

second proposal in the sense I give it ought not to bring about any such result; it would rather confirm the Club in its original character. If the funds for improving the 'Journal' are not found in this way other ways may be devised in which they can be secured. That its condition now is not altogether satisfactory is obvious. The task of Editor is more than can be fairly thrown—without paid aid—on any Member who cannot afford to make it, as Mr. Coolidge in his day did, one of the chief occupations of his leisure.*

MOUNTAINEERING IN THE HIMALAYAS.

BY MAJOR THE HON. C. G. BRUCE.

(Read before the Alpine Club, December 11, 1899.)

I WAS originally asked to read a paper on Military Mountaineering, but I am afraid that mountaineering, as understood by this Club, is for India and its frontiers unnecessary. It must be borne in mind that the Himalayas are not the Alps; that India is not divided by one narrow ridge of high mountains from another civilised Power, as is the case between certain countries of Europe; that it is not necessary to hold high passes by special corps of trained Alpine troops; that what is wanted is not Alpine troops, but very active and highly trained hill troops.

It would be incorrect to describe to this Club the work necessary for the Indian frontiers as mountaineering. What, however, is of value is the educational side of mountaineering. The actual effort of climbing up steep ice or rocks is of little importance, most of the hill men, of whatever race, enlisted into the Indian army being excellent walkers and capable of covering steep, rocky hill-sides and every description of broken ground at a great pace.

It will, however, be allowed that mere activity is not everything in a mountain guide or a hill fighter.

There is probably no training so good as the practice of mountaineering for developing the path-finding instincts, for helping a man to readily pick out the right route or the safest route across a new country.

I do not suppose there are many members of the Alpine

* For the discussion on this subject see the 'Proceedings of the Club,' p. 352.

Club who would back their judgment in point to point leading at night in a new country against that of a first-rate Swiss.

Again, there is no sport, with the possible exception of polo, that teaches a man to keep his head better in an emergency, or to rapidly decide on the right course to be taken.

I expect most people here have suffered at times from being led by a bungler, or have been in positions where loss of nerve or want of decision would have meant serious consequences.

It will be understood from what I have said that I regard the practice of mountaineering as a valuable aid to military training. It is, however, a training which only a few men can obtain, but there is no reason to reject it on that account.

I will now leave the subject of military mountaineering, and very shortly point out the different advantages and disadvantages for climbers of the different districts of the Himalayas.

It should be understood that the most westerly parts of the Himalayas and the ranges of the Hindu Raj and Hindu Kush, Karakoram.s are not very much affected by the Monsoon. The further one goes east the more affected he becomes. This is due to two causes—the first, and most important, that in the west the monsoon itself is very light, and secondly that the high mountains are well defended by high ranges of foot hills, over which the monsoon has first to pass, and in doing so loses much of its moisture.

Of course there is in many districts local bad weather, but not sufficient to prevent work. There is also uniformly better weather on the northern side of the main range than on the southern. One may say, therefore, that from the middle of June until the end of August the weather is uniformly unsatisfactory on the southern slopes of the Himalayas from Kangra to Bhutan, whereas from Chitral to Western Kashmir one can work the whole summer through. I will not say that on the southern (?) slopes the weather will not be occasionally bad during the monsoon months, but it will not be so bad as to stop work for long.

I have climbed mountains in every month from May until November. In fact, my first climbs in 1890 were made in June. I attempted two peaks on the small range which divides the Kaghan valley from Kashmir territory; they both had the same names in common with some *ten* other points—*Ragee*, *Bogee*.

My companions were two capital Kaghani.s, both Swatis by race, and a Goorkha orderly. We had one ice axe



Photo by Dr. J. Norman Collie.

A MINOR RIDGE IN THE HIMALAYAS,
NANGA PARVAT.

Steam Electric Engraving Co.

and about 50 ft. of cotton rope. Many Kaghani go very well on rocks and snow, but know nothing of hard, steep snow or of ice, and have a quite peculiar terror of anything in the shape of a crevasse. They are capital porters and first-rate walkers. We did very well on both climbs, considering all things, but as nearly as possible slipped into a large bergschrund on the first mountain. We also did everything wrong that it was possible to do.

