

THE
HIMALAYAN
JOURNAL

RECORDS OF THE HIMALAYAN CLUB

Edited by C. W. F. NOYCE

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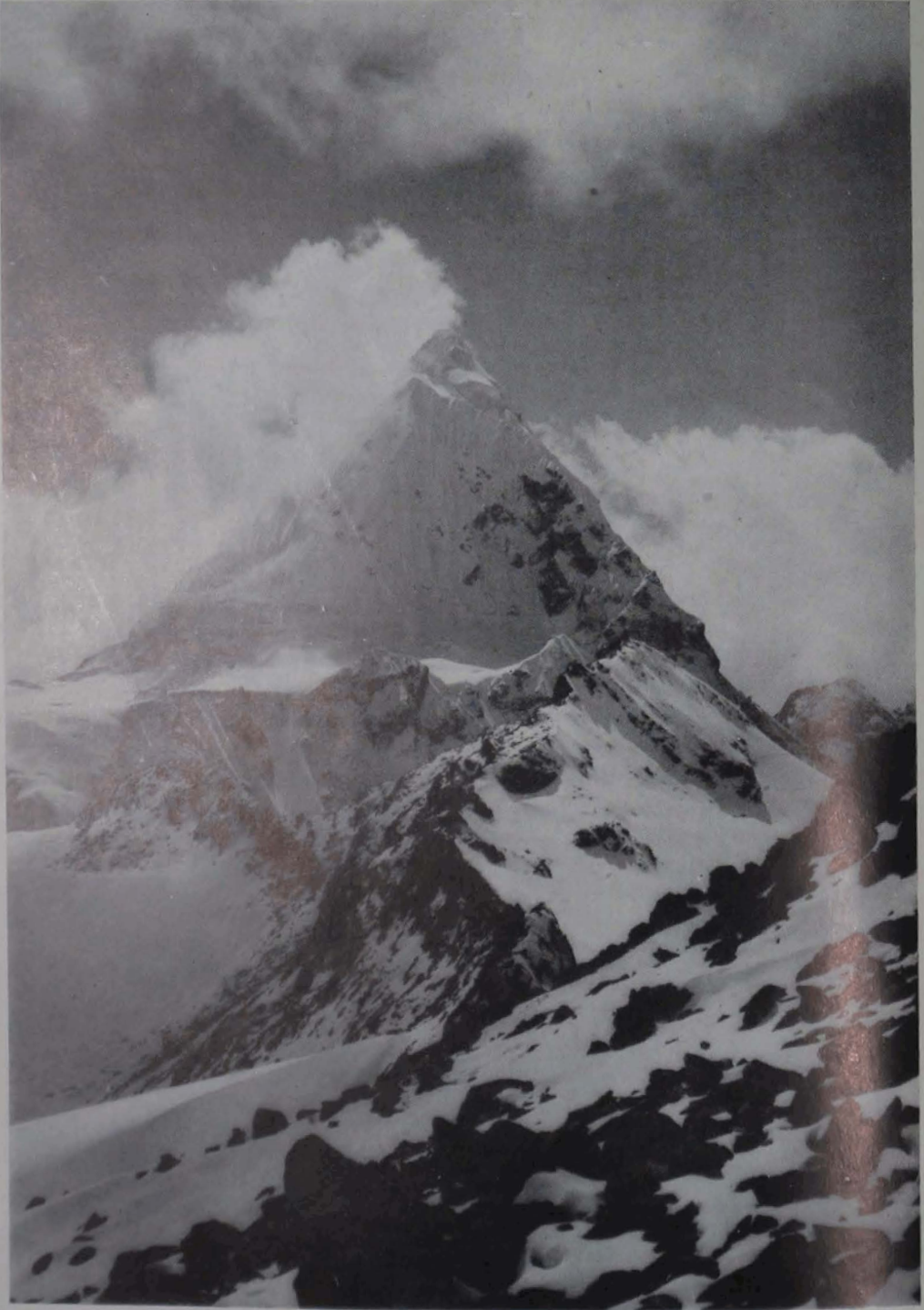


Photo by D. M. Macpherson

Face of Chombu from ridge above Sebu La, N.E.

THE
H I M A L A Y A N
J O U R N A L

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EDITED BY
C. W. F. NOYCE

*'To encourage and assist Himalayan
travel and exploration, and to extend
knowledge of the Himalaya and adjoining
mountain ranges through science,
art, literature, and sport.'*

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EDITORIAL

THE presence and matter of this editorial requires explanation and apology. It has been the custom of the *Himalayan Journal* to dispense with such aids in the past. But the loss of Kenneth Mason as editor needs an expression of public regret, as does the demand that somebody else should enter the room that he has left. The Himalayan world owes to him an immense debt of gratitude. In the first place the beauty of production of this journal hitherto has made it very easily the most attractive of all mountain periodicals. But more than this, it was also very much more complete, because Kenneth Mason had the art and the knowledge to present the various facets of the Himalaya, and to link each with each. These mountains, more than any others, hold an attraction for every interest that is worthiest in us. It is the often forgotten editorial task to stimulate and to co-ordinate these by a greater knowledge. In this respect Kenneth Mason was the perfect editor, and his loss is irreplaceable.

The journal for 1946 would inevitably be a 'coming to life' number, even if it were edited by a Himalayan expert. There is no point in wasting time regretting the quality of what now fills the mould; but words of explanation are required on the layout of this number adopted under the circumstances. It will be seen at once that there are far too many expedition accounts and far too few articles of general or non-climbing interest. It has not been possible even to approach the informative and scientific value of previous numbers, and this partly because during the war years few expeditions longer than a very brief leave-snatch have been undertaken. And there are fewer still who are prepared to write even of these. Therefore it will be found that there are a very large number of minor journeys described; and yet these, in that they are the type of journey likely to be the only one practicable for the next few years, may be of some interest. If the chances of return to the Himalaya grow, they will grow most profitably from the small, easy and self-planned party, rather than from the heavy and laborious expedition. The men who eventually climb Everest will have then behind them a record of minor achievement and experience. They will be acclimatized in every sense, and they will not approach a gamble but something more like a scientific problem. There are a number of very obvious virgin peaks to be climbed, to begin with: Nun, the Panch Chuli and Pandim, for instance. It is the climbers of these, and the scientists looking for exploration

starting-points, who might find ideas and suggestions from what has been attempted in the war years.

The inclusion of a short story is a novelty in this journal, though it is a feature of other mountaineering publications. It needs defence. The good fortune of securing a story of such quality as the 'Two Griefs' would be almost sufficient. But apart from this, the *Himalayan Journal* should touch every side of Himalayan life, and it is assuredly worth while to experiment in various ways of presenting that life. A bigger apology is demanded for the omission of an adequate account of a good many other odd bits of Himalayan activity, such as the beginnings of Aircrew Mountain Centre, with its aim of physical and 'moral' rehabilitation in Kashmir. Nor has the account yet come in of the activities of the Italian Prisoners of War from the camp at Yol. Moreover when it comes to explorations and obituary and other notes over the past six years it is necessary to choose. Much has gone into other journals, such as the *Alpine*, to which in particular this number will owe a great deal. We would here express our gratitude to the editor for his help, and for making much easier the retracing of the Himalayan journey backwards.

It would be impossible in this one number to make a complete record of all that has happened since the last journal was produced in 1940. Whether another number immediately filling the gaps left by this will be possible seems very doubtful. Paper and other difficulties and expenses make the production of one volume a fairly substantial undertaking, demanding the friendliness and co-operation of Press and contributors. Therefore for the omissions this Journal looks for indulgence, and to the Club for their rectification.

1939 KARAKORAM EXPEDITION

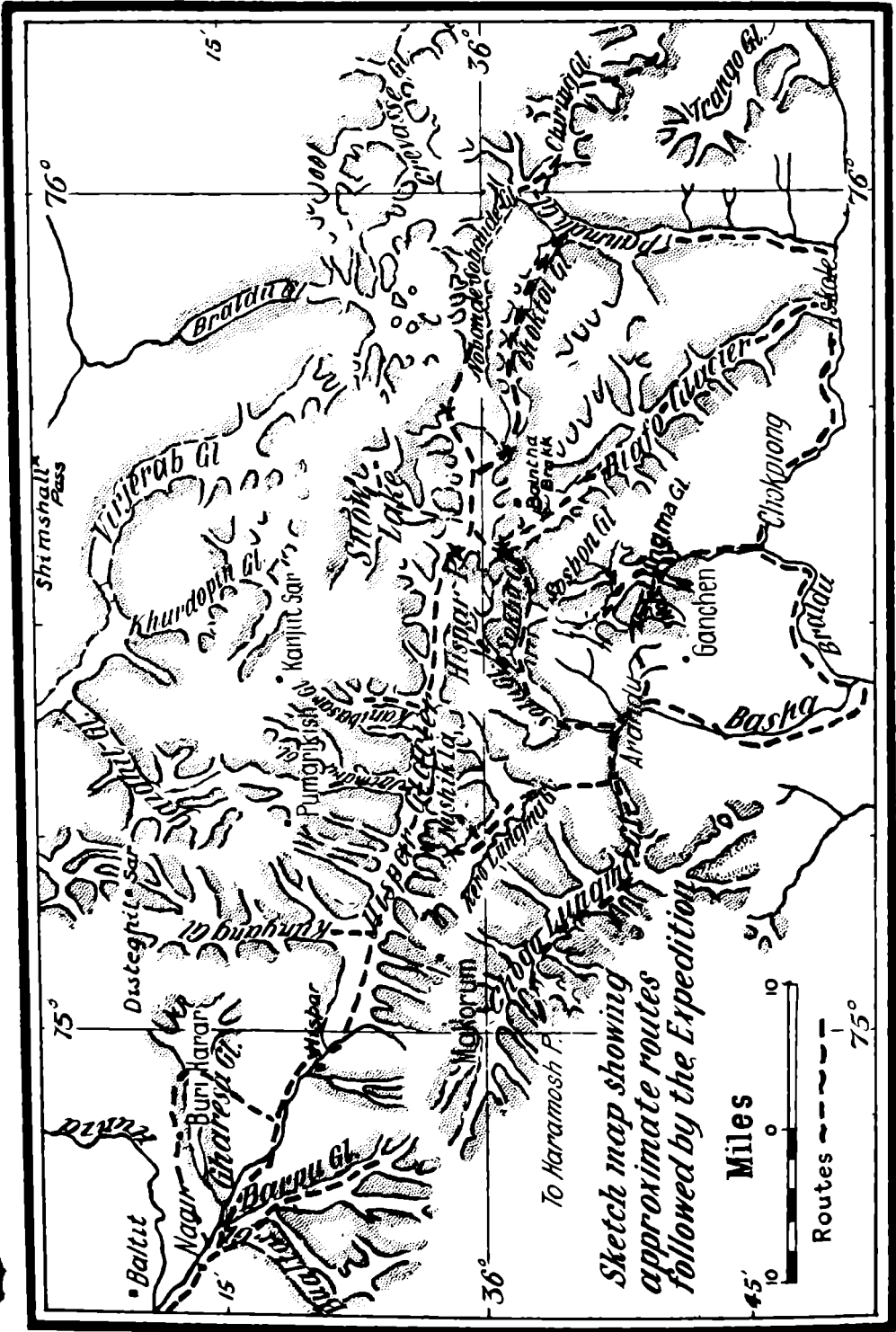
PETER MOTT

THE map which resulted from the 1937 Shaksgam Expedition went a long way towards filling in the topographical void of the central Karakoram. But it left one important gap of completely unsurveyed territory between the confluence of the Shaksgam and Braldu rivers, and the watershed lying north of the Crevasse glacier. There remained also the long-standing confusion in the region of the Hispar and Biafo glaciers, which had for many years assumed an almost legendary significance. In 1905 Dr. and Mrs. Bullock Workman claimed to have found a glacier (the 'Cornice') without an outlet, while the great ice-field of the 'Snow Lake', discovered by Sir Martin Conway in 1892, was thought by later geographers to be the possible source of all the major glaciers in the region. These geographical anomalies were finally disposed of by Tilman in 1937 when, at the conclusion of the Shaksgam Expedition, he crossed the Snow Lake (now renamed Lukpe Lawo), discovered a pass that led over the west wall of the Biafo into the head of the 'Cornice', and followed the latter down a perfectly normal course into the Basha valley.

Tilman's journey succeeded in clearing up the major uncertainties in the area, but there still remained much that required further exploration. The existing maps were based on the very sketchy surveys of Conway and the Bullock Workmans, and were not only unreliable in detail but also unconnected to the few G.T.S. points then available.

Shipton planned to spend the summer of 1939 in making a properly connected survey of the whole of the Snow Lake country including on the east the Panmah and Nobande Sobande, to the south the Biafo, and west as far as the Chogo Lungma and Hispar glacier systems. The total area to be surveyed amounted to some 2,000 sq. miles.

One of the greatest hindrances to travel in the Karakoram is the rivers, which in the late spring and summer become immense swollen torrents that constitute impassable barriers. It was hoped that during the winter the rivers, when frozen and snow-covered, instead of impeding progress, would provide a means of travel on ski into the heart of the unexplored regions north and east of the Shimshall pass. With this in view Shipton planned to move up in the late autumn to a winter base near the village of Shimshall. Little is known of the conditions during the winter months on the northern



*Sketch map showing
 approximate routes
 followed by the Expedition*

Sketch Map by P. Mott.

side of the range or of the behaviour of the people, animals and plants there. The winter programme therefore held out possibilities of wide and varied interest.

Finally in the spring of 1940 a journey was to be attempted from Shimshal to Leh, following the Shaksgam to the east and then passing through and mapping the little known parts of the Aghil range.

The expedition, assembled in Srinagar at the end of May, consisted of Eric Shipton, leader; Dr. R. Scott Russell, plant physiologist; Dr. E. C. Fountaine, medical officer; and myself, surveyor. Messrs. A. F. Betterton and Campbell Secord accompanied us for some weeks, the latter joining us at Nagir during the outward journey. The Survey of India, who had expressed considerable interest in our plans, not only assisted with much sound advice and a monetary grant, but also lent us two of their most experienced surveyors, Fazal Ellahi and Inayat Khan, to assist with the plane-tabling during the summer season. Last, but far from least important, were the nine sherpa porters, headed by the redoubtable Angtharkay who in 1933 carried up to 27,400 feet on Everest.

The road to Gilgit from Kashmir is a long and varied one. At Bandipura, the limit of the motor-road, we found our caravan in readiness amounting to thirty-five heavily loaded pack ponies. Climbing rapidly above the terraced ricefields, we looked down on the Vale of Kashmir; the Dal Lake and floating gardens; the smoke rising from numbers of ramshackle little villages shaded by graceful chinars and tall white poplars: the whole softened and transformed into a dreamlike unreality by wreaths of blue haze above which floated a line of distant snow peaks, seemingly unattached to the world below. After crossing the pass above the Tragbal bungalow, we descended into the beautiful alpine valley of the Kischenganga, thankful for the relief of pinewoods and clear mountain streams to protect us from the heat of a scorching sun. Once again the track climbed, this time reaching snow on the Kamri pass (14,000 feet) with a fine view of Nanga Parbat. There followed a rapid change of scene. Leaving the greenery and pinewoods behind, we followed the path down a valley filled with a profusion of Himalayan rose to the attractive village of Astor, which climbs steeply from the river in a series of irrigated terraces laden at the time with a rich crop of wheat, barley and corn. The rest of the journey to Gilgit was along a wearisome track, clinging first to the barren cliffs above the Astor gorge, and then crossing the torrid Bunji plain, parched and arid as any desert.

After two days spent in enjoying the rest and lavish hospitality of Gilgit, we left on the last stage of the 250-mile march to Nagir in the Hispar valley, the real base of operations.

Almost at once we plunged into country the scale of which it was at first difficult to comprehend. The Hunza valley, which we followed for some distance, is overshadowed on the south by Rakaposhi (25,550 feet), a serene precipice of fluted ice and rock that towers 20,000 feet above the valley floor with a directness that challenges the imagination.

When within a day's march of Nagir, Russell, Fazal Ellahi and I, with five sherpas, ascended a hill known as Zangia Harar (14,031 feet), from which I hoped to begin the survey, and Russell his botany. We started the climb from the village of Phikar, which three years before had been the scene of a terrible landslide in which twenty-six people lost their lives. The upper part of the village is built on a wide shelf where the hillside eases off before dropping steeply to the river. Part of this shelf, composed of conglomerate, broke away from the rest, and a whole section of the village was swept down. It must have been a remarkably precipitate fall, for we found isolated trees flourishing happily 500 feet below where they formerly existed. We were none of us in very good trim and even the sherpas found the going very hard. There was no water to be had until we had climbed 5,000 feet and were within an hour of the top. We camped two nights on the summit of Zangia Harar, which was one of the G.T.S. stations of the Indo-Russian triangulation. I experienced a bad attack of altitude sickness at this camp and spent a very miserable two days getting acclimatized. On both nights we carried out a fix for latitude and longitude but the results were not as successful as we hoped owing to the illumination system of the instrument giving trouble. On the third day we rejoined Shipton at Nagir, on 5th July.

Shipton's original plan had been to take the whole party straight up to the Hispar pass and establish a permanent camp for at least two months on the Snow Lake. From a measured base-line it was proposed to extend a triangulation outwards in all directions, providing a framework which would be tied on to any existing G.T.S. points in the area. While the surveyors were at work, there would have been ample time for others to explore the possibilities of any passes over the main watershed to the north, and across to the Panmah and Sokha ('Cornice') glaciers south-east and south-west respectively. The Survey of India, however, was anxious to have a triangulation carried up the Hispar glacier from the Indo-Russian series in the Hunza valley, a distance of some 60 miles as the crow flies. Very unwisely, as it proved, the original plans were changed and we decided on the latter course.

The day following our arrival at Nagir, Russell, Secord and Betterton went up the Barpu glacier to collect plants and look for



Photo by P. G. Mott

1. *The Indus valley near Rondu*



Photo by P. G. Mott

2. *A Hunza shepherd*



Photo by P. G. Mott

3. Sherpas with heavy loads crossing the moraine-covered ice of the Hispar glacier

a pass to the Chogo Lungma, while Shipton, Fountaine and I set out to climb Buri Harar, the second of the Indo-Russian trig. stations with which I hoped to make a connexion. Led by a native of the village, who claimed to know the route, we endured the most horrible waterless climb in intense heat, and were finally forced to camp without water near the top of the ridge, where we were reduced to sucking raw eggs to alleviate our thirst. As soon as it was light we set off again and two hours later reached a small brook, the most welcome sight of water I have ever had! The station Buri Harar, instead of being on the 'highest accessible point of the ridge', as it was described in the Survey of India pamphlet, proved to be on a low inconspicuous spur which was totally unsuitable for our purpose. With little difficulty we climbed a further 2,000 feet to the true summit of the ridge, whence we looked down into a deep-cut valley containing the dead moraine of the Gharesa glacier. Fountaine left us the next day to follow up the Gharesa in the hope of finding a pass over the watershed to the glaciers of Shimshall. Though he found no sign of a pass, he was able to explore up to the head of the glacier which rises from a range of high peaks; several of these are over 24,000 feet. Fountaine took with him the Zeiss light phototheodolite and brought back photographs from which we were able to fill in the gaps in Inayat Khan's plane-table survey at the end of the expedition. The Gharesa, which was previously unexplored, is therefore now both known and well mapped.

Shipton and I returned rather disconsolately to Nagir. Five valuable days had been spent on a wild-goose chase that had achieved little else than to point out more forcibly than ever the mistake of not having adhered to the original plan. It was by this time too late to alter the plans again, as both the Indian plane-tables had been at work for a week and they were in urgent need of further triangulated points. A very active week followed while we laid out a base-line and climbed to several high tops in the vicinity of Nagir. Often we would spend four or five hours on the summit of a hill waiting for the clouds to disperse and sighting the telescope on the peaks as they emerged every now and then between rolling masses of thick mist. While we were on the Barpu and Bualtar glaciers a stone avalanche continued for two days, filling the air for miles around with a dense dust haze that screened most of our view. Always the trouble of finding water and fuel in such barren country made camp sites difficult to find and added to the exertion of the climbs. Our one great delight was the ablation valleys that were a feature of many of the glaciers. That on the Barpu followed along its right bank almost to the head, and was filled with clumps of willow and a gay profusion of rose thickets and wild flowers.

The rest of the party meanwhile were growing impatient to move on to more interesting parts. On 16th July Russell and Betterton left with sixty local coolies to lay a dump of food up the Hispar glacier, and to attempt a crossing of the Nushik La over the southern watershed to Baltistan. The Nushik La had only once before been crossed, by two Europeans, Bruce and Eckenstein, who were members of Conway's expedition in 1892. The Workmans had also tried it with the aid of a Swiss guide but without success and produced a highly ornamental account of their failure. Only one of the sixty Nagiri porters with Russell's party would agree to attempt the climb to the pass. The four Europeans and the sherpas had therefore to carry very heavy loads. Russell first reconnoitred a route, and after a good deal of difficulty owing to steep slopes of heavily crevassed ice, the whole party succeeded in reaching the top and camped one night at the head of the Kero Lungma glacier on the southern side. Betterton had one unpleasant experience during the climb when he fell down a crevasse, but was held on the rope by Secord, who hauled him out to safety. Russell and Betterton descended next day to Arandu, whence the latter returned via Skardu to Srinagar, while Russell rejoined Secord and Fontaine on the pass and the party descended again to the Hispar.

Having completed our work at Nagir, Shipton and I with the remaining sherpas and thirty coolies moved up to Hispar village, just below the snout of the glacier. Shipton then left me to establish a dump at the foot of the Hispar pass, taking with him Angharkay and all the coolies, and leaving me with sherpas Gyalgen and Lobsang. The next ten days were some of the hardest I experienced on the whole expedition.

Immediately west of Hispar village the track crosses a rickety suspension bridge over a boiling torrent of water and follows down the north bank of a deep gorge with high conglomerate cliffs on both sides. Six miles down, where the gorge ends, the track recrosses the Hispar river by another bridge. Between the two bridges the valley is enclosed by high and virtually barren ridges, each of which required a climb of 8,000 feet to reach the survey stations I had located on the top. The day of Shipton's departure Lobsang and I, with a native of Hispar, set out to climb the northern of the two ridges, which culminated in three pronounced rock steps. After our previous experience of local guides, I was at first disinclined to accept the advice of the man of Hispar, whose appearance was anything but prepossessing. However, he was so insistent that he knew the best route that I allowed myself unwisely to be persuaded. For seven unbearable hours we toiled in the hot sun up a very steep slope without sign of water. Always ahead there appeared still

another nalla with the hope that it might contain a stream; always it proved bone dry like the rest. We were 5,000 feet above the river and it was growing late, when Lobsang excitedly pointed to a damp patch of sand which he began to follow uphill like a bloodhound on the trail. In a little while we came on a small hollow lined with tall grass. It might well have been a mirage in so desolate an area. At first there was still no sign of water and we were about to continue the search elsewhere when a faint gurgling noise attracted my attention. On going to investigate, I discovered a minute stream hidden in the grass: it must have been the only trickle of water on the whole of that vast arid mountain-side. In the morning I left Lobsang in camp as he was not feeling well, and continued the climb with the local. I had estimated it would take only two hours from the camp to reach the summit, but in fact it took seven. We traversed first across an interminable stretch of loose scree cut up by innumerable gullies each 50 feet deep. At 17,000 feet we were forced round on to the northern slope of the mountain, where I kicked steps up a steep snow incline, above which a final scramble up 200 feet of boulders at last brought us out on a narrow rock platform that proved to be the summit. My companion had been feeling the altitude badly and had already collapsed several times on the way up, but refused to be left alone. While I carried out my observations he lay on the ground in a dejected heap and groaned so much I feared I might have to carry him down. The view from this point was magnificent and well repaid the effort of the climb. Directly below lay the Gharesa glacier descending from a ring of mighty peaks behind which I could see the fluted crown of Disteghil (25,868 feet). Far to the east the Hispar glacier stretched like a grey arterial road leading to the dazzling ice slopes of the pass, 50 miles away. Turning south and west I had a bird's-eye view of the whole of the country we had been working in, culminating in the great wall of ice-covered pyramids that overshadows the head of the Barpu and Bualtar glaciers. It was indeed a panorama of such tremendous magnitude and infinite complexity that one despaired of ever being able to capture its contours on a map.

Following our return from the Gharesa summit, Gyalgen, Lobsang and I set off again, this time to ascend the southern ridge of the valley where I had intersected a distinctive rock tower on which hinged the next triangle of the framework. By keeping to the south side of the gorge I hoped to make a direct approach to the point up a narrow valley I had seen from the Gharesa ridge. The entrance to this valley was by way of a cleft scarcely 20 feet in width between vertical conglomerate cliffs 100 feet in height. We followed up this extraordinary gully until suddenly without warning we came face

up to a waterfall wedged tightly between the perpendicular faces of the cliffs; there was absolutely no way of surmounting this obstacle and we were forced to retrace our steps to the main valley. We tried another gully lower down with exactly the same result. The only course left was to follow the Hispar downstream until we could find a suitable place to gain the main spur of the ridge. Had we appreciated in the least the difficulties that lay ahead we should without question have returned to the upper bridge and followed the track down the north side of the gorge. Since we were already a long way below the bridge I decided it would be quicker to continue along the south shore until we met the track at the lower of the two bridges. In place of the earlier sandflats, however, the river now clung tenaciously to the sides of the canyon, forcing us continually into a climb of several hundred feet where a bluff fell sheer into the boiling fury of the water. Finally, when within sight of the lower bridge, we were baulked completely by a sharp spur of hardened silt. The sherpas were beyond praise. They had been carrying 60-70 lb. loads for ten consecutive hours with scarcely any rest or food. The robust, sturdy figure of Lobsang seemed activated by a tireless mechanism. Not even this final obstacle perturbed him and he began at once to cut steps up to the crest of the spur where a series of pointed pinnacles, like minarets, stood out against the fading blue of the sky. From the top of the pinnacle ridge I managed to work my way along on to some rocks and slither down the far side on to a silt platform. The sherpas with their heavy packs were unable to follow, and I was left alone in approaching twilight, a thousand feet above the river and cut off completely from food, water, and warm clothes. In the half light the descent to the river looked extremely difficult, and I was unable to regain the ridge from which I had come. I therefore took the only remaining course and lunged uphill, clinging to the roots of plants and embedded stones for a handhold. After a most hazardous piece of climbing I regained the spur 500 feet above the place where I had left the sherpas, and to my intense relief heard the voices of my faithful companions still toiling uphill on the far side of the ridge in a valiant effort to reach me. We slept that night on platforms cut into the silt and just low enough to prevent us from rolling downhill. In the morning we made a long and difficult descent to the bridge by cutting steps all the way in consolidated silt that was as hard as glacier ice. After a much-needed meal and water, we continued along the track as far as the grazing ground of Haru, whence for many tiresome hours we climbed up grass- and scrub-covered slopes and spent the next night in some sheep pens just below a small lake called Rash Phari, at a height of about 14,500 feet. A climb of another 2,000 feet next morning

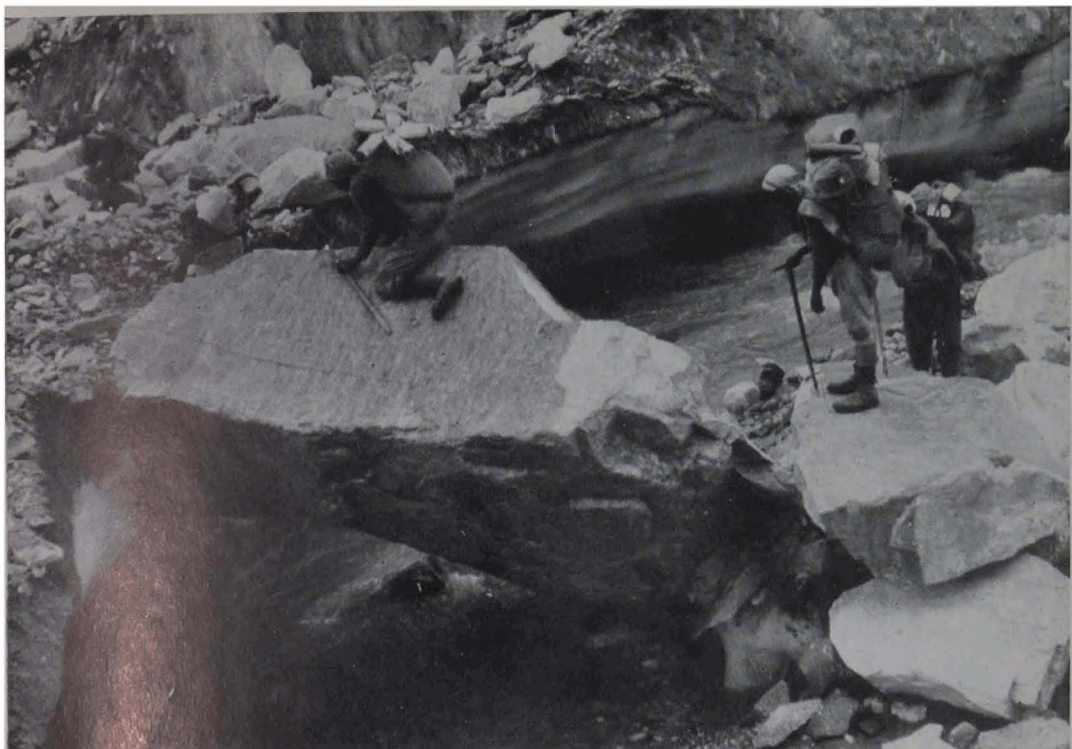


Photo by P. G. Mott

4. *A natural bridge which provided the only means of crossing a large melt-stream that runs down the lower half of the Hispar glacier*



Photo by P. G. Mott

5. *View from south side of Hispar glacier looking up Kani Basa glacier to Kanjut Sar (25,460 feet)*



Photo by P. G. M.

