

VIEWS IN INDIA,

CHIEFLY AMONG THE

HIMALAYA MOUNTAINS,

TAKEN DURING TOURS IN THE DIRECTION OF

• MUSSOOREE, SIMLA,

THE SOURCES OF THE JUMNA AND GANGES, &c. &c. IN 1829-31-32

> WITH NOTES AND DESCRIPTIVE ILLUSTRATIONS.

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PRELIMINARY OBSERVATIONS ON

THE HIMALAYA MOUNTAINS.

THE Himalaya is that stupendous range of mountains, which, stretching from the Indus on the north-west, to the Bramaputra on the south-east, divides the plains of Hindostan . from the wilds of Thibet and Tartary. West of the Indus, a continuation of the same range, but running in a more westerly direction, is known among the Afghans at the Hindoo Kosh: properly speaking, however, the chain is the same, as it can scarcely be said to suffer interruption from the stream of the Incus, which, rising on the northern side, passes through it in about latitude 35° north, near the borders of Cashmere. From this point, the Himalaya has a south-eastern course, extending along the sources of all the Punjab rivers that form the Indus, (except the Sutlej, which also penetrates it,) down across the heads of the Jumna and Ganges, skirting the whole of the Nepaul territory, and constituting (except in a few instances where penetrated by rivers) one continued mountainous chain from Cabul to Bootan; but beyond these limits it is lost in unexplored country, where it is supposed to extend, with decreased elevation, as far as the Chinese sea. These mountains, in their great extent, receive various appellations, such as, Himala, Himmaleh, Himachal, Himavat, &c., having a similar signification, expressive of snow or cold.

The Himalaya Mountains, previous to 1815, remained almost wholly unexplored by Europeans; since which, they have been but partially traversed, and as the information derived from the natives cannot be depended upon, they may be said, even at the present day, to be comparatively little known. This is much to be regretted, for that tract of country cannot be considered otherwise than highly interesting, and one that offers a wide field both for scientific and commercial speculation. It may also claim the attention of the geographer and the statesman, not only, says Mr. Fraser, "as containing the sources of so many of the majestic rivers that fertilize and enrich Hindostan and other Asiatic regions, and the being inhabited by nations and tribes of a singular character and very warlike disposition, who have for ages defied the arms of the most powerful Asiatic monarchs; but it serves as a magnificent and most efficient boundary between two empires of such extent as China, and that which once owned the sway of the house of Timor, but now chiefly the milder rule of the British government."

The Great Himalayan Snowy Range is only the more lofty crest of this mountainous tract, immediately ordering Hindostan; its height is enormous, and may there be considered as an immense supporting wall, or buttress, to the grand Tibetian plateau on the north, which is itself elevated many thousand feet above the level of the sea, and into which the descent is far less than on the southern declivity of the mountains. This snowy belt is of considerable breadth, and, although rugged and broken, its extreme

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height presents a barrier perfectly insuperable, except where the beds of rivers, by partially intersecting it, or holding their course wholly through it, (which is rare,) admit of an approach to its more remote recesses, or offer, at best, a possibility of penetrating across the range through decerts of rock and snow.

The hilly country attached to the southern declivity of the Snowy Himalayas, is divided into various kingdoms and provinces: eastward of the Sutlej are Sirmoor, Gurwall, Kumaon, Nepaul, &c., besides several inferior states, the very names of which, to the British, prior to the Ghoorka war of 1815, were involved in conjecture. The greater part of these provinces consist of a succession of high mountainous ridges, jumbled together in various forms and directions, occasionally intersecting each other, but generally steep and rugged: the whole becoming gradually elevated farther north, and /mperceptibly uniting with, and forming as it were roots or branches of, one great stem. The summits are generally narrow, and the declivities great, which render the intervening vallies much confine. Strictly speaking, however, except in Nepaul, there are few or no vallies, for the deep and irregular dells which separate the ridges, are scarcely entitled to that appellation.

The horizontal depth of the whole mountainous mass, including the snowy belt, varies in different parts; but between the Sutlej and the Ganges, the distance from the plains of Hindostan to those of Thibet, has been estimated at from eighty to one hundred miles.

With regard to altitude, as far as our knowledge extends, the Himalaya mountains are the highest range of alpine mountains in the world, twenty of its peaks exceeding in height the loftiest of the Andes. Among the most elevated is Dhawalagiri, or the White Mountain, situated, it is supposed, near the source of the Gunduck river, and to which, measurements taken from remote stations affix a height exceeding 27,000 feet bove the level of the sea. The near coincidence of Captain Blake's observations, nade in 1814, with the more recent ones of Captain Webb and others, justify the belief, that when the true height shall be accurately determined, it will be found rather to exceed than fall short of that estimate. (Other peaks in the same territory, from the extreme distance at which they are visible, are supposed to be not less than 28,000 feet; but from the policy pursued by the Ghoorkas, in imitation of the Chinese, of excluding all strangers from their dominions, they are not approachable, and remain in consequence unexamined. Mr. Moorcroft was of opinion, that some of the peaks which he saw on his journey to Manasarowar, were elevated at least 30,000 feet; and, more recently, Dr. Gerard, from some observations at great heights, barometrically ascertained, calculated some peaks in the Kailas, or northern portion of the Himalaya, at not less than 30,000 feet above the level of the ocean; indicating a probability that the highest pinnacles have still to be ascertained in that quarter. "Fortunately, however, (says Mr. Royle,) we do not depend upon these approximations only, for a true estimate of the height of the Himalayan peaks. These mountains have been so carefully and scientifically surveyed from the Sutlej to the Gogra, by Captains Hodson, Webb, and Herbert, and with a bias apparently to take the lowest rather than the highest results which their observations gave them, that it would not, perhaps, be advancing too much to say, that if they err, it is rather on the side of deficiency than excess." The

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following numbers may be received as affording a very near approach to a correct determination of the height of some of the principal and best ascertained points.

	FEET.
Dhawalagiri, or the White Mountains; above the level of the sea,	27,000
Nunda Debee, one of the Juwahir cluster of peaks, and No. 14, A, 2, of	
Hodson and Herbert's survey, ?	25,741
Setghur, (properly Swetaghur,) or the White Tower north of Nepaul, .	25,261
A mountain, supposed to be Dhaibau, above Catmandoo 20,140 feet;	
above the sea,	24,768
A mountain, not named, observed from Catmandoo, in the direction of	
Caila-Bhairava, 20,000 feet above the valley of Nepaul, and above	
the level of the sea,	24,625
Another near to it, 18,662 feet above the Nepaul valley; above the level	Ser Ser
of the sea,	23,261
A third in the vicinity, 18,451 ditto.;	
Two peaks, named St. George and St. Patrick, situated at the head of	
the Bhagiruttee, or true Ganges; calculated in Hodson and Herbert's	
survey—the first at,	22,654
$-$ the last at, \ldots \cdots \cdots \cdots \cdots	22,798
The two peaks of the Roodroo Himala, north-east of the Ganges,	
22,390, and	22,906
Peaks of the Jumnootree, or Bunderpooch Mountains, (giving rise to	
the Jumna, the Tonse, and the Berai Gunga,) varying in elevation	
from 20,122, to	21,155
Also upwards of fifty inferior peaks, lying between lon. 78° and 80° East,	
varying from 18 to	20,000

Several of the above mountains, in the direction of Catmandoo in Nepaul, are visible from Patna at a distance of from 150 to 160 geographical miles. Peaks still more remote in this direction, are seen' in the north-east quarter, at the prodigious distance of 195 geographical miles from Patna. Chamalari, near which Captain Turner passed in his journey to Bootan and Thibet, is supposed to be the same mountain which is seen from Purneah, Rajmahl, and other places in Bengal, the most remote being distant not less than 232 English miles. This, 'according to the calculation of Mr. Colebrook, requires an elevation of at least 28,000 feet, to be barely discernible at that distance in the mean state of the atmosphere, although less might suffice under circumstances of extraordinery refraction.

Although from their vas) extent the Himalayas have been but partially explored, and our knowledge of them is consequently very limited, yet within the last twenty years much valuable information relative to them has been obtained, through the arduous and persevering efforts of a few scientific individuals, more particularly the gentlemen engaged in the late surveys, and other adventurous travellers, among whom the Messrs. Gerard may be mentioned as second to none in energy and enterprise. The result of their labours, so far, has proved both interesting and satisfactory, and

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such as may be justly expected to stimulate others to further researches. Accounts of their tours and discoveries, together with minute tables of their calculations and observations, have been published at different periods; but these consist chiefly of detached papers, and are not to be met with in any regular or connected form. The following observations, founded on the works of Colebrooke, Fraser, Webb, Raper, Hodson, and Herbert, the Messrs. Gerard, &c., (the best authorities,) are chiefly extracted from Hamilton's East India Gazetteer, and the notes prefixed to Royle's "Botany of the Himalayan Mountains," a work now publishing, and to which the scientific reader is referred, as affording the best general account of these parts, and as most likely to supply the desideratum alluded to.

Except in the surveyed portion of the Himalayas, little is known of the passes leading from one face of the snowy mountains to the other: they always lead over the lowest parts of the range, and their elevation is generally from 15 to 16,000 feet, mostly flanked by peaks several thousand feet higher. The principal of these are the Shatool or Rol passes, near the course of the Sutlej; also the Gonass, and the Brooang (or Burenda), passes; the first is stated to be the most difficult, the last the least so. Others more to the eastward exist, among which are the Mana and Netee passes, near the Dauli branch of the Ganges; of these, the last is reckoned the best passage through the Himalaya in the western parts, and will probably be so improved as to render it of still more easy access. The Netee pass was ascertained by Captain Webb to be elevated 16,570 feet; and the Mana, not less than 18,000 feet, by barometrical observation. Some of these passes cannot be visited before June, or the beginning of July; that to the Bhuddrinath not being open until May. Spring, summer, and autumn are comprised in five months, from May to September; and by the commencement of October, the cold becomes very severe. The air within the mountains has been described by Captain Hodson as " clear, light, and very dry, in which evaporation is very rapid; the sky of a deep blue colour; and the stars of great brilliancy, appearing and disappearing instantaneously, without any apparent augmentation of their size." But between the northern and southern face of the Himalaya, considerable difference in the climate, and other peculiarities, exist, for both habitations and cultivation are found extending to a much greater height on the former than on the latter. The crest only of these passes can now be visited, as persons are prohibited crossing the frontier, for fear of exciting the jealousy of the Tibetian authorities, and disturbing the trans-Himalayan trade of the province of Kumaon.

In no part of the Himalayas on the southern side, is there any thing like tableland to be found. The Himalayan glens for the most part run perpendicular to the range, or from N.N.E. and N.E. to S.S.W. and S.W. The-face exposed to the N.W. is invariably rugged, and the opposite one facing the S.E. shelving. On the declivity towards the N.W., the trees grow at elevations several hundred feet higher than those on the opposite face, which has a more gentle slope; in some instances, the difference exceeds one thousand feet. The general height of the forest on the southern face of the Himalaya, is about 12,000 feet above the level of the sea: oaks and pines reach that altitude, birches ascend a few feet higher. Descending from the pass of Bandajin, the level of the highest juniper was 13,300 feet.

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"On ascending the southern slope of the Snowy Range, the extreme beight of cultivation is 10,000 feet, and even there the crops are frequently cut green; the highest habitation is 9,500 feet; 11,800 may be reckoned the utmost limit of forest, and 12,000 that of bushes; although in ravines and sheltered spots, dwarf birches and small bushes may be perceived extending almost to 13,000 feet. On the north side, in the valley of the Baspa river, the villages are found at 11,400 feet; reultivation about the same; and the forest at least 13,000 feet. Advancing further, villages are found at 13,000 feet; cultivation at 13,600; fine birch-trees at 14,000; and furze bushes, affording excellent fuel, 17,000 feet above the level of the sea. Further east, towards Lake Manasarovaro, according to Tartar information, crops and bushes thrive at a still greater elevation. In the exterior chain to the south, where the heat is only reflected from one side, the warmth is much less than in the interior cluster, where there is a reverberation of heat from all sides."

In 1817 Captain Webb visited Juwahir Pugunnah, and near the village of Milum, at an elevation of 11,401 feet, found extensive fields of a species of barley and buckwheat; and at a height of 15,000 feet above this, he perceived plants of the jatamansi, or spikenard. "The road from Milum to Tartary leads along the banks of a mountain stream, and is a continued ascent of four days' journey for laden sheep and goats. This route opens in July, at which time the Bhooteas find pasture for their flocks, even at the fourth halting-place, which, allowing only 500 feet ascent for each day, will carry the limit of vegetation in this quarter of the Himalaya to 13,500 feet. On the 21st of June, 1817, Captain Webb's camp was 11,630 feet above Calcutta, on a clear spot, surrounded by rich forests of oak, pine, and rhododendra, the surface covered with rank vegetation, as high as the Kaee; very extensive strawberry beds were in full flower, and numerous currant bushes in blossom. On the 22nd of June, on the summit of Pilgointa Churhai, 12,642 feet above Calcutta, there was not any snow to be seen in the vicinity. The soil collected over the rock was a rich black mould, covered with strawberry plants not yet in flower, dandelions, butter-cups, and a profusion of small flowers; and 500 feet lower was a forest of birch-trees, alpine rhododendra, and raga pine. In 1818, the Netee pass, or ghaut, was explored by the same officer, when still greater discrepancies with the calculations of theory, resulted. The crest of the Netee Ghaut was found, by a mean of four barometers, to be 16,814 feet above the level of the sea; and he estimated the lowest part of the valley of the Sutlej, which he was prevented visiting by the Chinese functionaries, at 14,924 feet." , When seen by Captain Webb, the crest of this pass had no snow on it, nor any on the ridges 300 feet above it; and herds of cattle pastured on the grassy banks of the Sutlej: on which account the lower point of congelation was estimated at not less than 17,000 feet, on the northern side of the Himalaya mountains.

The Messrs. Gerard ascended the Pargeul mountains, near the Shipké Pass, on the borders of Tartary, to the enormous height of 19,411 feet above the level of the ocean, "measured barometrically, and confirmed trigonometrically, within two miles of the summit, which is conjectured to be 22,000' feet. The rocks here lie in 'immense detached masses, heaped on one another. Seeds of a species of campanula were gathered at the elevation of 16,800 feet, on a spot where the thermometer, in the

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middle of October, was at 27° Fahrenheit; but the utmost limits of lichens and mosses must doubtless reach much further. At the elevation of 16,200 feet, on the confines of Chinese Tartary, real ammonites were picked up, not salgram stones merely, containing their impressions. Ammonites were also found in the beds of torrents, near the Niti and Mana passes."

The upper part of the state of Kunawar, in the valley of the Sutlej, is completely shut within the Himalayan range, the height of which is sufficient to exclude it from the influence of the periodical rains; the climate is, therefore, quite different from that of the adjacent districts, being dry and cold, and the country covered with snow in winter, although in summer enjoying several months of powerful sun. In some villages the sun is not seen for more than nine hours, being obscured by the surrounding mountains. But in the Himalayas every kind of climate is to be found; and by ascending or descending the mountains, the inhabitants can pass to a variety of temperatures: and by a few days, or sometimes even hours' journey, they may exchange the heat of Bengal for the cold of Russia. In a late journey through the north-eastern parts of Kunawar, Dr. Gerard writes, that he "came upon a village at a height of 14,700 feet. It was the middle of October, and the thermometer on two mornings was 17°, yet the sun's rays were oppressive, and all the streams and lakes which were sheeted with ice during the night, were free and running by two o'clock. The finest crops of barley are reared here, and to irrigation and solar heat are the people indebted for a crop. The barometer gave for the highest field 14,900 feet of elevation;" and this, Dr. Gerard adds, "verifies the inferences deduced relative to the limit of cultivation on the upper course of the Sutlej, and I think it quite probable that crops may vegetate at 16 and 17,000 feet. The yaks and shawl-goats seemed finer than at any other spot within my observation." Again, he continues, "On the north-eastern frontier of Kunawar, close to the stone bridge (near Changrezing,) I attained a height of more than 20,000 feet, without crossing snow, the barometer shewing 14,320, thermometer 27°, at 1 P.M. (giving above the sea 20,419 feet, by the usual calculations.) Notwithstanding this elevation, I felt oppressed by the sun's rays, though the air in the shade was freezing."

