivated ground at the confluence, very similar to Yirkha; thence recrossing the river, the road lay over a great landslip which, for some years past, has quite obliterated the former hot spring of Kálápáni: the name however has been transferred to another spring further down on the left bank of the Káli, (to which the road crosses again,) but the water here is neither black nor hot, nor any way remarkable. Below this the valley begins to expand, and gives room for Shangduma, a very pleasant little *maidan* on the left bank of the river, beautifully planted with Pines. It was here that the Commissioner (Lushington) had his interview with Bashti-Ram Sing in September or October, 1841, 3 months before the Sikh discomfiture and flight from Pruang. Close below Shangduma, is the hamlet of Mala-Kawa. The

valley of the eastern Káli then opens into the main valley of the Kúnti-Yánkti, our road falling into the Kúnti road at the hamlet of Tala-Kawa, and thence entering on ground already sufficiently described in my way to Kúnti.

Having tried in vain to reconcile the map with what I saw of the ground between Lípú-Lekh and Gárbia, I have come to the conclusion that the map is wrong in many particulars. The position of Kálápánf, if the same site as that pointed out to me, may be about right, but from that to the "Mandarin" the distance is very far short of the truth, leaving no room for the two confluent streams of Yirkha and the other, which have been omitted accordingly; on the other hand the "Koonlus Peaks" interfere with the necessary corrections, which if the position of the former has been truly fixed by distant triangulation, indicates some radical error in the survey of the valley. The Káli meets the Kúnti river at right angles a long way above Chángrew, and not as the map has it, in an acute angle tending south-eastward towards that village. The confluence of the Tinkar river is equally misdirected; it should come obliquely from the north-eastward running close under the village of Chángrew.

It was more than 5 hours' walk from Yirkha to Gárbia, where I arrived at 3½ P. M. I here found my servants and all that I had left behind at Kúnti, and I was not sorry to exchange the inhospitalities of Húndés for some of the comforts of civilized life again.

It cost me the rest of the afternoon to clean myself, ablutions having been quite out of the question during the last 10 days; even now my face was only just enough recovered from the blistering of Lánkpya Dhúra to bear a gentle application of warm water. On looking into the glass I was quite astonished at my own visage; my nose was one entire cicatrix, contrasting strangely with my cheeks, which had already changed their skin and were now a color that I had never known since boyhood in England; such roses are to be gathered only in the gardens of Húndés.

(To be continued.)

4.—As a whole I think that the Kashmírian architecture, with its noble fluted pillars, its vast colonnades, its lofty pediments, and its elegant trefoiled arches, is fully entitled to be classed as a distinct style. I have therefore ventured to call it the “ARIAN ORDER,” a name to which it has a double right; firstly, because it was the style of the *Aryas* or *Arians* of Kashmír; and secondly, because its intercolumniations are always of four diameters, an interval which the Greeks called *Araiostyle*.

Narrative of a Journey to Cho Lagan (Rákas Tal), Cho Mapan (Manasarówar), and the valley of Pruang in Gnari, Hundés, in September and October 1846. By HENRY STRACHEY, Lieut. 66th Regt. Bengal N. I.

(Concluded from page 182.)

10th October.—Parties of Hunias, mostly Khampa, frequent Byáns at this time of the year, for the usual traffic, bringing sheep with salt and borax to be exchanged for grain. One of these, now encamped at Gárbia, inform me that they are Khampa, natives of “Chang,” i. e. the province of which Digarcha is the capital; Kham proper, the original seat of their tribe, is a long way off, between U, i. e. the province of which Lhássa is the capital, and Gyánák, i. e. China, and they know little or nothing about that country, as their families have been long since settled in the vicinity of Digarcha, and their trading excursions have always been in this direction, away from Kham.

Immediately east of the mountains which bound that side of Cho-Mápán near the *Sámo-tokechim Tarjum*, in the district of Hor Tol, rises a stream, *Chima-Yungdung*, so named from the profusion of the sand, “*Chima*,” which covers the ground about, probably the same granitic debris that spreads for miles around the base of Mononangli. This river flows eastward past Digarcha and Lhássa, and informants recognize the name of “Bráhmápútra,” as applied to it by the Hindus of Nipál; or pretend to do so, for I am not sure that the Nipalese do identify the river as the Bráhmápútra.

The Gángri range of mountains subsides at *Tankcham-Tarjum*, the next east from *Sámo-tokechim*. Hor Tol is *Jang-tang*, i. e., untilled pasture ground, and belongs to the province of Gnari, subject to the

Garpun of Gartokh : the people of that ilk have the reputation of being great thieves ; their head-man is "Goba Lobjang."

Beyond Hor Tol, eastward, lies the district of Tosher, by some pronounced Doshel, also *Jang-tang* ; it is subject to the Zungpun of Sáku Zúng, or Sáka, which is the centre of the province next east of Gnari ; how far from the Nipál frontier uncertain.

Bhotias brought me the skin of a *Barji*, the brown bear, which Traill has improperly called "Tawny : " the color is not tawny, i. e. tenny, which implies a tendency to yellow, but a fair umber brown : some people have an idea that this beast is white or turns white in winter, which the Bhotias assured me is never the case. Maximum thermometer in sun 92° ; in shade at sunset 46°.

11th October.—Hoar frost at sunrise ; thermometer 32° ; maximum in sun during the day 82° ; at 4 P. M. 50°, boiled at 194° ; elevation of Gárbia 10,272 feet.

The barley here is now under the sickle, but much of it seems still imperfectly ripe, and I doubt whether all of it ever can ripen properly, the due quantum of sunshine being so much curtailed by the high surrounding mountains at all times, and throughout summer by the constant clouds. The gooseberries appear to be in the same predicament ; no great loss, for they are utterly worthless.

I must mention, once for all, a strong south wind prevails here, and which is of universal occurrence in all the Alpine valleys of the Himálaya, penetrating also to the north side of the snowy ranges, where there is an opening through the chain of mountain, as I observed it in the valley of Pruang, and other travellers have noticed the same in Kunáwar.

In Jwár the village of Martoli is notorious among the Bhotias for its "Pon,"* being from its elevated site towards the bottom of the valley particularly exposed to the current of air from the lower regions. This wind appears to be the end of the great westerly current which prevails over the continent of northern India, and here impinging on the south-western face of the Himálaya, enters all the valleys that debouch in that direction. It here follows the universal custom of rising at mid-day and attaining its greatest intensity in the afternoon. They say that this Bhotia "Pon" reverses its direction, blowing down the valleys at

* "Wind."

night ; I was always too fast locked in sleep to attest this fact myself, but I had it from the best Bhotia authority, Hirdu Budha, Thokdar of Chaudáns.