6. *Triangulating above the Hispar Glacier*



Photo by P. G. M.

7. *The head of the Hispar glacier and pass to the 'Snow Lake'. Baintha Brab (Conway's 'Ogre' Pk. 18,433 M) shows immediately to the right of the pass. In the middle left of the picture is the Workmans' peak found to be 19,400 feet instead of 21,300 feet.*

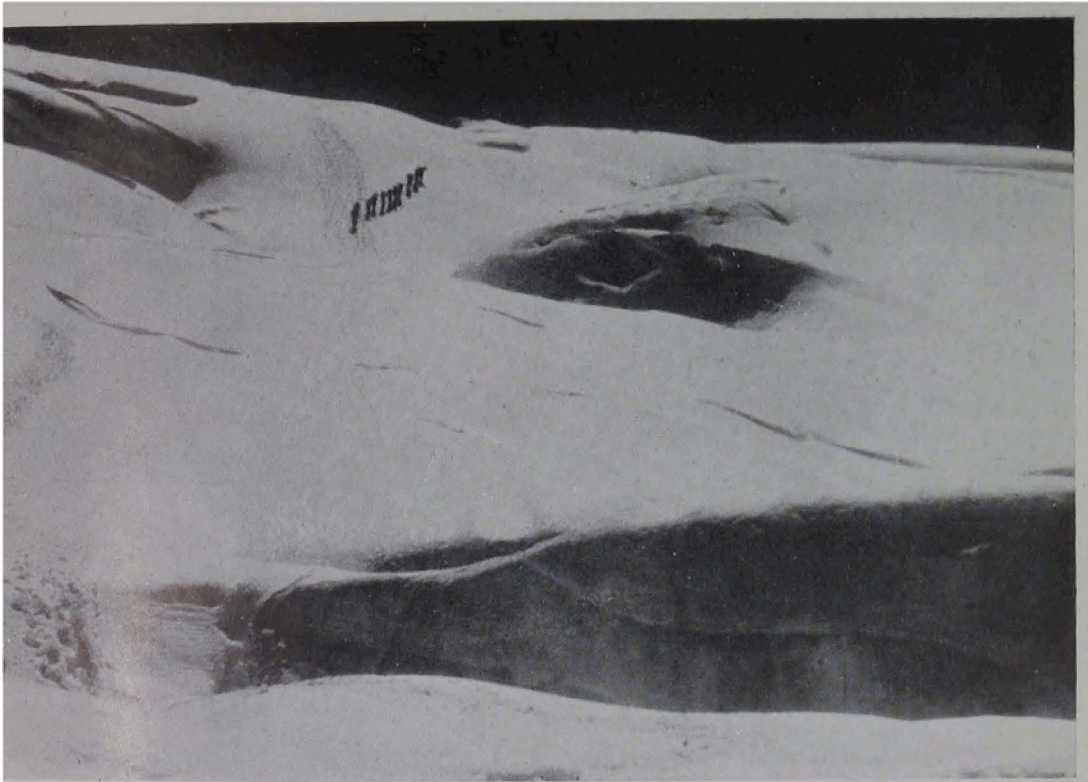


Photo by P. G. Mott

8. *The ascent to the Hispar Pass*



Photo by P. G. Mott

9. *Camp on the Hispar Pass (17,000 feet)*



Photo by P. G. Moll

10. *Lukpe Lawo* (Snow Lake) seen from the Hispar Pass. *Baintha Brakk*
(Pk 18/43 M) is in centre of photo



Photo by P. G. Moll

11. Snow and ice fluting on an unnamed peak above the Snow Lake

brought us at last to the illusive survey point. By then the weather had changed for the worse: mist, snow and sleet continued intermittently all day, reducing visibility to a few hundred feet. It rained all the following night. At daybreak there at first seemed no hope of the weather clearing up and we spent the first half of the day huddled in the bleak shelter of the sheep pens. At midday there were signs of the clouds breaking up, so Gyalgen and I climbed once again to the survey point, where I was just able to snatch the peaks up the Hispar glacier as they appeared between rolling banks of mist.

On 31st July the whole party reassembled at Makorum, half-way up the Hispar glacier, where we had a beautiful camp on a terrace beneath flower-covered slopes that provided Russell with an excellent opportunity for collecting plants and taking soil specimens for analysis. His object was to investigate the effect of environment and climate on the processes that control plant growth.

While Shipton and I continued with the triangulation, and Fazal Ellahi worked on the detailed plane-tableing of the upper Hispar, Fountaine and Secord made an interesting exploration of the Kunyang glacier, a northern tributary of the Hispar that leads beneath the towering ice precipices of Disteghil, with the intention of reaching a high saddle at the head of the Kunyang, which would have provided a pass across to the Yazghil glacier and a direct route to Shimshall. They crossed a high pass that led from a tributary to the head of the main glacier, but were forced to abandon any attempt to reach the final col over the main watershed owing to the danger of ice avalanches.

From Makorum we moved camp across the glacier and up the northern limit of the ice to Kani Basa about 6 miles west of the Hispar pass. Here I met with an accident that destroyed our hopes of an accurate connexion between the Indo-Russian triangulation in the Hunza valley and the few G.T.S. points in the Lukpe Lawo (Snow Lake) area that formed part of the old Kashmir Series. Successive periods of freeze and thaw had undermined the stability of a pile of rocks covering the top of a nearby hill that comprised one of my stations. Owing to bad weather I had to climb this hill on two occasions: the second time I went up alone. The top of the rock pile was surmounted by a large boulder weighing several tons on which I set up the theodolite. Unknown to me the boulder must have been finely balanced beneath, though I had already spent the previous day sitting on top of it! As I moved round to level the instrument there was an ominous rumble underneath and the whole mass began to roll downhill. I was carried head-first down the slope for about 20 feet when, luckily for me, the rock avalanche came

prematurely to a standstill and, apart from bruises, I emerged unharmed. The theodolite, however, had its vertical axis bent and was useless for further work. The rest of the triangulation had to be carried out with the small Zeiss instrument that was incapable of the accuracy required. The disappointment of being frustrated when within 15 miles of my goal completely destroyed any thankfulness I should have felt for my escape from what might easily have proved a fatal accident.

The Nagiri porters had given trouble from the start. In the early stages of placing dumps up the glacier both Shipton and Russell had experienced endless difficulty with them. At Kani Basa they refused flatly to go over the Hispar pass though we offered them sleeping-bags, warm clothing, tents, and extra pay for the two days needed to establish a camp on the Snow lake. Nothing but a dread fear of venturing on the upper part of the glacier could have produced so blank a refusal.

The burden of transporting the stores and equipment needed for a period of at least two months now rested entirely with the nine sherpas, one Nagiri man (who remained faithful to us throughout the expedition), and five Europeans. Our personal clothing and possessions were reduced to 25 lb. per head. Everything not absolutely essential was left behind in a dump which Shipton cleared on his way back at the end of the summer. On 13th August we set off heavily loaded for the Hispar pass.

A brilliant sun converted the pure white slopes in front of us into a million pin-points of flashing crystal. Gaping voids of steel blue lay below the tumbled séracs, and dwarfed the little cavalcade that threaded its way gingerly across the ice bridges or toiled up the long snow slopes towards the barely perceptible summit of the last rise. Early in the afternoon we pitched camp on the highest point of the pass at 17,000 feet. The panorama that unfolded itself before us must rank as one of the most majestic and transcendently beautiful landscapes in the world. A thousand feet below the camp the upper reaches of the Biafo glacier split up into two great arms to the north-west and north-east. At the limit of each arm a ring of ice-falls plunged precipitately down into the snow-filled amphitheatre which Conway so aptly termed the Snow lake. Dominating the southern ring of mountains, the matchless spire of Baintha Brakk (Conway's 'Ogre' Peak, 23,900 feet) soared into a sky of deepest blue, with a pennant of snow streaming from its crest. Beyond this proximate vision there stretched a limitless field of ivory towers each belittled by the magnitude of the surrounding ranges but individually giant in their own right. There was a sense of utter remoteness and transcendent peace in this limitless arena of high peaks that held

one suspended in its grip. I have seldom, if ever, witnessed a finer mountain view.

Two days were spent on top of the pass during which Shipton, Fountaine and I occupied several high triangulation stations. Russell and Secord ascended a peak on the north that had been climbed in 1908 by the Workmans, who had given its height as 21,300 feet. Both our triangulated value and that of Fazal Ellahi on his plane-table showed the true height of this mountain to be only 19,400. This was typical of the discrepancies we found between the actual height of the peaks in this area and those shown on the existing maps, which in nearly every case were wildly in error. The weather during these two days was perfect and we gained very extensive views from the various stations, reaching as far as K2 and Haramosh. The height for the Hispar pass worked out at 16,910 feet, and our fixing placed it 7 miles west of the position shown on the map, thus shortening the length of the Hispar to 30 miles. On 15th August we descended to the Snow lake and camped at the divide of the two main glaciers. Here the party broke into three, and we were never again reunited until the end of the summer, in Gilgit.

Shipton, Fountaine and Secord descended the Biafo glacier to Askole, where Secord left them and returned to Kashmir. From Askole Shipton and Fountaine, with three weeks' food, proceeded up the Panmah, where they carried out a remarkably successful exploration and survey of the exceedingly complicated and difficult region enclosing the Panmah, Nobande Sobande, Chiring and Choktoi glaciers. The lower Panmah is typical of most of the valleys of the district. It is desolate and barren, and its bed is filled with gravel and mud deposits, with large alluvial fans split up by the present streams into high cliffs and deep gorges. Typical also are the frequent oases: grassy glades, willow and rose thickets irrigated by spring water. The largest of these is the grazing ground of Panmah, which is about 12 miles up the valley, at the snout of the glacier.

On 25th August Shipton began a photographic survey of the Panmah, using the Zeiss light phototheodolite. After a successful beginning the party were overtaken by a spell of bad weather and confined for three days to a camp opposite the junction of the Choktoi glacier with the Panmah. The delay was made good use of by Angtharkay, who shot several ibex which kept them well supplied with meat for the next three weeks. As soon as the weather cleared they continued the survey up the main glacier to its junction with the Chiring. From here Fountaine, with two sherpas, followed the Chiring glacier to its head, where they climbed without difficulty a

high col overlooking the Sarpo Laggo glacier. The pass he was on (the long-sought 'New Mustagh Pass') affords a very easy means of communication across the main Asiatic watershed; certainly the quickest and easiest route between Askole and the Shaksgam river. From the summit of the pass he had a fine view of Skyang Kangri (staircase), K2, Broad peak and the Gasherbrum peaks, besides the Latok group, Kanjut and other giants, to the west. Shipton meanwhile climbed a 19,600-foot summit north of the Chiring, commanding a magnificent view of the whole district and providing him with an admirable survey station. The following two days he ascended two other peaks, one above the Drenmang glacier with a view up the Nobande Sobande, and one west of the Panmah.

On Fontaine's return, the whole party moved down the main glacier again, surveying *en route*. After camping one night on the right bank of the Choktoi they entered the upper basin of this glacier, where they were confronted with the stupendous granite peaks of the Latok group, standing a sheer 7,000 feet above the glacier. One after another the ice spires crowning the knife-sharp ridges of Baintha Brakk ('Ogre') and its surrounding peaks flicked into view, brilliantly translucent in the afternoon sun. The walls flanking the glacier were so steep and unbroken that it was with difficulty they reached a point high enough for a suitable station. After completing the survey of the Choktoi they moved camp to the crest of a col between the Choktoi and the Nobande Sobande, which had been crossed by Desio's party on the Duke of Spoleto's expedition in 1929. The col afforded an excellent position for a survey station. On 9th September Shipton, with Angtharkay and Kusang, abseiled down an overhanging ice slope north of the col and descended to the Nobande Sobande.

Having acted as human belays for Shipton's party, Fontaine and Lhakpa Tensing descended to the Choktoi and entered a deep gorge formed by sheer granite cliffs where they camped for the night. In the morning they discovered that the gorge connected with a large alley leading from still higher up the main glacier at a point beneath an impossible ice-fall. By climbing on to a broad ice shelf they were able to reach a steep ice ridge, up which they cut steps for 500 feet to the summit of a col; thence they were able to descend without difficulty to the Snow lake, and on the following day arrived at the food dump left by Fazal Ellahi.

In the meantime Shipton and his two sherpas spent two days on the Nobande Sobande finishing off the survey. They then crossed a col at the head of the glacier which led them back to the Snow lake. The descent on the west side of the pass proved a difficult one owing to a steep ice slope, down which the loads had to be lowered from



Photo by E. E. Shipton

12. *Granite spires of the Latok Group seen from the Choktoi glacier*

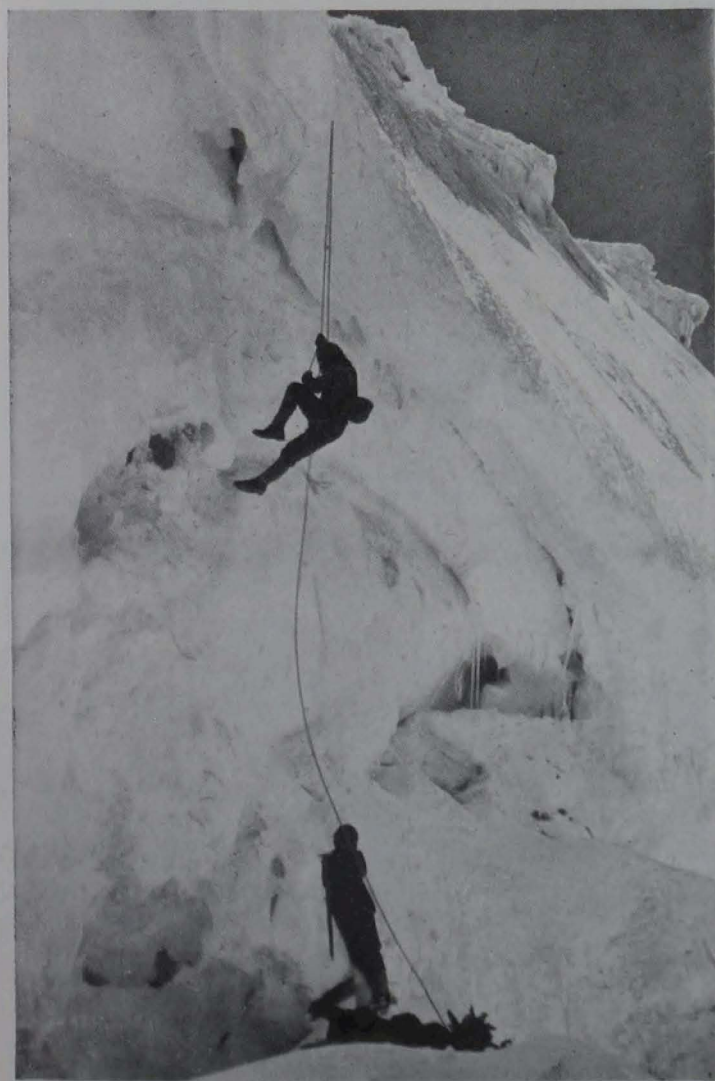


Photo by E. E. Shipton

13. *The descent of Shipton's party from Desio's Col to the Nobande Sobande*



Photo by P. G. Mell

14. *Plane-tableting above the Sosbon on the summit of the 'Peninsula' ridge*



Photo by P. G. Mell

15. *The pinnacle cirque dividing the Sokha and Sosbon glaciers*

ledge to ledge. On 11th September, in drifting cloud and snow, they crossed the Snow lake, rejoining Fountaine and Lhakpa Tensing at the dump.

On the break-up of the expedition into three parties after our crossing of the Hispar pass, surveyor Fazal Ellahi, with four sherpas and his personal servant (a Punjabi), began a plane-table survey of the whole Biafo glacier, including its enormous upper basin which comprises the Lukpe Lawo (Snow lake). For the next six weeks Fazal Ellahi was left almost entirely to his own resources. It is a great tribute to the skill and energy of this very fine surveyor that in so short a period he managed to cover 200 sq. miles of very high and most intricate country on his plane-table, with remarkable accuracy and speed, and without a single mishap to any of his party. His final map, part of which was checked by Shipton on the ground, not only proved to be extremely accurate, but as an example of topographical drawing in the field is without exception the neatest and most beautifully drawn I have ever seen.

Russell and I, with sherpas Gyalgen and Gyalgen Mikchi, comprising the third offshoot of our Snow lake base, set off southwards towards a gap in the tremendous rock wall that hems in the Biafo on the west, with the intention of crossing Tilman's pass over to the much-discussed region of the Sokha ('cornice') and Solu ('garden') glaciers. A few days before our departure Shipton and Russell had reconnoitred the approach to the pass, but we were still not at all certain that it was the same col as Tilman had crossed. The first day, having pitched camp at the foot of the pass, we continued a mile or two down the Biafo to examine another inlet that looked as if it might provide a more promising route. At the head of this valley a cirque of glaciers clung fanwise in a desperate effort to gain a hold on the sheer cliffs above. One look was sufficient to remove any hope of an alternative route in this direction. Early next morning, therefore, we began the climb to Tilman's col (now called Sokha La). Crossing first the tumbled debris of an avalanche, we reached a wide bergschrund protected by a curtain of stalactites, through which Russell, with methodical vandalism, smashed a path, enabling us each in turn to climb down on to an ice shelf within the bergschrund, and then out again on the far side. The slope above was very steep, and, with our heavy packs, necessitated some hard step-cutting by Russell. On arriving at the summit of the col it had been my intention to make a plane-table fix as a starting-point for the map of the Sokha, but the view to the east was hidden by low clouds, and it began to snow and sleet. The valley into which we looked down was scarcely a mile in width and hemmed in by cliffs, whose jagged summits soared 5,000 feet above the moraine-covered

ice of the glacier. Two miles west of the pass the glacier took an abrupt turn to the south, and its lower reaches were lost to view behind a precipitous bluff. Directly opposite us was another low col unscalable from the north, but which was probably the saddle reached by the Workmans from the Sosbon. From the top of this col, the outlet of the glacier would have been screened by the bulge of the rock bluff, which may have given rise to the fable of an enclosed glacier, though it is hard to understand how anyone could have made so emphatic a claim without further investigation.

The descent from the pass gave no trouble, and we camped that evening on a bed of dry grass, the first we had seen for ten days. There followed a busy week botanizing and surveying in as intricate a piece of country as one could find anywhere. A characteristic feature of the Sokha was a remarkable cirque of Gothic pinnacles standing at the head of a steep ice fall. I was to meet these pinnacles again two weeks later, when I viewed their southern face from the head of the west arm of the Sosbon glacier.

The lower slopes of the Sokha and Solu glaciers were well covered with vegetation and a variety of wild flowers. Blue geraniums, aconites and forget-me-nots mingled with the yellow of dwarf poppies and scarlet hedy sarums. An abundance of juniper and willow grew in the ablation valleys and on the hillsides, providing us with all the fuel we required. In the ablation valleys we found many fresh bear tracks; in the Solu I came across the recent lair of a bear who had carved out a comfortable home in the middle of a clump of salix. The fertility of these two valleys provided Russell with a magnificent field for his botanical work, and formed a large contribution to the collection of over one thousand plants which he acquired during the summer.

The survey of the Sokha and Solu glaciers was rendered extremely difficult by both the total absence of any control points, and the steepness and narrowness of the valleys. In order to begin the survey at all I was obliged to lay out a base of estimated length, and extend this into a graphical triangulation by means of a Wild telescopic alidade. Using this self-made control, I filled in the detail to an assumed scale and a relative system of heights; contours being shown at first by form-lines. By climbing to a high station at the junction of the glaciers, I succeeded in connecting the survey to two distant points above the Hispar, which established the correct values for scale and height. Azimuth was obtained by sighting the alidade on Polaris at a computed time, and making a graphical allowance for its variation from true north. Later the whole map was redrawn to the true scale, and the form-lines converted into contours by reference to the Hispar control points. The result is



Photo by P. G. Mott

16. *A typical Karakoram river forming an unpassable barrier during the late spring and summer*



Photo by P. G. Mott

17. *A village in the Braldu valley depending entirely on irrigation for its lush fertility*

less accurate than our other surveys, but forms an adequate map of the area which could not have been achieved by any other method in the short time at our disposal.

Five miles north of the divide between the two glaciers the Solu takes a sharp turn to the east, and for the final 2 miles at its head runs parallel to the Sokha, from which it is divided by a ridge some 19,000 feet high. There is a fairly low saddle at the head of the Solu which is probably that first climbed by Tilman from the Snow lake. The tremendously steep ice-fall below the saddle destroys any possibility of its use as a pass, though with changing ice conditions, it might at some future date prove to be crossable. Whereas the Sokha col presents no real difficulties, there would seem no particular advantage other than interest in attempting the Solu col.

On 27th August we moved down to the snout of the Solu, where there is a small grazing village known as Dabadas, the first habitation we had seen since leaving Hispar a month before. As soon as I had rounded off the survey we followed down the Kuschuchan Lungma river to its junction with the Basha valley near Arandu. In a series of hot marches we reached Askole three days later by way of the Basha and Braldu valleys. At Askole Russell left me, and proceeded up the Biafo to join Shipton on the Snow lake, where they carried out some further exploration, including the discovery of a high pass (19,500 feet) over the main watershed to the head of the Khurdopin. Unfortunately they were unable to make use of this col owing to the necessity of having to evacuate the dumps down the Hispar.

At Askole I received a very rude shock in the form of a telegram from Secord (sent by runner) which read: 'Srinagar September 3rd—German Polish war outbreak. Russo-German treaty. Campbell.' Here was the end of all our hopes and absorbing plans for the winter. I returned the vile missive to its envelope and sent a porter with it to catch up Russell's party.

Fountaine was to have joined me at Askole. After waiting three days in vain for his arrival, I left a note with the Lombardar of the village and set off down the Braldu with Gyalgen and three local porters. At Chokpiong we struck up the Hoh Lumba valley and made an initial camp a mile below the snout of the Sosbon glacier, near the flourishing grazing village of Nangmoni Tapsa, which provided us with a goat for the sum of three rupees. Next morning we climbed to the top of a high ridge, south of the Hoh Lumba, that overlooks the whole area of the Sosbon and Hoh Lungma glaciers and their two main tributaries, the Tsilbu and Chongahanmung. From this very fine view-point I was able to see nearly all the high peaks surrounding the upper Hispar and Lukpe

Lawo, including the distinctive twin summit of Kanjut Sar (25,460 feet) and the graceful spire of Braintha Brakk. Near by, the gaunt faces of Ganchen (21,000 feet) and its brother peak Hikmul rose in a direct challenge of bare rock and ice from the main arm of the Hoh Lungma. Immediately below the ridge where I was standing an unmapped glacier (Chongahanmung) drained into a delta of mud flats and channels beside the lateral moraine of the Hoh Lungma. On the north the broken moraine of the Sosbon split into two curving tentacles that embraced a pear-shaped 'peninsula' of rock, covered on its lower slopes with scrub and showing patches of snow and ice on top. The eastern arm of the Sosbon followed directly beneath an un-named giant of 21,000 feet forming part of the main ridge between the Sosbon and Biafo. I was able to get a really sound fixing from this excellent station, which kept me fully occupied for six hours taking rays to the multitude of detail that surrounded me on every side.

Unfortunately the weather broke, and for five days we had a period of snow and mist with scarcely a break. Ganchen's summit remained obdurately hidden in cloud, and without its use it was almost impossible to continue with the survey. We moved camp to the edge of a small lake that lies just west of the divide between the Sosbon and Hoh Lungma. By September 14th the weather showed signs of clearing, and I was able to begin work again. From a varied pattern of grey and brown the landscape had changed in the past few days to a shimmering wilderness of virgin white: winter had arrived with unexpected suddenness. It was bitterly cold on the tops, with a chill wind that made plane-tabling a most unpleasant occupation.

For some time I had been troubled by an irritable rash that covered my legs and the lower part of my body. While we were on the Snow lake it had largely disappeared, but the hot marches in the Braldu valley had brought it out again worse than ever. The irritation was so bad that I was sleeping scarcely at all at nights. By the time I reached the Sosbon my meagre supply of medical dressings was exhausted, and in many places the spots had gone septic and turned into large sores from which the poison had spread up into my groin. Walking and climbing became acutely painful, and I began to wonder, if Fountaine failed to turn up, how I was going to get back to Gilgit.

On completion of the Hoh Lungma survey, I moved camp to the Sosbon divide, where I paid off one of the two local men who had accompanied me from Askole. Our one small Meade tent had to accommodate the remaining local, Gyalgen and myself, which tested its elasticity to the limit. From this camp I was able to reach

another excellent station by climbing to the summit of the peninsula ridge, where I obtained a magnificent view across the Sokha pinnacles to Kanjut Sar in the distance. I discovered that the two pincer glaciers of the Sosbon are divided only at their head by a very narrow vertical rock wall, where they almost meet. There appeared to be a complicated tangle of sharp ridges at the source of the eastern of the two glaciers, which I was unfortunately never able to sort out owing to the inclement weather and my state of health.

At last, on 19th September, a message arrived from Fountaine, who was encamped at Nangmoni Tapsa, having reached there three weeks later than planned. My legs by this time were in very bad shape and the journey down the glacier will long remain in my memory as one of the most painful and unpleasant days I have ever spent.

The original plan had been that Fountaine and I should work together for the remaining three or four weeks of the summer programme in the exploration and mapping of the Kero Lungma and Chogo Lungma glaciers. It was hoped to return to Gilgit by way of a high col below Haramosh peak, leading from one of the branches of the Chogo Lungma. The saddle had been sighted by Dr. Workman in 1903; he later suggested it as a possible means of communication between Arandu and the Indus valley. The condition of my legs made my early return to Gilgit essential, and necessitated a considerable modification of our plans. An additional reason for cutting short our stay was that our funds were running dangerously low. It was therefore decided that Fountaine should proceed up the Chogo Lungma, and make a bid for the Haramosh pass, while I returned, as soon as I was well enough to travel, by the longer and easier route via the Ganto La to Rondu in the Indus valley, and thence across the Harpo La to Astor. Lhakpa Tensing, who for some time had been suffering from a dental abscess, was sent down to Skardu for treatment with directions to rejoin me in the Basha valley for the return journey to Gilgit.

On 22nd September Fountaine, accompanied by Gyalgen and Kusang, started up the Hoh Lungma and made for a saddle I had seen during the survey north of Hikmul peak at the head of the Tsilbu. After cutting a way up a steep ice slope covered by a thin layer of loose snow, negotiating two difficult bergschrunds, some rocks and a steep gully, they reached the top of the col (18,000 feet), whence they had a fine view up the Chogo Lungma to Haramosh. A steep descent of 8,000 feet brought them down to Bisil in the Basha valley, which they followed up for 4 miles. Unfortunately the rope bridge across the river to Arandu was down, and there was no

hope of fording the roaring torrent of the Basha river. Further progress up the left bank of the river was also barred by another stream, the Kero Lungma, almost as turbulent. An attempt to ford the latter was unsuccessful; so Fontaine decided to camp for the night and make a second attempt in the morning, when the night frosts above the snow line might have caused a diminution in the volume of water. At daybreak, with an alpine rope attached to his waist, Fontaine pushed forward into the current. The flow was extremely forceful and the water waist high, besides being intensely cold as it came directly from the glacier. By the time he was approaching the opposite bank all sensation in his legs had gone, and it was difficult to judge where his feet were resting on the bottom. Eventually he reached the support of a protruding rock, and succeeded in pulling himself through shallower water to dry land. He then held the rope while the sherpas crossed in a similar manner.

From Arandu they travelled up the Chogo Lungma keeping to the ablation valley on its left bank where there was ample wood for the sherpas to prepare a large quantity of tsampa (roasted flour) for use in the high camps. The third day they crossed to the southern side of the glacier and camped on a rocky outcrop at 14,000 feet. Only a short distance above this camp there entered from the left a tributary glacier which appeared to run uniformly upwards for about 8 miles where it ended in the col seen by the Workmans. Another day was spent weaving a route in and out of the intricate maze of crevasses up this glacier as far as the limit of the bare ice, where they camped at 15,000 feet. Progress the following day rapidly deteriorated and they were soon knee, and at times thigh, deep in snow. Such conditions at a height of 16,000 feet under a burden of 50-60 lb. loads were intensely fatiguing and made frequent rests essential. After negotiating some giant crevasses at the top of the last steep slope, they gained the crest of the pass after a long and very exhausting day. On the far side the rock face gave the impression of dropping almost sheer for 4,000 feet, while the true valley glacier, forming the slopes of Haramosh peak, hung suspended about 200 yards to the left. At the foot of the precipice below them was a short stretch of grass that suddenly entered a golden belt of fading willows and silver birch with beyond a dark belt of conifers. In the distance lay a blue mass of hills, gentle and warm with no sign of snow. The whole scene was a superb mass of colour, inviting, safe and hospitable. Despite the fact that there was no obvious route of descent, and it was by then 4 o'clock in the afternoon, they decided to try to reach this tempting valley below. For the first hour the going was very steep, over loose rock and patches of soft snow. Before long they were menaced by falling stones that began

to bounce round them on all sides; both Fountaine and Kusang were hit, the former ducking just in time to save his head, and the latter being struck in the back, where the padding of his rucksack saved him from injury. Just before nightfall they managed to reach the first grass, on which they were able to camp. In the morning an ice avalanche swept 4 miles down the valley, missing their camp by only 100 yards. From the Haramosh valley they completed the march to Gilgit in three days along the desert valleys of the Indus and Gilgit rivers.