"All travellers over the Himalaya have bremarked, that a difficulty of breathing, attended with lassitude and severe head-ache, takes place at an altitude of nearly 15,000 feet above the level of the sea. The native mountaineers, who feel it as sensibly as strangers, and know nothing about the rarity or density of the atmosphere, attribute the faintness to certain exhalations frem noxious plants; and Captain Hodson was inclined to think them right, as the faintness was never experienced on naked snow, even when higher, or where vegetation was completely absent; but only an inability to go far without stopping to take breath. By the natives it is called *biche*. With respect to the cold of the Himalaya, our information is rather defective. On peaks formed of solid rock, that have been for ages covered with never-melting snow, and not exposed to the vicis-situdes of the seasons, an uniform cold must always have prevailed,—all moisture is frožen, no rain falls, no partial thaws take place, or there would be glaciers; in fact, although we hear a great deal about the snows of the Himalaya, very little is said about ice."

"Throughout the Himalaya, as far as yet explored, the only rock sufficiently extensive to characterize its formation is gneiss, the other rocks occurring only in beds and

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veins. Granite veins are numerous in some positions, but it does not form the leading feature in the geology of these mountains, which differ in structure remarkably from the Andes. Other differences occur, among which, the most remarkable is the total absence of volcanoes. The chief mineral productions hitherto found are sulphur, allum, plumbago, bitumen, gypsum, potstone, borax, rock-salt, gold-dust in small quantities, copper, lead, iron in some abundance, antimony combined with lead and sulphur, and manganese with iron. No volcanoes were seen or heard of by Captain Hodson, when he explored the sources of the Ganges; where the mountains consist of various sorts of granite; nor were any shells or animal-remains seen. The magnetic variation was very small, about one degree easterly, scarcely differing from that of the plains of Hindostan. The diurnal tides of the barometer are perceptible, the mercury always falling a little before noon, as on the plains."

The most eastern portion of the Himalaya mountains that has been traversed by Europeans, lies in Bootan, north of the Bengal district of Rungpoor; where Captain Turner, during his embassy to the Teshoo Lama, in 1783, crossed over to the north, penetrating a considerable way into the Great Plateau, or Table-land of Tartary, the elevation of which is estimated at 15, or 16,000 fect above the level of the sea.

In the Hindoo mythology, Himalaya is deified, and represented as the father of the Ganges, and of her sister Ooma, the spouse of Siva, the destroying power. Himalaya signifies in the Hindooee, "the abode of snow."

The present series of views are intended more particularly to illustrate that portion of the Himalayan region lying between the rivers Sutlej and Kalee, having for its boundary on the north and north-east, the snowy chain of the Himalaya; and to the south and south-west, the plains of Hindostan. Within this tract of country are comprised the provinces of Sirmoor, Gurwall, and Kuman, besides several other inferior states, the whole of which are now either annexed to the British possessions, or are become allies and tributaries to that government.

In the very beginning of the present century, the Ghoorkas, a brave race, from the Nepaul country, governed by an enterprising chieftain, extended their conquests into these provinces, and advanced even as far northward and westward as the Sutlej, the most eastern branch of the river Indus. The hill-chiefs towards the Jumna and the Sutlej are said to have been accustomed to encroach on each other's possessions, viewing all their neighbours' movements with the utmost jealousy, and having no common principle of mutual defence. The consequence was, that each fell singly before the Ghoorkas, and offered little resistance to a body of half-disciplined barbarians, who imposed on them by a wretched imitation of the dress, constitution, and accoutrements of the British Sepoys. That they might successfully have defended such a country, scarcely admits of a doubt, yet the invaders were suffered to capture, without the aid of artillery, every hill-fort, from the Ganges to the Sutlej.

When Ameer Singh Thappa, the Ghoorka chief, first attracted notice, he was employed in subduing the intervening states; and as he advanced westward, he erected forts and stockades at convenient distances, especially at Almora, Serinagar, and

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Malown; and on the Seik frontier he established a strong line of fortifications. A series of encroachments also began on the British possessions, along the whole northern frontier, more particularly in the districts of Goruckpoor and Sarun, where, at length, in 1814, two thanas, or p/tice stations, were ^cattacked by a large body of Ghoorkas, and nearly all the garrisons destroyed.

The sword was now drawn, but the war was protracted, and several severe checks, such as the British troops had not been lately accustomed to receive, were experienced. At length, in 1815, Sir David Ochterlony assumed the chief command, and having penetrated the hills, he, by a series of skilful operations, dislodged the Ghoorkas from the fortified heights of Malown, and cultimately so baffled and pent up their renowned commander Ammeer Singh, that he was glad to capitulate, and abandon the whole of the territory west of the Kalee.

A treaty of peace was subsequently concluded, by the conditions of which, the Nepaulese renounced all the lands respecting which there had been any previous discussion, and all claims of every description to the country west of the Kalee, or Gogra river. Within the large tract last mentioned, Kumaon, the Deyrah Dhoon, and other small portions of territory, were annexed to the British dominions; but with these exceptions, the whole country west of the Kalee was restored to the surviving representatives of the families who had possessed it before the Ghoorka invasion. In cases where the ancient families had become extinct, the lands were bestowed on chiefs who had served with zeal and figlelity.

With respect to the revenues of these provinces, from the nature of the country, as well as its slender population, it will be readily imagined that it is by no means proportioned to the extent of land. It is stated to be not only trifling in amount, but as being collected irregularly, and with much difficulty. The anecdote that is related of the rajah of Gurwall may serve to illustrate the resources, not only of that, but of most of the adjoining districts. It is said that the great Acbar, in the zenith of his power, having obliged even some of the hill-chieftains to become his tributaries; from among these he exacted the homage of the rajah of Gurwall, demanding from him an account of the revenues of his raje, accompanied by a chart descriptive of his country, that the amount of his tribute might be settled. In obedience to the commands of the emperor, the rajah repaired to the presence, and on the first day of audience, after displaying a true but not very flourishing state of his finances, on being asked for his chart, facetiously introduced a very lean camel, assuring the shah that such was the best semblance of his country-all heights and hollows; up and down, and very poor. The emperor, smiling at the ingenuity of his comparison, exempted him from tribute, observing, that from one so poor he had nothing to demand.

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CHIEFLY IN

[VIGNETTE.]

RUNJEET SINGH'S ENCAMPMENT AT ROOPUR, ON THE RIVER SUTLEJ.

THE distance is a representation of the camp of Runjeet Singh, the chieftain of Lahore, on the occasion of his interview with the Governor-General of India, Lord William Bentinck, in October, 1831.

This meeting, though nominally one of mere ceremony, was, it is supposed, rather of a political character, calculated to cement more strongly the union of the two powers, flatter Runjeet's vanity, induce him to enter into a defensive alliance with the British, and to gain by treaty the navigation of the Indus, for the more speedy transport of troops by steam from Bombay, in case of an invasion, or any hostile demonstration on the part of Russia, or the powers on the north-west frontier.

The spot selected for this purpose was most happily chosen, being among the lower skirts of the Himalaya, where the Sutlej first enters the plains. For, besides the extraordinary beauty of the surrounding scenery, it possessed additional interest from being situated on the Sutlej, the Hyphasis of Alexander, which stopped that conqueror's career in the East. At Roopur, also, is the very ghaut, or ferry, at which Nadir Shah made the passage of the Sutlej, when he invaded India, about a century ago: circumstances which bestow on it a somewhat classic charm in the minds of those acquainted with the history of the country.

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RUNJEET SINGH'S ENCAMPMENT

The two armies were encamped on opposite sides of the river, Runjeet's occupying the right bank; and, as their movements were distinctly visible from our side, it was wonderful and amusing to witness the celerity with which a barren sandbank was metamorphosed into what appeared almost fairy ground. A spot of about eight acres had been, some days previously, marked out, and small patches or plots had been sown in devices with some kind of herb, and kept well wetted. This was not observable by the uninitiated; so that when the chief arrived, magnificent tents and pavilions, of crimson, scarlet, and gold, with costly embroidery and awnings, supported by golden pillars, suddenly arose as it were by magic; the upper surface of the earth (which had become disengaged by the sun and the shooting of the thickly-sown seed) was removed, and displayed parternes in patterns of the brightest green. The whole was enclosed on three sides by a wall of crimson, lined with yellow satin, having lofty gateways or entrances of the same, and flanked by towers of scarlet and gold; one side lay open to the river, which spread like a mirror before it, in the full development of war-horses, warriors, elephants, camels; canopies, towers, and minarets, all united together in the freshest green of Eastern spring.

Above and immediately behind this enclosure which contained the habitation of the chief, the bank of the river rises in a bold precipitous rock to the extent of about sixty feet, and there breaks into ridges of unequal elevation to the height of three hundred and fifty feet: on the first glittered a silver summer-house, or temple; it was portable, formed of wood, and covered with plates of embossed silver. The several camps of Runjeet's army were situated between these hills, having a view of the snowy range in the back ground, open at north-west a crazy-looking bridge of boats, constructed for the occasion, connected the two territories; and on some of the eminences, commanding the neighbouring heights, small forts were visible, much in character with the canvass world that lay below.

Nothing could be more picturesque than the scene of the entrée of the chief into his own camp on the morning of the 25th; it is thus described by an eye-witness:—" About a mile off we descried tents, which, as far as the eye could reach, covered the whole banks; and, at the distance of another mile, we entered the streets formed by his troops for him to pass through. On passing along, I thought I was on enchanted ground. One line was composed of lancers in yellew satin, (the spring colour of the East,) having all their arms and horse-trappings richly embroidered with gold;

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the officers most sumptuously attired. The other side of the street consisted of six battalions of infantry, three deep, each battalion 800 men, dressed like our sepahees, with the 'exception of their topees; and their arms and accoutrements appeared to be European. At the head of the infantry were 40 guns, well equipped for a native chief's aviny; and beyond were 200 Surwar camels, with crimson and gold housings, each carrying a swivel. I cannot guess the distance to which the whole extended, but it must have been immense. In the centre of the street, which was about eighty yards wide, stood the chiefs of battalions, opposite their corps and companies, and the two heads of divisions opposite the heads of their divisions, all dressed most gorgeously, and some of them with quantities of jewels. The Surwars took up their position in the Surwar line on elephants, richly adorned, forming a curious relief to the interminable yellow; one of them, with his attendants on two other elephants, appeared to be stationed between every two or three hundred men. After waiting some time at the extremity of the street, a gun fired, and announced the approach of the Maharajah : in a few minutes, his swarm of elephants, towering above all things, made their appearance; presently a squadron of lancers passed down, as if they and their horses were mad; then followed some mounted matchlock-men going through their antics; then came a fat, portly-looking person, bedizened with gold, jewels, and satin, on a prancing charger, superbly caparisoned, with a troop of attendants in various costumes, some in armour; and about a hundred vards in their rear approached the arbiter of the fate of millions, on a majestic elephant, in a gold howdah, accompanied by six other elephants abreast, carrying his and our ministers. Guns were fired on both sides the river, that shook our very tont-pegs; both parties were exceedingly polite, the Sheik rather poetically so. Lord William, through an interpreter, expressed a hope that the Maharajah (his majesty) had not experienced any bad effects from the heat: the chief replied, that 'The path through the garden of friendship is ever green, and sown with the sweetest flowers."" A good specimen of Eastern phraseology.

On minute examination, the interior arrangement and decorations of his camp-equipage fully corresponded to the idea which might be formed from their magnificence without. The two principal tents were of scarlet and purple broadcloth, lined, one with yellow satin, the other with shawls edged and decorated with gold, having massive gold poles, richly chased. Two of the smaller pavilions were outside, composed of crimson velvet, singularly

RUNJEET SINGH'S ENCAMPMENT

and richly wrought, with representations in gold embroidery of the leaves of the lotus. Each tent had splendid awnings of scarlet cloth, beautifully decorated; the cords of crims a silk; and under both tents and awnings were spread carpets of shawls and yellow velvet, beautifully embroidered with crimson and gold. One of the smaller pavilions, near the river, and which appeared to be appropriated for bathing and the coilet, and where Runjeet chiefly sat during the heat of the day, was lined throughout, awnings and all, with the finest shawls of Cashmere.

Runjeet paid his first visit on the 26th, which was returned by the Governor-General on the following day. Nautches, or evening parties, were also given and returned, and reviews of the troops on either side took place; all attended with great display, and affording sights of Eastern pageantry and splendour not often witnessed in modern days.

The presents given and received on the different visits were of the most sumptuous description; and Runjeet evidently wished to impress every one with a favourable idea of his munificence and liberality. He bestowed shawls and silks on each person who visited him, or was introduced to him; and on some occasions he called before him, when he observed them, even the soldiers and camp-followers, who strolled by accident near the precincts of his camp, and these he questioned, and dismissed with presents of from 50 to 100 rupees. To each of the bands of the escort of the Governor-General, on the occasions of their performing in his presence, he gave 1000 rupees. He was highly delighted with our troops and their movements, especially the Europeans; and as he rode up and down the ranks of His Majesty's 16th lancers and 31st regiment, he exclaimed that they were "so fair, so young," all like "sahiblog; e" (gentlemen); their equipments, particularly those of the lancers, striking him much. After the review, several mule-loads of rupees were brought, which he ordered to be given to our troops.

We observed in his train, on several occasions, the large dray-horse presented by his late majesty George the Fourth to Runjeet. He is a noble animal, but much out of condition; he designates him his 'Hathee sa Ghorah,' or Elephant Horse, and has him occasionally led in state, caparisoned like an elephant, with a howdah, &c. He certainly formed a singular contrast, in size and appearance, to the Arabs' and other horses of India, which were gaily prancing and curveting about him. Among the novelties of Runjeet's entertainments was a band of amazons, or armed women,

AT ROOPUR, ON THE RIVER SUTLEJ.

used as a guard to the zenanah, or seraglio; they were splendidly attired; among them were some lovely girls, with ruby lips, teeth of pearl, checks of the tulip, and forms to wake the passion, of an anchorite: he appeared very kind to them, and once during the evening, as in their play they were scattering about rose-leaves and gold-dust, some of the latter falling in his eye, extinguished, for the time the chieftain's *only* luminary, and created a great laugh at his expense; but he bore the whole very good-humouredly. After singing a song or two, they received their "rooksat.' Runjeet wore on his arm a diamond, called 'the Mountain of Light,' which is said by some to be the largest in the world. Mention is not made of it in the accounts of the principal known diamonds; but, judging from the models generally exhibited, it appeared larger than any of them.