It is also observable that immediately over all the principal mountain-torrents, a very strong wind blows in the direction of the current, and in strength proportioned to the volume and rapidity of the stream ; this I take to be a mere mechanical action of the moving water by which it drags along with it the superjacent stream of air in contact with its surface. On my way up here in the beginning of September, when distressed with the great heat of the lower vallies, I often experienced much relief, by sitting on the banks of the streams or on the bridges, in these cooling currents of air.

Budhi, 12th October.—Maximum Thermometer in sun during the afternoon 104° ; at 2½ P. M. in shade 62°, boiled at 197° ; elevation 8600 feet ; the village is 150 feet higher, i. e. 8,750 feet ; Thermometer at sunset 52°.

Another party of Khampa Hunias, one of them a decent-looking man, rather intelligent and understanding a few words of Hindustani, gave me the following information.

Four rivers rise from Gangri, according to Tibetan mythology, from the mountain itself or the lakes ; in geographical fact (which informant properly distinguished from the legend) from their vicinity nearer or further, they are,

1st. (The Indus) ; *Sing-Chin (or Jing) Kamba (or Kampa)* on the northward, fabled to spring from the mouth of the Lion, (Sing ?)

2nd. *Lang-Chin Kamba* on the westward (the Satrudra or Sutluj) from the mouth of the Ox (Lang.)

3rd. On the southward *Mapchu Kamba* (the Kárnáli) from the Peacock (Mapchu.)

4th. The Brahmaputra, to the eastward, *Tamjyak Kamba*, from the Horse (Tám ? or Tamjyak ?)

In his exploration of the Sutluj in 1819, Herbert obtained the same names for these four rivers, allowing for differences of corrupt pronunciation by illiterate informants. (Asiatic Researches, 1825, Vol. XV. Art. VI.)

China Yungdung is the local name of the sandy ground in which the last river rises : it is said to originate in springs. East of its source in

Hor-Tal, this river takes the name of *Eru-Zhungbu*, or as Turner has it, *Erl dwomboo*, by which it is known at Zhigatze and Lhasa.

In Hor-Tal, somewhat this side (i. e. west) of the Tankcham, Tarjum, which is the next east of Samoo Takchin, there is a third lake, the Gungyut. Cho, similar to Lagam and Mapan, but smaller.

The Tarjum, next east of Tanksham, is Tukshum, in the district of Toshel.

Hor-Tal is the most eastern district of the Gartokh Iláka, and Toshel the most western of the next province, (name unknown) under the Zungpun of Saka, (or Saku-Zung.) The boundary between the two provinces is the La of Maryum, i. e. a hill ridge over a village of the latter name. The country to the west of this is called Todh Gnari Lungba, i. e. the province of Upper (or further) Gnari, or simply Gnari. It once formed the easternmost province of the dominions of Ladak, a circumstance which gave a pretence for the claim and invasion of the Sikhs under Zorawar Singh, after their conquest of Ladak proper.

The Gangri mountains subside about Maryum La; probably the La itself is a terminating spur of the Gangri range; beyond that, eastward, extends table-land with smaller, more irregular and detached hills, all the way to Lhasa, and as far as informant knows to the northward.

East of Maryum La, the general name of the country to Lhasa inclusive is *Bod*, (Unde, Indian name *Bhote*?) but it is doubtful to me whether this does not comprise the whole of what we call Tibet, including Ladak and Balti on the north-west, and perhaps Kham on the north-east.

Jung Gáldáng Phropang, (i. e. realm of the Emperor's sway, or something of the sort,) appears to be rather an extraneous political designation, than a native proper name indigenous to the land and its people, and if the term was rightly explained to me it looks like a recent introduction by the Chinese since the growth of their power in that quarter.

The Hunias know China proper by no other name than Gyanak, and the Chinese are, Gyami. Guinak, the capital of Chinese Tartary, is in fact a city of Nibelungen, built by Moorcroft. Peking is Tashi-tukur, i. e. the city of ten thousands.

The above may explain the information got by Herbert from the

Sayana of Namja in Hangarang, that the country beyond Shipki is called by the Kanawaris Jang, by the Tartars Galdang Paprang; beyond it is Kamling (i. e. Kham?) and Gehna (i. e. Gyának?)

The term *Jang-Tang* merely denotes uncultivated pastoral high lands in contradistinction to *Rung-Tang*, which signifies low lands, with villages and agriculture; thus the people of Ladak call the district of Rudukh on their eastern border, Jang-Tang, as being more bleak and unreclaimed than their own sheltered and less elevated vallies: hence also the appellation of *Rungba*, by which the Hunias designate all the Bhotias from the south-side of the Himálaya. The remains of an old boundary wall at Chirchun (which the Jwaris stupidly omitted to show me, when I was there in June last), are called *Jang-tang*, *Rung-tang*; the wall was raised, according to tradition, to mark the frontier between Hundes and Khasdes, or some fraction of it, for parts of those countries, and absurdly enough at this point, the boundary being defined beyond all mistake by the natural barrier of the snowy range, which here separates the northward and southward rivers by a single mountain ridge; a better debateable land might have been found a few miles to the westward at Laptel, where the river, though rising on the north of the double snowy range of Jwar, in a valley easily accessible to Hundes, turns southward again into the Girthi valley south of the Niti passes.

The southern part of Gnari is called Gugi, (or Gokey,) which includes the valley of the Sutlej, perhaps all the way from Kyunglung, and the plain of Gyanima to the Shipki frontier.

On the north side of the Gangri mountains is a valley hight, Bong, or Bongbwa, Tal, Jang-tang, inhabited by shepherds, and salt carriers. North (and east?) of that are the salt and Borax fields, and north (east?) of them the Gold mines, which appear to be the Ultima Thule of Gnari.

Pashm (Shawl Wool), is produced abundantly in the eastern provinces of Bod as far as Lhassa, though not equal perhaps in quantity or quality to that of Gnari. The people of U-Chang, (i. e. the provinces about Lhassa and Digharcha) are so ignorant and unskilful, that they use up their Pashm along with the wool, even for the basest purposes, such as making ropes, &c. The superior quality of the Ruddukh Pashm arises not only from the coldness of the climate there, but also

from the skill of the Ruddukh-pa, in combing it out without shearing the fleece; in Gugi and Pruang, where this article forms a small, and that illicit, fraction of their trade, the people are content to shear it along with the hair, from which it is afterwards picked with much trouble. Of late a few Bisehir people have been taking a little Pashm, (twenty or thirty cooly loads yearly) through Pruang by Humla and Jumla to Bairaj, i. e. Baraich, in north-eastern Oude (formerly a flourishing town and mart of importance), whence merchants buy and take it to Lucknow, and it is there disposed of to one or two Cashmiri Shawl weavers, who have lately settled in the city.