The whole party, reunited after many weeks, spent a month in Gilgit undecided at first whether to carry on with our winter plans or return to Kashmir. A telegram was dispatched to the Government of India offering our services in any capacity. At the end of four weeks we received the reply: 'Have no suggestions.' This merely added to our dilemma, since obviously no one was anxious for our return. It seemed, however, unthinkable to continue with our plans in the constant knowledge that our families and friends and even the very source of our existence were in mortal danger. Reluctantly, therefore, we turned our backs on Shimshall and took the road back to civilization and total war.

At least we had the satisfaction of a successful summer. 1,600 sq. miles of very difficult country had been well mapped, and the geographical problems of the Snow lake and the country surrounding its attendant glaciers had been cleared up once and for all. A number of interesting new passes had been discovered and crossed, opening up routes which should be of assistance to future travellers in this region. Russell's very large collection of plants, added to his physiological research, formed a notable contribution to the expedition's results.

Above all, we could look back on six months of absorbing interest and delectable endeavour that not even the shadow of the Nazi spectre could ever snatch from our memory.

SOME MINOR EXPEDITIONS IN THE HIMALAYA

T. H. SOMERVELL

THERE are several ways of enjoying mountains. As seen from below they show that striking contrast between the cold, blue and white, snowy peaks and the green and fertile valleys or dark slopes of pine-trees, which provide the picture postcard maker with his stock-in-trade. But most of us, and all those among us who are mountaineers, are not content with the beauty of distance or of contrast—we want to get amongst the peaks and snow-fields; many of us want to go still farther and accept the challenge that all peaks present, the challenge to get to the top.

Personally, I am one of those fortunate beings who come into both these categories. I enjoy all mountains, small and great; looking at them, travelling among them, slogging away at the approaches to them, climbing their steep sides or ridges, attaining their summits if possible; but if not, what matter? The views are grand almost anywhere among them, and mountains are usually at their best from somewhere about half-way up a peak that is near them.

Among the Himalayas, I have climbed on many peaks, and attained the summits of but few. Yet it has all been good fun, good exercise, and above all good experience of the beautiful. When the Lama of Rongbuk Monastery asked us in 1922 why we wanted to climb Everest, General Bruce told him that we wished to get as near Heaven as we could. He said this with a twinkle in his kindly and humorous eye; but he spoke more truth, perhaps, than he realized. For mountains, especially in the Himalayas, where distances are so great and the snows are so solitary, do bring us right away from the world and its materialism, and in very truth give us an experience of something which is, I believe, heavenly and divine. Some of Smythe's 'sermonizing' on these lines is not only very well written, but is very good sense. Mountains do help us to forget the world and its wars and quarrels and competition and all the artificial things which ordinary life holds in cities and factories, even in villages. So during the last twenty years of life in a village in India, I have made half a dozen expeditions to the mountains, not to climb great giants like Kamet or Nanda Devi, but to find uplift and beauty, to get good exercise and a change of climate from the relaxing moist air of Travancore. All these expeditions have been entirely unimportant. They have simply been ways of spending a holiday. But some of them have

entailed a good deal of work. If you get asked on a big expedition, such as the Everest ones, which were my first introduction to the Himalaya, you have very little to do in preparation. Someone else is probably in charge of stores, another is O.C. tents, yet another gets the ropes and axes, another attends to the oxygen apparatus, and so on. But when you come to run for yourself an altogether minor expedition which will never get into the newspapers, you have got to do everything yourself—to look out coolies and porters and perhaps a pack animal or two; to get ready stores and tents; to remember that your ice-axe is in England and can't be got at, to find that you have a lovely warm coat but no suitable boots, that your primus stove has gone wrong, and that you stepped on your only goggles last year and forgot all about it.

If you are lucky enough to be able to start from a civilized 'centre', you will find an agent, like Karma Paul in Darjeeling or one of several in Srinagar, who will take on the whole of the question of food and transport and very likely provide some camp equipment for hire. But all places are not 'laid on' in this way, and unless you want to waste a lot of time at the start of your trek, you will have to get everything fixed up beforehand, either by letter, or, better, by the kind offices of some friend who is on the spot. But you will be rewarded for your trouble; for I have found, in common with many others, that a climbing expedition with one or two companions and no terrific objective can give a more real and serene enjoyment than you are likely to get from a large and spectacular attempt on a major peak. Perhaps because I am a solitary bird in some ways, I have made expeditions without any companions except a pony or two and a man to look after them. Under these circumstances one cannot do much serious mountaineering, but one can climb minor peaks, or go off into the blue all alone with a sketch-book and a camera, returning to camp at night after a grand day, with a few drawings, providing material for oil paintings to be done in the studio during the next few months or years, till the time comes round for another holiday in the hills.

The first expedition of this sort that I did was with my friend Crawford on the way back from the 1922 Everest Expedition. It was, of course, only a little side-show on the way home, and all our food and porters were already laid on, for we merely had to arrange for a few of the expedition's porters and a modicum of its food to be side-tracked with us in Lhonak, the northernmost valley of Sikkim, instead of going the longer way round by Phari Dzong and the Natu La.

In lovely weather we left the 'ordinary route' near Kampa Dzong and trekked up a long and stony valley, to the Naku La, with views of Chomiomo and the northern outposts of Kangchenjunga in front of us. Over the easy pass we found ourselves at once in green pastures and lush meadows looking down the long series of valleys leading to the south. But alas! The monsoon was in full swing, and our ascent of little Chomiomo was done to an accompaniment of thunder and lightning, which sent us skeltering down the easy snowy dome to get refuge from the elements' rage in the gullies on the west side of the mountain. Next day in the lush meadows we said good-bye to Mallory, who was travelling straight home to Darjeeling; Crawford and I set off westward in very indifferent weather to try our luck in Lhonak. First of all we had to make a map of the mountain forming the northern border of Sikkim in this part. We stepped a base line of a mile and triangulated with a prismatic compass. It was fair weather and we could see enough to make a workable map; but we never saw those fine mountains again. Several times we attempted to climb them, and got stuck—once on a severe crack in a small but vertical face of rock, more usually on heavy, moist snow, of which we were both inordinately frightened, for both of us had, but a few weeks before, shared the perils of that terrible avalanche on the North Col which put an end to our third attempt on Everest, and killed several of our companions; and always in thick cloud, with or without falling snow or sleet. We got one day to the top of the Choten Niyima La,* and a more desolate spot it would be hard to imagine in that weather. The peak to its east side looked easy, so we tried it; but here the heavy snow defeated us once more. So we turned our attention to the south side of the valley, and approached the Fluted peak after climbing two 18,000-foot mountains which seemed but heaps of stones in comparison with the lovely things around them. To get on to that very beautiful cone, the Fluted peak, we had to cross a slope of snow; but when we threw a stone on it a fair-sized avalanche was started—and we were a bit too avalanche-shy to go farther. Then we made an attempt to get up to the Jonsong La, and took a camp high up the rough, stony and inhospitable glacier. Next day, as usual, it rained, or snowed—I forget which—and we had to content ourselves with a dreary walk among mist and drizzle behind which we knew—for we had seen them in the early morning—were fine mountains.

A few days later it was time to go, and back we went, sometimes doing double marches, crossing the southern outflank of Chomiomo (and climbing a small rocky peak) to that delightful place, Thangu.

* See map, p. 47.

A pretty dud show, as far as views or weather or great summits are concerned. But it had its moments of real enjoyment, such as the quarter-hour when we saw Siniolchu from the north; and the fleeting visions of Langpo peak and Tent peak. Our reception at Thangu bungalow by Major and Mrs. Bailey, the first real roof that had been over our heads for four months, was one of the high lights. Damp rhododendron and soaking juniper provide a poor fire to dry one after fording unfordable and swollen streams in order to fail to climb an invisible mountain in sleet. But, even so, I enjoyed it, and so, I think, did Crawford.

In 1924 I again visited Everest; that year there were no side-shows, except for attempts to see Gaurisankar, one of which was, for ten minutes, successful, and provided Norton and myself with an unforgettable view of that most magnificent mountain from just across the valley to its north-west. In 1926 my wife and I joined Ruttledge and his wife and Col. (now Gen. Sir Roger) Wilson in an expedition to the northern side of Nanda Devi. I was taken ill with acute jaundice at half time and returned; but we had a most enjoyable month or so of trekking and climbing. It was hardly a 'minor' expedition, for we had seventy or more coolies, as well as several Everest porters, including that fine chap Chettan, who was killed on Kangchenjunga by an avalanche. The route lay through quite a different kind of country from the dense forests of Sikhim; most of the foothills of Kumaon are covered with widely spaced pine trees, with grass and bracken in between. In many places there are large clearings, and the river beds are rocky or stony and without vegetation. Several passes, of 4,000 feet or more up and down, had to be crossed as we threaded our way across several valleys to get to Martoli, on the north-east side of Nanda Kot. Martoli, and the next village, Milam, are lovely places—groups of deserted houses in green fields awaiting their occupation in July by the shepherds who come up for grazing. All around the grassy valleys are peaks of the finest and most varied shapes, culminating in the east peak of Nanda Devi on one side, and in Pancha Chule on the other. Great spires of rock, and the contorted strata of the 'Bad-dream mountain' overshadowed us to the north. And from Milam up a deeply cut valley to its north-east leads the track to Mansarowar and Kailas, the land of Hindu legend, 'the source of all the big rivers of India and of all spiritual beings and blessings'. Our first task, based on Milam, was to try to see the northern face of Nanda Devi. Owing to the circle of high mountains which completely surrounds the northern foot of this lovely peak, and the glaciers which flow down its northern side, nobody had ever seen this face of Nanda Devi. So nobody

knew if there might not be a way up, at least as hopeful as the way by which it was finally climbed by Odell and Tilman and which at that time (1926) was believed to be inaccessible. Ruttledge, Wilson and I, with a few of our porters and four tents between us, went up a glacier which is the lowest tributary that actually leads down to the Milam glacier. We camped in a lovely place among rocks and snow, about 12,000 feet. Next day we went up the glacier and camped on ice, where I felt a bit of a fool as I got fever and headache and seemed to be suffering from altitude—at 14,000 feet! Anyway, I was all right next morning, and we went on up the complicated ice-fall which leads to the upper névé. Thence we thought we could go up the mountain side at the head of the glacier, and be the first people ever to look down on the northern slopes or cliffs of the highest mountain wholly in the British Empire. The last and most rickety snow-bridge on that fantastic ice-fall seemed to take hours to cross, as we were under continuous bombardment from stones falling from the cliffs on our south side; for the sun was getting up. At last across the bridge, we had to contour along the edge of the upper névé, for the snow was too deep to be comfortable. Here again we advanced under a steady fire from mountain artillery. But when at last we were forced to take to the snow, it proved so deep and so exhausting that we had to give up all thoughts of attaining the edge of the basin that evening, and we had no food for a further day. So one more failure was added to my already discreditable list which began with Everest. Having failed to see over the basin from its edge, we next thought of trying to look over the edge from a higher mountain a few miles away. The best viewpoint seemed to be the Kwanl Ganga-ka Pahar to the north-east of Milam. So there we went—one day up the deep gorge which in places nearly proved impassable, and which is without exception the riskiest bit of travelling on an ordinary trade route that I have ever done.

The gorge led out to an open valley at the foot of our peak which sloped relentlessly up from the valley bed. In this we camped, and next day Wilson, Mr. and Mrs. Ruttledge and myself climbed up to 15,500 feet with small tents, sending our coolies down. The following day we took our camp to 17,500, on a snowy shelf facing west and with a glorious view, and the next day we climbed up the south-west ridge of the mountain. It was not too easy with its shattered rock (like the Täschhorn), and its deep snow. But we got up the ridge, and landed less than 1,000 feet from the top of the peak at a shoulder from which a lovely snowy crest curved up to the summit. Could we get up in the hour? We were debating this point and the likelihood of avalanches, when one of



Photo by T. H. Somervell

1. *Kangchenjunga and peaks running down to the W. Guicha La. Beginning of North Ridge of Pandim on right*



Photo by T. H. Somervell

2. *Above Gurais*



Photo by T. H. Sams

3. *The Rupal Nalla, with Nanga Parbat*



Photo by T. H. Sams

4. *Nanga Parbat from South*

the party was found to be suffering from sickness. That decided us to register yet another failure, in order to get down to a lower level for our camp. And it was perhaps as well we did so, as far as I was concerned. For within two days I was down with jaundice. The views we obtained of the northern side of Nanda Devi were magnificent, and so was Nanda Kot; both of them quite unforgettable. So our climb had not been in vain. My wife had climbed up to over 16,000 feet to meet me on the way down, and we got a meal ready for the others before they arrived in camp. But the next day I was quite laid up, and must have got a chill on the liver. I could eat nothing at all, had some fever, and went yellow all over. And I had to be back at Almora in ten days' time. On the way out, I had wondered whether the trip was going to be too much for my wife, for it was her first expedition among the Himalaya. But I need not have bothered about that, for on the return journey, as I dragged my weary footsteps up the passes and felt almost moribund when we arrived at the camping site later in the day, my wife was a tower of strength, carrying the rucksack, pitching the tent, getting meals and a hot-water bottle ready, and managing the cook and the coolies as if she had travelled in the Himalaya all her life. After about a week of walking without solid food at all, my appetite suddenly returned at the sight of a fish. A villager who wished to make a favourable impression on the Commissioner came along with this appetizing six-pounder in his hand, and was bitterly disappointed to find I was not the D.C. But I wasn't going to lose that fish—the one thing for which I felt I at last had an appetite. So I told him how intimate a friend I was with Ruttledge, how we were really his representatives, and so on. And the fish was ours.

The next mountain holiday I had was with Allsup in Sikhim, in 1928. We got together a grand lot of Everest porters and our stores, and went by the Pemiongchi monastery route to Jongri, in order to attempt Pandim, the nearest major Himalayan peak to civilization which had never been climbed. At Pemiongchi the lamas were friendly, and it was interesting to compare their little temple and ashram with the much larger monasteries I knew in Tibet. Somebody was a bit too friendly and stole my aneroid, companion of 150 climbs, from my bedroom at the Dak Bungalow, through an open window. Moral—open your windows at the top, not the bottom, when near monasteries. Next day something went wrong, and our Sirdar told us we must split the march into two. So our march was only a few miles, to our next camp; but the lovely views of Kabru made up for it, and to one who like myself enjoys painting mountains, there is something to be said for a

short day's march. Then down a steep slope to the river, across it, and up the other side to a grassy plateau, on which was a village, Yoksam, the head-man of which graciously offered us his house to sleep in. We had a look inside, and as graciously declined. Our party of two climbers was, we thought, sufficient without increasing our numbers by several thousands. The tame Lama of the village from Dubdi came along to our tent and offered to pray for fine weather for our expedition, if we rewarded him suitably. We gave him 8 annas, considered ample reward by our staff, but not by the Lama, who procured in return only 8 annas' worth of fine weather.

The next two days were the most romantic of any days I have had in Himalayan foothills—more like a story in Blackwood than anything else. We made our way along a quite invisible path, which was usually an unknown quantity to us, for we were hardly ever on it. On a slope of 45° (which seemed nearer 80° in most places) there grows an impenetrable forest for many miles, and every tree of that forest had made up its mind to do its very best to keep trespassers away by reinforcing with lianas and other parasitic growths the already impassable undergrowth. The path (when we found it) was seldom more than 6 inches wide, and in some places went actually along branches and roots. It took us all our time, but we got there somehow and found a cave with signs of previous travellers, where we got very warm, and almost dry, by a colossal camp-fire. The next day we got down a steep slope, crossed a foaming torrent, Prek Chu, on a broken bridge which necessitated a bathe in the rushing water and a roping-up of the party.

Suddenly the country changed. After a mile or two of forest and undergrowth we reached a really good path—that is to say, an unmistakable one—and for 7,000 feet we kept to the spur of the long ridge which leads up to Jongri. Here we pitched our tents amid snow and ice and agreed that it was an ideal place for the Mountain Club of India to build a hut. (The Himalayan club had only just begun and had not come my way in those early days.) After a day of sketching and short walks to get views when the clouds allowed, we went off to camp below the Guicha La through the vale of the Prek Chu, to the snow-covered Chemthang, in that lovely amphitheatre which is dominated by the impressive western face of Pandim. We decided to prospect, and see where we could pitch a camp from which Pandim could be climbed in a day. Obviously, somewhere a bit above and to the south-east of the Guicha La. So, to reconnoitre, we went up the pass next day, in thick mist most of the way, and with hopes of a camp site, if only the mist rolled away. But it didn't, and what we thought would be the simple north ridge of Pandim turned out to be such

a complex pile of seracs and gendarmes, lying there just as if thrown down at random by some colossal giant, that we knew it was hopeless to try Pandim in such weather. So after enjoying the fine view of Kangchenjunga and Simvu from the Guicha La (see *H.J.*, vol. viii, p. 132) which we saw bit by bit between the clouds, but never in its full magnificence, we returned to camp again feeling that it was not worth pushing forward in such weather. Another failure. And a decision to try some of the minor but possibly entertaining peaks round about the Kang La and the Kokthang. So down we went from Jongri, and this time up the steep track leading to the Kang La, slithering about in the most infernal mixture of slush and mud I have ever seen.

Once up the steep part, we entered the altogether delightful valley of the Tikip Chu, and there we camped. We passed on up the valley, with magnificent views, when the clouds allowed us to have them, of the mountains—Kabru and little Kabru, Kokthang—and some fine smaller ones such as the Kabru Dome and the Forked peak. We explored one or two glaciers to the northern side of our valley, and encamped again at the foot of the snow-field which led up to the Kang La. Here unfortunately Allsup got dysentery, and I had to do a solitary ascent of the peak north of the Kang La, which must surely have one of the grandest views that any mountain of its size (17,910 feet) enjoys. I saw it bit by bit as the clouds showed a rift, and the sight of Jannu, even in pieces, is not to be forgotten; for surely Jannu is one of the world's finest peaks. Between our camp and Kabru is a delightful range of mountains, culminating in the domed peak which Cooke climbed seven years later (*H.J.*, vol. viii, p. 107). The weather got worse and worse, so that, instead of going back the straight way to Chiabanjan and Phalut, we had to retrace our steps—our porters were not well-shod enough to brave the rigours of a 15,000-foot pass, the Oma La, in an April of blizzards. On our return through the steep forest between Yoksam and Dubdi, we encountered our lama friend and complained to him about the weather. 'What do you expect for 8 annas? If you had given me a rupee you would have had good weather' he told us. Back to Pemiongchi and down the long slope via Singachelling to Dentam, where we found that our porters had gone on up the hill to Chiabanjan, so we had to follow, the last few miles of that steep and tiring ascent—at the end of a 17-mile march—being made in the most torrential rain. Fagged out, we camped at the deserted Chiabanjan. Next day in mist and rain over Singalila hill to Phalut, but not unrewarded—for we had a fine view of Chamlang for an hour or so, though Makalu and Everest were hidden. Then another march in mixed weather to

Sandakphu, and a miraculous morning. We rose early to find all the clouds rolled away, and the finest panorama in Asia spreading before us, all as clear as crystal, with the sun just lighting up the tops and ridges with gold, while all else was in deep purple shadow. What a morning! At Thanglu we were rewarded richly by the faithful George Wood-Johnson, who had come out to meet us with an incredible number of bottles of beer in his rucksack. And so to Darjeeling and to work again after a completely unsatisfactory holiday, in which we had done nothing we intended to do, but which had provided us with many hours of deep enjoyment, and a few moments of Paradise.

The next expedition I made was to Nanga Parbat. A mountain is always at its best from some peak close to it, but well below its height. And I wanted to enjoy Nanga Parbat, not to climb it—to paint it, not struggle with it. I had hoped to go with Humphrey Trevelyan, but he could not get leave, so I had to go alone. By the kind offices of the late Dr. Neve, who put me up at Srinagar and put me wise with regard to personnel and equipment, I started off with an old shikari, called Abdulla, and his son, Aziz Ganai, who had been with the Germans on Nanga Parbat but had not done any climbing. We first made a week's tour with a few practice climbs, on Mahadeo and two other peaks, one on either side of the Sind valley. We had good weather, fine views, and I managed to teach Aziz the use of rope and axe, and found him an intelligent pupil. He was to be my only climbing companion on the mountains we had our eyes on, to the southern and western sides of Nanga Parbat. After reprovisioning at Srinagar, we set out, a party of four, to get there. A lovely lazy day boating down the river and across the Wular Lake to Bandipur. There we collected a few coolies to take us as far as Gurais. Up over the snow-covered Tragbal pass, with marvellous views, from Nanga Parbat to the north to the delicate blue beauty of the Pir Panjal in the south-east reflected in the mirror of the Wular lake. At Gurais we changed our coolies, and had some difficulty in persuading a party to come with us, for the Burzil pass had not been crossed that year. However, at last we got them to come, and set off in glorious weather over the long snow-fields of the Burzil—what a place for ski-ing! We had some companions on our trek over the pass, Yarkandis looking for all the world like the chorus in a Russian Opera. We almost expected them at any moment to do the Polovtziian dances from *Prince Igor*. Without knowing a word of their lingo, we made friends with them, and a fine hardy lot they were. Down at the other side of the pass we thawed out at Sardar Chauki, and after a long day turned in at Chillam Bungalow.

As we went down towards Godai, I traversed along at a high level above the valley on the eastern side, and got some grand views of Nanga Parbat. The first near sight of that glorious peak, now only a few miles away, is one of the big experiences of a lifetime. I had never seen anything so beautiful, nor so emphatically proclaiming its Divine origin. As a painter, it called me, of course, to put something down on to canvas—but also to worship.

At Gurikot we joined in the local game of polo on one of those 200 by 30 yards polo grounds which every village hereabouts possesses. My attention was divided between keeping my own seat and place in the game on the one hand, and admiring the superb horsemanship of the local team on the other. Next day, rounding the corner into the Rupal nalla, we were suddenly confronted with the colossal south face of Nanga Parbat in all its glory. Another period of worship. The sight of the great white object of our pilgrimage acted as a spur and made me long to get on to it, as mountains always do. But this urge had to be restrained, for there was painting to be done, and after all we wanted to climb not Nanga herself but the mountains round about her. We found a delightful camping ground on a level field near the village of Rampur, and there we stayed for over a week, climbing each day one or other of the 16,000- or 17,000-foot mountains near by. One day I crossed the stream—a fair-sized river—on the excellent bridge near by, and went along its northern bank, and up a peak just opposite the Rakiot summit of Nanga Parbat. Here we were right in the heart of the most stupendous snow and ice scenery. We climbed no great mountain, but we had plenty of fun getting to our three unnamed summits, and the most glorious weather; not a cloud on the great mountain for five days together, and then only just the right amount to give mystery to the peak without obscuring so much that one could not see its architecture.

The mention of that word emboldens me to write a word to painters of mountains. Too many amateurs fail to do good mountain pictures because they don't draw their mountains. They do capable pine-trees and lush green valleys, and behind it they put a mountain without dignity, or solidity, or beauty. The reason—lack of drawing ability. We cannot reproduce nature, so let us try to simplify her mass of detail, and to let the majesty of the mountains appear. The only way to do that is to get the main lines of the mountain right. Don't try to make them steeper than they are in order to be more effective. Simplify the general outlines, almost one might say 'cubify' them; let not details, however delightful or however significant to the climber, take your eye or your pencil away from the right proportions. Professor Nicholas Roerich, the finest mountain

painter now alive, has got the knack of getting all the dignity of the hills on to his canvas, by deliberately letting only the really significant lines of the peaks and glaciers and rocky foregrounds be reproduced by his brush, very often in a simple curve or line.

We had an amusing return journey from Rampur to Srinagar. Our Gurais coolies went home when we made our camp, well satisfied with their pay, as we indeed were with their work. For our return we thought we should easily get coolies from Rampur. But would they go? We offered them twice the ordinary rate; but there were no offers from the inhabitants of the Rupal nalla. The people there had plenty of horses and crops and goats and dogs—why should they want to go a journey and get *money* for it? All their commerce in those parts is done by barter. Rupees meant nothing except to the few very wealthy men of the 'head-man' type, who were a cut above coolie work. But at last the worthy Abdulla persuaded a man with three ponies to come. He drew an eloquent word-picture of the delights of Bandipur, and the lovely things—carpets, harness, clothes—that could be had there in exchange for the filthy and worthless lucre which we offered for his ponies' services.

Two days away from Rampur, we camped at one of the most delightful spots I have seen in all my travels. To east and west of us were a grand lot of peaks, very like the Zermatt peaks in size and shape, including a replica of the Matterhorn, correct in every particular including the ridge, but slightly smaller than our Swiss friend. What a place for a climbing holiday. Only one day farther than the bungalow the other side of the Kamri pass. A village band to regale the dull evenings, with two tunes in their repertoire. Friendly people, with plenty of cows and goats and hens. And a selection from fifty mountains of Alpine size, most of them virgin peaks, and all within two days of the summit (if attainable). The place itself an ideal valley, open enough to be airy and to see over the top of one side of it the lovely Nanga herself.

The next two days took us over the Kamri pass—a good, short pass, with deep snow on the north side and none on the south. The ponies could not manage the snow and their legs simply went through it. Again and again we tried, but there was no 'beaten track', as once again we were the first to cross this pass in the year. So we just had to unload the ponies and carry the stuff ourselves. The ponies could do it all right unloaded, and walked up, sinking in only every fourth step or so. Three times I went up and down that pass to get the loads up, and decided *not* to offer myself as a coolie for Himalayan parties. We finally got over, and glissaded down snow-filled gullies while the ponies went down by the path.

much of it free from snow on this southern side. And so back to Srinagar having done nothing to write home about, but had a real good time with glorious views and weather.

The next trip I made to the Himalaya was in 1937 to the Simla district. This was forced upon me by a septic foot which couldn't wear a boot, so I had to choose a place where I could push-bike among the mountains. The Hindustan-Tibet road through Simla was ideal for this; and with two mules and a driver, kindly provided by the P.W.D., I started off on a push-bike, which the forest officer, an Indian, kindly lent me. This arrangement enabled me to do plenty of sketching, and we had grand weather for this; it was the time of year (May) for clouds and sudden showers interrupting bright, sunny days, just the best type of weather for pictorial effects. If I saw anything I wanted to sketch, I would sit down and do it while the mules came up, and by the time I had finished they were a mile or two ahead, so that I soon caught up again. In this way I went the first five days' march. Here the road got much rougher, and as my foot had recovered sufficiently to wear a boot, I left the bike at the Dak bungalow and went on with the mules, on foot. When we got to Dharm Gatti, we left the road and turned south-east to camp on the rough ground towards the shapely Hansbeshan, only a small mountain by Himalayan standards (17,000 feet) but a fine outstanding rocky peak, not too easy of ascent. Here there were two difficulties—the impossibility of getting local men to take a camp up high, and the foot which had had too much walking and was very painful. So I had to sit down to a painting holiday rather than a climbing one.

But it was not a bad holiday, though perhaps the least interesting and the least successful of all my Himalayan trips. The mountains are really rather too far away from Simla to be climbable in a limited holiday. A better expedition could be made by leaving the Tibet road at Narkunda and striking north towards Kulu, exploring the fine peaks to the north-east of this track. They provide great variety of steepness and size, and would give a grand holiday of climbing to anyone who went there.

The next Himalayan trip I did was not mountaineering at all, but simply trekking and view-finding. I was very anxious that my wife should see Everest before she left India, and I knew she was keen to see the glories of the Himalaya in that part of the world. So we went up to Darjeeling, with our small boy of seven, in January 1943. We stayed at Singtom tea estate for a week or two, on the side of the Darjeeling hills that faces the Himalaya, and there, with the aid of our kind host Davenport and of my old Everest friend Karma Paul, we got up a small party of ten

coolies (including a few of the old-stagers who had been with me before) and went up the Singalila ridge to Phalut. We started in pouring rain, amid the jeers of my friends at the Planters' Club. But I said to them: 'No, we're not mad as you suppose. If we start in bad weather we'll get it fine just when we want it.' I can't say I said this with much conviction, but as events turned out it was right. After two days of real stormy and unpleasant weather, we got up to Tanglu and settled down at the bungalow in a snow-storm, to wake the next morning with a gorgeous sunrise and a superb view. The pull up next day to Sandakphu was done in snow; but the barometer was rising, and for our two days at Sandakphu and two at Phalut we had the most glorious weather imaginable. I fear I was very unsociable, sketching at every opportunity; but with that lovely view in front of one all day, what else can a painter do? I began sketching each day before sunrise when it was so cold that the brush froze before one could get it on the paper; and I had to do pastels until the sun came up. But what a wealth of subjects there were! From Gaurisankar in the west to Siniolchu in the east, every detail in that glorious panorama was visible for four days, and one simply had to drink it all in, once again in a spirit more akin to worship than to any other emotion.

We came back via Ramam and Rimbik; a way not so gorgeous as the ridge-walk, but introducing us to grand forest scenery, a small monastery, and some very jolly walks though devoid of the great panorama. But as the weather was now on the rebound, and never clear except in the early morning, it was a suitable way home, and we had had an unforgettable ten days as a memory to brood over for many years to come.