Runjeet Singh is lord of the Punjab (or Country of the Five Rivers, branches of the Indus); and Cashmere, of which he is sovereign, can only be approached through his dominions; which favour he is extremely jealous of granting to any one. But the permission to enter his territory being once obtained, his hospitality is of the most princely kind. The sum of 100 rupees is sent to the traveller every day whilst in "his dominions, besides other costly presents, and attendance of every sort, calculated to impress ideas of his unbounded wealth and power. M. Jacquemont, the French naturalist, under the auspices of our government, appears to have been almost the only one who was privileged, of late, to travel as far as Cashmere, and has given some amusing information regarding the country and its resources. He says-"There is no want of local character here: the English, who have no political influence in this country, have not been able to efface it, as they have in India. At Lahore, I lived in a little palace of the 'Arabian Nights.' A battalion of infantry was on duty near me; the drums beat in the fields when I put my head out of doors; and when I walked in the alleys of my garden in the cool of the evening, fountains played around me by thousands. A most splendid fête was given me, with an accompaniment of Cashmerian girls, as a matter of course; and although they had their eyes daubed round with black and white, my taste is depraved enough to have thought them the more beautiful for it." Again, he says :-- "Runjeet disciplines his little army (from 30 to 40,000 men) in the European fashion, and almost all his officers are Frenchmen. The principal one is M. Allard, who is quite the Soliman Bey of Runjeet. He is well paid, but half a prisoner; Runjeet taking care to make him spend the whole of his income, in

RUNJEET SINGH'S ENCAMPMENT.

order to take away the desire of leaving him. He pursues the same policy with regard to his other European officers, upon whom he only half relies. In order to maintain his army, he is obliged to grind his country with imposts which are ruining it. Several of his provinces are calling for the English; and I doubt not but that some day or other (but not for years) the Company will extend the limits of their empire from the Sutlej to the Indus."

Runjeet is a slight man, and rather of low stature, with a sharp face and quick expression, rendered more remarkable by the loss of an eye, said to be from the small-pox. He is reported to have been wonderfully anxious that the escort which accompanied the Governor-General to the other side the Sutlej should consist of little more than his personal staff. The native character is naturally suspicious, and he appears to have guarded pretty well against surprise, when he brought with him to the place of rendezvous a force nearly ten times that of the British.

If Runjeet Singh were sincerely attached to the British, he would, no doubt, form a powerful and useful ally; but it is said that little reliance is to be placed on the "wily chieftain's fidelity, and that many good lacs of rupees were expended on this occasion " without advancing the business one jot." Let that be as it may, to mere observers there was the appearance of the greatest amity on both sides, and the whole scene was one of much novelty and interest.

ENTRANCE TO THE KEREE PASS, LEADING TO THE VALLEY OF DEYRAH DHOON.

PLATE IL.

VIEWED by the traveller from the plains at a short distance beyond Saharunpore, the whole mountain barrier of the Himalaya presents the appearance of three separate and parallel ranges: first, the small belt of hills bounding the Valley of the Dhoon, whose dark and wooded outlines are distinctly traced; beyond which, a range, evidently more lofty; and wearing a bluer or more hazy hue; and above that again, what at a first glance might be mistaken for clouds, were they not so stationary, and but for their pyramidal forms, which, clearly white, or tinted with the morning sun, tower above every thing terrestrial, seeming to pierce even the heavens themselves:—these are the crests of the mighty snow-clad Himalaya, the sublime and imposing appearance of which from the plains, even at the distance of 150 miles, has long since consecrated them among the Hindoos as the abode of their most favourite deities.

...

On a nearer approach, however, the snowy peaks become less distinguishable; and after passing the low hills above mentioned, and entering the Valley of the Dhoon, they are entirely lost to the eye, being eclipsed by the summits of the nearer, or what may be termed the secondary chain of the Himalaya, which here rise into a dignity and grandeur that cannot fail to surprise. Having crossed the valley, the ascent to these is abrupt; after which, all seeming regularity of ranges vanishes, and the whole presents a confused assemblage of mountains, heaped on each other, and running into ridges which defy arrangement, but all terminating to the north and north-west in the chain of snowy peaks. Plates v. vi. and vii. will convey, better than words, an idea of the country through which the approach alluded to is made, and of the general appearance of this mountainous tract.

The Valley of Deyrah Dhoon, here mentioned, is the most valuable of the possessions attached to the province of Gurwall; it stretches from the Jumna to the Ganges, and is separated from the Gangetic plains by a low

ENTRANCE TO THE KEREE PASS.

serrated range of hills, which, commencing at Hurdwar, runs to the northwest as far as Nahun, and which is distinct from the great mass of northern mountains, to which it may be considered as a sort of outwork. Seen from a height, these hills have a most singular aspect, and "remind one," says Mr. Fraser, "of a wave of the sea that has rolled by, shewing here and there its broken crest, half turned backwards." See plate v.

Through this ridge there are several openings which afford a tolerably easy communication between Saharunpore and the Dhoon; but the principal are the pass of Hurdwar, by the side of the Ganges; that of Timlee, within a few miles of the Jumna; and the intermediate one of Keree. The ascent by these passes into the Valley is, for the most part, so gradual as to be scarcely perceptible; yet the general elevation of the Dhoon itself has been found, by barometrical observation, to be from 1000 to 1200 feet above the level of the ocean. . Its climate also differs much from that of Saharunpoor, for it is scarcely affected by the hot winds, and during the winter season the mountains immediately bounding it to the north are capped with snow, while instances have even occurred of a fall of snow within the limits of the Valley. The inhabitants do not differ materially in person or language from those of the neighbouring plains. Game and wild animals of every description abound. This Valley was originally a jaghire from Aurungzebe to Futteh Sah, the reigning rajah of Gurwall, and properly belonged to the throne of Delhi, but, on the invasion of Gurwall in 1803, it was seized on by the Ghoorkas along with the rest of the province, and was afterwards ceded by them to the British in 1815. Its revenue is productive, and increasing; and, considered in a military and political point of view, it is of importance as connecting the British territory east of the Ganges within the hills, with the Kardeh Dhoon beyond the Jumna; and thus, by means of Malown and Subhatoo, and eventually of a fortress in Sirmoor, furnishing an uninterrupted line of defence from the Kalee to the Sutlej .- Hamilton's Gazetteer.

The Keree Pass, (the entrance to which is the subject of the present engraving,) like the Timlee, forms the bed of a watercourse, and exhibits, according to the season at which it is viewed, a disturbed torrent, or a shrunken stream, passing over a bed of water-worn pebbles and gravel, with high cliffs on either side. This pass is remarkable for presenting, in miniature, the internal structure and appearances of the larger and more perfect rocky formations, assuming the wildest and most romantic forms of forest, 'crag, and precipice, and offering a series of subjects well calculated to fill the sketchbook of the artist or amateur.

ENTRANCE TO THE KEREE PASS.

Dr. Gerrard, the indefatigable explorer of the Himalaya, mentions the sensation of enthusiasm and delight he experienced on first entering the hilly regions through these parts, adverting to which he observes, --- "Inhabitants of the north, long exiled from the place of their birth, and contending with the fiery atmosphere of the plains, can alone conceive the pleasure derived from the approach to a northern climate, and the gradual features of a northern landscape. During the rainy months, when every tree in the surrounding forest is in a state of green luxuriance, more lovely scenes cannot be imagined than those formed by the amphitheatres; of which new varieties open to us as we advance, and our view is closed in by those behind, in winding up these gravelly passes with lofty wooded eminences, precipitous steeps, and shady ravines opening on either side. The gigantic Scandent Bauhinia, the stem of which resembles a snake of the largest size, twines round the trunks of the trees, often hanging in festoons, over us from their loftiest branches, bearing its large woody siliquæ or flowers, which mingle their fragrance with that of the Mimosæ. 'Also numerous other plants, the roots of which have remained inactive and unobserved during the dry season, now shew their flowers and foliage, tempting the unwary admirer of nature, by the smiling aspect of all around, to linger in these unhealthy spots, where scarcely any native of the country can remain for a week or two (particularly, passing the night) without an attack of remittent fever."

The general line of these low hills is nearly north-west and southeast; their summits varying in elevation from 500 to 900 feet above the plains, and about 2500 above the level of the sea. They are chiefly composed of sandstone, more or less destructible, of indurated clay, and beds of rounded pebbles and gravel; a description which applies to them all the distance from their termination half way to the Sutlej.

The depth of the Keree Pass is between six and seven miles, and the halting-places are the Mohun Chokee at the entrance of, and the Shorepore Chokee within, the Pass.



Sanges entoung the Plains neuri-Hardward

PLATE III.

THE GANGES ENTERING THE PLAINS; NEAR HURDWAR.

THE river Ganges takes its rise among the loftiest of the snowy peaks, and, after winding for a hundred and fifty miles through a stupendous labyrinth of mountains, enters the plains of Hindostan at Hurdwar, a small town, situated on the verge of the southern declivity of the Himalaya; where that mighty river appears to have forced its passage through the lower and outermost range of hills. From a raging torrent, it here changes to a clear broad stream, and glides tranquilly, with a fall of somewhat less than a foot a mile, for nearly 1200 miles to the ocean; fertilizing vast tracts of territory, watering the most populous cities, and fostering the means of wealth and commerce in the finest provinces of India.

This river does not assume the name of Ganga, or Ganges, until its junction with the Alaknunda, just above Hurdwar, being previously called the Bhagiruttee. From Hurdwar to its confluence with the Jumna at Allahabad, the bed of the Ganges is generally from a mile to a mile and a quarter wide; after which its course becomes more winding, and varies from half a mile to three miles in breadth, according to the nature of the channel. In the dry season the mean rate of the current is less than three miles per hour, but in the wet season it runs from five to six miles an hour, and occasionally even as much as seven or eight in particular situations. The Ganges owes part of its increase to the rains that fall in the mountains, although it does not appear to be much affected by the melting of the snow in spring. The sum total of its rising is thirty-two feet, out of which it rises fifteen feet by the end of June, and the rainy season does not seriously begin in the low countries until about that time. By the end of July, all the flat country of Bengal contiguous to the Ganges and Brahmaputra is overflowed, and forms an inundation of more than 100 miles in breadth. nothing appearing but villages and trees, and here and there the artificial site of an abandoned village resembling an island."

THE GANGES ENTERING THE PLAINS, NEAR HURDWAR.

In its course through the plains, the Ganges receives eleven rivers, some of which are equal to the Rhine, none smaller than the Thames, besides a great many others of less note. The Hoogly, of all the lower branches of the Ganges, is considered the true river, and is held most sacred, in consequence of its running in the most direct line from the source; and although the waters of the whole river, from Gungotree to Sagor island, are holy, yet some places are more eminently so than the rest.

The sources and confluences of rivers being generally esteemed sacred among the Hindoos, we are not surpfised that Hurdwar, from its situation, should be regarded with peculiar reverence; especially when we are told that the Brahmins of India venerate this flood to such a degree as to believe, among other absurdities, that the first descent of the Ganges from heaven was designed to fill the "hollowed, but then empty, bed of ocean itself."

Hurdwar (or Hurreedwar) signifies the Gate of Hurree, or Vishmoo, the Saviour of the Hindoo mythology; and has, from the earliest times, been one of the most considerable places of pilgrimage among the Hindoos, who flock in hordes at stated times to immerse themselves in the holy stream, at the point where it first emancipates itself from the gigantic mountains which give it birth. Amidst these may be observed many poor wretches, victims of disease, or in the last stage of life, who have been carried, or, in some instances, have literally crawled, for hundreds of miles, apprehensive lest they should expire from exhaustion before they reach the sacred goal; where, as they arrive, they exhibit signs of the most extravagant joy at finding themselves able once more to wash their limbs in the hallowed stream : or they are borne to the water's edge, to say their last prayer, attended by the Brahmin ; and in some instances, they prevail upon their friends to extinguish the still lingering spark of life, and launch them at once into the broad bosom of the Ganges. Numbers of the swoln corses of these wretched beings may be seen afterwards floating on the surface, the prey of the quick-eyed vulture, or anxiously watched from the shore by a tribe of expectant half-starved dogs and jackals. Happy is he considered who can thus, and in this spot, terminate his earthly existence, securing to himself a blessed immortality. But, among these devotees are some who assemble here previously to their performance of the more arduous penance of a pilgrimage to the shrines of their deities, at Jumnootree, Gungotree, Kedarnath, and Bhudrinath, the source's of the four great feeders of the Ganges, which spring from amidst the deep and gloomy chasms of the snowy Himalaya; and happiest by far is he who may live to complete such a task--it is sufficient to wash away the sins of his family for a whole genera-

THE GANGES ENTERING THE PLAINS, NEAR HURDWAR.

tion—and not only is he certain of immortality, but he may even hope to be absorbed into the Divine essence itself!

Those, however, who can anticipate no such propitious issue in a future life, are content to carry away with them a pot of the holy water; and this they shew to their wondering families in their distant homes, who do not fail to hoard it up with the greatest care, attributing to it all the virtues and properties of a talisman.

In the vicinity of Hurdwar are some of the most lovely landscapes that are to be met with by the traveller amidst the picturesque and varied scenery presented by this river in its long and sweeping course. To the south are spread the wild wastes of the Terraee; and beyond the pass are the fine forests of the Dhoon, interspersed with rich cultivation, and watered by numerous rivulets. These tracts abound with wild animals, among which are elephants, rhinoceroses, tigers, leopards, bears, with hyenas, foxes, and jackals. Several species of deer are also met with amid these places, as well as a great variety of the feathered tribe. Monkeys and pea-fowl, being held sacred and encouraged by the Hindoos, are likewise in immense abundance. The pursuit of these animals, and fishing, together with the exceeding beauty of the surrounding scenery, are great temptations to the sportsman, and the lover of nature, to long and frequent rambles, and consequent exposure to the sun and the pestilential air of the jungles. A late writer has remarked, that the most beautiful spots are generally the most unhealthy; and that where the vegetable world is the most luxuriant, the human 'race is almost invariably the reverse. Each succeeding year affords a melancholy proof of the correctness of this observation, in the loss of the lives of some one or more of the European gentry, who, in their ardour for sport, forget the dangers which surround them, and fall a prey to the malignant fevers of the neighbouring country.

The view in the accompanying engraving is taken from the new road, lately constructed by government, from the Pass into the Valley of the Dhoon. The hill seen in the distance is the Chandnee pahar (or Silver Mountain), on the summit of which, a height of about 600 feet, is erected a white temple to Mahadeva, to whose altar the pilgrims, crossing the river in boats, repair to fulfil their devotions, after performing[®] their ablutions in the river



PLATE IV.

PART OF THE GHAUT, DURING THE FAIR, AT HURDWAR.

THE great annual fair at Hurdwar is considered a most interesting sight; so much so, that no person who has the opportunity, should quit India without witnessing it.

It takes place in the month of April, and lasts for nearly a fortnight. As a place of pilgrimage, the great benefit appears to be derived from plunging into the Ganges at a certain spot, and at an auspicious moment calculated by the Brahmins; particularly every twelfth year, when Jupiter is in Aquarius at the time of the sun's entering Aries, it is considered highly meritorious to bathe here, and the concourse of pilgrims is greatly increased; vast multitudes even from the remotest quarters, assemble, not only from religious motives, but also for the purposes of commerce. Large caravans from the northern and western countries arrive here, supplying with their merchandise the most important places of Hindostan.

The number of persons usually, collected on these occasions is stated to be from two to three hundred thousand; and once in twelve years, when particular ceremonies are observed, they have been computed at upwards of a million.

It is not an easy task to describe in a few words the extraordinary scene during the fair. The following animated account is from the pen of a brother officer, extracted from his popular and talented volumes recently published, and convey, in the opinion of the compiler of these notes, a better idea of it than any written description he has met with.

For several miles before reaching Hurdwar, says Captain Skinner, "we had passed thousands of people in every description of vehicle hastening towards it. These were of all ages, all costumes, and all complexions : no spot upon earth can produce so great a variety of the human race at one assemblage, and it would be impossible to enumerate the articles of different sorts, or even the countries that produce them, offered for sale in the streets.

PART OF THE GHAUT,

"There are horses from all parts of the globe, elephants, camels, and buffaloes, cows, and sheep of every denomination, thickly crowded together; dogs, cats, and monkeys, leopards, bears, and cheatas; sometimes the cubs of a tigress; and always, from the elk to the moose deer, every species of that animal.' Shawls from Cashmere, and woollen cloths from England, are displayed on the same stall; coral from the Red Sea, agate from the Guzzerat, precious stones from Ceylon, gums and spices from Arabia, asafætida and rose-water from Persia, brought by the natives of each country to the mart, lie by the side of watches from France, pickles from Chiná, sauces from England, and perfume from Bondstreet and the Rue St. Honoré. I have seen a case of French rouge, and senna for the fingers of an Eastern fair, selling in adjoining stalls; antimony to give languor to an Oriental eye, and all the embellishments of an European toilet!