I think, having got so far, I might say a few words about how I extended my climbing operations. In 1891 I arranged to accompany Sir Martin Conway the following year into the Karakorams, and having been granted six months' leave brought over to England a Goorkha, whom I took to Switzerland, and we both worked with Zurbriggen for a month in the winter of that year.

This man was the first Goorkha to be taught ice and snow work. In 1892, with Sir Martin Conway, I saw for the first time the great mountains, both Hindu Kush, Karakorams, and Himalayas. Also I first went among them at a time of year when respect for them is most easily learnt—in May and June.

In the Bagrot Nullah, where we were for part of May and June, avalanches were continually falling; we could often see four or five falling at the same time.

Four Goorkhas and myself were unlucky enough to get under the direct line of one of these little ordinary avalanches. The solid part of it was caught in seracs 4,000 to 5,000 ft. above us, but the avalanche dust and wind came down on us and caught us; it rolled me over like a shot rabbit, and when I came to I was quite speechless for a minute or two, the Goorkhas being in the same condition. Our subsequent journeys in the Karakorams led us through probably (I prefer to use the name 'Mustagh,' or 'White Mountains,' to 'Karakorams,' or 'Black Gravel') the most gigantic mountains in the world. It is hard to realise how great the size is. Possibly if I say that the mountain scale is as much greater than the Alps as the Alps are greater than the Snowdon range, or that the rock mountains compare with the Chamonix Aiguilles as the Aiguilles do with the Coolin Hills, some idea may be formed of the magnitude of the mountains in Asia.

It is possible to compare the scale of the ice scenery on Mont Blanc, both north and south, with Nanga Parbat—that is to say, that the scale of the icefalls, &c., on Nanga Parbat is not so much greater than Mont Blanc as to be beyond

comparison. Without exaggeration one may say that from a Karakoram standpoint there are no large glaciers on Nanga Parbat.

After the crossing of the Nushik La, in the beginning of July, we descended to Arundu, a village at the foot of the Chogo Lungma Glacier, from which issues the Basha River. At the head of this great glacier lies Mount Kupultung (25,000 ft.) and a great mountain district, which is almost unknown, as I believe; with the exception of the Survey parties years ago only Mr. and Mrs. Bullock Workman have explored it. I can recommend this district to any party intending to visit the Himalayas; it is easier of access than the Baltoro or Hispar Glacier, and probably on as magnificent a scale; a pass could probably be made over to the Bagrote Nullah, leading into the Gilgit valley.

In the winter of 1892 I was lucky enough to get down to Chilas with Sir George Robertson's expedition, which punished the Chilasis for much misconduct, and added another district to the Maharajah of Kashmir's dominions. I was then able to see one of the most magnificent sights to be found in the world—a view of Nanga Parbat from across the Indus.

One can stand on the fields of Gor, and look down to the river which is 4,000 ft. below one, and directly up to the summit of Nanga Parbat, nearly 20,000 ft. above one's head! Gor also supplied us with partridges! Partridge-shooting was carried on under some difficulty, we having to post sentries round and shoot the ground between them, all the beaters being also armed.

Food supplies were very short, and especially so at my little post—Darang, below Gor, on the banks of the Indus—and I am sorry to say that, owing to my self-helpful habits, from which both friends and foes suffered, I got the name of the 'Robber of Darang.' But what can one do after a continued diet of canary seed and goat's milk when mail bags containing both bread and plum pudding pass through one's hands?

In January 1893 I was still more fortunate, as I was attached to Sir George Robertson's mission to Chitral, and was able to see that interesting country under native rule, and to do a little shooting and climbing in it.

The people also were most interesting, being very cheerful and apparently friendly, though treacherous to a degree. Colonel Durand called Chitral 'the land of mirth and murder.'

While there in the first week of May 1893 with Captain Younghusband we climbed a small peak above Chitral, called Ispero Zorn, an account of which appeared in the 'Alpine Journal' some years ago. It was only 13,500 ft. high, but gave us a very good scramble. It was, however, an admirable point of view—Tirich Mir to the E., and to the S. and S.E. the high ridge dividing Chitral from Pathan land. The group of Tirich Mir is a ridge running in a southerly direction from the main chain of the Hindu Kush, and is head and shoulders higher than any mountain near it, three points being marked in the Survey maps as over 26,000 ft. in altitude. It is also probably the most westerly of all the great peaks.