In 1944 for my last holiday in the Himalaya I filled in the gap between Simla and Kashmir by going to Kulu, and on as soon as possible to Lahul. A grand place for climbing, with hundreds of mountains up to 22,000 feet, many of them accessible with one or at most two nights camping above the villages and the Dak bungalows. How I wish I had discovered Lahul before. I recommend it heartily as perhaps the best climbing-ground of all for those who don't feel able to tackle the major peaks, or who have a holiday limited in time. The weather there in late September was perfect, and I believe it usually is at that time. Good climbing to any of my fellow members of the Himalayan Club who find themselves in Kulu or Lahul. Perhaps, like the writer, they will feel that for feasibility and weather, if not for size, the Lahul mountains are the best of the lot. I trust it won't be many years before I am there again myself, or, if not there, at some other part of India's glorious northern boundary.

THE TWO GRIEFS

PHILIP WOODRUFF

SUNDARI was supposed to be husking rice. She put a handful of grain into a depression in a big stone in the paved terrace before the house and pounded it with a thick heavy stick. The stick was more than 5 feet long and several inches thick, almost deserving the name of a beam, of the kind we are enjoined to observe in our own eye. There was a thin hold cut in the middle where two hands could hold it comfortably. Sundari stood up, holding the beam in the middle, and with one end pounded the grain in the egg-shaped hole, which had been cut deep with chisel and mallet. It was hard work, and after a little she put down the beam and sat on the rock, gazing out over the valley.

It was the middle of the morning, but the sun had only just reached the long slopes which ran down below her to the north. The pines threw up their arms to heaven, sparkling in the brightness, throwing back the sun from a million dancing needles; the firs and cedars stood like dark pointed pyramids, soaking in the light, giving none back. The open patches of cultivation in the breaks of the forest were beginning to turn to pale gold; it would soon be the time of harvest and rejoicing.

But Sundari had eyes for none of this. She was thinking of her two griefs. She did not formulate these very clearly to herself. She could neither read nor write, nor even understand Hindustani. She could speak only the patois of her little section of the hills, a broad crude speech that did not lend itself to analytical thought. But she knew that these two discomforts were there in her mind.

The first was much the simpler. Her sister had married into a family who lived on the next ridge, and there was no doubt about it, they were doing better than the little homestead where Sundari lived. Their sheep and goats and cattle were increasing. And they were showing their prosperity in a practical form. At the last fair, Ganga Devi had been loaded with silver ornaments—great hoops of silver in nose and ears, collars and bracelets, and anklets, and a heart-shaped piece of worked silver, of intricate device, hanging over her breast. And a rich new bodice of brightly coloured silk, deep crimson beneath a cloak of apple green, and a splash of orange in her petticoats. She had been dressed like a bride, and Sundari herself could make no such show. If she was to have such ornaments as that, the homestead must have more cattle and sheep.

If anyone in this part of the hills wants to become more prosperous,

he will first consider which god to propitiate. Every valley has its godling, an influence for good or evil, whose kingdom does not stretch beyond the next ridge. They were there before the Hindus came over the western passes into the plains, and little by little seeped up into the mountains. They will perhaps be there when Shiv and Vishnu are forgotten. The little gods have taken on for the time being a faint smack of Hinduism, but at heart they are no more Hindus than their worshippers. They acknowledge the suzerainty of the great gods, but no more. And in their own kingdoms they are supreme, terrible little gods who can kill or maim a man or blight a harvest. They are concerned with crops and cattle and rain, the fish in the rivers and the fertility of women; and, so long as they are not crossed and many goats are killed before them, they will not step outside their limits. They do not meddle in politics, and the big gods leave them alone.

Sundari lived on the crown of a ridge, and there was no reason why she should not go to Kaunr to the east or Bhairab to the west. She might go to either (or rather, she might send one of her husbands to sacrifice a goat, and beg the god to make her prosperous. But the little gods were inclined to disregard vague prayers of that kind. They were far more likely to interest themselves in something definite, such as destroying her sister's cattle. But she could hardly send one of her husbands to ask the godling to curse Ganga Devi and her household. Even if she could persuade one of them to go, the priest would tell the villagers; and Ganga Devi might well go with two goats, and turn the curse on Sundari. No, the way to the gods could not be a secret way, and therefore this did not look a very good way.

Thoughts of her husbands led Sundari to her second grief. This was much less clearly formulated than the first, and she could hardly have put it into words. But it was very real. As is the custom in this part of the hills, she had married three brothers. They were joint in ownership of land and cattle and sheep, so that it was natural to share one wife, at any rate until they were rich enough to afford a second. But joint ownership did not in practice work out quite so simply, in the case of a wife. The land and animals they truly owned, and with regard to them they could practise some division of function. Though each knew something of the others' work, one was the husbandman, another the shepherd, and the third, who looked after the cattle, was also the man of business and affairs, and it was he who went to the plains to buy salt and sugar and iron, or to the headquarters of the subdivision to pay land revenue. Now it may be that a wife requires three functions in a husband; she needs a lover to beget her children, a master to give

her daily tasks and set her to housekeeping, and a protector to fight dragons and wild beasts, if they molest her, or lawyers, tax-gatherers, and policemen in a more developed world. If her husbands had been content to accept these three roles, Sundari would have been happy. Gopalu, the cowherd, was well-fitted to be her protector; Jodhu, the husbandman, might have ordered her daily life; but Autaru, the youngest, the shepherd, he was the lover to please her. And there would have been no difficulty about the children, for all of them, like the whole homestead, would stand in the name of Gopalu, the eldest.

But of course there could be no question of any such pleasant arrangement. All must take their turn as lovers. And although Sundari did not object actively to either of the others, she did not feel she saw enough of Autaru; and in fact she saw less of him than of Jodhu and Gopalu, for he was often away in the high grazing grounds with his sheep.

As she brooded on her two troubles, rankling there at the back of her untaught, unformed mind, gradually they turned themselves into problems. How to get more prosperity, more wealth in herds and flocks; how to get more of Autaru to herself. And in neither problem could the godlings help her, for she could only go to them through the husband and the priest.

But at the back of her mind was another way to get her will. Whether because of the custom of polyandry, which certainly makes them more self-willed than other women, and may, as in Sundari, produce a state of sulky irritancy, or because of some trick of ancestry or climate, the women of these parts are known throughout the neighbouring hills for witchcraft. Just as every Brahman can be a priest on occasion, so here every woman carries with her a knowledge of dark things and she may be forced to develop strange powers. Sometimes she has the evil eye; she has developed in herself the power to blight any good thing that comes within her influence. She can curdle milk and make sheep barren; she can place her power upon a man so that he will go mad and die. The knowledge is handed down from mother to daughter; it is a weapon in the armoury of each. Perhaps it is needed in a land where brides are sold for silver and a woman's natural weapons go for nothing; not for her the sidelong glance, the fluttering eyelid; and perhaps the mother who hands on the knowledge of witchcraft is not far distant in intention from her who sends her daughter to a finishing school. The men do not know this secret lore, though they are well aware of its results, and they will not go near a woman who is marked out by her own prosperity and the misfortunes of her neighbours as having taken up her weapons and developed the power of evil.

There is a story that long ago someone was so foolish as to talk of this power in a British court of law. The incredulous magistrate asked for proof, and sent for some lemons from a basket which had just arrived at his house. They brought him six. Three he opened; they were juicy and fragrant. Three he placed on his table before the witch as a test; and when he opened these, they were dried up, flesh and juice withered. He carried the experiment no further. But nowadays even these backward people know better than to talk about such things in court.

Sundari sat and brooded. She did not want Jodhu and Gopalu. She did want Autaru. She wanted more cattle and sheep. If she had a ghost at her service, he could make the cattle fertile and the crops grow, as no living man could do. And she knew how to take power over a ghost. If she had one husband less, she would have a larger share of Autaru. Gopalu had gone away for the day; he would not be back before evening. Autaru, her lover, had gone to the high grazing grounds that morning with his sheep. He would be there some days for the lambing. Jodhu was in the fields below the house, spreading dung on a field he meant to plough for the winter crop. Jodhu would come home for his morning meal before long. Jodhu was the man. If Jodhu should die, in a way she knew, his ghost would serve her faithfully; and Autaru would have to stay behind to look after the fields. Her resolution hardened. She stood up and went into the house.

Inside the house she went through certain spells, learnt from her mother. Then she made the vow that was the centre of all the magic. If the nameless one would grant her prayer and turn to poison the food that she would cook, she vowed that she would give the poison to the first man to enter the house. If she did not, the curse would fall on her, and all her food would be poison. Then she went out again, and took a leaf of the first green thing she saw. It did not matter what it might be. She took it back into the house, and pronounced over it the second and most difficult part of the rite. Then she cut the leaf up very small and mixed it with flour and began to bake a cake. When it was cooked she put her hand on it; if the spell had failed, the cake and the pot would stick to her hand, and she would have to try again. But it did not stick. All was well. Peace, the charm's wound up.

She turned with the cake in her hand as she heard the bleating of sheep outside. Autaru came in. She gazed at him with stony horror.

'I had to come back,' he said. 'I got up to the shrine at the top of the hill, and tied a rag on the tree to keep away ghosts. Then just as I was leaving, I sneezed. That was bad enough, but there

right in the way, cutting grass at the corner was that witch, Kalyan Singh's wife. I couldn't go on, could I? If I had left the shrine after sneezing, and met a witch, the sheep would have been ill. All the lambs would have died. So I came back. Give me something to eat.'

She dared not break her vow. She gave him the cake.

He squatted to eat it.

'I shall go again to-morrow,' he said. 'Are you glad I came back?'

But there was no to-morrow for him. He staggered to his feet, his hand to his head.

'My head is swimming,' he said. 'I can't stand.'

He caught for a moment at the post of the door, reeled outside, and fell lifeless on the roughly paved terrace, with his right hand on the little egg-shaped hollow still half-full of partially husked rice.

[This story was told me by a forest officer, himself a hillman, of his near neighbours to the west; and the only liberties I have taken with it are to elaborate the motive, about which he was not very clear; and to shorten the period of sickness, which in the original lasted some weeks. But alas, when I moved into the district of which the story was related, I was told there were no witches there. 'A little farther west', they said, 'there are many witches. But not here.' But that my informant believed every word he told me, I have no doubt. P. W.]

IN SIKKIM—THE TENT PEAK

E. GROB

(This account was received from Grob's brother in Switzerland together with a book about the expedition, published in Munich in 1940, which is reviewed later in this number. The account has been translated as it stands, with only minor omissions, in order to give the vividness of the original. It was written at the Base Camp in July of 1939, after the successful attack on the Tent peak (24,165 feet). It should be mentioned that from their first attempt, above Camp II, they had been forced to retire owing to the fall and broken leg of the porter Kandova (20th May). One point in the account worth querying is the statement that the Lachen natives cannot stand the cold. The experience of the majority of Himalayan travellers in Sikkim is very much the reverse.)

On arrival back in Gangtok after this expedition the 'Drei im Himalaja' were greeted with the news that war had broken out. Grob, a Swiss, was allowed to pass through to his country. Schmaderer and Paidar were interned.—Ed.)

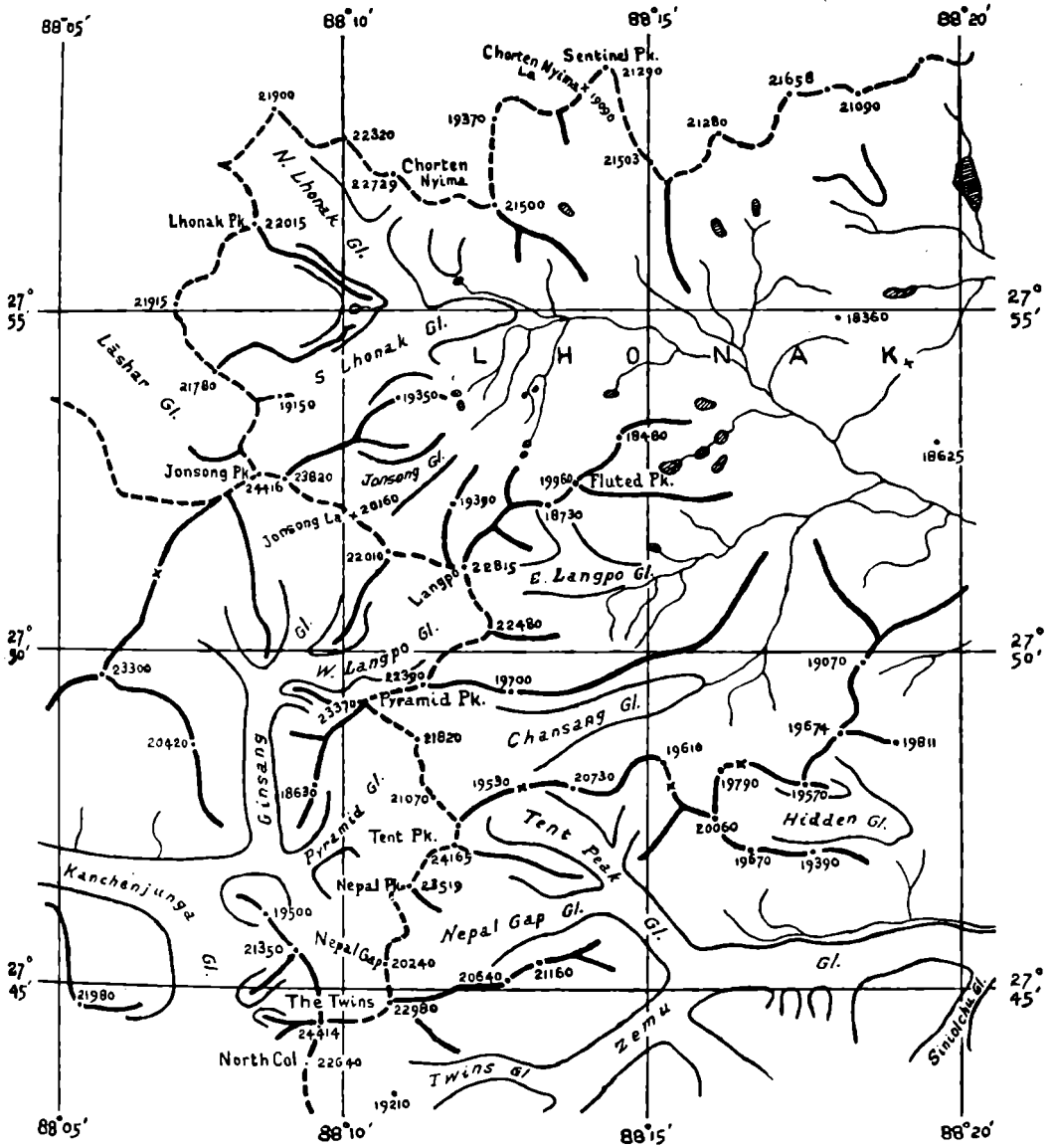
Base Camp, 5th July 1939.

THE Tent peak, 7,363 metres, has had an ice-axe planted upon its head. Yes, this mighty ice and rock peak, which had hitherto repulsed haughtily every attempt, was the chief goal of our expedition. Even Göttner and Wien,¹ gallant climbers that they were, had to give up the attempt. Hard struggles and privations lie behind us; yet we can scarcely believe our luck, that we have overcome this most powerful bastion of Kangchenjunga. . . .

On the 23rd May, after settling the formalities connected with the unfortunate Kandova, we were ready to come to grips with the Tent peak. We really wanted to march on the 23rd, but there was still so much to be done. Also, Pansy (Ang Tsering II) appeared suddenly in my tent to announce four Englishmen. We found that they were four English officers from Delhi way, who had come up with a number of Lachen natives and a 'house tent', and planned to spend some days by the Green lake. We were soon friends. We invited them to tea and gossiped pleasantly. They were pressing in their invitations for us to visit them at home.

In comparison with our friends, who were faultlessly clad, we with our beards, heavy boots, ice-axes, and half-worn-through clothes, looked like crumpled scarecrows. But we could entertain our guests well enough; we had everything at our disposal. A three and a half room stone house, excellent kitchen, German and English

¹ See *H.J.*, vol. ix, p. 58 et seq. Also *Alpine Journal*, no. 254, p. 44, 1936 German Sikkim expedition—Ed.



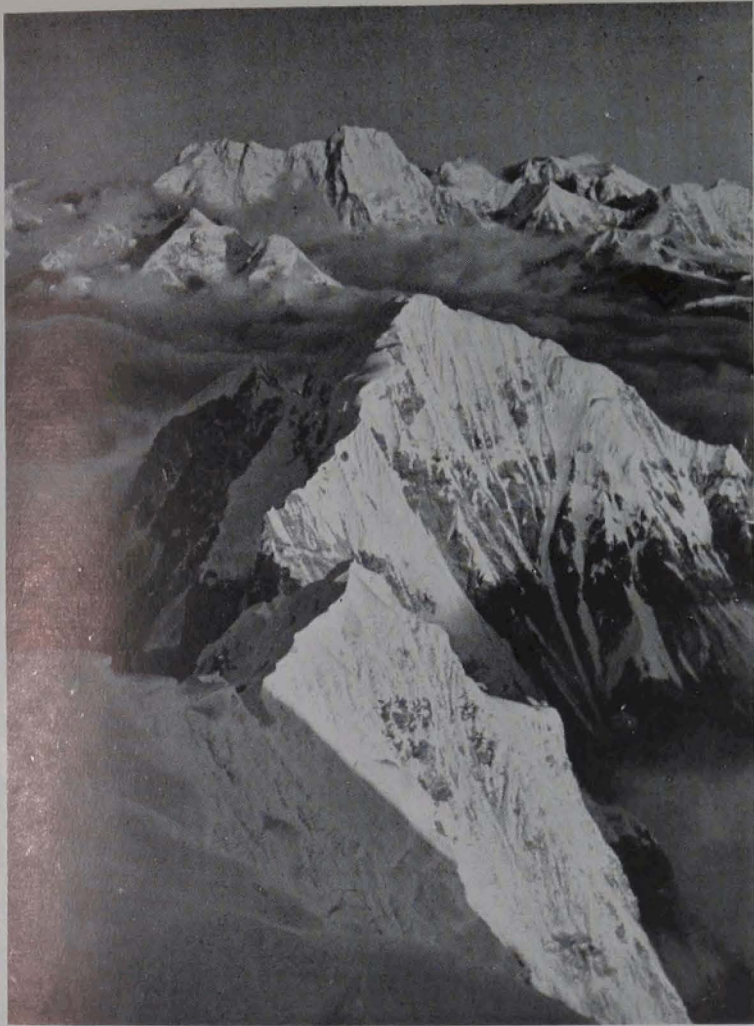
*Upper Zemu and Lhonak.
Sketch Map by G. Whittle.*

literature. We put one room for the night at the disposal of the Lachen natives, who cannot stand the cold. The Englishmen were especially interested in maps and books on the Sikkim Himalayas. They enjoyed themselves greatly, and accompanied us for an hour next day. First of all we strolled back by the Green lake, and came round into the Green lake glacier. Look! The Tent peak shone above us like a cloud mountain, proud in its beauty. So powerful was the impression it made that not one of us could say a word. Would we three ever stand up there, above the clouds, on this unearthly vision? Our four young friends darted hither and thither from boulder to boulder, and photographed us with the mountains behind. Only when our nailed boots dug into the upper Nepal Gap glacier did they leave us.

We reached Camp II, 6,000 metres, on the upper Nepal Gap glacier in the evening, tired out. Schmaderer and Paidar were still arranging the loads for the attempt. Our body of porters had seriously dwindled. Karma was accompanying the unfortunate Kandova to Gangtok. Pansy was at Base Camp. Four men instead of seven.

On the 24th May the real assault began. It was cloudy, unfriendly weather. Eight days before I had reconnoitred the route to the Nepal Gap with Illa, Ila, and Kandova. After we had all crossed the glacier, riddled with hidden crevasses, the way lay up a slope of increasing steepness towards the Nepal Gap. In the middle was a breach which gave some difficulty to the heavily laden porters. We then moved over a rotten, dubious snow bridge. Two possible routes led to the Nepal Gap: left, a rock wall, right, an ice couloir. To minimize the risk of stone fall, half the party climbed the wall while Illa, Ila and I climbed the couloir; but I was deceived over the time required. The steps to be cut were endless. In my eagerness I had forgotten to put on a wind jacket, so that my shirt was wet through when I arrived with my porters under an ice gendarme armed with icicles. A gangway led us to the other side of the sentinel, and so to our comrades. An icy wind blew from the Nepal side; the porters could scarcely hold their loads. My wet shirt froze instantly, and Illa lent me an old windjacket. We struggled together along the side of the sentinel, until we found a more sheltered spot for our Bivouac III. We had brought three tents, one tent each for Paidar and Schmaderer, the three orderlies, Illa and myself. Schmaderer got everything ready with great skill to cook us each something hot, despite the strong wind.

The only way to the Tent peak leads over another 7,000-metre mountain, the Nepal peak. We were therefore committed to bringing our porter column as high as possible up the Nepal peak. On the



1. *Nepal Peak and Tent Peak from Siniolchu*



2. *Summit ridge of Nepal Peak. Kangchenjunga left background*



A. On the ridge between Nepal and Tent Peaks



25th the weather was fine. Our Camp III was at 6,350 metres. Mount Everest and Makalu showed across Nepal in a strange yellow light. The kindly sun warmed our limbs. The porters dried the clothes, so that it was not until late in the morning that we set out. After two hours we came upon a crevasse which barred our way. We were compelled to pitch Camp IV on the spot, about 6,600 metres, and to cast about for a way through the icewall. I was convinced that the only possible line was between the western Nepal wall and the northern glacier fall; I worked, therefore, some two hours with two axes, ice-hammers and pegs, until I reached the upper steep wall. Above me hung a dangerous hanging glacier and huge icicles. Paidar secured me from below and prepared a step-ladder for next day. We could therefore crawl into our tent with the consciousness that we could overcome this hindrance next morning. Schmaderer added to the ladder in the evening with pegs. On the morning of the 26th May we roped orderlies and baggage up the vertical wall. Later, a great deal of time was used up by the three climbers having to spend hours cutting many weary steps to bring the orderlies higher. Most of the way one of us cut only steps for the left foot, the other only for the right, to save time. Thus we were able, on the evening of the 26th, to pitch our tents at a height of 7,000 metres. Paidar and Schmaderer found a wind-free camping site under a peculiar bulging rock. We were now only three-quarters of an hour from the summit of the Nepal peak, and had before us an astounding view. Most of the mountains, like the Sugarloaf, Siniolchu and Simvu lay below us. With the Twins near Kangchenjunga we were already on terms of brotherly equality. Yet how much easier were these Nepal slopes to overcome in 1937! Under the conditions prevailing at the moment the Nepal peak was a difficult mountain. The porters were dead tired. Also, the high and exposed position seemed to have an effect on their morale. Illa, an Everest 'tiger', grumbled that Everest was not so steep, and that here *rasta kharab* (the way is bad). But we could not help them; for us the Nepal peak was only the first stage, and that the easiest. We had to have up here tents, sleeping bags, food for several days, paraffin, &c.

The 27th was unkind. We three attempted the summit of the Nepal peak, by a long narrow ridge. The weather had improved. We stood on the small summit cone, 7,153 metres, and shook hands in the tradition of mountaineers. Ludwig declared proudly: 'It's a 7,000er.' We had a specially good view over Nepal, Tibet, North Sikkim. Fantastic clouds rose from the valleys like smoke banners. Kangchenjunga had lost something of its overpowering height. Savage Jannu raised its proud head rather more confidently. Apart

from these, almost all the peaks lay below us. Even Makalu and Everest looked modest enough. We traced our route to the Tent peak through glasses. Our worst fears were confirmed. Right up to the true summit battlement there led a line of sharp, overhanging towers and steep walls, over $1\frac{1}{2}$ kilometres long. Besides this, between the Nepal and Tent peaks there were many downs and ups in height. But the biggest problem was the true summit battlement itself, consisting of ice grooves and granite rock likely to give difficult climbing. We took our leave of our fine mountain top, and returned to our tents.

We had fixed the morrow for the attempt. Our provisions were strictly rationed. It would be three days at least before we returned to our porters—perhaps longer. Not before five days were the porters to think of leaving. They saw that their sahibs had before them a serious task, and gave us an especially earnest farewell salaam the next morning.

28th May. We took with us all our most important equipment: two tents, ice-pitons, karabiner, hammers, cooker, some clothes and provisions, medicines, paraffin. We put on as much as we could: much underclothing, windjackets with hoods, warm-lined climbing boots with special crampons. We also took various energy foods in tablet form, such as Dextrin. The order on the rope was: Schmaderer, myself, Paidar. As the first man had most work to do his pack must be lightest. As middle man I had the heaviest load, and the complete high altitude tent in addition to everything else. Paidar brought the cooker. In about an hour we reached the Nepal peak summit. The weather was calm and fine. We stopped some minutes, and could observe the clouds seething in the depths. Then began the assault. First, we set to work on a slender tower. Schmaderer swung his axe and hurled overhanging pieces of the tower into the depths. Like rope dancers we wriggled ourselves forward. At first, further progress seemed a mad idea. Our boots found scarcely any grip, left and right were tremendous drops, while the crest itself was untrustworthy. But we were now quite determined to defy resistance. We continued along the ridge, and after 80 metres came to two great ice humps which barred the direct line. Ludwig hacked away their upper crest and scrambled up as if in his sleep. We must needs hurry now, to arrive by evening at the lowest saddle before the summit battlement of the Tent peak. The ridge traversing became harder and harder. The best safeguard had been to sit astride the ridge with axe dug in, but we had little time for that now. Should one of us fall on one side, the rest must be prepared to jump down the other. The view in all directions was terrible and beautiful. Kanchenjunga drew us more and more within its circle, and we

experienced a strange joy at finding ourselves suspended here, over 7,000 metres up. Schmaderer, enchanted, shouted back: 'It's not like this in the Alps.' It was unimaginable: the finest mountains around us, far below, at 5,000 or 6,000 metres, a billowing sea of cloud while we stood on our narrow crest in bright sun. We had now come 200 metres and an ice tower barred our way. This should be surmounted by a steep wall on its right side, a very dangerous bit of climbing. Abutting it was a sharp downward ridge. Climbing down is the hardest part of all. We reached the saddle and Schmaderer immediately wriggled up on the other side. He found, unfortunately, that further direct progress along the ridge was impossible, as the ice was rotten. There was nothing for it but to climb left on to the very steep wall of the Nepal side. Ice pitons in the left hand, axe in the right and special crampons on the feet made the climbing of the wall possible. I found my comparatively heavy rucksack exceedingly uncomfortable. Our toes and ankle-joints were chiefly in demand. We climbed on up northwards until we found a resting place under a rock. But we must go still farther. Back to the wall. Finally we were able to climb back on to the ridge, which had become somewhat broader, and continue north towards the Tent peak. But the saddle was still some way off, and that was where we wanted to pitch our tent. The going was now much easier, and after much climbing up and down we reached the saddle. An icy wind made a camping site impossible; we continued some way further towards the Tent peak, and cut a platform in a crevasse for our little tent. The sun was already set over Nepal. Ludwig cooked us something hot. Camp VI had the advantage of being sheltered, but the disadvantage of getting no sun in the morning. It was bitterly cold, but there was warmth in the comradeship in the tent. That night I slept in the middle, next night Schmaderer, and so on. What experiences we had had during the past day! What a wonderful spectacle the whole day, at a height of over 7,000 metres! The memory of it would never leave me. The Tent peak might defeat us but we would fight, fight and experience. Yes, we were now well and truly in the Himalaya.

We spent a long time on the morning of the 29th May beating with ice-axes at our frozen boots before we could pull them on. We ascended the steep, iced slope, and arrived in $1\frac{1}{2}$ hours at the great crux of the peak—the actual summit sweep. The tent and many other things we left in the crevasse; we took only the 'Zarski sack' in case we should be unable to return that night. Unlike the day before, we experienced a sharp wind blowing from Nepal, while the cloud level was about 5,500 metres. Everything lay about us in an indescribable splendour, North Sikkim showing itself ever clearer.

Huge granite blocks leaned over us, making us wonder whether there could ever be a way through. Steep ice walls and ridges led up to them. One granite block stood in a steep gully, surrounded by gleaming ice. But Ludwig swung his axe, chipped some holds and climbed like a cat, clawing with his fingers on to the block, then up and over. Soon we were all three, after severe climbing, lodged in the ice and rock gully. How splendid now to be on the sunny side, and to be able to grip the warm granite with our hands! It was a proud and sublime feeling to be accomplishing difficult climbing at 7,200 metres. I was reminded suddenly of our climb on the Matterhorn. Feverishly we worked ourselves higher, and after some three-quarters of an hour reached the last rocks, leaving them to the right on the steep summit slope. The upper section was of delicate snow, and there was a danger of its coming away. But our determination was not now to be broken. We climbed this bit too, the slope eased somewhat and—5 minutes more to the highest point, 7,363 metres.