" In roaming through the fair, you are amused by the tricks of the Eastern jockeys: here one is ambling on a richly caparisoned horse, with necklaces of beads and bangles of silver, displaying his paces with the utmost dexterity; another is galloping as hard as hc can, to shew how admirably he can bring his horse on his haunches; while a third lets his horse loose, and calls him by a whistle, to prove his docidity. Elephants and camels are at the same time exhibiting their several graces and accomplishments."

The horse fair is a great point of attraction to European visitors, presenting animals of every breed, and at all prices. Among them is always one horse which is valued at a lac of rupees £10,000) and is generally one of the fattest in the market. Those seen two successive years by the writer of these notes, were large northern or Persian horses: no doubt, they were fine animals, but more adapted to the Eastern taste, presenting such a mass of obesity as to hide their real beauties and good points, and were rather objects of disgust than admiration to an English eye. No one of these has yet been known to fetch the price demanded by the owner; they may rather, therefore, be considered in the light of show-cattle.

"The dealers," continues the author above quoted, "invariably ask ten times as much as they mean to take, and vary their demands as they gather from your countenance your anxiety or indifference for the purchase. It is not uncommon for a horse-dealer to fall, in the course of a few moments, from ten to one thousand rupees; when the bargain is about to be concluded, the buyer and the seller throw a cloth over their hands, and, naming a price, ascertain by the pressure of certain joints, how nearly they are making towards its termination. By this means, in the midst of a crowd, they deal in secret; and it is laughable to see, through an affected air of carelessness, how deeply they are interested.

DURING THE FAIR, AT HURDWAR.

"During their great attention to worldly matters, they are not forgetful of the grand object of the Hurdwar meeting: the devout bathers of both sexes assemble in thousands, and perform their ablutions with so perfect a sincerity, and indifference to appearance, that they seem nearly ignorant whether they are clad or not.

"The Ghaut presents as motley and singular a sight as the fair itself: Europeans lounging on the backs of elephants, to witness the bathing; Brahmins busy in collecting tribute; religious mendicants displaying every species of indecency and distortion; and Christian ministers anxiously and industriously distributing to the pilgrims copies of the Scriptures, translated into their various languages. Some of these excellent men—for no difficulty or labour stays them on their heavenward course—sit in the porches of the temples, with baskets of tracts by their sides, giving them to all who approach. We hear very little of Hindoo conversion, and many who have not the opportunity of witnessing the zeal and perseverance of our missionaries, may imagine that they slumber at their posts: but theirs is a silent way, and their endeavours, through divine assistance, have produced some effect."

The town of Hurdwar is small, and is joined, lower down, by Kunkle, both of which run parallel with the river. There are some handsome houses, with flights of steps running down to the river. Many of these are adorned outside with grotesque paintings and flags, and are appropriated to the accommodation of the pilgrims; but the greater part have no other shelter than small canvass awnings, or that afforded by the surrounding trees.

Owing to the precautions of the British government, the fairs at Hurdwar of late years have gone off without bloodshed, to the wonder of the multitude assembled, who were for early accustomed to associate the idea of a pilgrimage to Hurdwar with much loss of life, from the fierce contention of hostile tribes, who were liable to meet upon that occasion.

The subject of this engraving is taken from the terrace just above the new Ghant lately constructed by the East India Company; in the distance is the Chandnee pahar, and white temple, with the Ganges winding through the plains.

Before the erection of the present Ghaut, frequent accidents occurred among the bathers. At the twelfth-yearly festival in 1819, in particular, a fearful calamity occurred. The passage leading down to the river from the main street, funnel-like, narrowed as it reached the Ghaut, or bathing-place. The whole place was crowded with people waiting for the propitious moment; when suddenly the sacred shell sounded, and all rushed forward to the river : the

PART OF THE GHAUT, AT HURDWAR.

crowd continuing to press on, the avenue became choked up, and in the uproar no less than seven hundred persons were squeezed to death, or carried into the river; among whom were the guards who were placed there to preserve order. The present building affords greater facility to the pilgrims, and is a fine object from the river.

Hurdwar is 1080 miles, travelling distance, from Calcutta; 110 miles N.E. from the city of Delhi; and 1024 feet above the level of the sea.



Massoorce and the Dhount from Landour

MUSSOOREE, FROM LANDOUR.

In order to comprehend more readily the point from which this view is taken, it is necessary to give a glance to the descriptive page of Plate Π .

The spectator is supposed to have passed the low belt of hills there mentioned. and through the fertile Valley of the Dhoon, a distance of about fourteen miles, to the village of Rajpoor, at the foot of the secondary chain of the Himalava. From the town of Deyrah in the centre of the valley, to Rajpoor, there is an ascent, but so gradual as to be scarcely perceptible; while from it the mountains rise suddenly, assuming a consequence and majesty of appearance for which the traveller is little prepared. The elevation is unusually abrupt and steep, presenting deep slopes, covered with the richest woods, interspersed with rocks, with yawning ravines on either side, that literally appear to have no bottom, but which respond to the sounds of numerous gushing streams, equally hidden from the eye, with no moving object to break the loneliness of the scene, save perhaps an eagle soaring o'er the depths below. The oak, the pine, and the rhododendron are predominant objects; and the last, which is in England a mere shrub, is here a large tree, and in April is in full blossom, bearing clusters of flowers each larger than the common rose; in short, the face of nature wears quite a different aspect, offering a pleasing contrast to the plains so recently quitted, where every thing appears, in comparison, "weary, stale, flat, and unprofitable."

On reaching the summit of this ridge, the traveller has attained a height of nearly 5000 feet above Rajpoor, and about 8000 above the level of the sea; when, turning to the south, the plains, and the whole country he has left, as far as the eye can reach, burst upon his view, spread out like a map at his feet ! To the right and left, in the extreme distance, may be traced the Jumna and the Ganges, at a distance of forty miles apart; where, after escaping from the control of the mountains, they seem to glide, snake-like, along the plains until they are lost in the horizon. Continuing their course, they wind for several hundred miles in a south-easterly direction, and unite under one name at Allahabad.

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PLATE V.

K

MUSSOOREE, FROM LANDOUR.

The tract of country lying between these rivers is termed the Doab (or Two Waters), one of the most fertile districts in India.

In the Valley below, the town of Deyrah, from which it takes its name, is scarcely perceptible; but to the left is visible a small hill, celebrated as being the site of the fort of Kalunga, established by the Ghoorkas, whose undaunted bravery in its defence, in 1814, must excite the admiration of every one who has read the account. Our troops here met with a check they were unaccustomed to receive in the East; besides experiencing the loss of their brave commander, General Rollo Gillespie, who was shot through the heart as he was cheering and leading on his men to the assault. A monument to the memory of the British officers who were slain on that occasion is erected close by; but scarcely a vestige of the fort remains, as it was shortly afterwards captured, and razed to the ground.* A battalion of these Ghoorkas (natives of Nepaul) in our service, are stationed at Devrah. They are well trained, and dressed as riflemen, and are reputed brave soldiers. They are short, but well made, active fellows ; their countenances bespeak good humour, their features and complexions forming a gradation between the Tartar and the Chinese. Numerous instances of their courage were afforded during the late Nepaul war, particularly in some enterprises by night, when they displayed a degree of daring, coupled with military skill, that for some time baffled our efforts to subdue them.

* The following account of the capture of Kalunga, soon after the death of General Gillespie, is subjoined, as a memorable instance of the resolute spirit which actuated the Ghoorkas in defence of their conquests :--

"The garrison consisted of about 300 men, while the besiegers amounted to nearly 3000, commanded by brave and experienced officers. After a desperate struggle, and with an immense loss on the part of the besiegers, the fort was abandoned by the survivors among the besieged, amounting to 70 men out of 300, who, fighting their way through different passes, eventually effected their escape, with the loss of very few lives. Before daylight, the officer who succeeded General Gillespie in command entered the fort. Here, indeed, was frightfully exhibited the desperate resistance which had been made by a few determined and but half-civilized soldiers against an immensely disproportioned force, highly disciplined, and under the ablest officers. What the besieged had done and suffered was incredible ; they had displayed the highest endurance and most indomitable courage. The ears of the victors were shocked by the dismal groans of the dying, and their hearts saddened at the sight of mangled limbs torn from their parent trunks by the bursting of the shells, and of bodies lying disfigured and putrid on the very spot where they had fallen by the shot, which was scattered like hail over their weak defences, causing a most frightful carnage. The corpses of those who had perished early in the siege, and had been insufficiently interred, were seen protruding through the earth, in a revolting' state of decay, and filling the air with the seeds of pestilence. The bodies of women and children were among the dead and dying, some mangled but yet alive, and imploring most piteously for a drop of water to slake their raging thirst, that was adding torment to their expiring agonies."-Rev. H. Caunter.

MUSSOOREE, FROM LANDOUR.

Although forming part of the same mountain or ridge as Mussooree, the designation of Landour is applied to that part in particular on which are situated the barracks and houses built by Government for the use of the convalescent depôt, first established in 1828, and generally occupying the highest peaks. Mussooree is an adjoining arm, or ramification, somewhat lower, containing only private houses, and is usually termed the civil, as Landour is the military station. But houses are rising so fast on every spot that can with safety be built upon, that the exact limits of the depôt station cannot be easily understood.

Since this ridge has been occupied by Europeans, the inhabited parts, particularly near the summits, have lost much of their beauty, from the great devastations that have taken place in the beautiful timber that every where adorned the mountain sides. This might have been in some degree necessary in the first instance, for the purposes of building; but much havoc has been committed through the wasteful habits of travellers and their servants, in cutting down young trees for temporary huts, fuel, &c.; and, in great measure, with a wantonness characteristic of the English abroad, many of the finest trees have been felled or blown up merely for the sake of amusement or occupation. Precautions have since been adopted, to prevent a continuance of this usage, so destructive to the appearance of the place, and to the comfort of the residents ; and all wood required either for building or fuel, is now brought from the more distant glens and ravines.

The nearer cluster of buildings in the annexed engraving is in Landour, beyond which the houses are chiefly in Mussooree. But since the original drawing was made, many fresh dwellings have been erected, and others are situated in the shelving and projecting parts of the southern face of the hill, and are therefore concealed from the eye'in the present view. The highest peak of Landour is in lat. 30° 23' N. and long. 78° 4' E., and in altitude is estimated at nearly 8000 feet above the level of the sea.

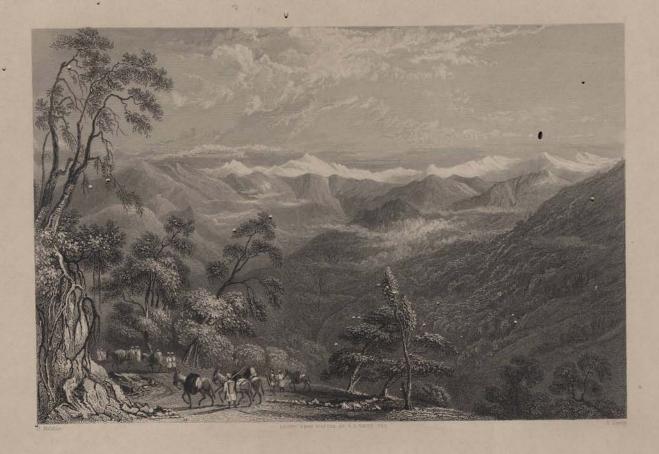


PLATE VI.

SNOWY RANGE, FROM LANDOUR.

THE whole ascent from the village of Rajpoor, at the foot of the hill to the heights of Landour, is unusually abrupt and rugged. Previous to 1828 there was merely a goat-track, indicating the line of ascent, then a matter of some difficulty; but since that period, by dint of labour, splendid roads have been constructed, which, in some parts, are cut through the solid rock. Now, at a few hundred feet below the highest peaks of this range, and at a height of about 7000 feet above the level of the sea, a complete circuit of the hill may be made, either on foot or on horseback, on a beautiful road, with no greater declivity than is desirable, for as much as four miles; so that the early riser may be here rewarded in his morning stroll by a mild yet bracing atmosphere, and some magnificent prospects. To the south, the plains, for a distance of more than sixty miles, may be distinguished with the naked eye; while, winding round the other face of the mountain, looking to the north, may be seen, at sun-rise, " a chain of snow reaching from Caubul to Thibet, changing into all the colours that the growing day can paint!"

There is certainly much pleasure in recognizing, after a long absence, the different trees, plants, and shrubs of our native isle. The oak, the pine, the holly—the walnut, the cherry, and the apricot—together with raspberries, strawberries, daisies, primroses, and violets, long strangers, become again familiar to the eye. To those who have for a length of time suffered the restraint, there is absolute luxury in wandering, during the day, fearlessly and uncontrolled, without inconvenience from the sun, and without experiencing fatigue. These delights can be best appreciated by those who quit for them the less pleasing alternative of dwelling beneath the influence of the intense heat of the plains in May and June ; and the enjoyment is doubled, perhaps, by indulging the contrast which every glance at the country below cannot fail to recall to the mind.

"The resident of Bengal," says Captain Skinner, "who gallops to his home the moment the sun rises the least above the horizon—as if Phaeton were whipping

SNOWY RANGE, FROM LANDOUR.

the steeds of Apollo in pursuit of him—finds himself, after a few days' enjoyment of mountain air, quite a different being; and the poor soldiers, who would have pined in hospital till past all hope of benefit, have in the thriving establishment at Landour an opportunity of regaining their strength before it is so utterly gone, as to render the words 'invalided' and 'buried' nearly synonymous."

"The country—for saving lives is conferring a benefit—is mainly indebted to Lord Combernere for the convalescent depôt at Landour; and the army of the East will have reason to be grateful to his lordship for his exertions in so humane a cause—for founding a temple to health where the ravages of sickness are so keenly felt. No spirit of Economy, I hope, will invade its precincts. This remorseless demon, I know, is hovering over the luxurious East; but may its craving be satisfied by some more trifling privations; and may the advantages gained to the service by the timely saving of valuable lives, and the consideration, that where many important functionaries would have returned for several years to England, a few months may now restore them to their duties—not only weigh with the Government to maintain, but to improve and increase it."

"In a part of the world so wild, and some years ago so little known, it is an object of high interest to see an English colony arising. The progress of the British arms has been so rapid, and the addition of territory so extraordinary, within the last thirty years, in the East, that we cease to view any new acquisition with surprise. Where our dwellings, however, rise to the skies, and we creep gradually into the bosom of the 'snowy Imaus which roving Tartar bounds,' we cannot fail to notice with pride the progress of civilization."

Mussooree and Landour, although similar in point of climate, and, indeed, in most other respects, to Simla, have one great advantage over this their rival station, in their nearer vicinity to the plains, which renders those places more easy of access, and more convenient for obtaining supplies. Simla, on the other hand, though difficult of access, is, as a place of residence, when once attained, not so rugged : the slopes are more gradual, and the roads are better, affording a greater facility of communication between the different dwellings; and these are advantages considered by some as conferring on it a decided superiority.

The usual time of resorting to these stations, either for health or recreation, is during the month of April, and the sojourn is generally until about the end of October, when they are deserted for the plains, of which the climate, in the upper provinces, is after that period one of the finest in the world. The mountain air becomes, about the close of October, too keen for the generality of visitors, but some prolong their stay; and those whose health requires a very cold climate,

SNOWY RANGE FROM LANDOUR.

are occasionally induced to reside there the whole winter. Latterly, also, a portion of the convalescents of the depôt at Landour have, on account of particular complaints, been retained there as long as eighteen months in continuance; an experiment which is stated to have been attended with great success.