Informant thinks that if there were any steady and remunerative demand for the Pashm in Kumaon and Gurwal, it would not fail to find its way across the frontier, notwithstanding the Ladak monopoly; for the Lhassan authorities in Gnari, are not incorruptible (except in matters of foreign intercourse), and have no other agency for effecting the prohibition than the people themselves, who are interested in evading it, most of them having flocks which produce the shawl wool, but no manufacture that can render it worth keeping in their own hands. Moorcroft in 1812, found the Garpan themselves ready to dabble in the contraband traffic, and they are known to do the same to this day.

The Nipalese have little intercourse with Gnari: being ignorant of shawl manufactures, they have no demand for the staple product, Pashm, and for every thing else, they have as good and better markets on their own frontier, and especially in U-Chang, to the eastward. A few of the Gorkhas visit Gangri on pilgrimage, but they seem to be prohibited from mercantile traffic with Gartokh. Of the western districts (as already mentioned), *Dung* and Marma have a small trade with Pruang through Byáns, and Bazinjia by Dhuli.

The Gorkhas pay tribute to China, their Vakil taking it all, or part of the way to Peking, probably to Lhasa only, every third year; the payment is nominal, being usually equalled or exceeded by the value of presents given in return by the Chinese to Nipal; but it is doubtless still understood as an acknowledgment of the imperial supremacy.

The Humla pass, following the opening made through the snowy range by the valley of the Karnali, is very much easier than any of the other routes, in the British Himálayan frontier at least, though in the middle of winter, the higher parts of this road are of course dif-

ficult and even dangerous. The people of Humla and Jumla are said to be such a lawless set, and so little restrained by the weak Government of the Gorkhas, that traders would have no great security by this route, even if the opening into Pruang were not barred, as now by the Chinese system of Lhasa.

After this the Khampa treated me to one of their complimentary chorusses; the whole party of them, half a dozen men and women, joining hands in a semicircle, sang together, if such an unmusical noise could be called singing, keeping time with a most uncouth swinging and swaying motion,—as good dancing as their song was music. On the British side of the snow, this performance is generally expected to terminate in *bakhshish*, and my Khampa would not stop till I silenced them with my silver.

Budhi, 14th October.—Thermometer at sunrise 42°. The air filled with what appeared to be the larvæ of Locusts? or the *Lamæ*, as they might as well be called; they seemed to be the same sort of animals, whose skeletons I saw on the top of the Gori Glacier in Jwar last June. Thermometer at sunset 54°.

Golam La, 15th October.—A very stiff march; 6½ miles on the map, occupying 7¼ hours. Having started with all my people rather late, i. e. at 7¼ A. M. I got my breakfast at Golam La by 4 P. M. The road from La-mare to this is very precipitous, in steep and narrow steps, the greater part of the way, and yet I got over the worst places in a *Dandi** (being lamed by tight shoes). The Bhotias were very clumsy at this work, being quite unaccustomed to it, but managed to tumble along somehow by dint of main strength; and as for ease to myself it was merely a transfer of exertion from legs to arms to keep my seat under the violent tilting to which the *Dandi* was subjected.

This road would be utterly unfit for riding on; indeed it would be bad for a led horse.

As well as I can make out, *La* in the Bhotia language signifies a large rock, and these two places, La-mare and Golam-la, derive their names from the great boulders lying upon the encamping grounds. Thermometer at sunset 60°.

16th October.—*Golam-la.* Thermometer at sunrise 50°; at 7 A. M. 52°; boiled at 198°; elevation 8000 feet; the confluence of the Najanggarh with the Kali is some 15000 feet below.

* A hill litter.

I found the march from Golam-la to Gala easier than yesterday's journey; though in steep steps a good part of the way; one main ascent and descent across Nirpaniah, is less troublesome than the succession of rugged ups and downs, between Budhi and Golam-la; this stage too is better shaded than the other, an advantage even at this season, the mid-day sun being still too hot.

We met a smiling rosy-faced *Tinker* on the top of Nirpaniah, who gave me a drink of water, and informed me that his pass is not so easy as Lipu Lekh, and the snow on it more troublesome, because his village has but 5 or 6 *Man* (families) whose small traffic is insufficient to make a good beaten path, Gala; comfortable quarters again in the cottages which afforded us so opportune a retreat in the three days' deluge of 18th to 20th September. Thermometer at 4½ P. M. 62°, boiled at 199°; elevation 7500 feet; the Kali hidden by the steepness of the ravine, is perhaps 1500 feet below.

Thermometer at sunset 66°; the sudden rise of temperature caused, I believe, by clouds which gathered in the evening.

17th October.—Gala.—Thermometer at sunrise 49°; marched to Titil Sosa, so Hirdu Budha names the encamping ground between his two villages. Thermometer at 4½ P. M. 62°; boiled at 198°; elevation 8000 feet; Thermometer at sunset 57°.

18th October.—Titil Sosa.—Thermometer at sunrise 50°: marched to Kela. Dárma Bhotias inform me that they call their river the Dárma Yankti; others say the Gori, which is also the name of the Jwar river. The names Kali and Gori are derived from the peculiar color of the water of those rivers at their sources. The Khasias of Kela call the Dárma river Dhauli, as down on the map; and Patwari Doorga Dutt thinks that this name is supported by the authority of the Puráná, which treat of these localities. Nyne Dhura, the eastern pass of Dárma, is a little stiffer than Lankpya (of western Byáns). The Glacier lies on the north side of it towards Hundes. The one *man* and some 100 laden sheep were lost this year, not on the Glacier, but by an avalanche which overwhelmed them at night in their encampment at Dawa, the *Dakhna* of the pass; this side, Kach, the western pass of Dárma, has Glaciers on both sides: some say it is dangerous and not frequented. Lebun Dhura, from Dárma into N. western Byáns, still frequented, is steepish and snowy; but not so high as Lankpya; the

18,942 feet of the map is undoubtedly a mistake, perhaps for 16,942. The pass into Rálám of eastern Jwar by the Phula Yankti between Sibú and Marcha of Dárma, is difficult or dangerous and rarely traversed. Rálám is a colony from Dárma and the alliance is still maintained between the two (by intermarriage, &c.), the Bhotias of Rálám holding little intercourse with the rest of the Jwáris. Gyuc-Dhura, from Sela of Dárma, to Kunti of Byáns, by the Pechko-Gankti, is difficult but still traversed; this year, one crossing the pass found the bracelets and other remains of a Dárma woman who eloped this way some years ago and perished in the snow along with her abductor. The Sobhula and Balch route into Munshari (traversed by Commissioner Trail) is always easily passable in summer; it can hardly be called an inter-Himálayan pass, being below the south end of the Pánch-Chula snowy range, and probably not much higher than Chipula, 13,500 feet, to which the Balch ridge adjoins on the south. Not a single head of cattle, informants aver, is left in Dárma except one or two of this season's importation from Hundes, and many of the sheep and goats have died of the same murrain: the village lands have been thrown out of cultivation for want of cattle to plough.