We were on the summit. We shook hands repeatedly, dug our axes into the snow and felt astonishment that it had been possible. The world lay at our feet; only Kangchenjunga still lorded it over us. It was as if all the changing pictures of the past days had combined to form a single one of superlative beauty. To the north, North Sikkim and Tibet, where the mighty glaciers give out, and pastures and lakes yield an inadequate sustenance for sheep (*sic*). To the west, in Nepal, Mount Everest, highest mountain in the world, with his brother Makalu and so many storm-girt warriors around him. To the east and south we were greeted by the proud comrades of our second mountain home, Siniolchu, Simvu and Kangchenjunga, while far, far below on the Nepal Gap glacier must be our tiny tent. Far below us still, the faithful Pansy would be cooking his tsamba. A swelling sea of cloud allowed a hundred peaks to stand out like islands, and from this sea fantastic cloud banners raised themselves and reached along beside the highest tops. Far, far beyond the cloud sea lay our homes, and the lives of our dear ones. The sun and the Whitsun bells would even now be waking them—for to-day was Whit-Monday.

That night we passed uncomfortably in the high altitude tent. It was again a bitterly cold night, and we had had a difficult climb down. We had been compelled to leave a rope on the rock in the ice gully. Schmaderer's little finger suffered frostbite that night. As we said good-night the same thought was in all our minds, but none of us spoke it: 'If the weather is bad to-morrow or storm catches us on the ridge, we shan't get back.' In the middle of the night I distinctly heard my name called, and then again. It was as though someone wanted to warn me. Then I saw Schmaderer's ghostly

figure swing his spear at cloud-reaching towers, then all was quiet again and then I heard the children's song: 'Droben steht die Kapelle. . . .'

The dark night was gone, and bright sun helped our return journey on the 30th to our waiting porters. A weary and perilous day lay behind us, when we reached Camp V at evening. Illa, Pansy's brother, put up my tent with sleeping bag. But the porters had eaten all their rations, and we had practically nothing in our rucksacks and pockets. We must, therefore, on the next day try to get down to Camp II at 6,000 metres. But it turned out otherwise.

The 31st brought clouds and dark weather. It was extremely difficult to find the way. The porters were weak and uncertain. At one steep slope the snow had slipped off, so that we had to fix a long rope. Everything went terribly slowly, until at last we came to the vertical abseil wall. Here there was a longer delay. Then I led one party of two orderlies. They were so uncertain and hesitated so long that I went first and kicked steps. At the next steep slope Schmaderer suddenly called from above; it was half dark, but I saw two bodies with sacks shoot down the slope. I rammed my axe in hard. The 12-metre rope held, but the porters were unnerved for the remainder of the descent. Arjeeba fell into a crevasse. Paidar and Schmaderer pulled him out complete with pack. We stopped for the night near the crevasse and shared out our remaining crumbs. The great joy was that we still had paraffin.

The 1st June was still gloomy, cloudy and dark. The descent was wearisome, but we arrived during the afternoon at Camp II, 6,600 metres, on the upper Nepal Gap glacier. How fortunate we were to be united here again. The orderlies spent an age cooking and eating, and then smoked like Turks. The 2nd brought us to the Base Camp. We crossed the upper Nepal Gap glacier on skis. It was an unaccustomed pleasure to be travelling on wood at 5,000–6,000 metres.

This is my account of the past ten days. The climbing of the Tent peak was our hardest Himalayan expedition. We are now real weather-beaten Himalaya-men. I myself am undecided whether I shall come next time with ice-axe or botany box. Both have their charms. It is fascinating to see how everything in the lower regions awakens to new life. To observe men, beasts and plants in wonderful Sikkim, with perhaps two orderlies—how splendid! And then, through the primeval forests to ride to Lachen. . . .

Note.—Grob's porters were: Ang Tsering (Pansy), Sirdar, Ila, Arjeeba, Ila Tensing (? Illa), Ang Karma, Gendin Bhutia, Kandawa (Kandova).—*Ed.*

THE MOUNTAINS OF CENTRAL LAHUL

(*National Union of Students expedition*)

LUDWIG KRENEK

LAHUL has comparatively little rain during the monsoon and this was one reason why we chose it for our visit to the Himalaya in August and September 1939. The other reason was that we could not hope to succeed on any much higher mountains with only eleven weeks holiday, including the voyages by sea to and from India. The approaches had to be short for the same reason. C. G. Bruce, in his book *Kulu and Lahoul* (London, 1914), described a few climbs near the Kulu-Leh road but nothing was known about the interior of the Bhaga-Chandra triangle (Map 1 inch to 4 miles, No. 52 H). We decided to attempt a peak marked 21,380 and to proceed to it by the Milang valley.

The members of our party were Donald Comber (Windsor), Dr. Frank Hollick (Cambridge), Robey Johnson (London), Miss Hilda Richmond (Leeds), Dr. Fritz Kolb (Vienna), and the author (Vienna). The National Union of Students in London and its Vienna branch office, the Amt für Studentenwanderungen, lent us equipment and helped to smooth our way with the authorities. In Kyelang we enjoyed the hospitality and advice of Rev. F. A. Peter and his sister Miss Elizabeth Peter. We had three Sherpa porters, Ang Tsering, Ang Nima, and Ang Babu. Provisions were bought in Bombay and Amritsar.

Hollick and Kolb preceded the main group by about two weeks, and made it possible for us to go right up to the glaciers without loss of time. Besides smaller excursions our advance party made a notable attempt to climb M 10 from the west. Kolb got as high as 18,000 feet, but there was not enough time to complete the climb.

We arrived in Manali six days after landing in Bombay. The trip to Kyelang took three days. *En route*, we crossed the Rangcha Gali in the hope of getting a good view, but were disappointed as all the higher peaks were in clouds. When Johnson and I climbed that pass again on our return journey we were luckier. The Shikar Beh range (along the left bank of the Chandra) and the peaks just north of Kyelang present themselves most favourably. Of the mountains of Central Lahul only some peaks of Tela Nullah and Koa Rong are visible. Kolb met us in Kyelang on the 25th August and we left for the Milang valley next day. The evening saw us camping

near the suspension bridge of birch twigs which connects Sumdo with Dartse; (these names and all further geographical details refer to our sketch-map rather than to 52 H—there are considerable differences). Up to here we had made use of five mules, but since the Bhaga was not fordable we changed over to twenty local coolies next day. There is a good path till just below Yotse, where the traveller has to face another of those precarious birch-twig bridges. We would have preferred to continue on the right bank, since Kolb had told us that we could re-cross the Milang only by an enormous detour over a snow bridge far inside the valley. But it turned out that the Koa Rong river was equally unfordable. So we proceeded over the bridge to Yotse and the Preliminary Camp (12,000 feet) of our advance party, where Hollick had spent some days in studying the distribution of certain aquatic insects.

We had decided to build a rope bridge rather than move all the luggage over the far away snow bridge. Therefore Johnson and Kolb with Ang Tsering did the trip over the latter that same evening in order to receive the rope at the other bank. On the 28th August with the first light we began building the bridge. Using a pulley to reduce friction we soon had all the loads safely across. A sheep was the first live passenger; some coolies followed while the rest of the caravan preferred to take the long way.

With the additional luggage of the advance party we had now twenty-seven loads but only twenty coolies (no more could be found). For the moment seven loads had to be left behind. The great Milang glacier begins with steep ice and the usual desolation of big boulders. The Dartse men moved splendidly over that difficult ground in their straw sandals. We were pleased with them also in other ways: they were cheerful, honest and dependable. When we reached the flat part of the glacier we could see in the distance a spot which seemed suitable for a base camp. Seven coolies—after some persuasion—agreed to dump their loads here and haul the other ones from down at the river right up to the Base Camp. Their original loads they fetched at dawn the next day without even being asked to do so.

The site of our Base Camp was ideal. (See illustrations 1 and 3.) It was situated on an old level lateral moraine 14,400 feet high, with a gorgeous view over almost the whole length of the glacier (9 miles). The spot had sunshine all day, it was out of the range of falling stones, and water was not far off. There was, of course, no firewood, only some scrub. For two days we were busy making ourselves comfortable. Then followed smaller excursions and on the 1st September we felt ready for real climbs. We split up into two groups. Miss Richmond, Johnson and Kolb, with Ang Tsering,

set out for M 10, while the rest of us, with Ang Babu, aimed at M 1.¹ Camps were pitched at about 17,000 feet and the two groups reached their peaks at 8 and 11 a.m. respectively, on the 2nd September. The climbs were easy ones except for the last steep ice ridge leading up to M 10. Nearby rocks were used there for the descent. Kolb and his group had clouds when they reached the top. But during the ascent they were able to scrutinize the approaches to Mulkila, M 6, and M 7. (See illustration 4.) On M 1 we had clear weather. The red rock towers on the other side of the Koa Rong glacier remind one of the Dolomites. It is doubtful whether any one of these peaks can be climbed from this side without extreme difficulty.

Our next aim was Mulkila. It was plain that the big ice fall in the southern branch of the Milang glacier would be the main difficulty on our way to the proposed site of Camp I. We found a passage on the extreme left, Johnson doing most of the path-finding. Moving slowly—we had heavy loads—we reached in six hours the island of red rocks and scree which had been singled out from M 10 for Camp I (17,000 feet).

Miss Richmond and Hollick returned to the Base Camp. They were to arrange for further supplies. We four others explored the route to Mulkila on the following day. The slopes over which we intended to reach the south ridge of our mountain did not seem practicable for porters. So we decided to make the attempt from a camp only 18,800 feet high, on the level snow at the head of the glacier. We also acquainted ourselves with the way up to the saddle. The shortest possible route was barred by a formidable bergschrund which was overcome by Kolb only after hard work. The rocks that followed were easy but much exposed to falling stones. The whole climb of 600 feet took us one and three-quarter hours.

The saddle (between Mulkila and M 6) lies on the main divide between the Chandra and the Bhaga rivers and is about 19,400 feet high. Through gaps in the clouds, we saw a huge glacier flowing down to the east.

With the object of finding a safer way we descended over steep and broken ice farther south. That way was longer and hardly easier but was out of reach of falling stones. There was also no bergschrund.

The next day we brought up our two tiny Welzenbach tents. We

¹ I hope the reader will not think that we called our mountains by letters and numbers. For us they were Schneeglocke (Snow bell) (M 1), Lyskamm (M 6), Richmond peak (M 7), and so on. The only native name which we were able to establish beyond doubt is that of the highest peak of Lahul, Mulkila (the accent is on the *a*), 21,380 feet. It is a beautiful name for a beautiful mountain, for it means Silver God.

called the new Camp II *a*, because we were later on to erect another one for M 7, which was at a similar height above Camp I and got the designation 2 *b*. Comber, Johnson, Kolb and I were all on our own; the Sherpas had gone down to bring more food from the base to Camp I. The weather was none too good. It snowed all the afternoon so that we could not cut any steps towards the saddle, as we had planned to do. In the evening the clouds broke at last and the Lyskamm's (M 6) high ice wall rose majestically just before us. The tracks of many fresh avalanches made it an awesome sight.

The weather was good when we left camp at 5 a.m. on the 7th September. We chose the longer way and reached the saddle at 7.30. This time we had a better view of the country to the east. There are some magnificent mountains on the right bank of the big glacier, the highest marked 20,430 on the map. The ridge leading up to M 6 is sharp, and bristled with cornices that day, but we would have chosen it as our line of ascent had we not discovered that M 7 was higher.

At 8 o'clock we turned towards Mulkila. At first there are some rock towers to be tackled, but after this the ridge widens and is so easy that we could go without ropes. At a shoulder, 20,400 feet high, we stopped from 10.10 to 10.45. Comber felt that he was not sufficiently acclimatized and decided to wait here for our return. In an hour's time we were at the foot of the steep rocks which form the top of Mulkila and which were to decide the success or failure of our attempt. We took the rope and at first followed the ridge till it became impracticable. My attempts to find a way in the eastern flank were unsuccessful; but the western flank offered a system of ledges and chimneys which allowed us to reach a big gully directly connected with the snow of the top. Here, with no more obstacles before us, I suddenly felt the altitude; and I was a bit envious of my two companions who did not seem to be bothered at all.

We spent one hour on the top (2.10 to 3.10 p.m.). There was no wind; the temperature was minus 1° C.; and there was no view. Already for some time we had been climbing in mist, and so there we sat without seeing a thing—as has happened to us on all the high peaks of Lahul.

We made a quick descent. In forty minutes we were out of the rocks and but a little later we reached the shoulder where Comber was the first to congratulate us. In spite of all our hurrying, we were caught in the dark on the lower ice slopes just above our tents. By 7.30 p.m. we were in safety again.

There was a general meeting in Camp I on the 8th September when Hollick and Miss Richmond had come up with all the porters. Johnson and Comber went back to the base in the afternoon. It

was their job now to see that we got enough food in the upper camps. The weather was fine and we enjoyed sunbathing protected by the warm red rocks behind our tents.

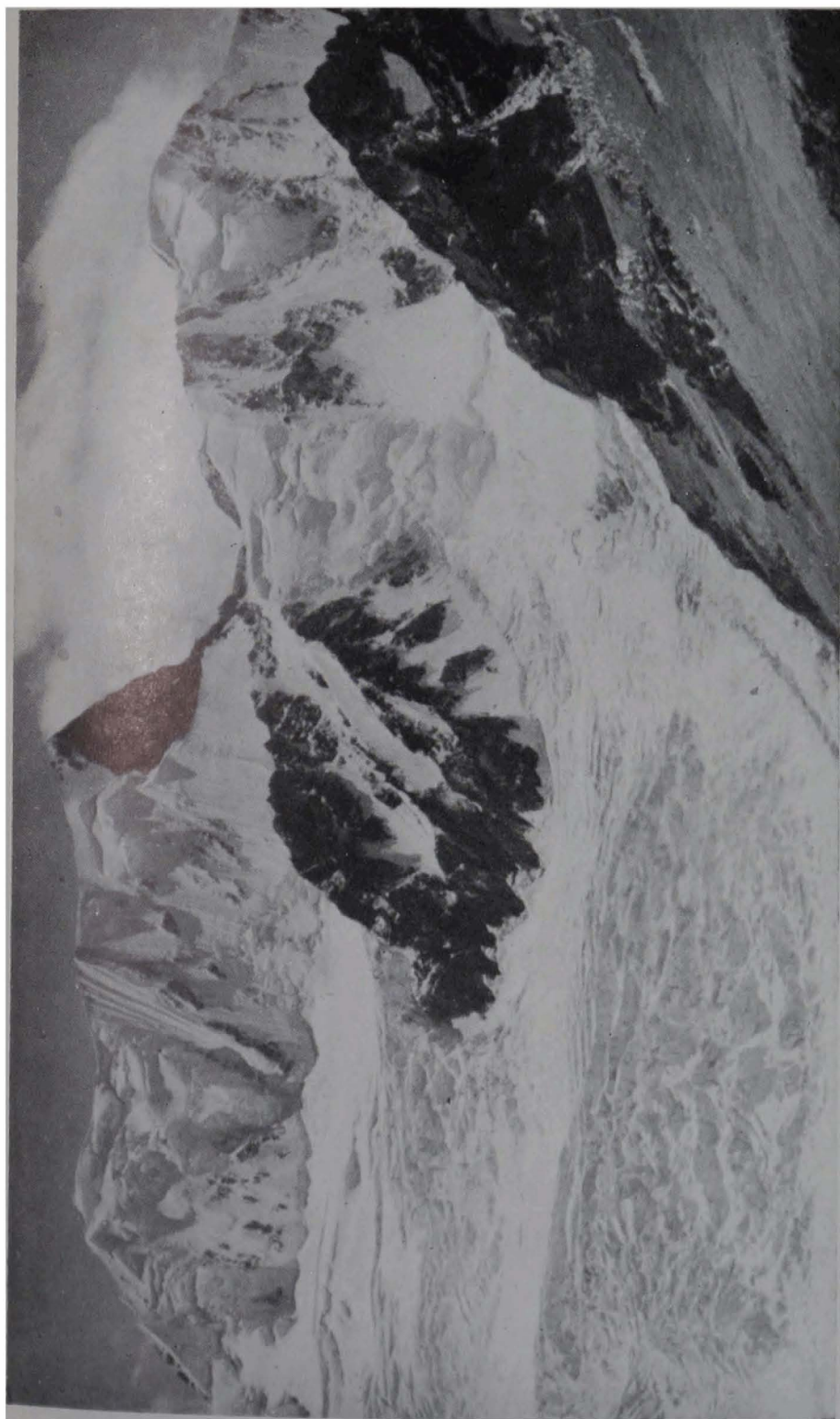
M 7 was our next aim. It is the second highest peak of the Milang group if one disregards M 5 as not independent enough. On the 9th September we moved up the southernmost branch of the glacier, slowly negotiating its big crevasses. Near the head of the glacier we climbed a not very steep buttress of ice far to the right of the deepest depression between M 6 and M 7. About half-way up there was a little shoulder where we could prepare with our ice-axes a platform for the Welzenbach tents (19,200 feet, five hours from Camp I). Kolb at once led the porters back over the steeper parts to the flat glacier whence they returned to Camp I by themselves. The afternoon was rather unpleasant. There was a strong wind, and snow fell all the time. Cooking in such small tents is irksome.

When we woke up next morning we found our camp buried in snow. Not before 7.50 had the weather sufficiently improved for us to leave. With low expectations we climbed up the icy slopes, cutting steps at first. We were on two ropes, Miss Richmond and I, and Kolb and Hollick. The buttress soon brought us up to the broad ridge which leads over two minor bumps to the foot of M 7. The going was heavy because of the rough surface of the ice: pinnacles had to be negotiated all the while—probably *pénitentes* in the first stage. The bad weather continued.

In the saddle just before our peak we waited from 10.20 till 11.40 a.m. At that time a ray of sunshine provided us with a ray of hope and we decided to attack the peak at once. There were two parts in the route we had planned: a very steep and high ice slope up to a rocky shoulder, and a ridge of rock and ice from there to the top. Not that we could see this now; but we knew it from earlier observations.

On ice walls it is always well to think of the descent from the outset. So I cut extra big steps every 15 yards in which to rest on the way down and from which to give such security as a rope can afford on steep ice. Miss Richmond was a splendid partner; her technique on crampons was superb.

A biting wind and gusts of snow welcomed us at the shoulder. The fog was thicker than ever. Should we turn back? Kolb and Hollick, however, who were now to take the lead, were determined to finish their job as we had finished ours. Moving rapidly over rock and ice we reached the top in what must have been very good time (20,800 feet, 2.5–2.40 p.m.). We were well acclimatized; a week earlier we could not have climbed so fast. As usual, we sat in thick clouds, but the wind had stopped and it was not snowing.



(a) *The ice walls of M7 and M8 from Base Camp (telephoto)*

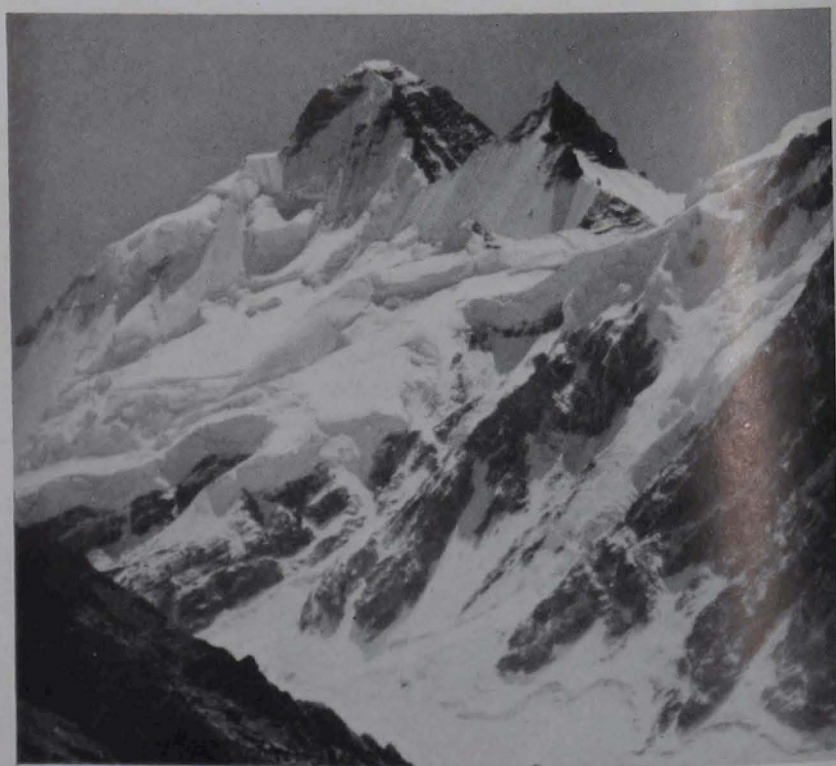
KR5
20,530

KR6
20,300

KR7
20,000



(b) *Mountains of the Koa Rong from the saddle between M1 and M2
(17,800 feet)*



(c) *Mulkila (21,380) and M5 (20,900) from Base Camp
(telephoto)*

We felt quite relieved when we were at the foot of the ice slope again. Somehow the two 'bumps' had become real peaks during our absence, judging by the time and effort it took us to traverse them. The Sherpas had come up to Camp II *b*, and with their help we were able to get everything down to Camp I that same evening.

It snowed all night and all morning. Only at 2 p.m. could we leave for the Base Camp. With the new snow the descent was difficult, but we managed to do the trip in less than four hours.

Now that we were all happily together again, our post and vegetable runner brought the news of the outbreak of the war. It was on the 11th September. Next morning we held a council and decided to break off our expedition. Our plan had been to try some of the rock peaks of the Koa Rong. Johnson had explored the way from our base into that valley on the 9th September.

Kolb went down to Kyelang in order to find out what had happened since the 3rd September, for that was the date of the newspaper which we had received. Would the Mediterranean still be open or had Italy entered the war? This was of great importance for our English friends. It would make no difference to Kolb and myself—holders of German passports. We knew what was in store for us. Kolb had also to recruit coolies for the evacuation of the Base Camp.

On the 13th September we went exploring the northern branch of the Milang glacier. Johnson on that occasion climbed M 3 (19,000 feet). We found many fossils. The morning of the 14th September brought us the finest weather we had had so far. The air was as clear as crystal. Comber went down with Ang Nima to the Preliminary Camp and waited there for Kolb to return. We others did whatever we thought was a pleasant way of spending the last day up there: taking photographs, collecting stones, plants, insects, and so on. At lunch-time Miss Richmond failed to appear. Johnson went to meet her but returned alone after two hours. Since she had often been late when collecting plants we had not at first thought of an accident, but now we became seriously alarmed. We organized a systematic search which went on till 1 a.m. next morning. When the eighteen coolies arrived a few hours later, they continued the search under Hollick's direction and found Hilda Richmond dead in a steep gully not far from the Base Camp. The stream bed from which we usually got our water was dry on the morning of the 14th September, owing to the intense cold which marked the onset of the fine autumn weather. Miss Richmond had meant to have a wash—she had a towel with her—and had therefore followed the course of the stream upwards into the steep rocks till she found a pool of clear water. There she was hit on the head by a falling stone and killed instantly.

Miss Hilda Richmond lies buried where our Base Camp was. A rough memorial of rocks marks the grave.

The final descent was accomplished the same day, the 15th September. We could ford the Milang river this time since it had much less water. Comber and Kolb were waiting for us on the far bank. We had to break to them the terrible news.

The night was spent just beyond Yotse bridge. Horses from the village took our loads next morning, since the Bhaga was also fordable now. After a restful day in Kylang with the Peters we marched on towards Manali. Rangcha Gali and Beas Rikhi were climbed on the way in order to complete our knowledge of Central Lahul. The weather was at its best. We were back in Manali on the 21st September 1939.

Explanation of the map. Based on trigonometrically fixed points of sheet 52 H. The details are taken from levelled photographic panoramas.

T = Telah nullah. KR = Koa rong (rong = narrow valley).

M = Milang.

T 2. Crest of reddish rocks with several pinnacles. Well visible from Jispa.

KR 1 (Punthotho = the twin pinnacles). A beautiful mountain, prominent from the valley south of our preliminary camp. Difficult. Best ascent probably along the south ridge.

KR 4, KR 5, KR 6 and KR 7 are very steep mountains with enormous walls of red rock.

M 4 (Mulkila). Just visible from the Beas Rikhi, but not from the Rohtang pass. A party of Italian officers tried to climb it in May 1945, but without success. They thought the 'saddle' impossible and tried therefore to reach the west ridge of Mulkila to the west of M 5. They succeeded, however, only in reaching the saddle south of M 5 (nearly 20,000 feet). The Italians did not know of our ascent.

M 5. A steep, black pyramid, is the second highest mountain of Central Lahul. It is too close to Mulkila to arouse much interest.

M 6. A double-topped mountain with a very steep ice wall to the north. North-east ridge possible.

M 7. Visible from the Rohtang pass, but not very impressive on account of the distance. The ascent from the southern Milang valley is probably even more difficult than from the north.

M 8. This is one of the most beautiful mountains of the Milang region, with steep ice walls to the north and south and with tremendous rock ridges and walls to the west. Well visible from the Rotang pass, as a sharp horn. Seems very difficult from all sides.

M 10. Gives an excellent view over the whole Milang region.

There is an easy, though steep pass (Pt. 16161 on map 52 H/SW) leading from the southern Milang valley to Khoksar. (I crossed it in June 1945. Our Base Camp could be reached by this route in 2 or 2½ days, the head of the southern Milang valley with its grand cirque of mountains in 1½ days.

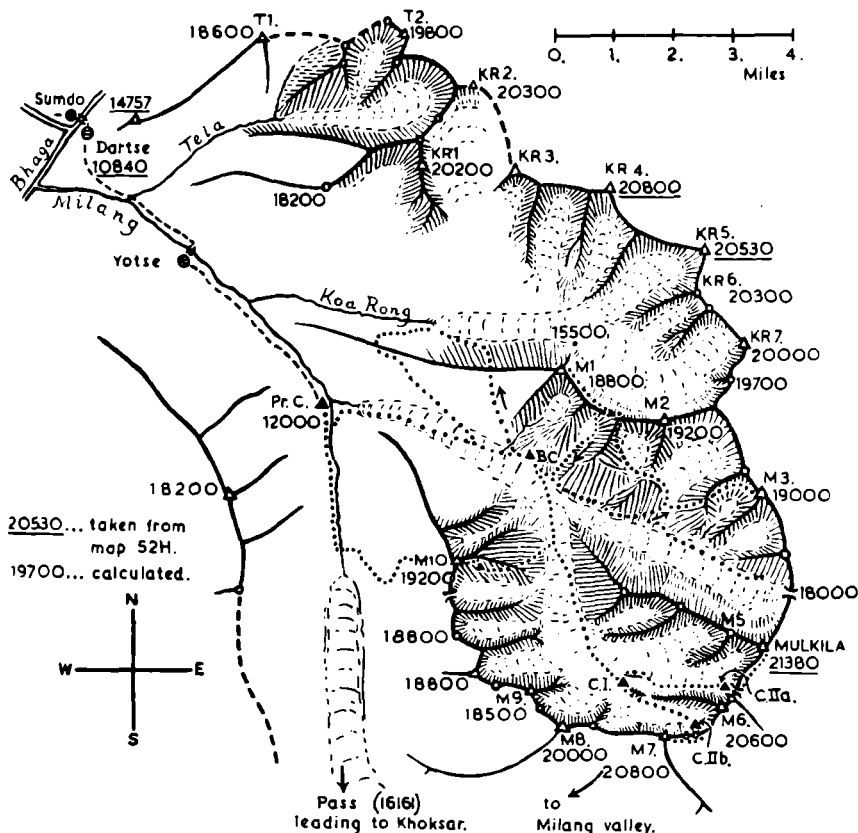


(d) Mulkila, M6 and M7 from below top of M10. Camp IIa left, camp IIb right. The routes are only shown up to the saddles. From there we followed the ridges

Some hints for mountaineering in Lahul

Mules are obtainable at Manali, Khoksar and Dartse. It is more difficult to get them at Kyalang, as most of them are used for the transport of 'kuth' to Kulu.

Coolies should be taken from Lahul, not from Kulu. The Lahulis are much better and more reliable. A few will be found at Khoksar, Jispa, Dartse and Yotse. During sowing and harvest, however, hardly any coolies will be available.



For the copying of this map the Journal is indebted to Dr. F. Hollick.

It is better not to rely on food supply in Lahul. Except for sheep and a little atta and rice (Kyalang) hardly anything is obtainable. Eggs and milk might be procured occasionally.

The weather during August and September 1939 was much better than that experienced by Bruce in 1912 and Michinton in 1914. According to the Rev. Peter the summer of 1939 was a 'normal' one. That means that even the monsoon period can be well used for mountaineering in Lahul. The best time, however, is June or October (June 1945 was perfect). Besides settled weather there is the additional advantage that the rivers can be easily crossed.