At Landour, and equally convenient to Mussooree, a good bazaar is established, containing some excellent shops, well attended by native merchants. For some time the natives objected to the slaughter of beef in the mountains, but this prejudice, like many others, is wearing away; and at the present time, at a distance of more than 1300 miles from Calcutta, and at the height of seven or eight thousand feet above the level of the sea, the luxury of the Indian capital maintains its sway; and provisions, with every article of European or native commodity, may be procured as easily and as reasonably as at the principal stations in the Upper Provinces.

In this, as well as in many of the views comprised in this series, it is a difficult task to convey a correct idea of the loftiness of the mountains which they are intended to represent; for the great elevation from which the sketches are chiefly made, together with the absence of extensive vallies, platforms, or plains of any kind, by means of which the eye seeks to oppose horizontal to vertical lines, singularly disguise and subtract from the actual height, rendering it apparently much less than it absolutely is. This delusion is strengthened, perhaps, by the luxuriance attained by trees and vegetation in this climate, at a height where it might be supposed nothing but barrenness could exist. In order, therefore, to aid the conception in judging of 'the loftiness and relative magnitude of the scenes, the spectator should bear in mind, that, in most cases, he views objects from situations of considerable elevation, seldom less than from 6 to 12000 feet above the level of the sea; and that enormous as some of the points above him may appear, due allowance must also be made for the perpendicular height of his own position.



The Allory and hills from near Murroren

PLATE VIL.

THE ABBEY AND HILLS, FROM NEAR MUSSOOREE.

AMONG the numerous habitations of the European gentry, which are yearly springing up, retired in each hollow, and crowning every height of this ridge, there is not perhaps one that presents a more picturesque appearance than the "Abbey," at present the seat of R. C. Glyn, Esq., of the Bengal civil service, and lately the property of Colonel Smith and Dr. Royle, of the same presidency, by whom it was planned and erected in 1829.

Perched on the very brow of a rugged moantain, it appears quite isolated from every other human dwelling; and during the rainy season especially, when dense clouds and fogs are floating about, it occasionally has the appearance of an island rising out of the sea of vapour which encompasses it. At other times, when the air is clear, it commands a panoramic view, which, perhaps, that of no other mansion in the world can equal !

The Chor mountain is visible, to the right, its head hoary with snow, which remains generally the greater part of the year unmelted; and in the extreme distance to the left, a partial glance of the Dhoon, and the plains beyond, is obtained, with the Jumna winding in a silver stream towards the south.

One of the greatest advantages of the climate in this part of the world, is, that it is so remarkably even. In the month of May, 1831, when the thermometer stood in Meerut and Saharunpoor at 90°, its highest point here at noon was 64° ; and its usual range from May to October was from 62° to 70° ; while at night a very slight difference was perceptible.

For two months, July and August, there is almost incessant rain, and during that period persons are much confined to their houses, the atmosphere being too wet and foggy for the use of, the gun; their wanderings are therefore limited to short walks between the showers. Occasional shots may be had at eagles, some of which are constantly soaring about, and are remarkably fine birds, having been known to measure as much as twelve feet across their wings. But at Landour, at one time, (in the absence of other sport or exercise,) the favourite

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THE ABBEY AND HILLS,

diversion consisted in detaching and launching down immense blocks of rock from the precipices to the depths below. Numbers of the gentlemen used to assemble on the highest peaks for that purpose,' furnished with pickaxes, crowbars, &c.; and, boyish as it may appear, they would work most indefatigably, being sometimes employed a whole week at one stone; and when the enormous mass was set in motion, all watched with interest its course as it bounded along, snapping off the trunks of the largest trees like reeds, and carrying away innumerable other fragments, with a tremendous crash : long after it was lost to the eye, could its devastating progress be known by the thundering noise from the glens below.

Excursions into the interior must be undertaken before or after the above months. Some travellers, in preference to returning to so moist a climate, quit their quarters in these stations, and continue their peregrinations beyond the snowy range into Kunawur, on the borders of Thibet, and, by remaining there, escape the influence of the rainy season.

"From the last day of July, until the end of August," Captain Skinner remarks in his Journal at Landour in 1828, " there has not been a dry hour; the clouds hang so heavily on the peaks of the mountains on which we live, that we are completely enveloped in mist. The Valley of the Dhoon is concealed from us all the day long; but towards sunset the vapour that overhangs it clears away a little, and we see it as a beautiful picture partially discovered through a thin veil. During this month (August) the thermometer has ranged from 60° to 62° throughout the 24 hours; so even a climate is rarely met with in any part of the world. Although every thing is extremely damp, and we cannot obtain a glance of the sun, I do not find that people complain of colds or rheumatism, or any of the usual accompaniments of a moist atmosphere. On the contrary, every person boasts of his health, and praises the climate. Towards the middle of September the rain began to abate its force, occasionally falling, however, in some quantity every day, and the temperature still continuing at 62°." " The effect of the climate of the hills upon the children is most astonishing. Their rosy cheeks, so rare generally in the plains, would rival those of the healthiest country babes in England."

When a person wishes to build among these hills, after selecting a spot, which must be determined in some measure by its approximation to the bazaar for supplies, and to a spring of water, a board is usually placed up with the discoverer's name, to shew that it has been taken possession of. This settled, the lease of a whole hill, covered with the finest timber, and abounding with game,

FROM NEAR MUSSOOREE.

may be obtained from the rajah of the district for a number of years by the annual payment of a trifling sum ; of so small a value is land, and so little do these mountainous regions contribute towards the revenue. The house itself may be reared without much trouble or expense; the greater part of the materials for the purpose are often to be found within a few hundred yards of each other; the sides of the hills are generally clothed with forests of oak, pine, or other large trees : and in levelling the spot for building, a quarry is opened that produces both stone and lime. Labour is cheap, and, under the superintendence of a few good mechanics and workmen from the plains, hands enough may be found to complete the fabric in a few months. It is a good plan to pitch a tent on the spot during the fine months, and personally to superintend the work, by which means a chance is obtained of getting housed before the rainy season, and the structure rises so quickly as to afford to the owner both amusement and occupation in so beautiful a country. Water is not so easily procured, for although it is heard constantly roaring around, it has often to be brought by the tedious carriage of men and mules from a considerable depth.

It may serve to convey some notion of the steepness of the Landour and Mussooree ridges, to relate, that on one occasion (witnessed by the author) as a gentleman was riding on the upper Landour road, both animal and rider were hurled over the side of the hill, by the starting of his mule; the gentleman, by lodging in a tree, in the early part of the descent, fortunately escaped with little injury; whilst the poor mule, after a few tremendous bounds, was soon lost sight of. From a motive of curiosity, search was made shortly afterwards for the remains of the beast; and the carcase, much mangled of course, was found at more than a mile from the spot where the accident occurred, and greatly out of the direction it was supposed it must have taken, having, in its velocity, wound round a considerable arm of the mountain. Several accidents, of a similar but more fatal nature, have recently occurred.

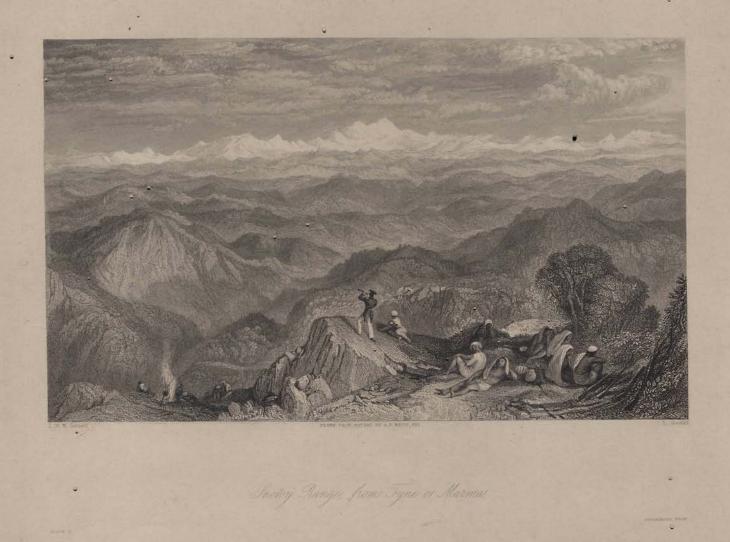


PLATE VIII.

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SNOWY RANGE, FROM TYNE, OR MARMA.

THE present view, taken from a height of about, 10,000 feet, affords a correct delineation of the Himalayas, as seen from a lofty point of the Marma ridge, by which the view of the Snowy Range to the left, in Plate v., is intercepted.

The magnificent prospect that awaited the writer of these pages, when, on arriving at this commanding spot, on a clear, morning, he made the sketch, is well impressed on his memory, as presenting a scane the most sublime and beautiful that can be imagined. The foreground, a projecting arm of Tyne, covered with noble forests, seemed to stand out like an island from the tumultuous ocean of mountains that lay around in wild confusion; their undulating outlines rising in gradation to the north, till bounded by the more stupendous piles of never-melting snow which towered in the back-ground in "still and spotless majesty." In the minds of persons sensible of an ordinary degree of interest in the works of nature, there certainly cannot be any thing in the material world so calculated to inspire awe and admiration as a survey of these, the mightiest earthly objects in the creation—" the patriarchs of the Continent—perhaps the surviving ruins of a former world."

The higher cluster of white peaks, near the centre, are those of Bunderpooch above Jumnootree, the source of the Jumna; to the right are the Rudra Himala (the Meru of Hindoo fable), near Gungotree, whence springs the Ganges; while eastward there are Kedarnath and Bhudrinath, all places of Hindoo pilgrimage, varying in height from 22 to 25,000 feet above the level of the sea, and from 12 to 15,000 feet above the eye of the spectator in the present scene. Still further to the east, the lofty peak of Dhawalagiri may be sometimes discerned (at a distance of 250 miles), rearing its white head to the astonishing height of 27,000 feet. But it would require a panoramic view, to represent the whole; for, far to the east and west does the continuous chain of snowy mountains extend, until they are lost to the vision in the indistinctness of distance

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SNOWY RANGE,

In a direct line, the nearest of the Snowy Range may be remote about thirty miles; but a fatiguing journey of many days, and three times that distance, must be surmounted before the foot of the more immediate of the snowy cliffs is attained. Several persons have been to the northward of them, but the peaks themselves have never been scaled. Beyond these are the plains of Thibet, at an elevation, it is said, of 15,000 feet above the sea, and the Chinese dominions of Tartary. The depth of the snowy zone itself is considerable, as may be inferred from the accounts received of different passages through the narrowest part, which present a detail of long and tedious journeys through deserts of rock and snow. So that this zone may here be considered as an enormous buttress, or supporting wall, to the Tibetian plateau on the north, into which the descent is moderate, when compared with that from the southern face of the mountains.

The following passage, relative to the Himalayas, is extracted from the journal of the late Bishop Heber. "I was not inattentive," he says, "to the question that was much debated at the time of my leaving Europe, respecting the real height of these celebrated hills. I conversed on the subject with several of the officers concerned in the survey, who are men of undoubted talent and science. Their measurements, they all assured me, were taken with high-priced instruments, on repeated trials, and with a careful comparison of their respective operations, sharpened, indeed, by a natural jealousy of the extraordinary results to which those operations conducted them. For many of the highest hills they had extremely favourable bases, and I can have no doubt, therefore, that their published tables may be depended on, and that Nundi Devi (which I feel some exultation in saying is completely within the limits of the British empire,) is really somewhere about 25,800 feet above the level of sea. Bhudrinath, Kedernath, and the threefold peak above Gungoutree, are all considerably lower, though the Brahmins are very unwilling to allow that these last are not the highest of all. Captain Gerard was one of the persons most concerned in the measurement and exploring of the Himalaya mountains; he had been in Ladak, and repeatedly beyond the Chinese frontier, though repelled each time, after penetrating a few miles, by the Tartar cavalry. He had himself ascended to the height of 19,600 feet, or 400 feet higher than Humboldt had ever climbed among the Andes, and the latter part of his ascent, for about two miles, was on an inclined plane of forty-two-a nearer approach to the perpendicular than Humboldt conceived it possible to climb for any distance together." Captain Gerard considered the altitude of the hills, and general geography on the British side of the frontier, to be as accurately determined, if not more so, than similar objects in most countries of Europe.

FROM TYNE, OR MARMA.

The Bishop alludes with rapture to his tour through a part of the Himalaya; this beautiful description is also from his gen-" Nothing which I ever saw equals the majesty of some parts of the mountain scenery I have passed through. There is, indeed, a want of water, and I could not help thinking how beautifully these hills would have been reflected in the noble lakes of Norway. But, over Norway, they have the advantages of a more brilliant sky, a warmer and more luxuriant vegetation, a still greater ruggedness and variety of outline, than is found in Doore or Fille-Fial; and, above all, the icy mountains are such a diadem and centre to the view, as not even Switzerland can shew. I thought them particularly grand when seen in the grey of the morning, while their cold distinct outline was visible along the dark sky, with no refraction to puzzle, or vapours to conceal it. At other times, their forms yary according to the shifting lights and shadows; and if it were not for the identity of situation, I could sometimes have doubted whether the peaks which I saw in the haze of the noon, were the same with those which, in the crimson light of the setting, or the amber brilliancy of the rising sun, had delighted me in so different a manner. Seen, however, as they may be, they are always wonderful and beautiful; and I look on them now with the more admiration, because I know that I am about to bid them adieu."

The present, together with the eight or ten succeeding plates, although not arranged in the form of a regular tour, will serve to convey a tolerably correct idea of the country passed through in making a gradual approach towards the sources of the Jumna and Ganges, contained within the Snowy Range of the Himalayas.

The aspect and general features of this portion of the Himalayas are thus correctly and forcibly conveyed in the language of Mr. Fraser :— "All this region," says he, "is wild, rugged, and difficult of access, consisting of a mass of hills, irregularly connected, or diverging, in ranges of various heights, from a huge elevated centre, but preserving no regularity of form or of direction. Their tops are sometimes clothed with forests of old and venerable wood; sometimes they are rocky, and green or brown; and it has been observed, that the general aspect to the south and south-east is always less wooded and less broken (though still very rough) than that to the north and north-west, which is almost uniformly precipitous, formed of sharp crags, covered with deep pine forests.

"The ravines that divide these hills are deep, and very sudden in their descent, often ending in dark chasms that are sometimes wooded; but they as often exhibit faces of bare rock of several hundred feet high, frowning at each other, with little more space between them than has been worn by the violence of

SNOWY RANGE, FROM TYNE, OR MARMA.

the torrents; these, taking their way from the mountain brows, where they have been collected from clouds, and rair, and melting snow, thunder down, and form these furrows in their sides.

"There are no spreading valleys, no rich meadow lands on the banks of rivers, no gentle undulation of ground; all is steep and difficult; toilsome rise and sudden fall. Such a country offers little encouragement to the husbandman; and, accordingly, cultivation is laboriously and sparingly scattered among the woods and rocks.

"As the country recedes from the plains, it increases in difficulty and elevation, till, at the foot of the Snowy Mountains, it assumes a savage wildness; and among them, save in the passes, or the beds of rivers, becomes totally impracticable and impervious.

"The rivers, and their beds too, it will be seen, gradually change their character as we approach nearer to their source, from the rapid and turbulent stream, flowing through a deep and rugged channel, but affording a comparatively easy road along its banks, to a furious torrent dashing from one huge block of stone to another, along which the traveller proceeds at first with difficulty, which increases to hazard of life, climbing over rocks, and picking his dangerous way across the face of precipices, till at length his career is stopped by masses of mighty ruin, that baffle all human attempts to invade them."