Kela is renowned for the excellence of its ghee, to which I can myself bear testimony, having swallowed a quantity of it in Bhauna's tea when we were in Hundes.

Thermometer at 4½ P. M. 72°, boiled at 204°; elevation 4750 feet: the confluence of Dhauli (alias Gori, alias Dárma Yankti), and Kali, about 1000 feet below; Thermometer at sunset 69°.

19th October.—*Kela*.—Thermometer at sunrise 58°. Patwari Durga-dutt takes his leave; he is an excellent sort of person, deserving of more Parwasti, than he has hitherto obtained.

March to Relagarh.—Thermometer at 4½ P. M. 78°, boiled at 205½°; Kali 300 feet below. Thermometer at sunset 68°: elevation of confluence of the Relagarh with Kali river, trigonometrically (?) by Webb, 3794 feet.

20th October.—*Relagarh*. Thermometer at sunrise 57°; marched to Dharchula. Thermometer at 5 P. M. 69°, boiled at 207°; elevation 2750 feet; Kali 150 feet below; Thermometer at sunset 67°.

21st October.—*Relagarh*. Thermometer at sunrise 56°; heavy dew; march to Balwakot, very picturesque scenery all the way, through wild

forest, along the course of the river, and climate now pleasant; Thermometer at 5 P. M. 67°, boiled at 208°; elevation 2250 feet; Kali close below; Thermometer at sunset 56°.

Here I found the dirty Jogi, whom I had met at Askot on the 10th September; he grinned foolishly when I had told him what I had seen of Kailas and Manasarowar, and then propounded his own ideas about the lake and mountain, which were silly and superstitious.

22d October.—*Balwakot*. Thermometer at sunrise 53°; heavy dew.

Bhauna (with Anand) made his appearance this morning. From his delay I had apprehended that something had gone wrong with him at Takla-khar, with reference to our illicit visit to Hundes; but happily nothing of the sort occurred, his stay in Pruang being protracted for his own pleasure, and some delay in collecting the money due to him (from Deba Chakwa and others) on former transactions. Chakwa himself is in Lhasa now, but has an agent still resident in Takla-khar. Bhauna met the usual cordial reception from his old *Mitr*, and *Aradh*, (trading-correspondent) Angdah the Tidyā Makhpan, which was the more good-natured as the Makhpan forthwith taxed Bhauna with his contraband introduction of the *Feling*, and seemed well assured of the fact, though stoutly denied by the offender. I suppose that his information must have come from some of the Hunias at Ningri, whom I had there allowed to stare at me without let, and these doubtless passed the report on to Tidyā; subsequent notice from the *Dúng* on the north of Toiyon, where we were encamped on the afternoon of the 7th instant, might have shown that we had come from the northward, and passed through the middle of Pruang by night, Bhauna indeed finding the ground safe, sufficiently owned the impeachment by propounding excuses for the act in question, on the score of his necessary subjection to the orders of his English Masters. The Makhpan observed, that as we had not been openly caught in the fact nothing further need be said about it; indeed as we had succeeded in effecting our passage through his district, his own interest required absolute silence on the subject, for if known to the Lhasan Governors their resentment would attribute our success to the Makhpan's negligence or connivance; and in their barbarous code, the admission of the meanest stranger into the country, is high treason. If it were not for this fear of his tyrannical masters, old Angdah said that he would be most happy to give a

welcome reception to any one, black or white, introduced by his friend Bhauna; and this I know is the feeling of many of the respectable natives of Gnari. At the time of our visit Pruang Zungpan was fortunately away from Takla-khar, attending on the Garpun, or Ship-chet, or Garpun, lately arrived from Lhassa, and then encamped at Barka: and this explains the report we had from the shepherds of Chujia Tal on the 2nd instant. I have not been able to ascertain precisely, who these dignitaries from Lhassa were: according to Bhauna, (who is by no means accurate,) there was a Garpun, an officer of higher rank than the Garpun, accompanied by one "Charon." From Jwári Bhotias, (who are better authority,) I afterwards learned that before they had left Gartokh (end of September) "Charon," the same that was Chaprang Zungpun from 1843 to 1845, had arrived from Lhassa, in the capacity of "Ship-chet," a sort of Special Commissioner, deputed to investigate and administer the affairs of the province, on this occasion more particularly to remove from his office for certain previous offences in a former situation, the senior Garpun, Dhinkar-sah, whose successor, Tannakar Gajjun, had not arrived when the Jwáris left Gartokh; perhaps he was now one of the party at Barka.

With some hesitation, after Bhauna hinted at the extreme probability of Angdah being appointed Tokdar of Tidyah on a salary of 50 Rs. per month when the English took possession of Pruang, the Makhpan directed his son Angil to write down some items of information which I had commissioned Bhauna to bring from Pruang: Bhauna being illiterate in the Tibetan language though proficient in the dialect of Gnari colloquially, interlined Angil's notes with a transcript of the Hunia words in Hindee characters, the result of which document I shall give at the end of my journal, much augmented and corrected by other information derived from the most reliable of the Jwári Bhotias.

Garjia Ghat, 22nd Oct.—The valley of the Kali between Dharchulla and this, which on my way up—11th to 13th September, was pestilentially hot, has now got cool and pleasant, but I doubt its salubrity yet; the little Quinine I had with me was not a tenth part of what was required by the Fever and Ague patients who crowded round me from every inhabited place this side of Kela.

The Rajbari Karinda (agent) caught two of the *Bán-mánus*, the wild men of Chipula, for my inspection. I saw nothing very remarkable

about them, except an expression of alarm and stupidity in their faces, and they are perhaps rather darker and otherwise more like lowland Hindustanis than the average of Kumaon Paharis. I imagine they were *dressed* for the occasion: one of them brought me a *Nasar*, a miserable fowl, in a wooden bowl of their own manufacture. They are civilized enough to make these wooden bowls for sale or barter in the villages of Askot, whence they supply their few wants. They live under temporary Chappers, frequently moving from place to place amidst the jungles of Chipula; their principal subsistence being certain edible roots of wild plants and what game they can catch, and they occasionally get presents of cooked food from the villagers. They have a dialect of their own, but some of them can communicate with their civilized neighbours of the villages in Pahari Hindi: all that my visitors would say in my presence was in answer to a question on that head,—that there were five or six ‘maw’ (families) of them. The Askot people could tell me nothing at all about the history of these *Bán-mánus*: but I imagine they are the people whom Traill calls Rawats or Rajis, a small remnant of the aborigines of the Hill country, or of an ancient tribe driven into the jungles by subsequent invaders from the lowlands.

It is a pity that some effort is not made to reclaim them from their bestial mode of life; they are a quiet, inoffensive set of people, and might probably be found tractable to civilization.