CHOMIOMO AND PAUHUNRI

T. H. TILLY AND C. W. F. NOYCE

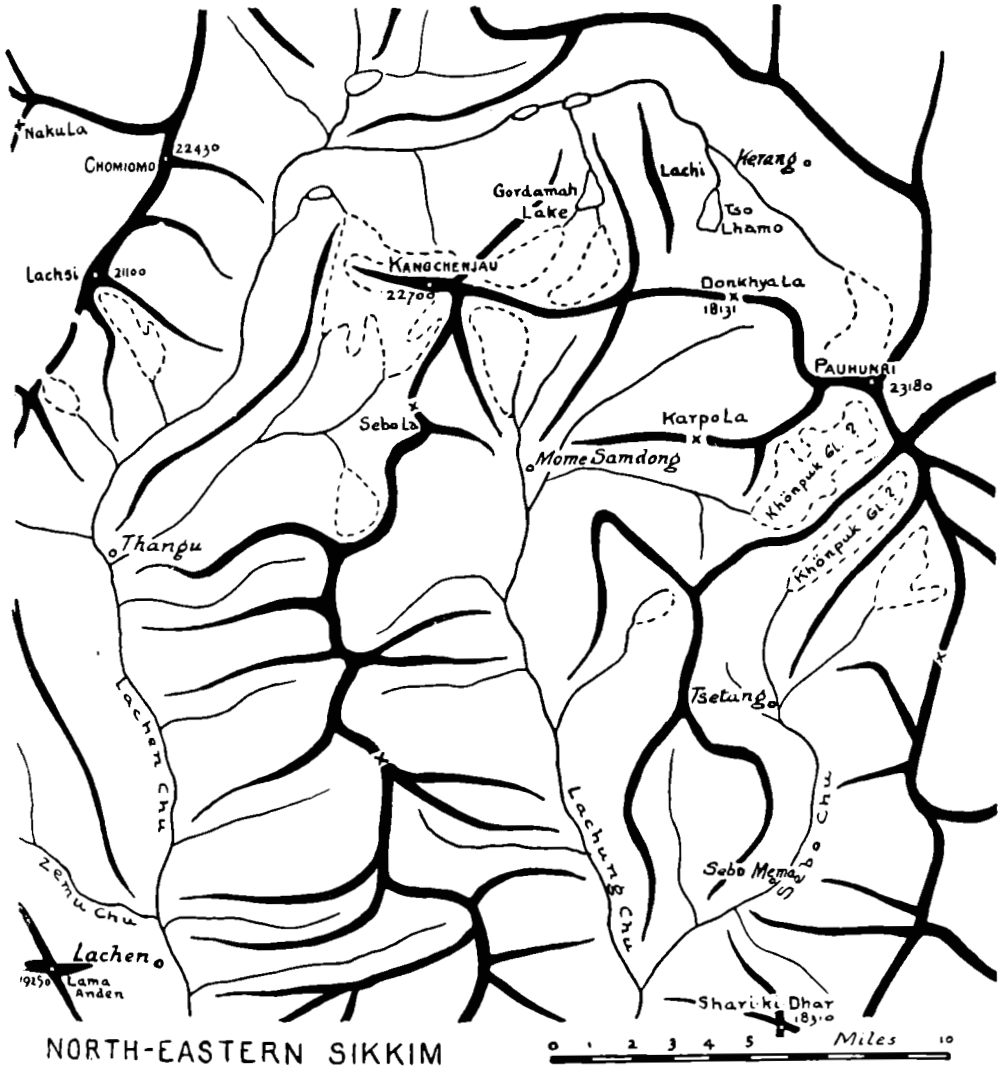
An account of these ascents has been put together because there are in them points of similarity and of general interest perhaps to those who organize small expeditions. They were both made in the course of a short leave (twenty-eight days and a month during the monsoon season of 1945, from Delhi. They were both believed to be second ascents of peaks ascended first by Dr. Kellas. And they were both made with Angtharkay as sirdar, philosopher and friend. The success of them, as climbs and enjoyable experiences, was in a very great measure indeed due to his thoughtfulness, his reliability and mountaineering knowledge. Enough has been written about him already, and by those who know him better. Later in this Journal is a notice published by him and giving his address and terms. He, more than any other single man, has advanced the Sherpa standard along the path on which Dr. Kellas started it, towards the immense reputation as climbers and carriers which the 'Tigers' now hold.

In another way too Dr. Kellas's name is linked with these escapades. He was the first, or almost the first, climber to show that a quick expedition made to a mountain of 22,000 or 23,000 feet by unacclimatized men is not the impossibility it used to be believed. Whether another big peak immediately after Chomiomo or Pauhunri would have been possible, without a short space for breathing, may be more doubtful. The ascent of peak 20,330 feet was accompanied with as much puffing and groaning as had been needed on the higher Pauhunri. But the parties reached Gangtok exceedingly fit and an immensity fitter than when they started. That is the encouragement that they have to offer, and the excuse for this article.—Ed.

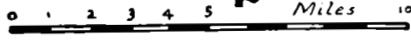
Chomiomo. (By T. H. Tilly.)

THE choice of a climbing district in which to spend a war-time leave of a bare twenty-eight days from and back to Delhi is not embarrassingly wide if much precious time is not to be lost in travelling, which includes the considerable amount of pleasant, but time-consuming, trekking usually necessary. Eventually George Crosby and I came to the conclusion that the mere forty-eight hours needed to reach the centre of things at Manali, with its splendid peaks and glaciers, almost selected the Kulu valley for us. Then Wilfrid Noyce returned from Aircrew Mountain Centre and Gordon Whittle from a visit to Burma. In spite of the long journey involved, we all felt enthusiastic about seeing something of Sikkim, about which we had heard so much, so we decided, provisionally, to visit the Lhonak valley.

The Club provided much of our equipment and we were able to bring a number of spare pairs of climbing boots and some warm clothing for the use of our porters. We started a reasonably well-found party, by war-time standards, and though lacking some of the



NORTH-EASTERN SIKKIM



Heights altered in the recent 1/2-inch map.

gear usually considered necessary, we never felt short of anything on the march or the mountain. Angtharkay and sixteen Sherpas were engaged from Darjeeling.

Most unfortunately Wilfrid Noyce's leave was cancelled at virtually the last moment—a great disappointment to all of us. The rest of us left Delhi by the Calcutta Mail on 10th July with quantities of baggage. Counting the various packages was not the least of our jobs *en route*. None of us seemed to know how many there ought to be and, in fact, a vital kitbag containing boots and spare clothing for the porters was nearly left behind at Giellekhola. A Sikkim State 15-cwt. Chevrolet took us from Giellekhola to the break in the road at the twentieth mile from Gangtok. After some delay awaiting another truck, we reached Gangtok at 7.30 p.m. to find Angtharkay and our porters expecting us at the Dak Bungalow.

The following day Whittle took on the job of sorting out the gear and packing the loads. He was able to get the porters on the road by noon, an excellent piece of work. Crosby went down to the bazaar to make some last-minute purchases. My job was to get the necessary permits. The Access to Mountains' Act does not apply to Sikkim, and one has to disclose the most intimate details about one's blood-pressure and other clinical characteristics before the authorities relent. Other parties would be well advised to submit their medical reports, on the appropriate form, in ample time, and should at the same time furnish precise particulars of their proposed route. The Political Officer has to apply to the Sikkim Durbar for the permit, and this body is not always easy to satisfy. Although we had applied some weeks earlier and furnished an outline of our route, letters had passed to and fro and nothing much had resulted. The authorities were helpful, but none the less it was 4.30 p.m. before we were able to start for Dikchu.

The three stages to Chungtang are dank and leechy. I had rubbed a heel and walked from Singhik to Chungtang in rubbers. This was the leeches' opportunity, and in spite of constant warfare my feet and ankles were a mass of gore. I counted twenty-six punctures. An unpleasant trick these pests have is working up the shaft of the ice-axe and getting between the fingers. The first intimation, as a rule, is seeing blood running down the shaft. The leech has usually fallen off by that time, gorged to repletion.

The walk up to Lachen took us out of the jungle, a welcome release, and the following day up to Thangu was delightful. The rhododendrons were not, of course, in bloom, but meadows of giant cowslips gave gaiety to the scene. At Thangu we took a day off to overhaul our equipment, most of which we had only received the day before leaving Delhi, but I was feeling tired and lethargic and

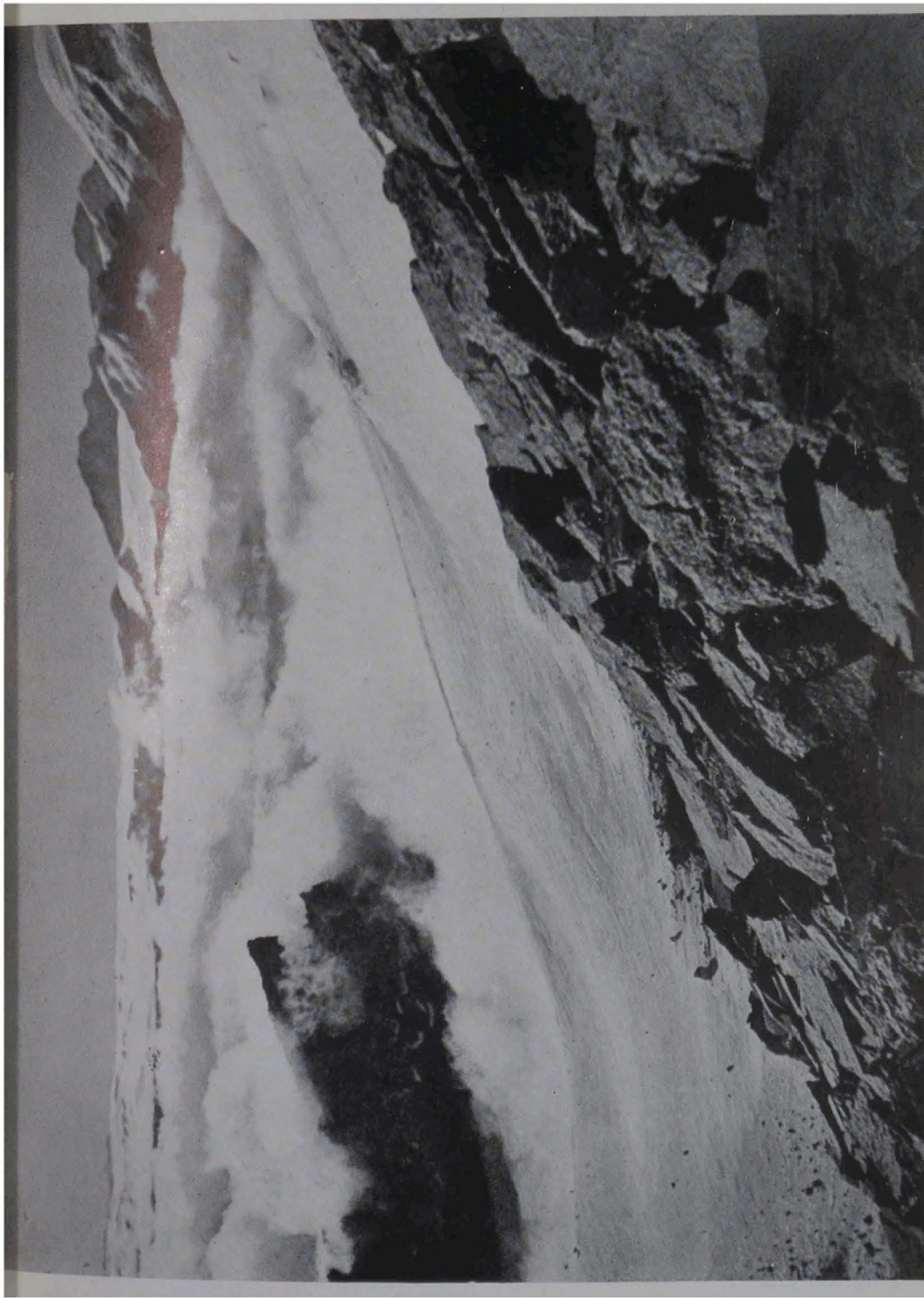


Photo by G. Crosby

View towards Pauhunri from Camp I on Chomomo

had a sore throat so was of little help. That evening we had a long talk about our plans. Whittle suggested, instead of crossing the Lungnak La into Lhonak, continuing north for another day and then attempting Chomiomo (22,403 feet). Angtharkay had been there before and told us that Chomiomo was certainly accessible from the north-east, so Whittle's suggestion was adopted without further ado. In the event, it was sad that he was unable personally to profit by it.

The following morning we set out again. The snows were now often visible, and the Teesta, dwindled to a relatively small stream, flowed happily through a green Alpine country. At Donkung (15,700 feet) camp had been pitched near a collection of stone built houses inhabited by Tibetans, and many black tents, each with attendant cur, were round about. I subsided into my sleeping bag and remained there all the next day. In the evening my temperature had dropped, following aspirin, and the next morning I was well again except for a cough and an attack of diarrhoea. Both proved a thorough nuisance in the days to come. Unfortunately, Whittle was feeling the altitude severely and had to go down on the 22nd, a bitter disappointment. The party was at a low ebb except for Crosby who was feeling very fit and spent the 21st climbing a rocky peak of 18,250 feet above Donkung to the west. The day was fine and he enjoyed excellent views.

On the 22nd Crosby and I set off after Angtharkay and the porters to establish the Base Camp. The morning was fine and Kangchenjau, rising directly opposite in great sweeps of slab crowned with ice, looked magnificently unassailable from the direction of Dongkung. Turning a corner, I saw for the first time the east face of Chomiomo which Crosby had examined the previous day from the 18,250-foot peak. It consists of broken cliffs at a high angle with a tortured glacier in the middle, suspended from the summit ice-cap. The upper ridges were veiled in cloud. A valley, in which sheep and goats were feeding, descended to the Teesta, and a subsidiary to the north gave access to an easy col about 17,500 feet in height at the foot of the fine rocky north-east ridge of a peak of 19,360 feet.

We traversed the ridge at about 18,000 feet half a mile above the col, descended easy slabs and scree, crossed a stream, and were soon in camp. It was cold but all the tents were up, there was a pleasant haze of wood smoke, and hot tea and malted milk biscuits appeared at once. Later we settled down in our sleeping bags, lying on comfortable lilo mattresses, and made short work of an excellent dinner consisting, for the most part, of the more succulent internal organs of a sheep purchased at Donkung. Snow fell during the night and it was rather cold. None the less, we both slept well.

The Base Camp was placed at about 17,700 feet near a small tarn below the north-east Chomiomo glacier amid a tangle of moraines. The glacier, deriving from the icy north-east face of the peak, is about a mile and a half in length and is contained between the steep rock walls of Peak 19,360 feet on the south and a massive mountain 20,330 feet high to the north. The views are grand, when visible, Chomiomo rising at the head of the glacier as a great cone. At its south-west extremity the glacier is bounded by a steep wall of rock and scree leading to a gap between the north-east ridge of Chomiomo and the pinnacled arête of Peak 20,330 feet. The route lay up the glacier and up and across the rock and scree wall to the gap, from which point the north-east ridge could apparently be followed to the summit. We hoped to place two camps *en route*, the second as high as possible so as to minimize the effect of our lack of acclimatization by a relatively short final ascent.

The following morning, after sorting out and packing the loads we left the Base Camp, threaded our way through the moraines and ascended the glacier snout to find that the glacier was mildly inclined and not crevassed. Snow fell at intervals but only lightly. As we gained height the weather gradually improved, disclosing a row of ice walls across the face of Chomiomo ahead, and a deep black groove down the centre caused by the frequent rock falls from a buttress just beneath the summit ridge. We kept near the true left bank of the glacier, which bends to the west, and, crossing the moraine, ascended the steep screes ahead. This part of the climb proved very laborious and I dragged painfully. The altitude was about 19,000 feet, but I fancy my wretched performance was due rather to the after-effects of the chill than to lack of acclimatization.

Camp I was placed on a promontory of rock jutting over the screes at an estimated height of 19,500 feet. Three tents were pitched and a small cave served the office of kitchen. Two of the tents had to be re-pitched as Crosby, after a horrible struggle, found it impossible to enter his. It started snowing in earnest, but the depression was banished by Angtharkay's culinary skill. Later we both took aspirin, in spite of which I spent rather a cold night.

The next morning, the 24th, was fine and cold. The arrangement was that all four Sherpas, Angtharkay, Dawa Thondup, Ila Namgen, and Ghil Khan, should carry to Camp II, and the last two would return and go up again the following day to help carry down the Camp II loads. An upward traverse over scree and broken rock led to the rock gap in the ridge ahead. We named this gap the 'Portje' as it was faintly reminiscent of the well-known one at the foot of the Portjengrat above the Saasthal. Here the purpose of

bundle of slips of paper on top of Angtharkay's load became evident and with loud cries and much laughter the rock gateposts were climbed and a splendid streamer of prayer flags was soon fluttering bravely over the gateway. The gods having been presumably appeased, the porters went on their way whilst we, passing beneath the banner, settled down out of the wind on the west side to smoke a cigarette. Behind rose the north, that is the Tibetan, face of Chomiomo, snow and ice from base to summit. From the base a white, relatively uncrevassed, glacier flows due north. The altitude of the 'Portje' must be about 20,000 feet, and a striking view over the 16,000 feet plateau on the Tibetan side extended to a row of snow-tipped summits on the horizon. Across the glacier a rock peak of well over 20,000 feet appeared as a mere buttress of the north-west ridge of Chomiomo by which Dr. Kellas made the first ascent of the peak. A network of crevasses low down corresponds with the position he gives in his description of the ascent. The weather was fine though rather unsettled. The monsoon was not much in evidence. Thin wisps of cloud drifting up from the south were dispersed on the Tibetan border. Squalls occasionally passed, sweeping at high speed from east to west across the Tibetan plains.

Starting off again, Crosby and I ascended broken rocks on the Tibetan side of the ridge to the crest, where easy rocks and short slopes of snow were succeeded by a long sweep of snow to a steep buttress. Angtharkay had wisely decided to traverse to the right to outflank the buttress which looked arduous for laden porters. The traverse took the four porters to the east flank of the north face. They had roped, and Angtharkay was busy cutting steps in diagonals where the slope steepened and ice was only an inch or two below the surface. Before we reached the steps a squall of wind and hail swept over us from the east, but was fortunately short-lived and the sun then became very hot. Some zigzags took us easily up a steepish slope to easier ground. The porters were now on the slopes to the left, cutting back to the crest of the ridge above the buttress. When we reached the foot of the slope Angtharkay appeared at the top and shouted down asking whether we wished to camp there or higher up. There seemed to be a good camp site a few hundred feet higher, the day was now perfect and we had plenty of time in hand; so, with the object of shortening so far as possible the summit climb the following day, I told him to make for this spot. We then went up the slope and tucked ourselves into two crannies to have a bite to eat and cool off. We then climbed up snow under the rocks and soon Kangchenjau, Gurudongmar, and a mass of cumulus casting shadows on the Cho Llamo plains greeted us over a translucent snow edge. The ridge ahead consisted of easy

snow and scree, and soon we met Ila and Ghil Khan returning to Camp I. After some easy climbing, Angtharkay met us with mugs of tea just below a scree platform on which Camp II had been pitched. We estimated the height at about 21,000 feet.

On the way up the ridge we had seen a typical squall formation approaching from the north-east. As we toiled up to the camp the base was trailing up the north Chomiomo glacier, and no sooner had we settled down in our sleeping bags than a gale with driving hail struck the camp. The hail changed to snow which started to enter our tent on a large scale through a gap beneath the zip fastener, but Crosby's bush hat, wedged in the gap, kept out most of it. After about an hour and a half the storm died down, about dusk. Then, after tinned meat, tea, and biscuits, we settled down for the night, both thoroughly warm, and I had an excellent sleep. I awoke at 6 a.m. and went outside the tent. Dawn was breaking, and though there was no wind it was bitterly cold. I struggled back into my warm sleeping bag. At 7 a.m., hot tea and sardines and, later, porridge flavoured with kerosine were delicious. Crosby was feeling far from well and decided, wisely, not to come any farther. His had been a great effort. He had never been high before but had gone very well without any pauses for acclimatization to 21,000 feet.

At 8.15 a.m. Angtharkay, Dawa Thondup and I started for the top, I slightly after the others. The surface was frozen and in perfect condition. The ridge formation just beyond the camp merged in a snow slope which, at varying angles, continued to the summit ridge—about 800 feet. It was still very cold. A short distance above the camp I saw Angtharkay prodding the snow. Undoubtedly there were a few small crevasses about, most of them choked with snow. When I reached them, the two Sherpas had roped, Angtharkay leading, and were making a loop for me in the middle. Roped, we set off again, kicking steps where the slope steepened. At one point a few steps had to be cut, and it was very steep for a few feet at the top over the remains of the cornice. Both porters appeared perfectly acclimatized and were going strongly. I felt perfectly well but was apt to become rather breathless and tired quickly. A short rest on my axe, however, would quickly revive me. I had never before been above 17,500 feet. At the top of the slope we settled down in the snow for a rest. My fingers were numb and the two Sherpas (whose hands felt hot) rubbed and beat them back to life.

We started again about 10.30 a.m. We had been in cloud continuously from a short distance above the camp, and visibility on the summit ridge was very bad. We were near the east end of this long ridge, and the highest point is towards the west end. The snow was soft but not deep. The ridge became narrow and a spiky gendarme

rock on the left and snow on the right, loomed through the murk. We avoided it easily on the right, but the traverse took us some way off the crest which rose again beyond the gendarme. Back on the ridge again in wretched visibility we arrived on a broad, plateau-like summit which the Sherpas seemed to think was the top. However, there had been one or two slight local clearances and we sat down hopefully to await another. Soon a fine pointed snow summit to the south-west, about 200 yards distant, loomed up, and we made our way towards it. Once we saw Kangchenjau through a gap in the clouds, but visibility then became, if anything, worse than before. The ridge rose steeply and we kicked up to the right of the crest to a sloping shelf and then a few steps half left to the top. Instead of a clearly marked summit, however, we found merely a slightly elevated area and it seemed that the sharp rise was merely a step on the ridge. Nothing was to be seen and we sat down to await another clearance. Soon a big unmistakable top appeared vaguely but how distant it was impossible to say. We waited until sure that it was indeed part of our mountain and then tracked over the snow towards it, at first slightly down and then steadily upwards. Near the top Angtharkay unroped and positively rushed to the top at a speed which, at 22,400 feet, spoke volumes. Arrived, he rent the air with hideous screeches. Dawa Thondup and I followed, and the former added his contribution, in a small way, to the din. The time was 12.30 p.m.

We remained on the summit for 20 minutes during which several slight clearances confirmed our position above everything else; so we were spared the gnawing doubts experienced earlier. I had already reconciled myself to the fact that there would be no view.

The descent went very easily, and at 1.40 p.m. we were back in camp drinking hot tea and eating biscuits. Ila and Ghil Khan had arrived; camp was soon struck and the four Sherpas on their way to Camp I. Crosby had spent the morning in his sleeping bag and was still feeling weak, so we descended slowly. It was a perfect afternoon and Chomiomo became completely clear of cloud. How I wished I could have been on the summit then! I spent a long time sitting in the evening sun a couple of hundred feet above the 'Portje', gazing out over Tibet and to the west where a fine group of snow peaks could be seen in the distance. Crosby joined me and we were soon in camp, Angtharkay producing soup and a superb dish of stewed mutton. The following morning in cloudy weather we made our way to the Base Camp, the four Sherpas cheerfully shouldering loads which looked enormous to us, carrying only light rucksacks.

It was cold at the Base Camp, and we retired into our tents to nurse our complexions. The following day we had intended to

climb one of the peaks in the vicinity but the state of our faces induced a certain lethargy, and we had an off day.

The next morning, 28th July, we left the Base Camp. It was a most unpleasant morning—always the best weather to leave the mountains—and we became very wet before getting into camp 4 miles south of Donkung. The precipitous east face of Chomiomo was alive with falling rocks, but little or nothing could be seen of it. The journey back to Gangtok was very wet. A huge landslide just north of Chungtang on the west side of the valley had created chaos, by blast, on the east side, uprooting trees and demolishing about 100 yards of the track. The most difficult climbing of the expedition was necessary here—down one tree trunk, up another, across a rock ledge under a small waterfall, and up a vertical bank of earth. The whole face of the hill opposite had collapsed into the Teesta. Trees, undergrowth, rocks and soil had all come down in a stupendous avalanche. Only the bare stump of a hill remained. The cloud base was low, and consequently we could not see what had happened above, but to the south of the shattered hillside a deeply cut gully was the channel for continuous rumbling falls of mud and rocks. A fan of debris had been thrust into the Teesta which presented a fearsome sight. There had been several lesser landslides between Chungtang and Singhik, and heavy and continuous rain made this the most laborious march of all. The jungle was doubly revolting after the heights, but was soon over, and we reached Gangtok in fine weather on the afternoon of 3rd August and Delhi on the evening of the 6th. We had been away $27\frac{1}{2}$ days.¹

Pauhunri. (By C. W. F. Noyce.)

I wanted more and more to visit Sikkim, the less likely it looked that I ever should. The valleys, they told me, are wilder and more enchanting than anywhere, the jungles are steeper and lead more directly to higher and more intricate snowfields. But the land is guarded, like the garden of the Hesperides, by its dragon. Sikkim is a semi-independent state governed by a maharaja; to enter, it is necessary to go through the very complicated formalities described above, involving both the British Political Officer in Sikkim, who seeks permission to enter the inner sanctuary, and the Deputy Commissioner at Darjeeling, who grants the frontier passes (subject to Sikkim's approval). Thus even after the Armistice of August 1945 had made leave unexpectedly possible, I found that I was but a very short way on the road to Sikkim. My companion was unable to come; so that from my own heat-stricken and unreliable brain

¹ For an attempt on Chomiomo by the reverse of Kellas's route, covering much of this ground, see G. A. R. Spence's account in *H.J.*, vol. v, p. 94.—*Ed.*

alone had to emanate the positive sheafs of telegrams that seemed to pass between Delhi, Darjeeling, Gangtok and Calcutta (residence of the Equipment Officer of the Himalayan Club). No more relieved and surprised person than myself could have been imagined, when the friendly Dak Bungalow of Gangtok loomed through a Scottish mist, and the grin of Angtharkay greeted me upon its doorstep.

Descriptions of the journey through Sikkim are a commonplace. Travellers have loved to dwell on the dank stuffiness of the Dikchu valley, the horrors of leeches that creep into the boot unseen and roll out like jellies, leaving marks to be seen and felt for the next three days. The one part of the journey that I had not expected was the jungle traversing, in the many places where the path had been swamped by collapsing vertical forest. It was a bad monsoon, and in September and even October we were in the thick of it. We only escaped when we dragged ourselves in a snow-storm over the Dongkya La (18,030 feet) and looked down on the sunny-smiling fairy plains of Tibet.

Pauhunri had not been part of my programme. It was too high (23,385 feet), I did not know the way and neither did Angtharkay, and I wanted to follow Harry Tilly's route of earlier in the year. But we seemed driven in that direction, by the weather and the gentler slope, and it had the great advantage that I had the fun of the route finding, for the Sherpas did not know that area. Base Camp we set at 17,000 feet and reconnoitred the north-eastern, Tibetan flank of the mountain. We then took a well-stocked Camp I up to 19,500 feet, and Angtharkay and Namgar, the next in strength, set Camp II, occupied for only one night, at 21,000 feet. This speed was made possible by the relatively uncomplicated glacier nature of the north-east face. But it left me panting like a fish, and in the awkward position of Duke of Plazatoro to my troops. This was still more so on the summit day, a day of fine sun and sticky snow, when Angtharkay had to do most of the laborious trail breaking, and at 11.15 a.m. judged that we could not make it in the day. A policy of persuasion was demanded of the Duke (trying the while not to show how out of breath he was) so that we should 'just go and look over the next little bit'. The summit was reached at 1.15 p.m.; I had been 16½ days from Delhi. Angtharkay's final effort was magnificent.

Returned to the Base Camp I found that there was time to visit Donkung and the Chomiomo glacier to the west, just not time to have a flying shot at the summit. And Angtharkay was unfit from a festering arm. We crossed the northern plain and he remained at Donkung, while three Sherpas and myself went up to Tilly's Base Camp site. I had two days there, one climbing the small peak to

the north of Chomiomo (Névé Peak I called it, 20,330 feet), the next exploring Chomiomo's own north face, in the faintly optimistic mood that it was pleasing to assume when there was no chance of ever seriously attempting it. The monsoon clouds were still piling up against the Pauhunri-Kangchenjau ridge, stretching long fingers in vain over the sunny land of Tibet. Only at the beginning and end of the day the mountain barrier itself stood out clear and triumphant.

Angharkay's arm was better when it was time to descend the westerly Lachen valley. We had been driven to Lachung and the east on the way up by reports of an excessive break between Chungthang and Lachen. This we imagined would be easier to take on a descent than ascent. And so it proved. We rejoined our outward route at Chungthang, grateful that the two hours jungly traversing past a fallen spur of the Teesta were no worse. The monsoon, in fact, was still waiting to receive us. Gangtok I found cut off from all but wireless communication with the outer world. I must wait. Stephen Olver, at the Residency, received me with a great kindness and hospitality, and gave me help in arranging to walk the first stages of the journey towards Siliguri railhead. I said good-bye to the Sherpas, sadly, and sat looking at the incomparable Kangchenjunga from the Residency lawn. I knew that the spell of the Sikkim mountains would lure me back, if chance or season ever conceivably offered, into their high company.¹

¹ Roughly the same route up Pauhunri was attempted by G. B. Gourlay and J. B. Auden in late October 1934 (*H.J.*, vol. vii, p. 139). Their conditions were very much colder and more unpleasant.

For Kellar's account of the first ascents of Chomiomo and Pauhunri see *A.J.* No. 196, p. 113.—*Ed.*

THE KASHMIR SAPPHIRE MINES

RICHARD V. GAINES

IN August 1944 I was able to secure three weeks leave from my duties with the U.S. Army in Calcutta, and, although the time available was barely sufficient, decided to attempt to visit the sapphire mines in Kashmir. As I was not able to obtain reliable information as to the best routes or their condition, I had to base my choice of routes in information contained in the 1st (1922) edition of Hutchinson's *Guide to Dalhousie and Chamba and the Inner Mountains between Simla and Kashmir*. In addition, I studied all available maps of the region and its approaches, and found other useful information in the library of the Geological Survey of India.