VILLAGE OF MOHUNA, NEAR DEOBUN.

PLATE IX.

DEGBUN, or Deybun, is the name of part of a high ridge in the secondary Himalaya, lying between the Tonse and the Jumna, N.W. of Landour, presenting some very grand and rugged rock scenery, overhung with lichens, and interspersed with a variety of forest trees.

The village, similar to most of the native habitations of these mountains, which are hereafter more particularly described, together with the surrounding objects, has a singularly wild and picturesque effect, on gaining the present height. The curiously stratified rocks above, though lofty and precipitous, bear but a small proportion to the depth of the chasm below. The heights about Deobun are famous as a favourite haunt of the musk-deer, and sportsmen frequent the neighbourhood in pursuit of that animal, which delights in the most inaccessible heights, amidst such rocks and forests as seem to defy the foot of man.

In the middle distance, the mountain side, as appears in the view, is carved into a succession of shelving terraces, on one of the uppermost of which are perched the travellers' tents. These terraces are observable near most of the villages: for, in the nearly total absence of level ground, the inhabitants are thus obliged to have recourse to an artificial mode of obtaining a flat surface, on which to grow their slender crops of corn: their method is more particularly alluded to in the succeeding pages. On a close approach, these plantations have a somewhat formal appearance, but when viewed at a distance, they give a singular, but by no means bad effect to the landscape.

When Europeans travel in the Himalaya, tents, provisions, clothes, every thing, is carried by the paharees, (or hill-men,) there being no safe footing for either mules or ponies. Few supplies of any kind, and no luxuries, are procurable at the villages, and most of these must therefore be carried all the way, or be dispensed with. The number of men requisite to transport all these

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VILLAGE OF MOHUNA,

articles, together with beds, sporting apparatus, &c. becomes formidable, especially should the party be composed of more than one gentleman. A less number than twenty for each person would scarcely suffice for a journey of any distance, even for a month's trip. But some men of consequence, wishing to keep up a degree of state, or not caring to be deprived of their wonted luxuries, have been known to retain as many as two hundred hill-coorlics, or porters, in addition to their personal servants. Much difficulty, however, is experienced in procuring sufficient coolies to carry the burdens, as they almost invariably object, and make pitiful excuses to be' left behind. Many are consequently obliged to be pressed into this service, and desertions, even attended with the forfeiture of their legal hire, are frequent. This reluctance is very extraordinary, particularly as Government has regulated a rate of pay for them exceeding the average of the wages of agricultural labour throughout India: it can only be attributed to their natural inertness, or an unwillingness to separate themselves from their families and usual routine, for a fatiguing and uncertain, though more profitable, employment.

The bustle, clamour, and contusion that generally attend the preparation for a start upon an excursion in these mountains, exceeds description; and some energy is required on the part of the domestics, as well as the master, to get the coolies to take up their loads, and to prevent defection. Their stratagems to get light burdens also is amusing enough: one will lift an almost empty basket, and pretend to be bending under the weight, while another will set off with a teakettle, a gun, or some light article, as if it was allotted to him, and ensure an easy load for that day at least. The coolies are, however, on the whole a goodhumoured race, and mild treatment appears to be more effectual with them than more violent measures.

In Kumaon, the porters chiefly make use of the head and neck as parts of the body on which they carry their burdens; but the Gurwallees, and inhabitants of the more western districts, a more intelligent race, bear their loads on their backs; by so doing they can travel farther, and with less toil to themselves: a striking instance of the pervading power of "dustoor," or custom, which prevents the Kumaonee from imitating the easier method of their hill-brethren.

A narrow funnel-shaped basket, about three feet deep, is usually adopted for packing up clothes, provisions, &c.; this is supported on the back by means of a loop or truss over each shoulder; and the usual burden is from forty to fifty pounds. These baskets are well adapted to the nature of the country, where the way in many parts is so precipitous, and the paths so narrow, that a less compact

NEAR DEOBUN.

burden would be liable to come in contact with projections in the rocks or branches of trees, and endanger the precipitation of the bearer, with his burden, down some of the frightful chasms which are met with at almost every turn.

The difficulties to be encountered in travelling through the Himalaya, together with the rudeness of the equipage, and the want of comfort, compared with that obtained in other parts of India, deter many from attempting it; and several who have most anxiously looked forward to the pleasure of an exploring excursion in these mountains, have, after the first or second day's journey, been overcome by fatigue, and, most completely repenting of their undertaking, returned-their ardour much cooled, and quite satisfied as to the stupendous character of the mountains and the grandeur of the scenery. Neither does the excitement of sport always afford a sufficient stimulus to pursue the journey : for the fatigues of the day are often so great, that the sportsman is quite exhausted before the termination of his march; and the game, except, what he may have met with on the line of progress, is left unmolested. In a country like this, the game, and indeed all wild animals, though abundant, have advantages that most provokingly favour them from the pursuit of the most eager sportsmen, and which are more effectual securities for their preservation than the most rigorous of game laws. Some there are, however, who, possessed of a spirit of adventure or curiosity, or imbued with the love of nature, so as to contemplate her with the feelings of a poet or the eye of a painter, forget, midst the beauty and variety of the scenery, the fatigues they encounter, and who regard the charms of novelty as more than compensating them for their slender accommodation and the poorness of their fare.

Almost every one who has attempted to describe the Himalaya, has spoken of them in raptures, acknowledging the inability of words to paint their beanties, or to express the sensations to which they give rise; all admitting that these mountains are invested with a character, a charm peculiarly their own, such as would justly entitle them to the epithets of sublimity and grandeur, if such can be applicable to any thing earthly. "I have beheld," says Captain Skinner, "nearly all the celebrated scenery of Europe, which poets and painters have immortalized, and of which all the tourists in the world are enamoured; but I have seen it surpassed in these unfrequented and almost unknown regions. The youth who, just emerged from college, gazes for the first time on Mont Blanc, may appreciate my feelings when I enjoy the glories of the Himalaya. Although I have seen the Alps—although I have witnessed the sun rise from the summit of Mount Etna, certainly one of the grandest objects

VILLAGE OF MOHUNA, NEAR DEOBUN.

in Europe-my awe and astonishment, so far from being diminished by such scenes, exceed all I felt when I first saw

" Hills peep o'er hills, and Alps on Alps arise !'

I was almost sorry that I could not cast off the ties of another world, as it were, and remain in these mountains for ever !"



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PLATE X.

VIEW NEAR JUBBERAH.

THE village of Jubberah lies north of the Mussooree and Marma ridges, on the route from the latter towards the source of the Jumn'a. The village is perceptible in shadow, on a height near the centre of the distance. In this view, the curious stripy effect produced by the mode of cultivating the sides of the hills, before alluded to, which, next to their great steepness and ruggedness, generally attracts the traveller's eye, is here more distinctly portrayed : as the method is somewhat ingenious, it may deserve a more particular description.

The great scarcity of level ground in the Himalaya has been noticed as forming one of its peculiar features. Indeed, in Gurwall so remarkable is this, that, after leaving the Valley of the Dhoon, and penetrating into the mountainous mass, some difficulty would be found in procuring a level space sufficiently large for the encampment of a thousand men : for the purposes of cultivation, therefore, wherever the nature of the mountain sides will admit of the labour, (and generally those least covered with rock are chosen,) they are cut into a succession of terraces, rising one above another like a flight of steps, each having a flat surface and a perpendicular face. This is a work of much care and labour, the rougher and more stony materials being picked out, and built up as a retaining wall to support the edge of each narrow strip of ground : much attention also is necessary in levelling the different surfaces, in order that after rain, or during the process of irrigation, the water may not rest too long, nor run off too violently, so as to carry away any portion of the scanty soil.

For the purposes of irrigation, numerous rivulets, at a sufficient height, are diverted from their course, often at a great distance, and led with much skill to the higher patches of cultivation, from which the water flows down to the rest, or is again collected into a stream, and carried to saturate another and lower range'of cultivated strips. Sometimes these streams are conveyed, by means of hollow trees, across a deep ravine to the opposite side of the dell, where water was not so easily procured from above. The natives, in many parts, appear to

VIEW NEAR JUBBERAH.

trust more to this irrigating system than to the rain which falls, particularly in the vicinity of the plains. On advancing further into the hills, where the rains are more seasonable, less care is observed to be paid to the horizontal flatness of the different fields or terraces, which are there allowed to take more of their natural form, and to follow uncontrolled the rise and swell of the hill.

The dimensions of the ledges, or strips of land, thus obtained, vary, of course, according to the nature of the ground; but in general they run from twelve to fifteen broad, and in the valleys, and towards the bases of the hills, where there is often a more gradual, or kind of terminating sweep, they assume, in some degree, the appearance of fields; while, in the more steep and rugged parts, the breadth of the terraces sometimes does not equal that of the supporting parapet.

In preparing the soil on many of these narrow strips, the use of cattle and the plough would be impracticable, and resort is had to manual labour in these cases : but where there is room for a plough, the instrument made use of is described by Mr. Fraser as being similar to that employed in the plains of Hindostan, and as being equally simple and inefficient. "It consists of a piece of crooked wood, one end of which is fastened to a rude yoke, which crosses the necks of two bullocks, and the other end, turned downwards, is sharpened to turn the ground ; while, near the acute angle formed by the bending, a handle is inserted, to guide and press the point into the earth. Patience, however, (the characteristic of the Hindoo of the plains,) serves also the mountaineer, instead of ampler means to attain his end ; and repeated ploughings produce an effect equal to that which a superior instrument would compass in one or two; and the soil of the hills in general favour these weak means, being free and easily worked, consisting chiefly of sand, the decomposition of sandy, micaceous, and slaty stones, mixed with a considerable portion of decayed vegetables.

"The instruments used in manual labour are equally rule and simple. A stick crossed at right angles, one end of which is shod with iron, resembling a miserable and broken sort of pickaxe, seems to be the principal one. But whatever their implements may be, or whether the fields are worked by the plough or by the hand, they assuredly bring them to a high degree of tilth; and in many instances exhibited a clean well-worked appearance, which could not be surpassed by an English farmer, with all his various and expensive apparatus."

"Of the use of manure they are by no means unaware; traces of its application appeared in most fields; but I could not learn that they pursued a regular system of cropping, or continued to sow the grains they required year

VIEW NEAR JUBBERAH.

after year. I believe they do, giving an occasional fallow of some years when the land is exhausted, or renewing it with manure and fresh soil.

"Two crops are usually reaped within the year; but it seldom happens that the same land will suit each sort of grain, or that, if it should, they employ it for both crops. The first crop consists of wheat and barley, and occasionally oats. Poppy, and certain kinds of oily seeds, a sort of purslane, with curiously variegated red and green leaves, and a few inferior grains, filled the list. The second crop consists chiefly of rice, but about the same time tobacco is planted, and a little cotton sown; together with several poorer sorts of grain, both oily and farinaceous, which are grown all over the hills, about the end of summer and autumn."

The men and women both engage in the labours of agriculture; the men chiefly guiding the plough and sowing; but most of the other work, such as weeding, breaking clods, gathering stones, reaping, threshing, &c., is performed by the women.

For cutting the corn, they use a small rude kind of sickle; and when cut, they tie the ears into sheaves, and leave them 'in the; fields to dry; but when rain is threatened, they carry the sheaves to small round places, paved, and surrounded by a low wall, where the rain, if any fall, quickly runs off, and the reflected heat from the stone soon dries them. These little paved places are also used for treading out the corn by means of cattle, who are yolked to a moveable stake or pivot in the centre, and guided round by the women or boys.

The corn is reduced to meal either by pounding in a mortar, a laborious operation, and which, like most of the hard work, devolves upon the women; or, in some districts, by means of a water-mill, which is very simply contrived to turn two stones contrariways. Falls of water are here abundant; and notwithstanding the simplicity of the machine, and the rude appearance of the shed and the whole construction, many of these mills may be seen at work on the same stream, answering all the purposes of our more complicated inventions.



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PLATE XI.

VILLAGE OF NAREE.

THERE is a great similarity in the appearance and construction of the villages and habitations of the people throughout the hill-provinces. Naree is situated near the course of the Jumna, about two days' march 'from the preceding view, and may be considered as furnishing a good specimen of the usual' style of the villages in Gurwall, and east of the Sutlej generally.

The villages commonly consist of clusters, of from five to twenty houses, a single detached habitation being seldom seen. At a distance, they frequently form picturesque objects, cresting the heights, overhanging the glens, or intermingled with wood on the sides of the hills. Generally speaking, however, the natives do not prefer as sites, either the highest peaks or the greatest depths; but, by choosing a situation about midway, they ensure a more temperate climate, a less rugged face, and a closer vicinity to their crops and pasturage, which are generally more flourishing and luxuriant near the glens, and towards the bases of the mountains.

When the degraded morals and uncivilized state of the mountaineers of the Himalaya are taken into consideration, it is surprising to observe the degree of skill and refinement they occasionally display in their dwellings, which, in construction, comfort, and appearance, are, by comparison, infinitely superior to those of the Alps, the highlands of Scotland, and most other countries. In most of the villages, near the houses are planted fine walnut, lemon, or, where they will grow, mango trees; which not only beautify the place, but afford a grateful shade to the inhabitants, who are used to sit on the terraces built at their roots, and indulge, during a great part of the day, in indolent repose. Roads, however, are seldom seen, but, in a taste truly Asiatic, they often permit the presence of incumbrances and nuisances, which render more difficult an approach to their dwellings.

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VILLAGE OF NAREE.

The houses consist sometimes of one, but generally of two or three stories; in the upper of these the family resides: the middle one is used for lumber, while the lower apartments are appropriated for the cattle, which, as constituting their chief wealth, are always carefully tended. Round the upper stories there is generally an enclosed balcony of wood, projecting some six or eight feet, and shaded by the projecting roof of the building. Sometimes, by means of these balconies, a communication is opened between several houses.

The walls are rudely, yet substantially, built of stone, with mud as a cement; but, between every two or three feet of wall, strong beams of wood are laid horizontally, joined by others perpendicularly, which are built up with the stone, and dovetailed and joined together at the corners, so as to bind round and strengthen the building greatly. Sometimes, in steep places, these are so contrived that the side of the hill serves for one of the walls.

The rooms are not very large, but clean and comfortable, considering the habits of the people; they are floored with planks of larch or cedar, which have an agreeable fragrance. In the interior the walls are either plastered with mud or whitewashed, and in the certre is always a "choolah," or fire-place, for warmth or cooking, which is washed and purified daily. Round this fire, or in a corner, the family sleep altogether, on dried grass, with a coarse blanket thrown over them. Beyond a few vessels for containing water, boxes for corn, with a few jars and cooking pots, there is no furniture of any sort.

The different stories are ascended by means of notched planks, instead of ladders or stairs. The windows are remarkably small, with a shifting board as a substitute for glass and shutters; and the doors or entrances are equally confined, so as to render it a matter of curiosity to see the cattle insinuate themselves through such small apertures. Chimnies are never thought of, and the smoke escapes as it can through the doors and windows; but the natives do not appear to feel the annoyance; nor does it appear to prove destructive to the vermin with which the rooms swarm, notwithstanding their neat appearance to the eye. This is a great nuisance to strangers; but the paharees (mountaineers) are not much incommoded by them; it is even said, that the irritation which they produce is agreeable to them in the colder climates, and that, when their numbers become excessive, they relieve themselves by immersing their clothes in boiling water.

The implements and tools for building are of the simplest and rudest kind. One of their best contrivances is a water-mill for turning wood, of a most primitive construction, but which answers their purpose remarkably well. They

VILLAGE OF NAREE.

fabricate with this machine vessels shaped like churns or pails, in which they keep milk, curds, &c.; also a kind of drinking-cup, from a species of knotty wood: these utensils are said to be much prized by the Chinese, and are sent through the passes to the marts for sale.