The river (Gori) here has subsided very much since we crossed it, 10th September, by a Jhula of cables. A large rock now dry in the middle of the stream affords a pier for two Sangas, which the Askotites have built in such a catcha fashion, that a few days since some of them were thrown off (by the swaying of the loose timbers), and had a narrow escape of drowning. One of the iron suspension bridges would be a great convenience here, this ghat being the only direct communication with lower Kumaon for the districts of Dharchula and Kela, (Khasia); Chandans, Darma, and Byans, (Bhotia.)

Thermometer at sunset 63°; boiled at 208½°; elevation of Garjia Ghat, by Webb, 2,094 feet; Barometrically b. t. 1918 feet. The confluence of the Gori with the Káli, 1½ miles below this, is 2059 feet above the sea level (by Webb’s book). Jhula ghat on the Káli, a running distance of 14 miles below the confluence, is 1875 feet, so that the fall between the two is 184 feet, being at the rate of 13 feet per mile.

23d October.—*Garjia Ghat* ; thermometer at sunrise 52° ; Dew.

Askot.—Camp 50 feet higher than the village. Thermometer at $4\frac{1}{2}$ P. M. 76° , boiled at 204° ; elevation, trigonometrically by Webb, 5089 feet. Thermometer at sunset 63° —(elevation b. t. 4519 feet).

24th October.—*Askot*. Thermometer at sunrise 53° ; Dew.

Singhali Khan.—Camp 50 feet below the Khan (Pass). Thermometer at sunset 60° , boiled at 202° ; elevation of pass, 5,650 feet.

25th October, *Singhali Khan*.—Thermometer at sunrise 50° .

Satghar.—Major Drummond's hut at 100 feet below the top of the pass ; thermometer at sunset 59° , boiled at $201\frac{1}{2}^{\circ}$; elevation of pass 6,000 feet.

26th October, *Satgarh*.—Thermometer at sunrise 50° .

27th October, *Petoragarh*.—Drummond's house (25 feet higher than the fort, which by Webb is 5,549 feet), 5,574 feet above the sea by barometric measurement ; Thermometer at 5 P. M. 64° ; boiled at $202\frac{1}{2}^{\circ}$, (Elevation b. t. 5,328 feet).

28th October, *Kantaganu Bungalow*. Thermometer at sunset 64° , boiled at 205° ; elevation 3,900 feet.

29th October—*Dhargarah Bungalow*. Thermometer at sunset 65° , boiled at 204° ; elevation 4500 feet.

31st October.—*Lohaghat*, (Ramsay's house.) Thermometer at sunset 63° , boiled at 202° ; elevation b. t. 5,630 feet. Webb makes one of the houses here 5,649 feet, the Hospital, I believe ; they are all near the same elevation.

1st November—*Pharka Bungalow* ; elevation by Webb 5,914 feet ; Thermometer at sunset 61° , boiled at $201\frac{1}{2}^{\circ}$ (b. t. 5,880 feet).

3rd November.—*Deo Dhura*, (vulgo Dee) *Bungalow*, elevation by Webb, barometrically 6,867 feet. Thermometer at sunset 53° , boiled at $199\frac{1}{2}^{\circ}$ (elevation b. t. 6948 feet.)

4th November.—*Dol Bungalow*. Thermometer at sunset 52° , boiled at 201° ; elevation 6,100 feet.

5th November.—*Almora*.

APPENDIX.

The present ruler of the Lhasan dominions, Bod-chi-Lama, is Kushu Gewah Ringborchy, of which terms the first and last are titles, and perhaps the *Gewah* also; as imported in the general title here given (by Tidyá Makhpan), he is the ecclesiastical head of the Buddhists of Tibet, of the prevailing sect, at least; the *Gelukpa*, the same as called elsewhere Dalai Lama, and Putala Lama, *Putalah* being the name of his monastic residence near Lhasa. The Bod-chi-Lama, is properly vested with the supreme control in temporal, no less than spiritual affairs throughout his own dominions, and in former days I imagine, that it depended very much upon the personal character of the reigning individual, what part of his temporal power was delegated to subordinate ministers; but of late years the predominance of Chinese influence at Lhasa has probably relieved the Lama from all the cares of governing his own dominions; under color of his name, and through the agency of Lhasan ministers, the country is ruled in fact by the Resident Imperial Commissioners.

Formerly the Chinese Deputy at Lhasa was an *Amba*, Military Resident (?), with a regiment of 500 Chinese soldiers. Two or three years ago two Gyámi, came to Lhasa, of such mean exterior that they attracted no notice, till after some time spent in private enquiries and observations, they suddenly produced their commissions and assumed the supreme authority under the style of "*Tungtang*," which they still hold; the *Amba* with his regiment of 500 remaining under their orders.

Kushu Panjan Ringborchy, is the present *Chan-i Lama*, (that is, superior of the province of "*Chang*," of which Digarcha is the principal town, Zhigatz Zung, the fortress, and Teshu Lumbu, the monastic residence,) a degenerate successor, and according to the superstitions of Tibet, a re-incarnation of the great Teshu Lama, Punjun Irtinnee, of Turner, who 70 years ago was in the fullest exercise of the political administration of his province and enjoying great influence beyond it, throughout the countries of Tibet and China. Chinese usurpations must now have reduced the Lama of Chang to the insignificance of a mere monk like his senior brother of Bod.

The principal officers of state in Lhasa, and actually employed in

the executive under the control of the Chinese "Tung-tang, are as follows :

1. The (*Bod-cki*) *Gelpu*, now by name Dorchey-chang ; the Wazir, or Prime Minister.

2. The *Kalan Sechu*, and

3. *Kalan Sheta*, according to Angil ; but the Jwaris say, that there are four Kalan, whose personal names, or sur-names rather, are

Sheta,

Dhuril or Dhuring,

Rakshya, and

Thomba. The particular functions of this office are unknown to my informants, but a "Kalan Sheta," is said to have come to Gartokh 8 or 9 years ago, with plenary powers for settling the affairs of Gnari.

4. Four *Debun*. These appear to be Military Officers, Generals. One of them came with the (so called) army from Lhasa to annihilate the Sikh invaders of Gnari in 1841, which being accomplished (whether by the Debun and his troops, or by frost and starvation), he continued to reside at Gartokh with the principal authority, civil as well as military, till 1845-46, when order and security being restored, the Debun was recalled to Lhasa, and the administration of the province left as formerly, to the two *Garpun*.

5. Four *Rúban* ; also Military Officers of secondary rank, equivalent to Colonels ? Inferior to these are *Gyakpun*, i. e. Centurians, a *Gya*, Centum, 100.

6. Four *Garpun*. Office unknown.

7. The *Ship-chet*, (not given in Angil's list,) is an Officer well known to the Jwaris ; one of this rank came to Gartokh, (as previously mentioned) in August or September last, with Commission amongst other things to remove from his office the senior *Garpun* : he appears to be a sort of Special Deputy, with extensive powers, superior to the local governors.

Next to these come the *Garpun* and *Zungpun*, the local Governors of provinces and districts.