The summer of 1893 found me in Hunza. During my stay of three months there I was able to do but little mountaineering, though I had a great deal of scrambling, and on one or two occasions reached points of over 18,000 ft. with one companion, a Goorkha orderly.

Hunza is probably the most extraordinary valley in the world. It lies at an average elevation of about 6,000 ft., and is surrounded on all sides by the most magnificent mountain scenery.

To the N., and directly over the Fort, rises, more steeply than it is possible to conceive, for 18,000 ft. the great peak of Boiyohaghurdoanashur.

I believe every one will allow that no more suitable or elegant name could be found. At least so I am led to believe, because, when I suggested that it should be called Mount John Jones Jenkins, as having more in common with modern nomenclature, Sir Martin Conway got fussy. The great chains of the Himalayas are, however, beyond the range of an ordinary hot weather leave trip, and, although most beautiful to see, are not so pleasant to work in, in my opinion, as the lower and nearer hills. Although one thoroughly enjoys climbs of 22,000 ft. and over, *after* they have been accomplished, I don't think any one will truthfully say that he is quite happy at over 20,000 ft.; at any rate one who has but few weeks in which to climb is obliged to be contented with the nearer ranges.

The nearer ranges are not to be despised, as they run up to 18,000 ft. in height, with a snow line considerably lower than the northern slopes of the Himalayas. They afford excellent rock and fair snow and ice work, though their glaciers are not on a large scale, and climbing can be had in them for at least seven months in the year, and last, but not least, there

is no forest scenery to surpass that which they afford. They would also be an excellent training ground for teaching hill men how to tackle the great peaks.

I myself have done most of my scrambling in the ranges which divide the Kaghan valley from Kashmir territory, and have had most delightful days on both peaks and passes. One of the pleasantest expeditions I had was in 1896, when on a fortnight's leave from Abbottabad; with Karbir leading us we accomplished a peak of about 16,000 feet, one of the innumerable Ragee-Bogees, by a very sporting rock arête, and next day descended into Kashmir territory, returning back again into Kaghan over a couple of passes and an elevated snowfield which took us down into the Narang valley of Kaghan.

On the first of these passes an amusing incident occurred. We had with us a dozen Kaghani, picked men and excellent goers, to carry our luggage. They were very good men, but, as usual, did not like snow or ice. On our arrival on top of the pass the northern side lay at a steep angle, hard frozen snow for about 50 feet down, which then dipped very steeply into the snow field below for another 50 feet, the face frozen almost to the consistency of ice. We saw at once that we should have difficulty with the carriers.

However we hit on a very good plan, which answered admirably; we stretched our only rope from the top down the first steep slope, cutting large steps right up to the edge of the ice slope. At the edge we cut an immense step.

The men had not been allowed to look over all this time, and so were in ignorance of what was before them. One Goorkha was stationed on the top of the rope; one at the big step, and myself and Karbir hardened our hearts and glissaded sitting on to the snow slope below. On the word being given a coolie was passed down with his load, and made to sit down on the big step. A violent push did the rest, and we did the fielding at the bottom. After two or three men had arrived safely the rest thought it great sport, and some wanted to go back and have another slide.

The best piece of climbing accomplished at all in Kaghan was the ascent of the most northern (but one of the different) Ragee-Bogee peaks (16,700 ft., *prox.*), which is close to the Shikara Pass, though separated by one peak from it. This was done by Harkir Thapa alone, about May 20, when the mountain was in a very dangerous condition.

I will now try and describe to you some incidents in an expedition which I undertook into Ladakh and Kashmir in

1898, for the purpose of training Goorkhas on lines which had been found to be successful. I took with me sixteen Goorkhas, from five different battalions—two of them on whom I relied as my guides—Havildar Harkir Thapa and Naick Karbir Barathoki, both mentioned before to-night and having both been with Sir Martin Conway in the Karakorams, and having been climbing fairly steadily ever since that time.

They gave the greatest satisfaction, though they had no easy task, as you will understand, with fourteen new men, all very active, and most of them very careless and given to larking in dangerous places.

We did a little climbing on our way to Ladakh, but our first camp of real interest was at Takba. From there we made a high camp under Peak D 66 (about 18,000 ft.), and had some fine scrambling, the only remarkable climbing being on D 66 by Harkir and Karbir alone.