With these people the axe and a sort of adze supply the place of all other tools. "It is singular," says Mr. Frazer, "that in the whole course of our travels through these mountains we never met with a saw, nor, as we are told, does such an instrument exist among them. When they want a plank, they cut down a tree with their axes, and split it into one or more pieces by means of wedges; thus so rudely tearing up the wood, that they seldom obtain more than one plank from the tree, which is chosen of the size required, and cut to the length they wish to give the board, before they begin to split it. All their houses are floored with planks thus procured; and the woodwork of their balconies, with every species of flat timber in use, costs them this exercise of labour, and loss of time and material."

"The species of wood which the natives make use of, are either of the larch kinds, or that which resembles the silver fir: both sorts abound in resin, which exudes plentifully from their bark and twigs; and the wood obtained from them is very durable, remaining uninjured, though exposed to the changes of the weather, as we have reason to believe, for fully a hundred years. In fact, the houses are kept together, for the greater part of the time they stand, by the woodwork they are bound with."

Of domestic animals the cow has the precedency; horses there are none, in the southern Himalaya, nor would the nature of the country admit of their use. The breed of cows is smaller than that of the plains, but similar in appearance, and all have the hump; they are generally of a black or dark-brindled colour; their milk is much esteemed by the natives. Sheep and goats are in plenty, the country in general being highly favourable for grazing; and the clothing of the inhabitants is almost entirely fabricated of wool. But the natives generally endeavour to conceal from strangers the number and extent of their flocks, and, indeed, the amount of their property generally; fearful, perhaps, lest some contribution might be levied.

In some parts, a breed of rams with four horns is not uncommon, and they are even seen occasionally with as many as six. Dogs are domesticated in most of the villages; they are large, fierce-looking animals, generally black, with a little red or white, and keep up a loud and incessant bark, on the approach of European travellers. The dogs of Bischur are remarked, by Mr. Fraser, as

VILLAGE OF NAREE.

being famed for their size and hardihood, bearing a considerable resemblance to the English mastiff, with head and ears more like the common shepherd's dog. The natives use them as sheep dogs, and also for hunting various sorts of game, even birds, which they tire out in their flight. Under their long shaggy hair, they are furnished with a down as fine and as soft as the shawl wool, and this is regularly shed with their hair : many animals in the colder regions are similarly supplied.

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PLATE XII.

BRIDGE AT BHURKOTE.

The natives of the Himalaya, it has been observed, evince considerable skill in constructing their dwellings and buildings generally. In some of their bridges, in particular, they display a degree of ingenuity, both in'invention and execution, that would be creditable to the workmen of many parts of England; and when the scarcity of tools among them is considered, as also their gross ignorance in most matters, it is really astonishing that they should be able to produce any thing half so good. The bridge of Bhurkote is one of the most perfect of its kind that has been seen; it is built of the deodar, a kind of larch, or cedar, possessing a most agreeable odour; and it is worth remarking, that in the whole construction neither rope, nails, or glue, is used.

When the stream, as in the present instance, is too wide to be spanned by single trees, both banks are first brought pretty nearly to a level by erecting piers or buttresses of stone; and upon each of these are laid rows of stout beams, the ends of the beams projecting about one-fourth their length over the river; the remaining parts being fixed in the piers, with a slight inclination towards the ground. Over these is laid another row of beams, the ends projecting still farther over the river, and receiving support from the lower ones. In this manner, on both sides of the river, a third or fourth row is laid, until the vacant space is sufficiently narrow to be connected by single planks. The lower ends of all the timbers are imbedded and kept down by strong masonry; but, in the absence of mortar, the stones are kept bound together by an elaborate frame-work of wood, consisting of stakes placed horizontally and perpendicularly, running through the stone work, and intersecting each other at right angles. These are fastened at the ends by notches fitting into each other, and by pegs of wood, that add great strength to the fabric. In crossing this novel specimen of pontine architecture, the passenger feels an elastic motion, not unlike the springs of a carriage; which, together with the roar and violence of the torrent below, 'gives

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BRIDGE AT BHURKOTE.

a sensation of any thing but security : a drove of cattle passing over this construction, tries its elasticity, and makes it creak amazingly. The trees near the bridge are alders, which here attain a gigantic size.

Before proceeding farther, it may not be out of place to say something here of the wild animals that are to be found in these regions. Towards the bases of the hills, and in the valleys of the Deyrah and Keardah, are to be met with most of the animals of the plains. Among these, the elephant and rhinoceros are occasionally caught; tigers and leopards abound; deer of various sorts are numerons; wild hogs, buffaloes, and hyenas are to be seen; and of smaller animals, such as jackals, foxes, porcupines, hares, and monkeys, there are plenty. Of the feathered race there is a great variety. Of game, are the peacock, the florikin; partridges, black and grey; jungle fowl, and several species of pheasant; quails; snipe, and aquatic fowl are sufficiently abundant.

On entering the hills, however, many of these disappear, and other quadrupeds and birds are found. The existence of the true tiger beyond the skirts of the mountains is doubtful : occasionally this animal may penetrate farther, but it is by the natives often confounded with the leopard, which here attains a great size. In the same regions are found bears, hyenas, various wild cats, many species of deer, together with numbers of monkeys in every direction —even in the remotest parts, bordering on the snowy range. Some account of a few of the animals peculiar to the mountains may prove interesting.

The musk deer, from its extreme scarcity, is first deserving of notice. The figure of this animal is somewhat singular: it attains the size of a small hog; its body and legs being completely those of a deer, but still it has a greater resemblance to a swine. It has a sharp snout and wrinkled countenance, the eye is small, black, and full, and from the upper jaw are two long curved tusks, projecting downwards below the lower jaw. It is covered over with a quantity of long hair, of a dark greyish-brown colour, that grows erect over its body, partaking considerably of the nature of feathers, or of porcupines' quills. The animal is remarkably shy and active, and is only to be met with in the most retired and rocky situations. It cannot endure the heat; and is more common near the snow, and in the vicinity of Thibet and Tartzry, where it is only hunted by permission, being considered the property of the government. "The musk," says Mr. Fraser, " is contained in a liquid state in a small bag, near the navel of the animal : when it is caught, this bag is taken just as it is found, and cut from the beast while yet alive. A small hollow reed is inserted into it, that the musk may not suffer from want of air, and the whole is tied round with a sinew of the

BRIDGE AT BHURKOTE.

animal. In this state, when it has dried, which it does in the shape of small brown grains, it is sold, together with the skin, for about twice its weight in silver. It is said that the animal must be caught alive in order to obtain its musk; should it be shot, the drug, it is affirmed, is absorbed into the body and lost, and the animal rendered unceatable. The scarcity and high price of musk give rise to many modes of adulterating it. The common way is by injecting a portion of the blood of the animal into the bag of musk while both are yet warm, and they then unite. Musk pads are generally sent to the rajah, or chief man of a district, either as nuzzurs (presents) or as a portion of tribute. It is highly prized as a medicine, as well as a perfume. It is also smoked by luxurious debauchees in hookahs, in which it acts as a strong stimulant; but only men of great wealth can afford this fascinating drug." The name by which the musk-deer is known in the hills is *custooree*, and the drug also has the same appellation.

Among other deer, the mohr, a species of elk, is common." When full-grown, these animals are of enormous size, equalling in stature that of a moderate horse. They have large spreading horns exceeding five feet in length, and are of a dusky-brown colour. They are very timid, and, when first started, they invariably turn round and gaze upon the intruder, apparently paralyzed with fear. From their size they generally fall an easy mark to the sportsman, should he take advantage of the pause; but after this, they dart off with incredible speed. It appears, however, an act of wantonness to shoot such magnificent creatures, seemingly adapted to the immensity of the regions in which they dwell, and fit habitants for the glorious forests by which they are surrounded.

Several other species of deer are found, with wild sheep, the existence of which, until lately, was unknown; and there is also a large description of wild goat, or chamois, a very strong and apparently very powerful animal. The horns of most of these animals are regarded with a kind of mysterious sanctity and virtue by the natives, who place them on their graves and their most holy places, and their temples are generally adorned with several pair of different sorts; even the horns of the ram are occasionally appropriated to the same purpose.

Bears are common throughout most of the provinces; and although these animals generally prefer frait, berries, and honey, yet, when pressed by hunger, they eat flesh. Frequently, out of mere mischief, they worry and destroy passengers, and are said particularly to attack women. One of the most beautiful little animals of these woods is the flying-squirrel; it is not very common, but is larger than the tame animal of Europe. Between the legs on each side, it has a quantity of loose skin, which, when distended, forms a kind of web or mem-

BRIDGE AT BHURKOTE.

brane connected with the body; and when leaping, which it does with amazing activity, it has the appearance of an animal flying. The whole body is covered with a most exquisitely soft brown fur, and the eye is uncommonly dark and brilliant. They are very clean, making beautiful pets for ladies, for which purpose they would be highly valued in England.

But the most singular animal of the hill-provinces is the wild dog, one of which Bishop Heber saw in possession of a gentleman at Almorah, and which he describes as resembling the fox in fur and form, but much larger and stronger, and very wild and fierce. They hunt, he says, in packs, give tongue like the domestic dog, and possess a very keen scent, making tremendous havoc among the game; but that mischief they are said amply to compensate by destroying wild beasts—even tigers. This assertion, it appears, had formerly been made in Captain Williamson's Field Sports of India, but obtained little credit. Upon inquiring, however, among his friends in Kumaon, the Bishop became assured of the fact, of which none entertained a doubt, the peasantry universally believed it; and it was further corroborated by the circumstance of tigers having been found recently killed and torn in pieces, which could be ascribed to no other enemy.

This country produces but few snakes, and those not of a venomous nature : altogether, the reptile branch of natural history does not gain much addition from our present knowledge of the Himalayas; but some account of the birds peculiar to these districts will be comprised in the following pages.



PLATE XIII-

VIEW NEAR KURSALEE.

THE approach to Kursalee is distinguished by some very grand and beautiful scenery. The situation of the village of Ozree on the height, with the Jumna flowing below, has a most picturesque effect; such places form, with these people, the favourite sites for their villages, the appearance of which, in the distance, is generally pleasing.

From the extreme clearness of the air in these regions at all times, except during the rainy months, the traveller is particularly liable to be deceived by the apparent distance of objects, and often, in traversing these mountains, does he bend his steps towards some spot in sight, imagining it to be close at hand; each height he gains he hopes to be the last, and expects it will bring him to the object of his search; but toil succeeds toil, until, weary and disappointed, he finds, that what he calculated to be a comparatively short distance, has proved to him a day's journey. This deception of judgment, with regard to distance, is also a constant source of annoyance to the sportsman, who, frequently, on eyeing a deer, or some other animal, with the advantage of deliberate aim, makes sure of his prey, but, on firing, is alsonished to see the animal bounding away unhurt, as though, favoured by the protecting genii of the place, the shot had fallen harmless from his gun.

Marches in the Himalaya generally consist of one long ascent, and corresponding descent, with occasionally a winding along one of the faces of a hill. In these ups and downs, the vicissitudes of temperature, that one is exposed to, are very trying; the change being frequently as much as from 45 to 95 degrees in the course of a few hours. Some of the vallies, from their confined situations, and the reflected heat, are immensely hot, and are rendered more intolerable by the annoyance of myriads of the common flies, with other tormenting insects. It often happens that the traveller may have started in the morning in winter costume, up to his knees in snow, when, before the evening, he has been glad of a cold bath, and par jed under the heat of the lightest clothing he could wear.



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PLATE XIV.

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KURSALEE is about twelve or thirteen marches distant from the Landour ridge, being the first village past which the Jumna flows, and the nearest to its source. It is situate in lat. 30° 57′ N., lon. 78° 21′ E., at an elevation of about 9000 feet above the level of the sea, occupying a plain of considerable size on the left bank of the rocky chasm which forms the channel of the Jumna. This spot is surrounded by high mountains, covered with dark rock and forest, rising one above another, some of them crested with snow, forming an amphitheatre of the boldest and wildest description. Towards the north, above these, rise the tremendous peaks of Bunderpooch or Jumnootree, covered with everlasting snow, and towering above the village, to a still further height of 12 or 13,000 feet, or nearly 22,000 feet above the sea. In consequence of being here so immediately under the base of the snowy range, the lower precipices obscure the extreme summits; but from some of the neighbouring heights, these magnificent objects are to be viewed to greater advantage, presenting vast pinnacles of snow, of the purest and most dazzling white.

The village of Kursalee is well built, and comparatively large, consisting of from 25 to 30 houses, with a population of between 250 and 300. The larger building, in the centre of the accompanying engraving, is a temple, superior in size, and differing somewhat in form and style from most of the religious edifices in this province : it is built entirely of wood, and ornamented with some elaborate carved work; the large area surrounding it is paved with thick slate, which gives it a remarkably clean appearance. The cold here is considerable all the year round, and in the winter is said to be very severe.

Before proceeding farther, it may prove interesting to give some account of the people who inhabit these hilly provinces. In this wild and extensive region

are to be found various tribes that differ much in appearance, language, manners, and disposition; but still the whole country is very thinly populated. It is generally believed, that, west of the Kalee, or Gogra, (branch of the Ganges,) all the original tribes have become either extinct or converted, although many of them are still said to exist eastward of that river, especially in the Nepaulese dominions. All, however, that have any pretensions to be considered aboriginal, are, like the natives of Bootan on the east, strongly marked as belonging to the Chinese or Tartar race of men, having no resemblance whatever to the Hindoos. The date of the period when the latter people penetrated into these regions appears to be remote, but it cannot be fixed with any certainty.

The inhabitants of Gurwall and Kumaon are called Khasyas, from their having settled in the Khas country ; but all claim a Rajpoot descent from families that have emigrated from the south, and acknowledge no connexion with the impure and original barbarians. West from Gurwall, the designation of Khass is altogether rejected ; and it is even asserted that the impure race never held that country. The Khasyas are fairer than the natives of the plains, their complexions being a kind of dirty white, resembling that of the Chinese and Tartars, but somewhat darker, whilst the general cast of their features indicates a descent from the Hindoos. In appearance there exists a considerable difference even between the natives of Gurwall and Kumaon : for although these two provinces are divided only by a small river, the former are stronger and more active, while both appear equally devoid of that energy which characterises the highlanders of most countries. No greater proof of their apathy and want of courage can be adduced than the easy manner in which they fell beneath the Ghoorka power, notwithstanding the natural strength and fastnesses of their country; and after their subjugation, although oppressed, and sold by hundreds into slavery, they scarcely made an effort to assert their independence.

Generally speaking, the mountaineers of these districts are of small stature, contemptible aspect, and servile address. If their appearance be so unprepossessing, they are in disposition still less calculated to beget sympathy for their condition. They are represented as being mean, grovelling, cowardly, and cruel: they are neither hospitable nor generous. Their intellect is of the lowest order, and their ignorance almost without a parallel, whilst some of their customs are quite degrading to humanity. In most of their dealings, they betray a mixture of caution, cunning, and dishonesty, combined with a degree of distrust and irresolution often remarkable in the Asiatic character. In their information also, and answers when questioned, they shew a disposition to prevaricate and

deceive; and although their prevailing character seems to be apathy and laziness, yet they occasionally exhibit, when roused, latent passions of a more violent nature, frequently becoming as obstinate as some of the brute creation. The higher classes, if not so circumscribed in knowledge, possess many of their vices in a greater degree; and although cringing and servile to those who are in any way their superiors, they are invariably tyrannical masters.

This may be considered the general character of the natives of these hillprovinces, and such has been noticed by several travellers; yet still in some districts much deviation may be found; and it has been remarked, that the farther removed from the plains, the more do these highlanders rise in activity, both of mind and of body. In several of the hill-states, this difference is observable; but in none more than among the Ghoorkas themselves, who are known to possess, not only resolute courage, but a high sense of honour, combining cheerfulness and patience under fatigue, and many of the highest requisites for making good soldiers.