Gnari is said to be the only province dignified with the superior rank of *Garpun* (?) The title is said to be derived from the name of their head-quarters, Gar. The place of the fair is called "Gartokh," also

Gar-Yarsa, which signifies the residence for summer, (from *Yar*, heat or summer), the winter quarters being at Gar, "Gunsa," (from Gun, cold or winter), two or three days further down the river north-west from Gartokh. The two Garpun act jointly, and the court so formed for the administration of the public affairs is termed "Lankya." There is some trifling difference in the rank or authority of the two Garpun; the senior is styled *Urku-gung*, in writing abbreviated to *U-gung*; and the junior *Urku-wa*, written *U-wuk*: they are also called *Urgu-Ma* and *Urgu-Ya* respectively, as mentioned by Traill. The Garpun have each a Sherishtadar, *Zungnirh*, and these two sometimes form an inferior Lankya, for the disposal of minor cases. Nirba (mentioned by Moorcroft,) denotes simply an "Agent" or man of business, of any sort; *Dunik*, a writer or Secretary.

The Zungpun derive their title from *Zung*, signifying either Fortress or Government, or both; and most of them still have their head quarters in quasi-forts, most frequently, in Gnari at least, without garrison. They also hold the general government of their several districts. In many places there appear to be two Zungpun acting jointly like the two Garpun of Gnari, as at Saka, centre of the province next east of Gnari, and (according to the man of Lamjung,) at Kirong and Nyanam (?) on the Nipal frontier; and this perhaps is the usual arrangement where they have independent charge, in direct communication with Lhasa. In the province of Gnari there are four Zungpun, entirely subordinate to the Garpun, in single charge of the four frontier stations, viz. on the northward, Rudukh, which includes supervision of the communications with Ladak.

South-westward Chaprang, including control of the Bisehir frontier—the communication with Chongsa, the Alpine valley of the Jahnavi Ganges, of which Nilang is the principal village, and that by the Mana pass with western British Gurhwal.

Central, Southward, Daba, (*Dapa* is a provincialism of the Niti Bho-tias,) the Zungpun of which has charge of all the Niti and Jwar passes on the British frontier of east Gurhwal and western Kumaon; and south-eastward, Pruang; head-quarters in Takhla-khar, with surveillance of the Darmá and Byáns passes into eastern Kumaon, and of the road to Humla of Nipal, at the bottom of the Pruang valley.

These provincial Governors, Garpun and Zungpun, come from Lhas-

sa or the adjacent country, and, for Gnari at least, are never natives of the province under command. Their regular term of office is 3 years, at the expiry of which, being relieved by successors similarly appointed, they return to Lhasa to give an account of themselves, which if satisfactory may result in further appointment. E. G. Deba Phundu, Pruang Zungpun from 1843 to 1845, is now, (according to the man of Lamjung) one of the joint Zungpun of Kirong. Dhinkar-Sah (i. e. Son of Dhinkar) late Garpun of Gnari, came from the Zung of Kirong, and before that was Zungpun of Chaprang. Sometimes merit or interest may extend the tenure of the same office by one individual to double the ordinary period. Deba Chakwa, a wealthy trader, well spoken of by our Bhotias, was Garpun of Gnari for 5 or 6 years from 1840 to 1845.

Some say that the revenues of the provinces are farmed to the Garpun and Zungpun, who may make what they can for themselves above the state contract, being paid no regular salary : it is certain that the people suffer the most arbitrary exactions, approaching sometimes to indiscriminate robbery.

The term *Deba* either above or prefixed to the names of persons or their official titles, answers to the Hindustani affix, "*Sahib*," and is applied particularly to the Officers of the Lhasan Government who are distinguished by the *Top-Knot*, a peculiar mode of tying up the hair (kept long) on the crown of the head with a skewer through the knot, in the fashion of the Chinese ; the losing of this top-knot is a form that accompanies deprivation of office. Moorcroft's Deba at Daba was the Gunpun ; his Viziers at Gartokh and Daba probably the Zungnirh of the Garpun, and the Nirba or Dunik of the Zungpun, Trail, following Moorcroft in these inaccuracies. Rajas, Viziers and the like in Tibet are, once for all, mere Hindustani fictions, which should not be retailed any further by English writers. The present Garpun of Gnari are—

1. Tannakarh Gajjun (according to Angil's note) Urkugung, recently appointed in place of Dhinkar-Sah, who, as before mentioned, had his top-knot united by the Ship-Chet the other day : the latter, in succession to Jurkwah, had been in office only one year : and his present disgrace, they say is for his having made certain unauthorized remissions of revenue from ryots of Kirong, where he was previously

joint Zungpun, which occasioned disturbances on the subsequent extortions of his successor.

2. Shungdub Lingbo, Urkúwa, appointed in 1845-46 in succession to Chakwa. This Shungdub, says Debu, has been to Calcutta via Nepal or Lo (?): he is well disposed towards us, and says that the repulsive attitude maintained by the Lhasan Government with regard to the British in India is solely the effect of Chinese dictation at their Court.

Present Pruang Jungpun (succeeded Phundu this year) is Shak Chumba; said (by the man of Lamjung) to be a Khampa from some place 20 days north of Lhasa, and (by the Byánsis) to trouble himself very little with public business, leaving it as much as possible to his Nirba.

Daba Zungpun is Chep-Chungba, also appointed in 1845-46. The Zung-Chungpun is the Government Mercantile Agent, a person of rank and consequence, who comes every year from Lhasa to Gartokh, and thence on to Ladak, before the war with the Sikh usurpers in that quarter. The principal article of this state traffic is tea, mostly of the coarsest sort made up in bricks: and this trash is disposed of by the barbarous expedient of forced sale for double or treble its real value. The whole quantity of tea to be inflicted on the province is made over to the Garpun, who distribute it to the several Zungpun, and they again to the heads of villages and Tals, who finally divide it equally among the families, and payment is realized by the reverse process.

The principal Gold Mines of Gnari (situated east or north-east of Rudukh) are farmed to a Sar-pun (*Sar*, Gold) on triennial contract with the Government at Lhasa.

The Gnari Pungkag *Chuksum*, are thirteen chief districts of the province under their own native hereditary chiefs (*Pun*) subject to the Lhasan Governors: they are

1. Dokachya, and
2. Jimkangnonu, both in the Zung of Rudukh.
3. Chumurthi, on the south bank of the Gartokh Indus, to the extreme west of Gnari, on the Pitti frontier. (?) The best of the ponies (some of them very good) imported into Kumaon by the Jwari Bhotias, are bred in this district, and brought for sale to the Gartokh fair, where the Jwaris buy them.