It was a rock climb—very difficult and very rotten. They got within 300 ft. of the top, but could not continue, as the rottenness of the rocks made it too dangerous.

Finally we made a new pass to Suru, which I ought to have enjoyed, but did not, owing to being very unwell with mountain sickness.

A few days afterwards we moved camp higher up W. of Nun Kun; from here many small climbs, scrambles, and explorations of an educational character were carried out—18,000 ft. second and third times.

After about a fortnight of this we crossed the ridge to the S. side with eight days' food, intending to cross about six high ridges that are marked on the map, and which would finally take us out to the foot of the Bhot Khol or Llama La Pass.

Imagine our astonishment, on arrival at the col, to find no ridges, but a great flat glacier running in a westerly direction, and right through where the ridges ought to have been.

We descended this, and on the second day crossed the Bhot Khol Pass to the northern side again, having had some excellent ice scrambling through a great icefall.

We camped on the northern side of Bhot Khol for some days, and from here two parties—one led by Harkir and the other by Karbir—accomplished two difficult climbs. Harkir, starting very late, climbed a high peak (19,500 ft. approximately) W. of the Bhot Khol Pass, and on the same range, by a very steep rock arête.

He had no lantern, and on his return found himself at
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dark with the great icefall that he had crossed in the morning to cross over before getting on the route home.

He told me that he was not keen to sit out a night at that height (over 15,000 ft.), so he determined to take his luck on the icefall without a lantern, and after three hours of uncomfortable work led his party through without mishap. I was not with the party, or I should have sat out, having been carefully trained by Professor Collie to enjoy sitting out at heights of about 19,000 ft. without food and with only the *smell* of some whiskey in a bottle.

Shortly after these climbs we took our whole camp over to the Wardwan side, and had some capital scrambling and climbing on our way down to the main Wardwan valley, an ascent of a peak above Konnag being one of the best and most enjoyable climbs we made in the whole expedition; excellent practice both on rock and ice.

It sounds very easy to say that we moved camp across the Bhot Khol Pass, but, as a matter of fact, it was rather a serious undertaking, as the path is rough, and much of it over glacier, and on this occasion we had to take food for several days with us.

Our party consisted of my wife and myself, sixteen Goorkhas, seven servants, five ponies, two or three yaks, and between fifty and sixty coolies, with our complete camp equipment and one small flock of sheep—a walking larder. More difficult than Théodule.

As soon as we had had enough of the Upper Wardwan we took a sporting route into Kashmir over the tops of the Kohenhar peaks (17,050 ft.), sending a little light baggage, enough for five days, over a high pass N. of the Kohenhar peaks, whilst the heavy luggage went round over the Margan Pass and rejoined us again in Kashmir.

From here I was recalled to go to Darjeeling on recruiting duty, and we finished our expedition by a forced march into Kaghan, where we had one very sporting day, climbing the lesser head of the most easterly of the twelve Ragee-Bogee points directly above the Shikara Pass, but separated by one peak from it.

We had intended to traverse this peak, but our attempt was quite spoilt by bad weather. Long before our arrival on the lesser summit that I have spoken of it had begun to snow.

The weather got thicker and thicker, and on our arrival a violent thunderstorm came on. Five of the men were struck by lightning, without any ill effects, however, with the