I was fortunate in that Capt. Robert C. Rice, also stationed near Calcutta, was able to get leave at the same time and accompany me on the expedition. We went by train to Pathankot, thence by car to Dalhousie, and set out from there with two riding and two baggage ponies, on 8th August. As it turned out, the ponies were too small, or we were too heavy, for them to be of much use for riding; still, they made easier a number of tiresome climbs on the trail from Chamba to Alwas.

In Chamba, we saw Mr. Slattery, Commissioner for Chamba State, and also a member of the Himalayan Club, and he very kindly gave us such information as he had about the trails, and also prepared letters of introduction to village head men along the way, instructing them to give us all possible assistance. I also borrowed a copy of the 1936 edition of Hutchinson's *Guide*, with much more detailed and up-to-date information about the trails, without which the trip would have been well-nigh impossible.

From Chamba to Alwas took us three days, although it is ordinarily listed as four stages. There are rest houses in Masrund, Kalhel, Tisa and Alwas, the latter one being so new that we were only the second visitors to sign the book. At Alwas we dismissed our horses, because Sach pass just ahead is impassable to any animals except sheep. We secured coolies to carry our food and kit, and made the rest of the trip on foot.

Alwas to Kilar was another three days, with stops for the night in a native hut at Sitrundi, and a rest house at Domei. As both Capt. Rice and myself had been living during the last year or more near sea-level, with little exercise, the 14,328-foot pass was a slow and exhausting proposition to climb. Fortunately it was free of snow, except for occasional patches. The mountain-sides above the

timber line were solidly carpeted with flowers of many varieties and colours, but a persistent mist and some rain cheated us of the views we had expected of 17,000-foot peaks nearby, and of the main Himalayas in the distance across the Chenab valley.

The rest house in Kilar was a large and rambling affair built in 1865. Scratched on the window-panes of the house were the names and dates of many of the earliest visitors, some going back nearly eighty years, and including many of the early explorers of the region. We were able to obtain some fresh vegetables, which made a welcome change in our diet. Between Kilar and Atholi, which took two days, we had four different sets of coolies, as they could not be induced to go farther than the next village ahead. All this changing and procuring of coolies took a great deal of time, and delayed our start several hours each day. On the remainder of the trip, we were generally able to hire men who would stay with us two or three days, which greatly simplified matters.

Kilar to Atholi is generally listed as four stages, but can be made in two without undue effort. We spent the night in a native hut at Ashdari, in Kashmir State. The border between Chamba and Kashmir is the Gunaur Nala, in which flows a raging torrent of a stream which a few hundred feet farther down empties into the Chenab. This stream is crossed by means of a jhula, or rope bridge. We had been advised that this one was in poor condition and probably impassable, but we had to chance it, as a detour around the Gunaur Nala would have taken an additional day. The jhula was made of vines which were largely rotted, and was indeed in very bad condition; so much so, that one of our coolies refused to cross it loaded, and one of the others had to make two trips to carry his load across. But the jhula did not choose to break on that day, and we were able to proceed.

At Atholi we had been told we would find a shoemaker, a hospital and other improvements. The shoemaker was of vital importance to us, as our Army boots had succumbed to the roughness of the trail, and were in bad condition. But the town turned out to be nothing but a dirty and dismal collection of mud huts, with no hospital or shoemaker, and the most depressed and disease-ridden populace I had seen in India. The rest-house was also in disrepair, and the chowkidar a ten-year-old boy who knew nothing about running the place. Nevertheless, we got along as well as we could.

Next morning we started up the Bhut Nala, a very beautiful valley forested with holly and walnut trees, and flanked by high snow peaks. The valley contained a large stream which flowed alternately in rapids and wide lake-like stretches with islands, and there were two cataracts of magnificent proportions. The first day

march brought us to Chashoti, where we had expected to camp; but there was a fine new rest-house there with a most enterprising chowkidar, and we were able to secure a good night's rest. The next day we went on to Matsel, where there is a large post of Kashmir Police, the headquarters of a network of smaller posts guarding all approaches to the sapphire mines, these being a monopoly of H.H. the Maharajah of Kashmir. As I had not secured prior permission to visit the mines, it appeared that our trip would have to end there, as access to the mines can be obtained only with great difficulty upon presenting a request to the proper authorities. Fortunately, I had documents from the Geological Survey of India and a membership card in the American Institute of Mining Engineers; these, along with our statement that we wished to visit the mines only briefly for scientific study, finally convinced the Chief of Police that we were harmless, and after having us write out statements of our intentions, he allowed us to proceed under escort. We continued on to Soomjam, which is also a police post and is generally listed as the locality of the mines. However, they are actually 6 miles farther on and 4,500 feet higher up. At Soomjam we changed escorts and were accompanied by two of the police to Kudi, a very steep climb of 3,000 feet in 3 miles, which we reached just at dusk.

Kudi is another police post, and consists of one barracks-like building at 13,500 feet. The view from there was impressive, with Mt. Raul in the foreground, and to the left of it, the broad U-shaped Bhut Nala leading to a series of peaks and Unasi-La pass in the distance. We spent the night at the post and the next morning were allowed to proceed to the mines in the company of three of the police.

The mines are at 15,000 feet and about 3 miles from Kudi, and we reached them in two hours. They are a series of irregular openings, pits, and alluvial workings on and just below a sharp ridge. They were not being worked in 1944, but had been worked in 1943, and many of the openings had been carefully walled up and sealed with stones to prevent access and possible looting. In the earliest days, after 1886, when the mines were first discovered, most of the stones recovered came from what was called the 'old mine', about a mile from the present workings. These latter were discovered much later, about 1927, after the old mine was exhausted. Most of the producing area is in about an acre of steeply sloping mountain side, and just above it on the crest of the ridge is still another police post called 'Black House', in allusion to the bleak and lonely life of the three constables who are stationed there. One of these constables is at all times to be seen standing on a platform overlooking the

mines, armed with a rifle and on the watch for unauthorized trespassers.

I inspected such pits as were accessible, and later climbed some distance along the ridge to about 16,000 feet, where, in a brief parting of the clouds, I was rewarded with a fine view of Nun and Kun in the far distance. Afterwards I descended again to a spot just below the mine area, where in loose sloping dirt it is possible to find many tiny blue fragments (of little or no value) of sapphires. Some of these were quite pretty; but at this point our actions were being watched like hawks by no less than six of the police, and we had to surrender every piece found. We eventually tired of this tantalizing pastime, and as the afternoon was advanced, started back toward Kudi.

That evening, late, we were back at Matsel, and, after further formalities with the police, we were allowed to leave the next morning. We made Atholi in one day. It was by now apparent to us that our route into the mines was not the easiest and quickest one possible, and that to go out again by way of Kishtwar would be advantageous, especially as our leave had only six days to go. Therefore we chose this route, and reached Kishtwar in two days, a distance of 51 miles, camping overnight at Piyas as there are no rest-houses along this way. We had hoped to get horses at Kishtwar, but could not do so at such short notice and so had to continue on foot. From there to Batote took us four days, with an easy trail all the way. From Batote to Jammu and Calcutta was three days by bus and train, thus making us three days late in returning from our leave.

It was unfortunate that our trip had to be so hurried, as the brief inspection I was able to make showed that the occurrence of the sapphires in Kashmir is a most unusual one and one which merits much study by both geologists and mineralogists. The region is one of sediments which have been metamorphosed into schists, slates, and marble, and which are further intruded and altered by numerous pegmatites. Many of the pegmatites in the vicinity of the sapphire mines have cavities lined with crystals of quartz, feldspar, tourmaline and aquamarine, some of which are of good gem quality. These have been little explored or exploited, possibly because the far greater value of the sapphires nearby has overshadowed their possibilities. The sapphires themselves are the result of interaction between intrusive pegmatites and a band up to 100 feet wide of pure green actinolite, forming contact metamorphic minerals including corundum (i.e. sapphire), some of which is of the clear bright 'electric' blue colour so highly prized by connoisseurs of gems. Most mining operations in recent years have been attempts to follow the contact of these pegmatites with the actinolite, in the hope

of finding pockets of soft kaolin containing crystals of sapphire, 'as thick as plums in a pudding', as was described in an early report, and which could be easily scraped out by hand.

Although Batote is one day farther away from Calcutta, by commercial transport, than Dalhousie, the route to Atholi through Batote and Kishtwar is easily the quickest and least difficult. From Dalhousie to Atholi took us nine days, as against six days from Atholi to Batote. But the route we took through Chamba and Pangi, while more difficult, is far more beautiful and interesting than the other, and I would not have missed it if that had saved a week. I had hoped to do some moderate climbing while in the vicinity of the mines, as there are a number of tempting 20,000-foot peaks near by. With the limited time at our disposal, however, this was out of the question. It seems certain that many of the 18,000- to 20,000-foot peaks in this area have never been scaled, and some of them would offer, as near as I could determine from distant scrutiny, enough rock and rope climbing to please the most ambitious. In addition, the country is exceedingly beautiful and the trails up the valleys excellent.

Our food on the trip consisted largely of K-rations. These are compact; however, for men doing protracted heavy exercise they provide neither sufficient calorific value nor are they sufficiently filling to do more than somewhat appease hunger. Although both Capt. Rice and myself became rapidly acclimatized to the altitudes we reached, the march of approximately 325 miles in nineteen days without rest was a bit too much for us in our soft physical condition, and toward the end we found our stamina decreasing rather than increasing. This was probably partially due to the diet.

I hope to go back some day, and make another, but this time leisurely, trip through the same country, and try one or two of the peaks. For the success of our 1944 trip, I am deeply indebted to Mr. J. B. Auden of the G.S.I. and the Himalayan Club, who lent us equipment and gave us excellent advice, and to Mr. W. D. West of the G.S.I., besides Mr. Slattery and many other people along the way who gave us assistance when we needed it.

THE AFDIGAR PASS IN HUNZA

R. C. F. SCHOMBERG

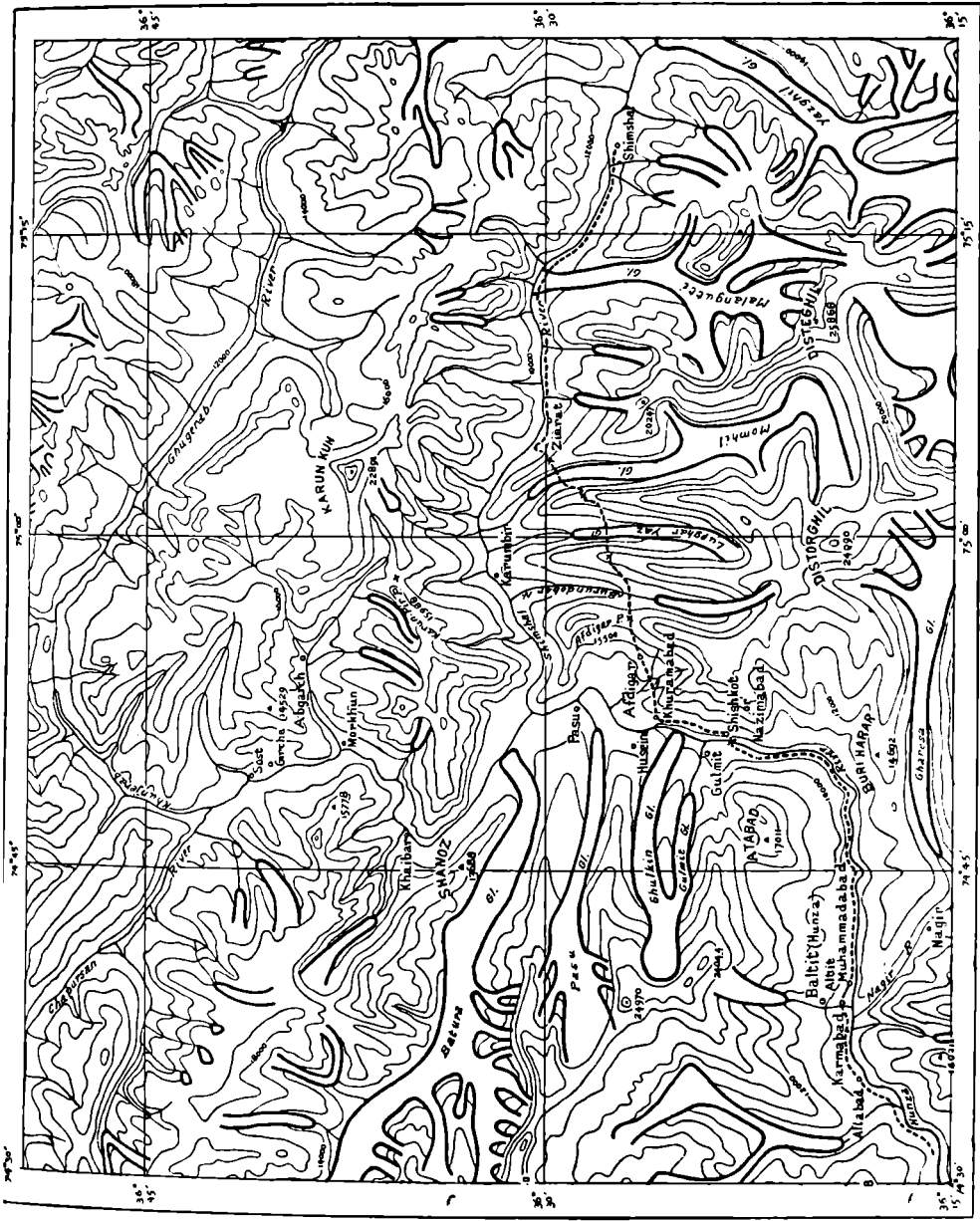
EARLY in the summer of 1945 I arrived in the Gilgit Agency on my way to the Shimshal valley (incidentally the spelling in the maps and elsewhere is Shingshal, which is incorrect) in the eastern part of the Hunza State. I had previously visited this area, and had done so by the Karun Pir pass, 15,988 feet, which is the normal approach to this remote valley during the summer. Having crossed this pass no less than three times, I had no wish to do so for a fourth, as there can be a monotony even in high places, and there is little pleasure in scrambling over a well-known pass.

On our arrival at Karimabad in Hunza, where the Mir resides, I was told that there was another approach to the Shimshal, over the Afdigar pass, and I was assured that this route was quicker, nearer and far less laborious than the Karun Pir. Indeed, I learned that a few years ago, when Mr. Eric Shipton and his party arrived in the Shimshal, as narrated in that jolly book *Blank on the Map*, one of the villagers took this route to inform the authorities of the coming of these strangers, and reached the Mir's palace in twenty-four hours. This is an impossible record even for a stout Shimshali hillman, but it is a good effort as a pleasing piece of mountaineering romance. Mr. Shipton would be shocked to hear that there was a difference of opinion in Shimshal whether his party were Germans or Chinese. Perhaps it was as well that these visitors proved to be neither.

My informant about this new way to the Shimshal area was the arbab or headman of that place, and he had been summoned to Hunza proper by the Mir to make arrangements about my journey. I should like to mention that the Mir, Mohamed Jamal Khan, had just succeeded his father. I had known the new ruler from boyhood, and I cannot speak too highly of his courtesy and help.

The arbab was a pleasant, elderly man who knew no language except his native Wakhi, a Persian dialect, as the people of Shimshal differ in speech and race from their neighbours in Hunza proper. After talking it over, we decided to try this new road; so after bidding farewell to the Mir we set out.

Our route lay up the Hunza valley, on the right of the river, 10 2 miles short of Gulmit. There the river was crossed by a small wire suspension bridge to Shishkut, now renamed Nazimabad, a growing hamlet on the left bank of the river. From there the track, such as it was, followed the left bank of the river to the Afdigar pastures.



Map by G. Whittle.

and the pass itself was immediately above, leading over the watershed on the left of the main Hunza valley into the outlying part of the Shimshal area.

From Shishkut we took supplies for four days, as the arbab, our guide, cicerone and chaperone, had told us a dozen times that we should reach Shimshal village in four marches. His information turned out to be incorrect. We had believed him up to now as he was the only person who had told us of this unknown route, and we were grateful to him for enabling us to traverse a way hitherto unvisited by any paleface and decidedly not on the map.

On starting from Shishkut, we at first followed the edge of the main stream, and were at once entangled in a series of terrific scrambles over rocks, involving in some places real rock climbing. The coolies were wonderful. We shoved, pushed, hung on by our eyebrows and toes, and at last reached a spur opposite the village of Huseini on the right of the valley. This piece of the road explained eloquently and silently why the Afdigar route was not fashionable, even amongst a race of climbers. Incidentally, the whole of this difficult march could be avoided by crossing the Hunza river at Huseini or at Pasu, by raft brought up from Gilgit. This narrative will show that there were other drawbacks to this route.

From the spur aforesaid we left the river, turned inland and moved gently up over a grassy plain, until we came to two large apricot trees, with some huts nearby, which formed the summer settlement of Khoramabad. In spite of the abundance of water, the only irrigated land consisted of a few grassy fields, and the inhabitants said that the water arrived too late in spring, and stopped too soon in summer to be of any use. They had tried, as some empty fields showed, to cultivate barley, but the water difficulty prevented this.

Our camp was under the apricot trees and we could see where the Afdigar pass should be. A glance showed that it would be impossible for laden coolies to cross it in one day from where we were. It meant a stiff ascent of at least 7,000 feet on end, and it was too much to expect from my party, willing and tough though it was.

The next day we left the apricot trees and the chikor, and rose steadily up the face of the hillside. We were in the game preserve of the late Mir of Hunza, Sir Mohamed Nazim Khan, grandfather of the present Mir, and at first we had a well-marked path to follow; the old Mir did not believe in walking, and always rode a yak on his shikar trips.

At 1 p.m., after a steady pull, the coolies said that they had had enough for the day. There was no other camping ground farther on and so we halted for the night at what I was told was Afdigar

itself. There was a ramshackle shepherds' hut, two tiny springs, abundance of wood and a pleasant level patch of ground for the tents. The aridity of the whole area was extraordinary, and I could well understand the failure of water lower down. Even now, early in the year, there was only just enough for us. There were many flowers, primulas and anemones especially. The growth of the juniper was remarkable; really fine trees were everywhere.

By this time, we had, I grieve to say, abandoned all confidence in the arbab, and discounted his remarks so much that conversation between us had degenerated into a few acid comments on his lack of knowledge.

The view from this camp was magnificent. We looked west over the very heart of the Hunza Karakoram. The peaks and glaciers of this wonderful mountain region were unfolded before us, and revealed secrets which anyone following the main route on the right of the valley would never know. The panorama of glistening snow and ice was far more majestic than anything that the Karun Pir had to offer, and amply compensated for any difficulties we had met with. We were exactly at the right height and at the right place to see the beauties of the Hunza mountains.

The following day was our third march from Shishkut, and we had to cross the pass. We were doubtful where it lay, there was no track of any kind, the arbab had no views at all, and we just had to grope our way up. We had sent, the evening before, some of the loads half-way up the hill, a device which saves much trouble on the actual day if the march be a long one. My headman, Daulat Shah of Hunza, long inured to exploring strange by-ways, went ahead and eventually found the pass. The climb to it was stony and slippery, but there was little snow as a rule. From the Afdigar camp we went up a grassy slope for an hour and a half, then over stone, followed by an awkward chimney for 200 yards, next up a very steep hill face for 250 yards and along a narrow ridge. The last 400 yards were very hard, especially on the coolies. In $4\frac{1}{2}$ hours after leaving camp, we were at the top. Owing to an accident to my hypsometer I was unable to take any altitude, but I estimate the height at about 15,500 feet. Below, on the Hunza side, the whole vast expanse of mountain floated serenely in a cloudless sky. In front and below us, towards Shimshal, we could see the dome-like head of Distorghil, 24,090 feet, and not to be confused with Disteghil. Distorghil is at the head of the Lupghar Yaz valley, which is parallel to and immediately west of the Momhil glacier.

The Afdigar pass was a knife edge, with very little snow. It was not a place to linger on, and at 11.15 a.m. we started to go down. The descent was precipitous, indeed it was a headlong scramble

over shale, and I swore that I would never attempt this pass in the reverse direction. There was no view, except to the north-east, where the great peak of the Karun Kuh of the map, height 22,891 feet, was visible. This was called by the men the Ghamerz-i-Kisht. In about 2½ hours we had reached the foot of the hill, and came to a stop in the narrow nala of Burundobar (the Hunza name) or Shu-gardan-i-zor in Wakhi. This is marked on the maps as the Ghutulji Yaz, but none of my men, either Hunza men or Wakhis, had ever heard of this name. Here we spent the night. The water in the nala was inky black, flowing from a dirty little glacier, but there was a spring of good clear water, and ample firewood; so we were very comfortable. We found that we were wedged in a defile, and that the only exit was up the hillside opposite, a most unpromising route. We attempted to follow the stream down, but it soon entered a precipitous defile, and all progress was impossible. Even if we had gone down to where it joined the Shimshal river in the Pasu defile, it is most unlikely that we should have been able to find a way up that valley. The defile is impassible except for a couple of months in winter, and even then it is necessary to ford the stream a number of times.

Although the crossing of the Afdigar pass had taken us a good deal longer than either we or certainly the arbab had expected, it was comparatively easy in comparison with our next stage in the journey out of the narrow Burundobar nala. We could see from our camp that it was going to be a laborious business, and so it proved, and the ignorance of the arbab was a further and unexpected complication. The poor man had not the remotest idea of the way, and once again my men had to go ahead and find out the route. It was incidentally a curious trick of the coolies that they never followed the exact path which the advanced party marked out for them with stones. It nearly always happened that the coolies, chiefly I fancy to assert their independence, chose some other way, often a mere deviation but enough to show that they had their own ideas. They were usually wrong.

So once again Daulat Shah, with a couple of Shimshalis, led the way, and although he made unavoidably several false casts, did the job very well. The arbab trudged behind and took no part in the proceedings. I felt sorry for him, but as he obviously knew nothing and, when appealed to, had no opinion to offer, our sympathies vanished. I doubt if he had been over this route since the distant glad days of his blythe boyhood, some fifty years ago. No wonder his memory was a little obscured by time.

We left at 6.20 a.m., crossed a snow bridge, went up a narrow cleft in the hillside, and then up the open slope. We then groped

our way through a chimney, under a natural arch or short tunnel, and emerged on the stone and shale slopes high above the floor of the nala. Our main problem was to strike the right place over the watershed between the Burundobar nala, in which we were, and the Lupghar Yaz Nala, which adjoined. It would not do to reach the crest at any place, because we should not be able to descend on the other side. As a matter of fact, this is exactly what happened, as when we did reach the top, we found there was no way down, and had to scramble along the watershed searching for the proper place which led down. For a party with no loads, it was not so bad; but for our men, all carrying an average weight of kit, it was a very arduous business. The men had already climbed a good height, and every unnecessary yard they went was a real infliction. Even for unladen men a false cast was tiring enough.

It took us a long time to reach the top of the watershed. We had to use the ice-axe, man-handle loads, shove, push, use the rope and indulge in every device until after over nine hours' hard work, we found ourselves at the top. Indeed the Afdigar pass was a parody of a pass compared with this wearisome climb. The poor arbab came in for torrents of abuse. The coolies, tired, hungry and cross, naturally reviled him, and after all he had brought us here. If we had known that he had forgotten the way, we should have made different arrangements, economizing loads, and easing the men. I think perhaps that abusing the poor old boy rather relieved the coolies and took their minds off the fatigue and annoyance of the march.

It was a great relief to me when we arrived at the crest and found that we were again on another knife edge. There was a good deal of snow about, which was providential, as it meant that there was water for the men. Later in the year this would have disappeared, and the climb would have been much more tiring.

On the far side there was no water at all. The descent was even steeper than from the Afdigar, and although we passed many excellent sites for a camp, with abundant wood, we had to push on, as there was no water to be met with. At last we reached the rather rimy glacier that occupies every nala in this area. Here we found that we had water but no wood, the usual predicament in these parts where the one or the other of these requirements of a camp was always missing. On the far side of the glacier, a good way off, I proved, we could see the summer quarters of the arbab, and even one or two persons moving about. We knew, and the coolies knew even better, that by pushing on we should have all we needed, for our wants were few and easily satisfied. So we plodded over the glacier, and camped just short of the huts and sheep fold of our

friend. We were thankful to camp on a piece of level ground, after having been over twelve hours on the way.

As we had been told in Hunza that we should arrive at Shimshal village in four marches, we had only taken supplies for that time. We had now not enough to carry us to our destination. Fortunately, the arbab was able to sell us 20 lb. of flour, which would just last us, but if we had been able to procure more I should have halted a day in the Lupghar Yaz valley, as the whole party needed a rest. The food question, always the one anxiety on these journeys, obliged us to go on. Some of the men were anxious to be off: those that came from Hunza wished to go home, back over the Afdigar pass, as they were afraid of the rope bridge across the Shimshal river if they took the usual route via the Karun Pir. It is curious how all these hillmen detest the local bridges. They are fond of laughing at the sahibs, the Kashmiris and the like, for being nervous when going over a rope bridge, or one of their 'duts', a contraption not unlike a 'flying fox' type of bridge; but in fact the local hillmen dislike these methods quite as much as any outsider. Indeed, I have known Shimshalis ford a stream, with difficulty and danger, sooner than tackle a bridge. We saw six men leave early for Shishkut, which they said that they would reach the following day. Even so, that meant longer than the arbab's estimate. It shows, however, how indifferent the hillman is to an ascent. I doubt if it makes much difference to him if he goes up hill or down hill, and I have often been amazed at the extraordinary short cuts that he takes. These oblige him to struggle up some cliff or down a precipice just to save a few yards of easy road.

We could well spare the men who left, as we had eaten their loads of flour, and we picked up one or two men at the arbab's steading.

On leaving this camp in the Lupghar Yaz valley, we went over open grassy downs for a few miles. We had not gone far before the arbab, his son and two other men arrived with food for the party. The feast consisted of great pots of 'dao-dao', a soup or mixture of sour milk and flour, highly esteemed and very filling. It was alarming to look at, but every one fell to, and devoured the mess with avidity. I saw my Hunza boy, Mahbub Ali, a sophisticated youth whom I had left in Calcutta when I was in China, tucking into the mess with gusto. It was wholesome, filling and free. For me, the arbab produced a venerable billy-goat, father no doubt of many kids, but long past parenthood, and also a sheep. We thanked him warmly, excused ourselves from taking the beasts, but accepted some of the local bread, called 'khish', made with butter and very palatable.

With our bellies bursting with food, we plodded on, little realizing how far we had to go. The track soon left the easy downlike pasture (for there was a path) and then grew stonier, rising steadily to the watershed on the right of the valley, between the Lupghar Yaz and the Momhil. We descended from the crest into the Momhil valley, which seemed entirely occupied by its glacier. There was no grass, except at the extreme top of the valley, on the left: juniper and brushwood were scanty, and the surging glacier monopolized the entire valley, bursting out of its trough. At the head of the valley, the snows were superb, the highest point being 24,860 feet. The dome of Distorghil (24,090 feet) was almost wholly within the Lupghar Yaz, but we could see some of its snow overflowing into the Momhil.

Although the moraine was not difficult, it took us nearly an hour to cross the glacier, and even to get on to the ice itself was an awkward business, as the clay sides of the trough offered no foothold. There were beautiful little lakelets of blue water dotted about the glacier.

We had to leave the Momhil by toiling up the right side of the valley, to a regular pass, and from there we went steeply down, at first over a rough rock trail, then down a soft shale slope, with clouds of dust rising high above us. We should, of course, have halted somewhere in the Momhil valley, but we all pushed on, for no particular reason. Perhaps we failed to realize how far camp was away. After this long steep drop from the crest of the watershed we arrived at the Shimshal river, but it was impossible to camp, as we had hoped. For one thing, it was not safe, and the danger from falling stones and earth was considerable. So on we went, shuffling in the heavy sand, or cursing over the stones. It was not until we had been thirteen hours on the road that we were able to reach camp, and by that time our thoughts were fixed solely on tea, food, and changing our feet, as the soldier would say. Jorums of hot tea soon dissipated the peevishness which possessed us all.

We had now joined the customary route from Hunza via the Karun Pir. The next day we reached Shimshal village, after six days of steady marching and without any loafing on the way. It was a saving of perhaps two days, but I doubt if the exertion made it worth while. Even the last march from the camp by the Shimshal river to the village itself was a long and boring one. The river had cut away the old road, we had to make considerable detours and it was an unexpected fatigue. It took us eleven hours to reach the hamlet. We should have halted half way, though as we were likely to spend several days in Shimshal itself, it did not matter very much. Generally speaking these long marches are a false economy, and it is always wise to make shorter ones, especially for the sake of the coolies.

It will be understood that we were glad when we arrived at the village. I think that if we had known the difficulties of the new route, we should have thought twice about taking it. One thing I certainly should have done, and that was to send all the extra loads via the Karun Pir, and take merely bare necessaries over the Afdigar pass. The conspicuously bad march from the Burundobar to the Lupghar Yaz, as trying a piece of hill travel as one could find, did not justify carrying a single extra pound of kit. The gradient is most severe, and the mere difficulty of the terrain was a serious problem. The coolies did wonders, and I cannot speak too highly of them. There is one point in favour of the Afdigar route, and that lies in its being inconspicuous.

I think baiting the poor arbab relieved the men of much of the tedium of the journey. It was nice to have an Aunt Sally always present.