4. Nabru, also on the south bank of the Gartokh Indus, between Chumurthi and Gar. (?)

5. Chajua, exclusively pastoral, in the west end of the valley of the Shajjan Indus, east of Gartokh, or else in the lower (and southern) part of the valley of the Rudukh Indus, north of Gartokh. With regard to which Rudukh river, the Jwaris assert (positively), that it is a distinct branch flowing past Rudukh from north and south, meeting the Gartokh Indus near Tashigang, a day or two below Gargunsa, whence the united river runs north-westward to Le, &c., and not, as existing maps have it, the lower part merely of the Gartokh river before its entrance into Ladak; but this is doubtful, as others assert as positively the opposite.

6. Bongba (or Bongbwa) Tal, further east up the Shajjan valley and north of the Gnari mountains; consisting of two divisions, viz. Bongmeth, that is, lower, and

7. Bong-toth, that is, upper Bong, the two being under separate *Pun*; one of my informants says that one or other of the Bong Tal is south of the Gnari range, on the east of the province, but Bhauna's version of Angil's note makes this *Bang*, distinct from *Bong*, which he also duly mentions as north of Gnari, and the residence of the *Dok-pa*, who are the carriers of the Salt and Borax from regions further north. Bongbwa Tal is a pastoral district, without villages.

8. Hor Tal, a pastoral district without villages, lying east of Cho-Mapan, between the Gnagri mountains and the Nipal Himálaya, said to communicate by an easy pass (or passes) with Jumla, direct, without intervention of Humla, from which circumstance may be gathered this fact, viz. that the main ridge of the Nipal Himálaya continues to make a great deal of southing far east from Momonangli, and much further than I could see any thing of it, in the course of my route to the lakes and Pruang.

9. Toiyon.

10. Kiron.

11. Tidy; these three are circles of villages, as before described, in the valley of Pruang; and their headmen have the title of *Makpan*, which is of military origin.

12. Kyungbuchya, the environs of Daba.

13. Tashikhausar, of Chaprang; and 14, Rakshyanonu, on the

right bank of the Sutlej (?) west of preceding (?) These three are agricultural divisions of the district of Gugi, i. e., the trans-Himālayan valley of the Sutlej (?)

Here are 14 Pun-kag, though my informant started with 13 only ; nor can he, nor I either, explain the discrepancy.

There are many other districts of inferior size and note, either included in the above or independent of them. Angil mentions.

Namdung, Majjan, and Jangyn, all north of Gaugri, without further particulars. Kyunglung he states to be under the Zungpun of Daba, and informants say that the remains of an old Fort there are kept by a functionary styled *Kharpun*, i. e. *Killadar*, Fort-holder, a native of Lhasa, but of inferior rank, and no power or importance.

Gyanima (whatever it may be worth) belongs to Kyunglung.

The villages of Pruang are distributed as follows :

Keli, Lakun, Dela-ling and Kauru, belong to Toiyon on the left bank of the Karnali, in the north-eastern quarter of central Pruang : the present Makhpan is Pimba.

Tidya, on the right bank of the river in the southern quarter, comprises the villages of

Maghraur, (the Makhpan's residence.) Nami, Chumi-thang, Chiling, Tashikang, Kaga, and Beli : the Makhpan is " Angdah," and his son (who wrote some miserable notes for me) Angil.

Kongarh-Dawa is Makhpan of Kiron, in the south-eastern quarter on the left bank of the river, the district including the following villages :—

Kongarh, (the Makhpan's own village, I suppose.)

Totakh, Dangya-chin, Manw, Chelugang, Shujey, Dojah, and Gajjan.

Kardam, the northernmost village of Pruang, with a monastery, and quasi-fort, is under a Zungpun of inferior rank, (or else a *Kharpun*) perhaps a native of the place ; he has to furnish the Tarjum at Barka.

The village of Kangjey belongs to Deba Nerchang, a Lama of Taklakhar, who is also proprietor of Churjia Tal.

Taklakhar, which contains a large monastery.

Shaprang, Lwakh, by the Hindustanis called " Loha-Kot."

Chokhrokh and Khajarh, which the Hindustanis call Kachar-Noth, the lowest village at Pruang (south-eastward) with a monastery, &c. a

place of considerable religious resort ; these all belong to the Lhoba Lama of Toklakhar and Khajarh, who is perhaps subordinate to the great Lhoba Lama of Dindi (vulgo Gangri.) The latter is superior of all the Gumba about Gangri and Mapan, his own monastic residence being Dindi, in the ravine under the west side of Kailas.

These Lhoba Lamas are, strange to say, (as imported by their title,) natives of Lho (the Indian Bootan, and a fresh relief of them comes all the way from that country every third year ; formerly, says Debu, persons of respectability, but of late, unaccountably, grown “snob-bish,” as though the church were on the decline in Lho.

The Lhassan Government have no other military force in the province of Gnari than a Militia of the country people, in the extremity of disorder and undiscipline ; and this even has become very much neglected since the fear of the Sikh invasion died away ; at best it is represented to be a most unwarlike rabble, utterly useless against an organized enemy. Magh or Makh is the generic name for this army : Makhmi soldiers ; and hence the title Makhpan, originally military chiefs, now peaceful villagers. Formerly three Regiments (also Makh) of 500 men each, used to muster at Gartokh, styled the Igru, Kungru, and Indu ; these are now merged into a single Makh, nominally of 500 men, but rarely mustering the full compliment. The Makh is assembled for two or three summer months during the Gartokh fairs and drilled by a *Gyakhpun*, (centurion :) the men get no pay, subsist, arm, and accouter themselves, and at the end of the exercising season are dismissed to their houses with—a fine of 3 Rupees each for their bad performance !

This is an extreme case of rare occurrence it is to be hoped. Bhauna, when late in Pruang, found the soldiery better treated. The quasi-garrison of Taklakhar had been recently discharged, as no longer required in these pacific times, and each man, who had served for the last three years, of course subsisting himself all the while, received six rupees, sum total of his pay for the whole period.

Such are the Chinese Cavalry and Infantry, who repulsed Captain Gerard's invasion of Tartary.

In Gnari there are four chief Kanbu or Kambu, i. e. Bishops ? or Abbots ? of the Gelukpa sect ? viz. at

1. Rudukh.

2. Rabgyaling, or Rabling, probably in the district of Nabru, or elsewhere, west of Gartokh ;

3. Tholing (or Ling), and

4. Shebiling, in Taklakhar ?

Each of which rules 25 *Gumba*, (Monasteries,) the Priors of which are Lamas, with establishment of many inferior Monks, *Daba* or *Gelong*. In Gnari the Nuns are styled *Chemu*, and not *Ani*, which latter word signifies *woman* simply, of any sort.