In forming the above estimate of this race of people, it must not at the same time be forgotten, that they first came under our observation when they were just released from the grinding tyranny of the Ghoorkas, so that their natural character may have been considerably warped and disguised by the severities practised upon them, which were sufficient to depress whatever may have survived of the free and generous spirit that commonly marks the highlander. Besides, we have the satisfaction of knowing, that in those states that have fallen more immediately under the rule of the British government, the character of the people, already, has undergone a perceptible change; and in many parts of Gurwall, and more particularly Kumaon, the people are considered by the official authorities as a peaceful, harmless, and industrious race, and as far removed from, as their neighbours are addicted to, dishonesty. It is even said in Kumaon, that the paharee coolies of that district are so scrupulous in this respect, that, notwithstanding their reluctance to engage as porters, no more effectual method has been discovered to retain them in the service, than by paying them a portion of their wages in advance, which, so far from acting as a temptation to desertion, rather serves as a guarantee for the performance of their compact.

"The influence of an oppressive government," says the East India Gazetteer, "in extinguishing all the natural springs of human industry and enterprise, was never'more strongly felt than by the effect that of the Ghoorkas has had on the natives of Kumaon. The Khasya had been so long accustomed to be regularly robbed of whatever superfluity he acquired, that gain, before the British conquest

had ceased to have any attractions." Even now, he works only to satisfy the immediate cravings of nature ; and beyond the measure necessary for their gratification, his labour may be compelled, but it is not to be purchased at any price ; and probably one generation, at least, must pass away, before the Kumaonee will acquire a distinct notion of personal property."

Fraser, Hamilton, &c.



Cantorny by a Sanghar, news - among lace.

PLATE XV.

CROSSING BY A SANGHA, NEAR JUMNOOTREE.

THE greater part of the ascent from Kursalee to Jumnootree, (more minutely given in the description accompanying Plate xv1.,) lies in the great chasm which the Jumna has made in forcing its way through the very heart of the mountains. Nothing can exceed the terrible wildness of some of the scenes, on thus tracing the river to its source : a chaotic confusion appears to reign over every thing ; each step that is taken seems to increase the difficulties of proceeding, and indicate an approach to the source of some mighty river. Such scenes are calculated to favour the superstitious belief of a people, and have given birth to most of the fabled scenes in the complicated drama of Hindoo mythology. Where could their gods be more sublimely enthroned, than amidst the awful recesses of the Himalaya?

Hindooism is the professed religion of the inhabitants of all this region. They hold sacred the principal Hindoo deities; they adore and protect the cow, and blindly follow many of the rites, superstitions, and prejudices of the Hindoos, without appearing to understand the meaning of them. "They adhere," says Mr. Fraser, "to the chief manners and customs of the Hindoos, only because they were adopted by their fathers before them; nor does there appear to be a Brahmin among them of more enlightened mind, or in any degree more intelligent, than the rest. In short, the religion, wild as it is among its most enlightened professors in the plains, is perverted and metamorphosed in the hills to a degree of such superior confusion, that it quite defies all order or comprehension.

"In every village, and on each way-side, there are temples to different Hindoo divinities; some to Mahadeo, or Seeva, under innumerable names; some to Gonesh, others to Bowanee, or to Calee; but there is an infinite variety of deities of their own, to whom they pay much adoration; and their temples are found on every hill, at every turn and remarkable place on the road. These are the Genii Loci, and their symbols and memorials are numerous and various; there is not a Teeba, or pinnacle of a hill, that is not supplied with a heap of

CROSSING BY A SANGHA,

stones, a single pillar, or a small hut, to which the Paharee turns with mysterious solemnity, and, prostrating himself, prays to the spirit of the place; and to every one of these are strange tales and curious legends attached.

"Superstition of this sort seems peculiarly natural to highland countries; such are the witches, spectres, and ghosts of the Scotch highlands, and those of the Indian mountains make not less impression on their inhabitants: any person taking delight in such mysterious tales, and who could follow the jargon of this country, might here find ample gratification for his taste."

The language spoken throughout a great portion of the hills, is a corruption of the Hindostanee dialect, containing a considerable number of Hindooee and Sanscrit words; but on penetrating farther north, the mixture with other jargons is greater, until it becomes quite unintelligible to the natives of the plains.

Most of the hill-people, it has been observed, call themselves Rajpoots, without any pretensions to the distinction. A partial observance only of the chief castes of the Hindoos is practised among them, and they appear altogether to disregard those minute subdivisions which exist among the people of the plains. They may be considered as divided into Brahmins, Rajpoots, Kunnoits, (an inferior class of Rajpoots,) and Coolies or Chumars. The former are numerous, and, as usual, take excellent care of themselves.

Persons of any of these castes, even the Brahmins, in addition to corn, milk, and vegetables, eat fish and flesh of every description they can procure, (except that of the cow, which they venerate,) not objecting even to the wild hog. The goat is esteemed a particular dainty. They all drink spirituous liquors when they can procure them, and make more than one species themselves, with which they delight to become intoxicated.

In their marriages, and system with regard to women generally, their practices are much at variance with the scrupulous ideas of Hindoos upon those subjects. One most revolting custom prevails, and which, were it not fully substantiated, would scarcely be credited. In fact, a system of polyandry, or plurality of husbands, is here established, the very reverse of the polygamy of the Mahomedans. It is usual for three, four, or more brothers of one family, to have but one wife in common among them, all of whom are bound to her by the indissoluble ties of civil contract. The first child becomes the property of the elder brother, and so on in rotation; and, notwithstanding this debasing communion, it is strange that disputes or differences among them scarcely ever occur; love and jealousy, even in their rudest forms, being feelings quite unknown among them.

NEAR JUMNOOTREE.

In answer to the inquiries made of them, respecting the admission of so extraordinary a practice among them, no satisfactory reason could be elicited; but they attributed it to their poverty, saying that they were too poor to maintain each man a wife to himself. This, however, could not be the true reason, for, in a country like this, where the women do more hard labour than the men, she must, it would be supposed, be a gaining, rather than a losing concern to the husband.

It has been suggested, that this custom, forming so singular a departure from the usages of mankind, may have been an expedient devised to prevent a redundant population in a country so little calculated for their support. Still, the question that naturally offers itself, is, as to what becomes of the superfluous females, or those who never married—the number of women always appearing disproportionate to that of the men. Either they must practise infanticide, or otherwise dispose of their female children; unless, from the operation of certain causes, the supply of females is less than that of males; neither of which they are inclined to admit.

Notwithstanding, however, their reluctance to avow the fact, it is well known that the practice of selling their female children to strangers was formerly quite common among them, and even now exists to a considerable extent; and until some better argument can be offered, the remark of the Rev. Hobart Caunter seems to afford the best solution of the mystery. "The practice of female infanticide among the Rajpoots," he observes, "must have necessitated the search after wives from among those races claiming the nearest kindred with themselves, where they might be the most readily found. As the Himalaya mountaineers, on the southern side, claim an affinity with the Rajpoots, the draughts of women from the former, to supply those which have been immolated, in obedience to the barbarous prejudices of a proud but noble race, whose customs, however sanguinary, are inviolable laws to them, may account for that paucity of females in the mountains which renders polygamy a necessary evil. Certain it is, that the daughters of these highlanders are frequently taken to the plains, and disposed of for prices according as the promise of beauty is greater or otherwise ; so that the deficiency caused by this singular trait of sordidness and parental indifference, may account for a practice which, however revolting to our better feelings, becomes a matter of civil expediency. The Rajpoot immolation must reduce that tribe to the necessity of seeking for wives somewhere; and if it be a matter of uncertainty whence they obtain them, the existence of polyandry among the inhabitants of the Himalavan mountains appears to me at once to solve, the problem."

CROSSING BY A SANGHA, NEAR JUMNOOTREE.

It is customary here to burn the dead, having carried them to some neighbouring height: after which they erect a pile of stones, and plant sticks hung with rags, to point out the spot, which is revered in memory of the deceased.

Except in cases of the death of persons of rank, it is not usual for wives to burn themselves on the funeral piles of their husbands. Mr. Fraser mentions an occasion, when twenty-two persons, of both sexes, burnt themselves with the body of a deceased rajah of Bischur; also several other instances near Nahnn. But these took place at a distant period, and are now, except in Nepaul, and other districts where the British have little or no control, of more rare occurrence than ever.

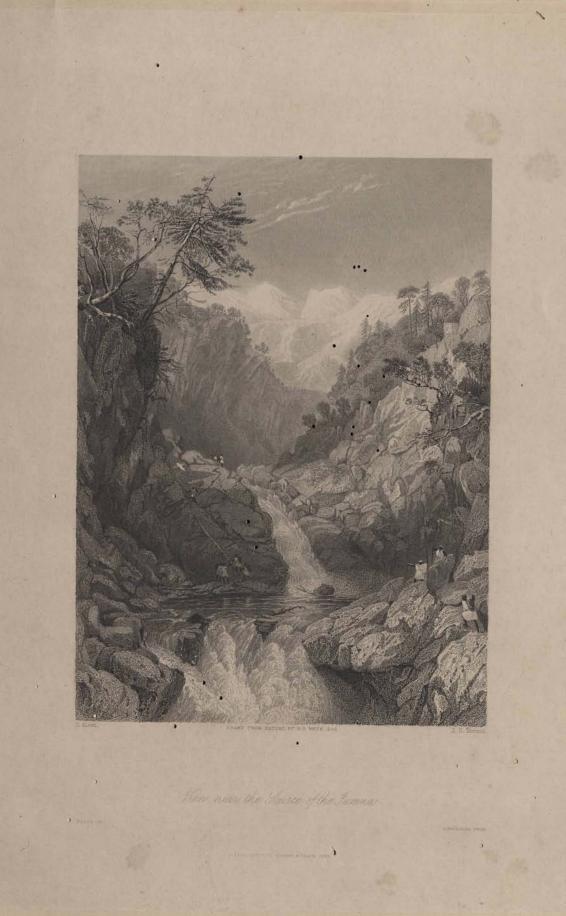


PLATE XVI.

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VIEW NEAR THE SOURCE OF THE JUMNA.

FROM Kursalee to Jumnootree the distance is about eight miles, of a most arduous and dangerous route, and not accessible until the month of May. The present head Brahmin of the village is an intelligent man, and always in attendance, to escort such visitors as may wish to make the ascent. He wears round his neck a number of coins and pieces of metal, given him by former travellers, with their names scratched upon them, and those he appears to value much. One coin, presented to him by James Baillie Fraser, Esq. (the celebrated author, and tourist of the Himalaya,) he shewed with more than common pride and satisfaction, saying that the name of the donor had a place in his memory and in his heart, never to be effaced : indeed, it is remarkable how much, and with what respect, that gentleman (under the name of 'Furruzun Sahib,') is both remembered and mentioned throughout these mountains, even after an interval of more than fifteen years. A few potatoes were brought to the present party by some of the villagers at Kursalee, which they stated to be the produce of those given them by Mr. Fraser in 1815, and which they had continued to plant every year, according to his directions, preserving them, as they said, as a treat to any European travellers who might chance to travel that way.

The Brahmins and guides generally require a day's notice from travellers, previously to making the ascent to the source of the Jumna, in order to prepare the way; as in many parts, a storm, or the falling in of some of the precipices, may have caused obstructions, so as to render a fresh track necessary; or the rising of the torrents, occasioned by a fall of rain, or the melting of the snow, may have carried away the sanghas or bridges, and rendered the construction of others necessary. Some of the bridges are of so very precarious a structure, as to require some degree of nerve and steadiness to cross them. They often consist of a single pine-tree, squared on the upper side, connecting two rocks, (see Plate xv.) and in other places, of smaller trees united together by twigs, on which are laid flat stones, the ends being confined by a pile of stones at either

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VIEW NEAR THE SOURCE OF THE JUMNA.

side. By such frail platforms the most frightful chasms are crossed, with foaming torrents below; whilst the tilting of the stones, and the falling of pebbles, together with the dinning noise and savage wildness of all around, render the situation of the traveller at times truly appalling.

The train that accompanies the traveller on these occasions is somewhat numerous. The Brahmins lead the way, followed by many of the mountaineers themselves. All the Hindoos' domestics are delighted at the opportunity of performing so pious an 'errand; while a few fakeers, or devotees, most fantastically distorted, are generally of the party, glad to take advantage of the guidance of the Brahmins.

The nature of the ascent to Jumnootree is thus minutely and correctly described by Mr. Fraser, of whose account, in the absence of any thing more than the brief notes explanatory of his sketches, the writer of these memoranda is induced to take advantage. "The course of the river here is a mere chasm, cut in the rock, and worn by the action of the waters and of winter storms. The sides, which are chiefly solid rocks, approach each other almost as close at the top as at their base, and the foliage on either brow mingles together. Above, the mountain is continued craggy and bare, the dark glen hardly shewing itself at any distance.

"Our path along the base of these wild precipices was thickly set with very dangerous steps, and always difficult and laborious; sometimes leading us along the face of a precipice above the deep pools, where there was little hold for hand or foot, where it was necessary to spring from a very uncertain footing to a distant bank, while a failure in the leap, or in the support, would have plunged us in the rapid stream. At others, we clambered up banks of loose fragments, of gigantic size, fallen from the cliffs above. At length we reached a pass where there was no possibility of continuing in the bed of the stream, and ascended through a thick and devious jungle of forest trees, and dwarf bamboo, mingled with various creepers and small shrubs, which rendered our progress painful and slow, for we had to creep on our hands and knees, clinging to the roots of trees and the stalks of bamboos, placed there by former passengers, and thus force ourselves up, along the sloping crest of a steep crag, to a point on which is placed a small altar to Byramjee.

"This spot is said to be half way from the village, and Byramjee is understood to be the *avant-courier* of Jumna, and the announcer of all those who come to worship her. His temple is only constructed of a few loose stones, and is not three feet high; there is no image, but it contained a great number of

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pieces of iron, with one, two, or more points, some plain, some twisted. A small brass canopy hung from the centre, together with a little brass lamp, and a small bell of the same metal, which is rung during worship. Here the officiating Brahmin's said a long prayer, with some fervency, ringing the bell, and offering flowers, which were also presented by all the attendants worshipping; thus propitiating the deity towards the strangers. The place is curiously chosen; extremely wild and gloomy, on the point of a rock overhanging the stream which runs below; it is surrounded by higher and more craggy precipices, covered with dark and thick jungle, and here and there the snow is seen from an opening far above. The descent from hence is more dangerous than even the ascent; it leads along the brink of the rock, and, where there is no footing naturally, sticks are laid along upon the roots of trees, or upon pins driven into the crevices of the rock, on which it is necessary to pass for several yards; the stones are all loose, and the ground very uncertain and soft. Descending thus, we again reached the bed of the river, and the path continued to increase in difficulty and danger, the water being more confined, the descent more rapid, the current stronger, and the falls more frequent and more grand. Again we crossed and recrossed the stream, the coldness of which (it having immediately left the snow) was so intense, as almost to benumb the joints : each time we plunged in, we felt as if cut to the bone. At length we reached the spot which had been pointed out to us from below as Jumnootree; but this was not the sacred source : here, however, there is a junction of three streams, and the place is more open than the channel below. (See Plate xv.)

"From the bed of the torrent, the mountain rises at once to its height, apparently without any very extensive irregularities; and the steepness of the declivity at this point may in some degree be estimated, when it is understood that here, though at the foot of this upper region of the mountain, the very peaks are seen towering above us, as ready to overwhelm the gazer with the snow from their summits; and, in fact, the avalanches from above fall into the channel of the river. At length, still following the channel, and ascending fast over a succession of rocks, stones, and precipices, we reached Jumnootree."

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