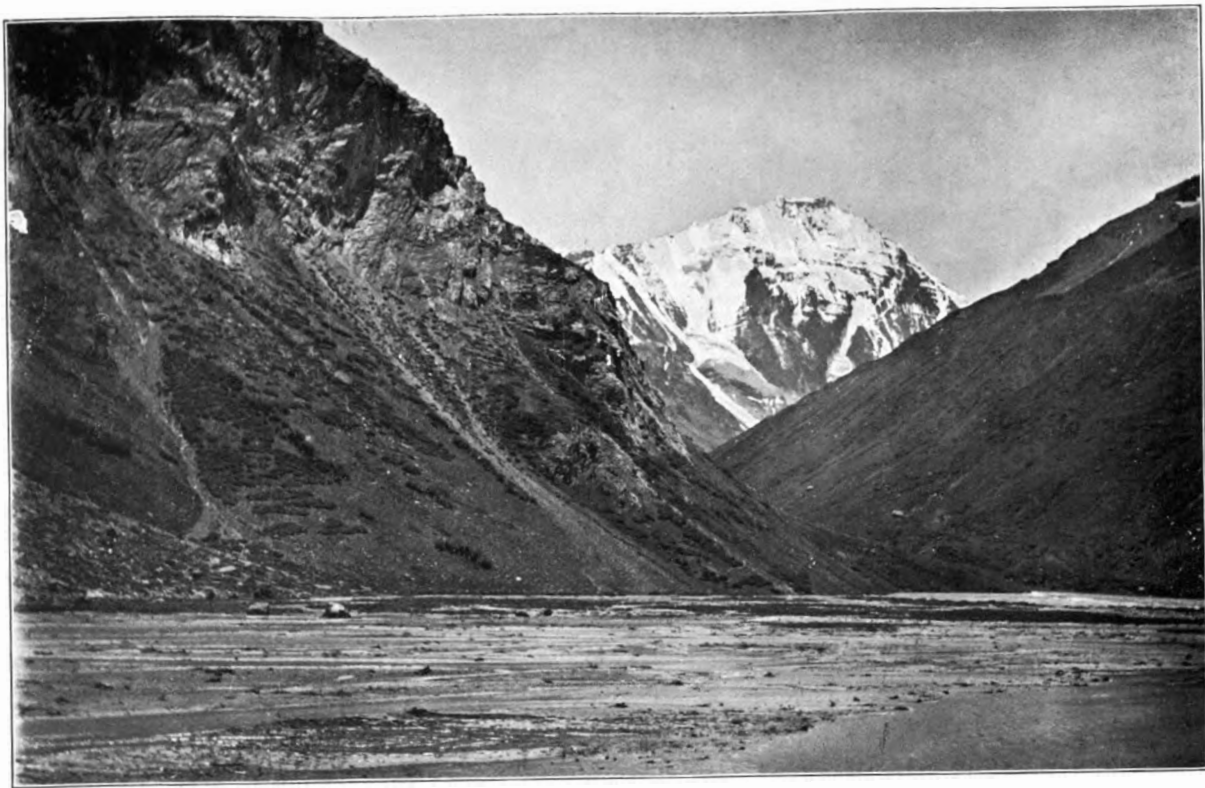


Photo by Mrs. Bruce.

BHOT KHOL LA.

Swan Electric Engraving Co.

exception that one man had a very uncomfortable arm for a couple of hours after.

This was an entirely new sensation for all the Goorkhas, and was much enjoyed. Harkir led us down through the storm at a great pace, by a new route, which he considered and which proved to be a short cut to the little village for which we were aiming.

We found the village empty, with the exception of some women, and spent the night on the roof of a house in the rain, toasting corn cobs for dinner. The weather was very bad the following day, and we were obliged to remain in the village, but left on the second day, and crossing by the Shikara Pass, now deep in fresh snow, rejoined our luggage again, and so home.

I should like to explain that although Goorkhas have up to the present time been almost exclusively used in later climbing in the Himalayas, as a race they are not necessarily the only people fit for the work. In fact there are many races who are more hardy and more active than the average Goorkha. The Goorkha has, however, had the advantage of a military training and of being a disciplined being, and last, and not least, he has acquired the habit of using nailed boots and socks.

EXCURSIONS IN THE GRAIANS.

By ALFRED HOLMES.

THE Ala Valley, on account of its accessibility, is a favourite climbing ground of the Turin section of the Italian Alpine Clubs. The valley itself is very beautiful, and the peaks at its head are mostly easy. The Bessanese, which is the most difficult, appears to be practically unknown to English climbers, for, according to a list of ascents in the May 1899 number of the 'Rivista,' it had never been climbed by an English party. Mr. Coolidge ascended it some years ago, but he is put down in the list as an American. Before knowing this we had arranged to begin our tour in the Graians with the ascent of the Bessanese. J. J. Brigg accompanied me to Turin, where we were joined by E. J. Mazzuchi. On July 3 we went by railway and carriage in about 6½ hrs. to Balme (4,784 ft.), which is very prettily situated on the left bank of the Stura, with a good inn (Albergo Reale) at the lower end of the village. We were met there by a porter named Bricco, recommended to us by