The Salt and Borax Mines of Gnari, or fields rather, "*Lha-lhaka*, as *Lháli-lhaka*, (by Herbert I think or Gerard? erroneously given as the names of districts) lie to the north of Bongbwa Tal, across mountains that round the north-east side of the valley of the Shajjan river, paralld to the Gangri range, and in the eastern part of the Zung of Rudukh. The two salts, I understand, are obtained from different spots in the same vicinity, and both worked in the same way by washing the earth taken from the surface of the ground in which they are developed by natural efflorescence. These salt fields are open to all who choose to adventure their labour in them, on payment of a tenth part of the produce to the Government, which has an excise establishment for collecting the dues on the spot. The proceeds form, perhaps, an item in the general contract for the revenues of Gnari between the Garpan and the Lhassan Government.

Soda also (carbonate of Soda) *Búl* or *Pul*, is abundant in many places, (I saw much of it, as mentioned, about the shores of the lakes,) but appears to constitute no trade like the others, though in Hundes it is used generally for helping the extract of Tea, the universal beverage drunk in vast quantity ; and by the higher classes, who sometimes wash their hands and faces, as a substitute for soap.

The principal Gold Mines, *Sar Chaka*, are ten days journey beyond the Salt Mines, further north, or north-east, (perhaps on the north-western borders of the Kám country ?) in a district otherwise uninhabited? named *Sar-báchyad*? These are farmed by a *Sarpún*, on triennial contract direct from Lhassa, independent of the authorities in Gnari. *Deba Chákwa* however held this contract for the last 3 years in which he was Garpan *Urku-wa* at Gartokh. He paid to the Lhassa Treasury 17,000 Rupees per annum ; had 170 miners at work, for whose subsistence he used to send supplies of *Sátu*, *Ghíu*, Tea, &c. from Pruang,

the "Sárbáchyad" country being barren, *Jang-tang*. These mines are worked in shafts and galleries under ground ; the gold is found in the pure native state (in silicious sandstone (?) or in quartz rock ?) : it undergoes no other process than washing and sifting before it enters the market, and after that requires little or no refining. The metal is sometimes found in large masses ; the Lama of Gangri is said to have one weighing 5 Nega, i. e. near a seer, and there are problematical stories of other masses of such supernatural size and shape that the Lamas pronounced them spiritually dangerous and insisted on their being consigned to earth again. The raw gold grains, as they come from the mines, constitute the main part of the heavy currency of this country, in which there is a great dearth of coined money ; that also arising, I believe, from foolish superstitions and state interferences ; of late years our Bhotias have circulated some of the Company's Rupees in Gnari, but so infatuated are the people, that they persist in keeping the exchange of this coin down to four timashis, though its intrinsic value is nearer six of them. The *Sar Shu*, by the Hindustanis called Phetang, is 8 masa, 8 or 9 Rupees worth of this gold, tied up in a minute bundle of paper and rag, which passes for money with the trouble of repeated scrutiny and weighment.

The Government Mail Establishment for conveyance of Dispatches between Gartokh and Lhasa is styled *Tarjúm*, and the same name is applied to the several stations of relay. At each *Tarjúm*, there is a superintendent of some sort, or one or two horsemen, who are furnished, like all the state requisitions in this province, by roster or some equivalent arrangement from the neighbouring villages or *Dúng*. The several stages are from double to treble an ordinary day's journey for a traveller with cattle, baggage, &c., that 30 or 40 miles, being proportioned to what is considered a day's work for a single man and horse, (the horses being ponies, but good ones.) Under ordinary circumstances, the post travels by day only, and at such a rate as to make one stage daily, sometimes two perhaps. There are no stated times, probably, for the dispatch of the mails, expresses being sent as occasion may require. The establishment is intended for the Government service only : and if private individuals get the use of it, it must be by interest with the Government Officials. There are 22 *Tarjum* between Gartokh and Lhasa. These places, being about 10 degrees of longitude asun-

der (from $80\frac{1}{2}$ to $90\frac{1}{2}^{\circ}$ east), and the geographical minute in this latitude nearly equal to the English mile, allowing for deviations from the straight line and for southing of the route from the parallel of Gartokh to that of Lhasa, the whole distance must be seven or eight hundred road miles, which would make the Tarjüm stages average some 35 miles each. My map shows near 40 from Nakyu to Misar, and about as much from Misar to Barka; the route from Gartokh to Misar being copied exactly from the map after Moorcroft and Hearsay, Nakyn fixed by information with reference to Gartokh, and Barka by my own survey.

Angil has given me the following list of the Tarjüm from Gartokh as far as he knew them.

1. Nakyu; this is only 5 miles from Gartokh.
2. Misar; furnished by the people of Kyunglung.
3. Barka; in the plain under Gangri, north of Cho Lagan; furnished from Kárdánkhár of Pruang.
4. Tokchin, or Samo-tokchin; and
5. Tandang, or Tankcham; these two in the district of Hortol, and thus far in the province of Gnari.
6. Dukshum, or Tukshum; and
7. Dodum; these two in the district of Doshel or 'Tosher.'
8. Samku.
9. Saka or Saku; the head-quarters of two joint Zungpun.
10. Uksey; the last 5 in the Zung of Saka; and twelve more, unknown, on to Lhasa.

Digarcha is 2 or 3 Tarjüm this side (west) of the capital.

There are no fixed Tarjüm establishments between Gartokh and the frontier stations of the Zungpun, dispatches being forwarded on those lines, *Taul*, i. e. *gaonsare*, from village to village, or *Dúng* to *Dúng*, or by single messengers.

Postscript, 25th July, 1847.

The above journal had left my hands and was past revision long before I saw for the first time the valuable notice of Csoma Kőrös on Tibetan Geography (Article I. No. 4, Asiatic Society's Journal for April, 1832), as also Jos. Cunningham's Article on Kunawar, &c. in the Asiatic Society's Journal (Vol. XIII. p. 172 et seq.) containing much accurate information.

I have no opportunity at present for tracing in detail the agreement or discrepancy between our several statements where we touch upon the same points : but I think I may say generally that my rude oral information is in the whole well corroborated by the literary investigations of the learned Hungarian.

My chief mistake appears to have been in assigning the eastern Tibetans of *Kham* national existence too independent of their common country, *Bod*, and perhaps a geographical extension too far to the north-westward. In the tribe of *Brukpa*, vulgo *Dakpa*, mentioned by *Csoma de Körös*, I recognize the inhabitants of the *Jang Thang*, north and east from *Gartokh*, the country of the Salt and Borax fields, and of the Gold Mines.

I have availed myself of *Csoma Körös's* article to insert the Tibetan name of *Tise* in my map, over the Peak of *Kailas*, as also to correct my *Kam* and *Lo*, to *Kham* and *Lho* ; I had omitted the aspirates of the initial consonants in these names, because they were by no means clear in the pronunciation of my informants.

Other of my Tibetan names would require correction to agree with the orthography of *Csoma Körös*, but it is as well to leave them unaltered, as their present form indicates the popular pronunciation current on the frontier of the British Himálayan provinces, *Kumaon* and *Gurhwal*, to which locality both my map and journal have particular reference.