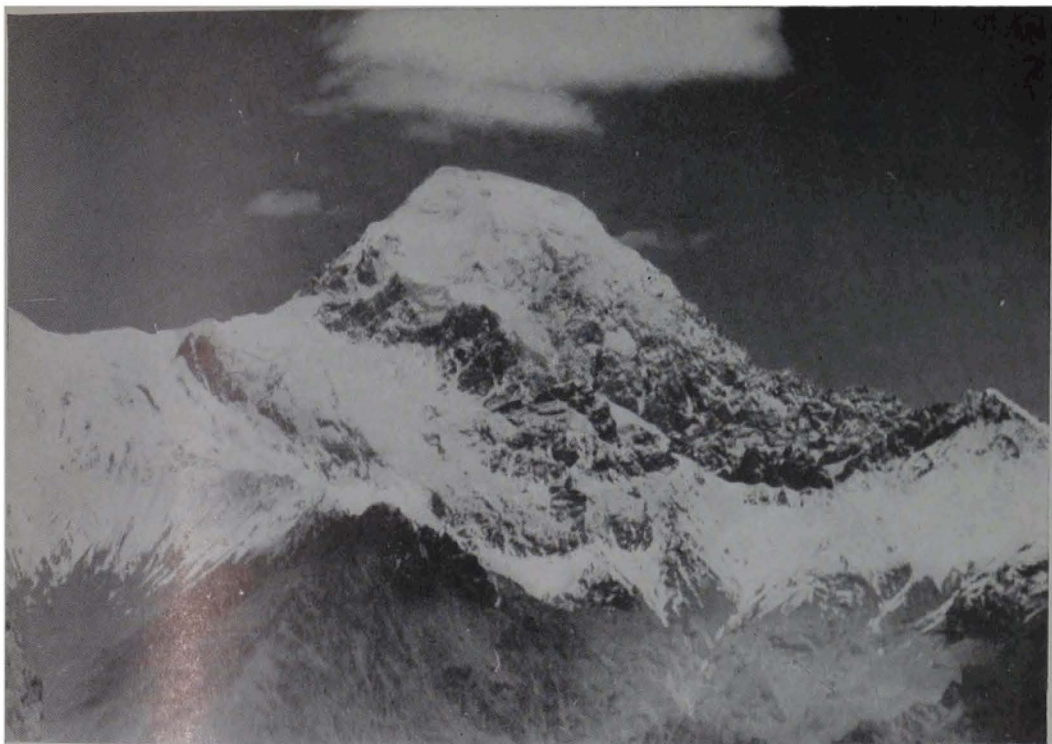


Photo by R. C. F. Schomberg

1. *Ghamerz-I-Kisht Peak in Shimshal from just below crest of Afdigar Pass on Shimshal side, looking north*



Photo by R. C. F. Schomberg

3. *Headman of Shimshal and son*



Photo by C. W. F. Noyes

1. *Ladakh peaks, from Glacier Three*



Photo by C. W. F. Noyes

2. *Above Glacier Three of Thajiwas Valley: Valehead Peak on the left*

AIRCREW MOUNTAIN CENTRE, 1945

J. A. JACKSON

(*Note.* An account of the beginnings and ideas of the Centre will be found in the *Alpine Journal*, No. 270, p. 74. It was started in August 1945 as a rehabilitation and physical training centre for aircrew. During the autumn months of that year climbing and trekking were based on Sonamarg. A number of the climbs done by instructors and pupils are described in *A Climber's Guide to Sonamarg, Kashmir*, published by the Himalayan Club. In the winter a skiing centre was started at Gulmarg, and, in collaboration with the Ski Club of India, the hut at Khillanmarg was used. The first Commanding Officer of the centre was Wing-Commander A. J. M. Smyth. It was thanks to him that this extremely profitable experiment in the training of men among mountains was carried out.—*Ed.*)

THE A.M.C. continued with its programme of trekking and climbing for Aircrew in 1945; again concentrating on trekking in Ladakh as far as Khargil, and on mountaineering in Thajiwas.

In Thajiwas (Glacier valley) several ascents were made of Umbrella peak (15,700 feet approx.), Mosquito peak, Lesser Thajiwas and Valehead peak (15,528 feet). The Glacier 3 route was again found interesting to work out, and a new north-west route (Valehead PK) to its summit was climbed.

In September, Glacier 2 gave a fine and interesting route to Greater Thajiwas (15,928 feet) (J. Waller, *Everlasting Hills*) on what is thought to be the second ascent of this peak.

The writer feels that the party had considerable good fortune in finding an unbroken sequence of snow and ice bridges by which to cross the glacier, for they must vary greatly in different seasons.

Four new peaks were ascended in the valley, two of them overlooking Glacier 2 and forming the flanking wall of its True Right. The first of these, named 'Cefn Carneth' (High Cairn), 15,750 feet, was ascended by Amphitheatre Gully and the rock wall on the right at the head of the gully to attain the saddle between Umbrella peak and this peak.

During the ascent of the second summit, named 'The Arrow', 15,800 feet, the same route was used to the saddle, then a traverse below the summit of 'Cefn Carneth' to the gully on its south-west. From the head of the gully a pleasant ridge led to the fine pinnacle peak which was named as above.

Kāsim Pahalin Bāl (16,200 feet approx.), the long ridge above Glacier 3, was traversed from the east end to a point named the West Pinnacle and was found to be an excellent ridge day giving nice exposures and fine panoramas. Six and seven pinnacles

approximate to the same height, but three of them were thought outstanding because of position and were named the East, Central and West Pinnacles. The Cairn was built on the Central Pinnacle although doubt remains which is the highest of the three.

The final portion of the West Pinnacle to the col between Kāsim Pahalin Bāl and Umbrella peak was not traversed owing to storm clouds approaching rapidly, and the quick way off was found to be a descent into Basmai Nar.

The fourth peak approximating to 15,500 feet in height rising at the head of the glacier to the right of the head of Durin Nar, was ascended along the north-west ridge from the col between Kāsim Pahalin Bāl and Valehead. The climbers found numerous hexagonal-shaped crystals below the last pinnacle (named the 'Crumpled Horn' owing to its peculiar shape) and one over 1 lb. in weight near the summit, and thus it was named 'Crystal Peak' by members of A.M.C.

In the Zaiwan Area, Peak 15,118 feet (Sentinel Peak) was ascended on 22nd June from Zaiwan F. H., and provided a pleasing mixed day of snow and rock in this month. Route was via the Yam Har and along the East Pinnacle ridge. In August, Peak 15,404 feet, the sister peak of Peak 15,118 feet, was ascended by the West Pinnacle ridge.

The only peak ascended in Ladakh was 'Cumberland peak', 17,150 feet. This was from Matayan Rest House and entailed a somewhat different route from the one used on its first ascent from Suweke Nar in September 1944 (C. G. to Sonamarg, G. Whittle).

Beraz, 17,881 feet, was attempted, but unfortunately the climbers had to turn back at approximately 17,000 feet after a very fine attempt for pupils.

The last climb, an attempt at Nichinai peak, 16,141 feet, was unsuccessful but provided a very fine mountain day.

An attempt was made by the north-east face on 7th October with the rocks covered by fairly deep powdered snow. The north-east face was ascended and then traversed for a little way to the base of the East Pinnacle, which must be given at 600 feet below the summit. A traverse of the last few hundred feet by a pupil would have taken too long, and with the shortage of time the climbers turned and descended by the same route. There were no apparent difficulties along the rest of the ridge, and it is thought that two experienced people would have finished the climb.

One interesting observation during the year was that trekking alone did little to improve results in the A.M.C. Pack Test, but it was found that mountaineering, which usually entailed the crossing of glaciers and ascent of rock to attain a summit, improved the results considerably and equalled those of the skiing season.

EXPEDITIONS

PANDIM (SIKKIM HIMALAYAS), 21,953 feet

DURING a visit to the Guicha La in the immediate vicinity of Kangchenjunga during December 1938, I had been attracted by what seemed to me a feasible route to a col on the south ridge of Pandim, by gaining which it might be possible to follow the ridge to this hitherto unattempted¹ summit.

Early in 1940 my wife and I, with C. R. Cooke, made preparations to attempt the ascent of Pandim by this ridge. In view of the possibility of my being recalled from my then employment for military service, my own participation in this enterprise had to be provisional; but I managed to obtain one month's leave, and in order to prevent the plan falling through we endeavoured to include others in the party. Most climbers in India at the time were not available, but eventually Herr Bernhardt, a Swiss in Calcutta, was added, and it was hoped that Charles Crawford, who had been on Chomolhari with Chapman, would be able to assist in the early stages of the climb. His leave would not permit of his remaining for the whole period.

Within a month of the small expedition starting, both Bernhardt and Crawford fell out, one owing to sudden illness, the other owing to his leave not materializing; my own case was rendered still more provisional by news that I was shortly to be relieved for military duty, and must expect orders to this effect at any time. We therefore left Darjeeling early in May with our plans elaborated, but realizing that they might be cancelled before we could complete them. The party consisted of Mr. and Mrs. C. R. Cooke, myself and my wife, and Dawa Thondup², Anghtharkay,² Kusang and Pasang Sherpa.²

The site selected for Base Camp, high up in the Parek Chu at about 13,800 feet, and immediately below the west face of Pandim, was reached on the 9th May. In the following four days we made a further detailed study of the proposed route, as well as preparations for an ascent of Forked peak. On the night of 13th May, when Cooke and myself had returned from working out a route up the latter mountain, and had carried loads up prior to attempting its ascent, the orders recalling me arrived by special messenger. The result was the hurried departure of myself and my wife for Darjeeling the same night, and the end of our high hopes of climbing Pandim, or even Forked peak.

¹ See Pandim in T. H. Somervell's account, p. 33.—*Ed.*

² 'Tigers.'

In view of the extent of our preparations, and of my personal strong opinion that the route chosen will 'go', it is perhaps worth giving the following details for the benefit of others. Having seen the north-west ridge from the Guicha La (Dec. 1938), and the north face and north-east ridge from the Zemu gap (Nov. 1937), I feel that the south ridge is by far the most likely route for the eventual ascent of Pandim. It should be added that Pandim is a magnificent mountain and is exceptionally easy of access from civilization, for it can be reached from Darjeeling via the Rangit valley and Yoksam in four to five days.

The Route

The south ridge runs down to a clearly marked col at a height of 18,500–19,000 feet, before rising again to a dome or sub-summit, and then continuing in a series of serrations towards Tingching Kang and Jubonu. The immediate approach to this col on the west side is a gently sloping glacier, which soon plunges down in a precipitous ice-fall towards the snout of the Alukthang glacier. The ice-fall itself provides no reasonable approach to the little upper glacier and col, but on its true left edge, and beneath the afore-mentioned dome on the ridge, there is a possible route. Separated from the ice-fall by a steep little snow ridge intersected by horizontal bands of rock, a Y-shaped couloir descends from the steep rocks of the dome. Its foot can be reached without technical difficulty by following the true left lateral moraine of the ice-fall, which descends to the very bed of the Parek Chu at the point where the debris of the Alukthang glacier terminates (this was the site of our Base Camp). From the top of this moraine ridge, an upward traverse over ice (its appearance suggested exposure to falling stones and ice) leads to the small snow fan issuing from the Y-shaped couloir, which is not excessively steep—my observations suggest 40 degrees. Some way up, an obvious branch to the left is then followed, and from the upper end of this it was clearly possible to get out on to the little snow ridge above the rock bands. This ridge in turn leads directly to the right bottom corner of the small upper glacier at the very point where it breaks away in the ice-fall. This, and the ensuing south ridge of the mountain, was our proposed route for 1940.

Schedule

I give below, for what it is worth, a rough schedule for the climb.

<i>Day</i>	<i>Action</i>
Z-3	Establish Advanced Base at the top of the moraine ridge, at 15,500–16,000 feet.



Photo by Dr. W. A. Jenkins

1. Pandim from upper Parek Chu

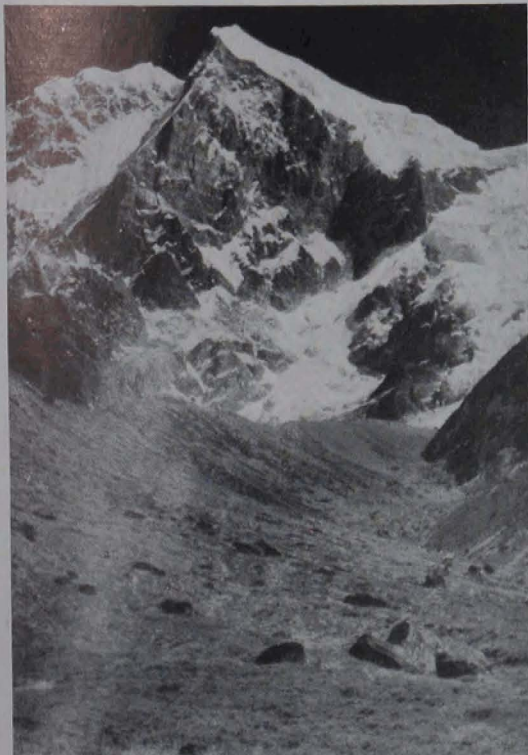


Photo by Dr. W. A. Jenkins

2. S.W. face of Pandim

<i>Day</i>	<i>Action</i>
Z-2	Reconnoitre towards the col, taking part loads for the upper camps (possibly to the foot of the left branch of the couloir, which appeared to be sheltered). Return to Advanced Base.
Z-1	Reconnoitre as far as the upper glacier, taking further loads upwards. Return to Advanced Base.
Z	Establish Camp I just below the col, at 18,500 feet.
Z+1	Prepare the route along the ridge towards the summit, dumping loads on the ridge. Return to Camp I.
Z+2	Establish Camp II on ridge at about 20,500 feet.
Z+3	Attempt the summit and return to Camp I (col).
Z+4	Descend to Base Camp.

Notes. (1) It will be realized that between the Advanced Base and the little upper glacier below the col, a certain amount of objective danger must exist from falling ice and stones; the couloir itself may be swept. In the time we were there no falls were observed, and the couloir does not appear to be particularly scoured. No camp could, however, safely be established on this section of the route.

(2) The initial section of the ridge rising from the col is steep, and may be rock; it did not appear to be easy. Some preparation of this part of the route was, therefore, allowed for.

(3) Our plan (as revised after the inability of Crawford and Bernhardt to join), allowed for two climbers and three porters.

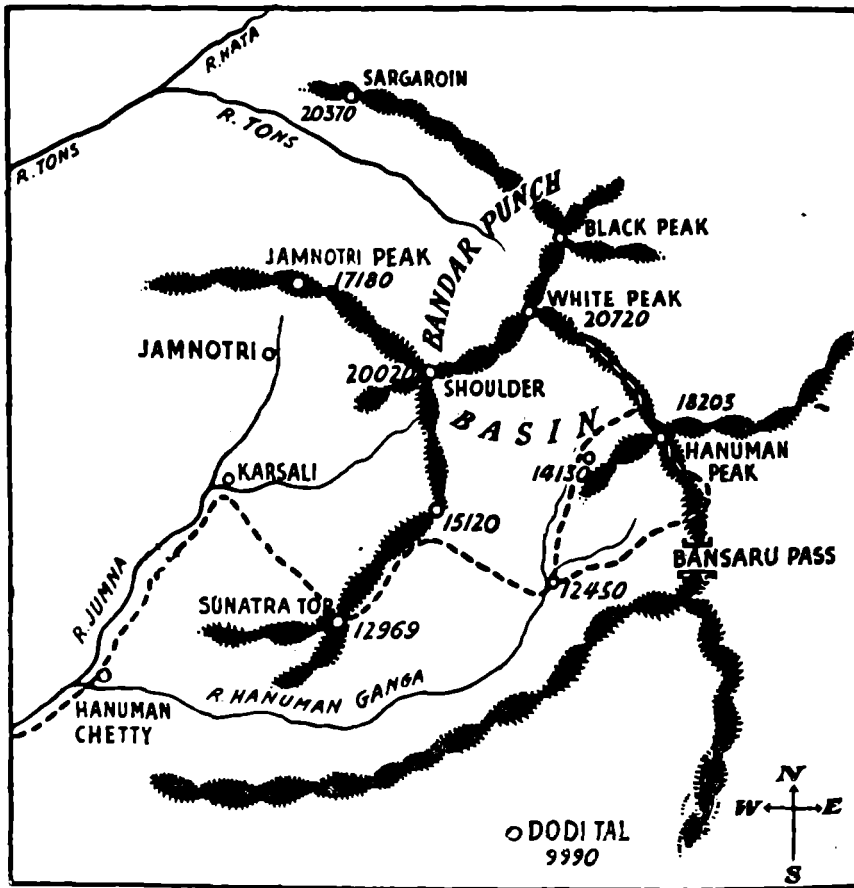
H. C. J. HUNT.

AN ATTEMPT ON BANDARPUNCH, NOVEMBER 1942

My first attempt to get on to the mountain proper was made by following a tributary of the Jumna river which flowed from the direction of Bandarpunch to just below Kharsali village. A huge landslide scree descends into this tributary from the hills above the left bank (south side), emptying into the stream 4 miles above the village. A bivouac tent was pitched level with the top of this scree, and about half a mile nearer Bandarpunch. I reconnoitred from here, attempting to reach a spur that would have brought me to a point due south of Bandarpunch ridge, about 19,000 feet, which I shall call 'A'. I got no farther than the top of a small rounded peak, and from here could look over into an attractive valley (Hanuman Ganga) emptying out of a corrie just below the scree south of 'A'. This corrie looked a more suitable place for a Base Camp, being higher and nearer where my tent was. Also, I found the snow above my land-slide camp to be mostly on north slopes, very deep and awkward.

I decided to go back to Kharsali and try a route I noted to this gully. A good coolie path led up through the forest south of the village, then along a wide grassy ridge to the valley flowing south from 'A'. Here the path descended with the stream, while we climbed to the corrie. The day's march was from the village at 8,000 feet to about 17,000 feet, and covered about 7 miles. It was

as much as I could get those Chakrata coolies to do, and after that I sent them back to the village.



*Bandarpunch (routes shown were taken by A. R. Leyden).
By courtesy of the Alpine Journal.*

Next day at 3 a.m. I climbed from the corrie camp on to the lower part of the spur I had tried previously, and at 7 a.m. was at the top of 'A'. Between me at 'A' and the huge wall-like slopes up to the ridge between the two peaks of Bandarpunch¹ was a wide snowfield lying on a glacier. It sloped from 'A' towards the mountain walls, and tilted eastward into another valley, which looked the best route up, if attempted from the Bhagirathi river, into which it evidently flowed.

I skirted this snowfield along its west edge, just where it fell sharply down into the river at Kharsali, then cut across to the centre of the main mountain wall. Along the foot of this wall was a glacier, bounded on each side by moraines, with the lower half

¹ The two 'peaks' are the 20,020-foot 'shoulder' and the White Peak, 20,720 feet. The point 'A' would be roughly due south of the ridge between them.—Ed.

clear of snow. I crossed just below a 100–200-foot step in the glacier, and then climbed straight up a bit of rib spur on the main mountain.

I got to where I could study the ridge above, which had a cornice leaning over my way, but broken off in places. The climbing was loose but seemed steeper and more firm higher up. There appeared nothing to prevent the cornice being reached at a number of points, and by other ribs than the one I was on; and it looked as if it could be crossed at various places where it had broken. Stones kept falling, and there was a grand ice-avalanche from high on the peak to my right.

I gave up because it was then about 4 p.m. On all this climb I had been continually bothered by the snow, which was deep and sticky in all places except where it faced due south. As I did not fancy retracing my steps, I decided to follow the glacier-moraines down east, and then skirt the bottom of the snowfield where it tilted west and south. A local but icy cold cloud, that had formed at about 4 p.m. just below the ridge, came right down and blotted out my landmarks, and I started across the snowfield too early.

There followed the worst journey of my life, and the only time I have really felt the need of others on lone climbing. The distance was about a mile, and the snow mostly hip-deep, so that I churned up quite a furrow as I went. It was also badly crevassed and taxed everything I knew of snow-work, feeling for the hollow spaces below the surface. It was about six hours before I reached snow-crust I could stand upon. My Indian-made boots (built with cardboard in the soles I discovered) were in bits, and I was frozen up to the knees. But a 1,000-foot glissade down a snow-gully from the west of 'A' thawed out my legs almost to the toes, and soon I could feel them painfully. The pot-holers' headlamp torch, which had been so useful crossing the glacier, was useless by the time I had finished the glissade, and as cloud came down I found it almost impossible to find my camp. I only saw it when the clouds lifted after half an hour. The climb took just over twenty-four hours, and I only rested once for a few minutes. I would suggest that this route up Bandarpunch would be practicable if a camp were pitched close under the walls and an approach made from the Bhagirathi river. The only places that might prove serious obstacles are (1) getting on to the ridge if there were a cornice (at that time of year the winds seemed to be mostly north or west and blew the cornice southwards). (2) Getting round a 'kink' on the ridge just under the main peak, which might involve a tricky traverse, at least on the south side.

BANDARPUNCH¹

ON 27th September 1943, A. R. Leyden and A. C. Mullen left Chakrata for Bandarpunch (20,720 feet). They had with them two Sherpas, Ang Karma and Dawa Thondup. From a point just opposite Karsali on the Jumna river they passed over by Sunatra Top to the southern basin, and camped at 12,450 feet. After a reconnaissance, camp was established by Leyden at 16,500 feet, under the south-east ridge of the mountain. Mullen was prevented from continuing by sore feet, but Leyden reached the ridge and reconnoitred to a height of 19,700 feet. Ang Karma was struck on the foot by a boulder on the way down from the 16,500 foot camp and disabled from further climbing. After two days' rest Mullen's foot had recovered and another attempt was made. They reached the ridge again, but got no farther.

In September–October 1944, Leyden with P. Wormald reached the ridge once more, but they were stopped by bad conditions and soft snow covering steep black ice. They succeeded, however, in climbing Hanuman peak (18,203 feet) from the southern, Bansaru pass, side.

CROSSING OF THE LAMKHAGA PASS (17,330 feet)

HARSIL, near Gangotri in the upper Bhagirathi valley, may well from its situation become an important climbing centre. Convenient passes which connect it with the higher valleys to the north are of interest to future parties. In May–June 1945 A. de Spindler reconnoitred and sent valuable record of the Lamkhaga, the higher of the two Nela passes. The lower but more difficult Chotkhaga pass (16,900 feet) had been used by Marco Pallis (*H.J.*, vol. vi) and J. F. S. Ottley (*H.J.*, vol. xii, p. 27 et seq.)²

Spindler chose the route from Chakrata instead of the more usual Mussourie route, and took mules, which he found less costly and troublesome than coolies, as well as cheaper at Chakrata than at Mussourie. In four stages he reached Nakuri. The same number would be needed from Mussourie, but each would be slightly longer. From there the party advanced to Sukki, coming across one really big landslide *en route*. From Sukki an unsuccessful attempt was made on Bandarpunch; the east side was chosen instead of the Bin Gad (to the south-east) by which Spindler had attempted the mountain in 1944. Sukki was regained on 12th June.

Spindler's two companions departed in the direction of Gangotri,

¹ See *A.J.*, vol. lv, no. 271, p. 173, for a good and full account by Leyden.—*Ed.*

² See also J. B. Anden's account, *H.J.*, vol. xii, p. 19, and photograph.—*Ed.*

while he with two porters left for Harsil and the Jalandri Gad. This valley had suffered severe damage; according to the locals a landslide in 1942 had dammed the river some miles up, and when the dam broke it had poured over, causing large-scale destruction and overwhelming much cultivated land even in the Bhagirathi valley. Spindler camped at Kiarkoti, 12,540 feet, and here learned from one of his porters that the Lamkhaga pass, about which he had had doubts, was in fact the easier of the passes and the one regularly used by the natives. Camp was therefore taken to a site just below a high traverse moraine hiding the steep glacier flowing down from the point 19,550 feet (Lamkhaga) into the Jalandri Gad. These peaks to the east of the valley, rising to some 20,000 feet, would be an El Dorado to a small climbing party. From his camp to the pass took $6\frac{1}{4}$ hours, the going being easy and the glacier of the final portion uncrevassed. From the pass the view included the Chotkhaga pass and much fine country to the east. Natives met at the top of the Lamkhaga definitely recommended it as the better of the two crossings. Spindler camped at Gundar Thadang, 15,200 feet, reaching it at 17.30 hours. He had left at 7.30 that morning.

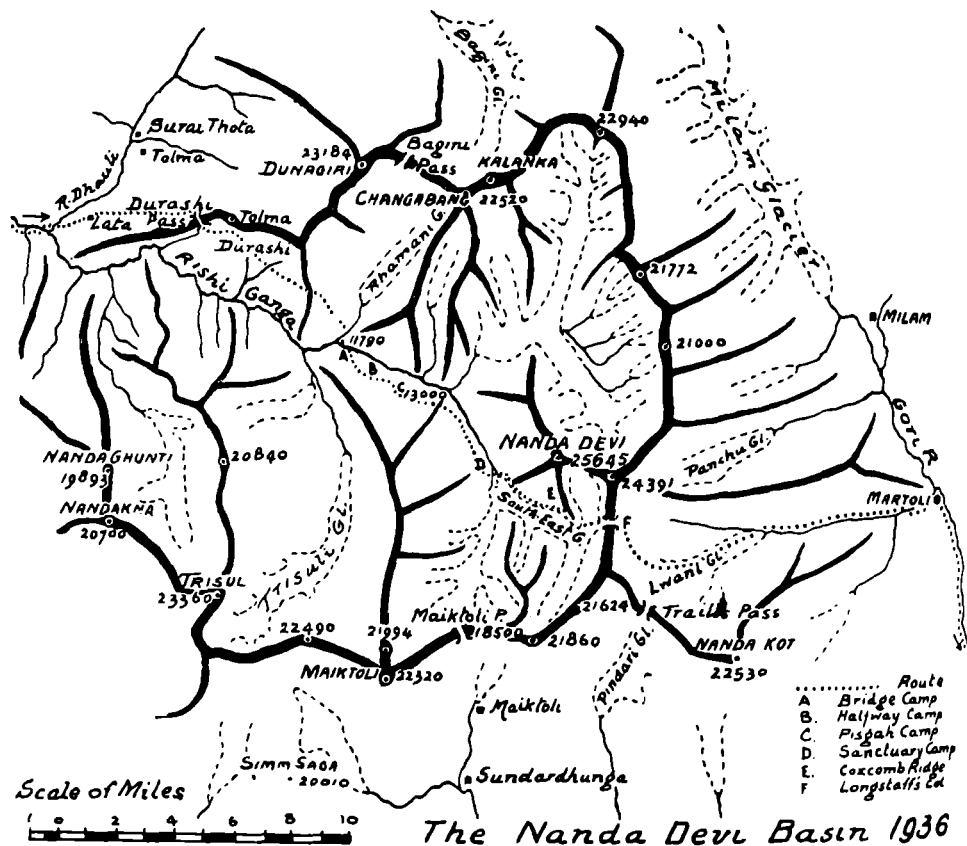
The journey down the Baspa included an idyllic camp at Shakuli Thadang, reached in $7\frac{1}{2}$ hours from Gundar Thadang. From here to Chatkul, the first inhabited village, was $4\frac{3}{4}$ hours walk, and in ten marches more he arrived at Simla. Spindler was very strongly of opinion that the whole stretch of country north-east of Bandarpunch badly needed exploration, and would give an ideal mountaineering holiday.

GHARWAL AND THE KUMAON

In May 1943 D. Gould and C. W. F. Noyce visited Bhuna from Ranikhet and explored the south-west ridge of the Trisul massif to a height of between 17,000 and 18,000 feet. They then descended to Sutol and ascended the Nandagini gorge to the West Trisul glacier. They climbed the north ridge of Chananian Sankar (16,586 feet). A visit was paid to the Gohna lake beyond Ramni.

In May 1944 J. G. Rawlinson and C. W. F. Noyce ascended the Sundardhunga valley south of Nanda Devi. They turned west up the Sukeram glacier and climbed what from the map and glimpses through cloud appeared to be Simsaga (20,010 feet), immediately opposite the Sanctuary outer wall. After descent to Sundardhunga they climbed through the Maiktoli gorge to Maiktoli, and on up to the 17,500 foot col between south and east Maiktoli peaks. Rawlinson had to return. Noyce ascended a second time,

and climbed South Maiktoli peak (19,430 feet)¹ from a camp at 16,000 feet. He went round by way of Khati and Phurkia on to the Pindari glacier, finishing with an ascent of a small rock aiguille, 15,050 feet, to the south of it.



On this expedition efforts were made to train the Dhotiyl porters in snow and ice work. Besides being a most lovable people they would with equipment and training make very competent mountaineers. And, if they could overcome their religious prejudices sufficiently to be willing to share their sahibs' tinned food, they might carry really high.

NOTES ON NANDA GHUNTI,² 1944

We chose Nanda Ghunti (20,700 feet) as the most readily accessible peak of its size and character in Garwhal, and we had been

¹ 'South Maiktoli peak' is Baujuri on the new $\frac{1}{2}$ -inch map. 'East Maiktoli peak' is Panwali Doar (21,860 feet).

See *Alpine Journal*, No. 267, p. 166, and No. 269, p. 403, for fuller account; also Goodfellow's note on Nanda Gunti in this number for ascent of Nandagini, and map showing Nanda Ghunti (marked in the old fashion as Nandakna) and Simsaga.—Ed.

² The name Nanda Ghunti has now been generally adopted instead of Nandakna



Photo by C. W. F. Noyce

1. *East Maiktoli Peak—Nanda Devi
behind*



Photo by C. W. F. Noyce

2. *Peaks of Simsaga group*

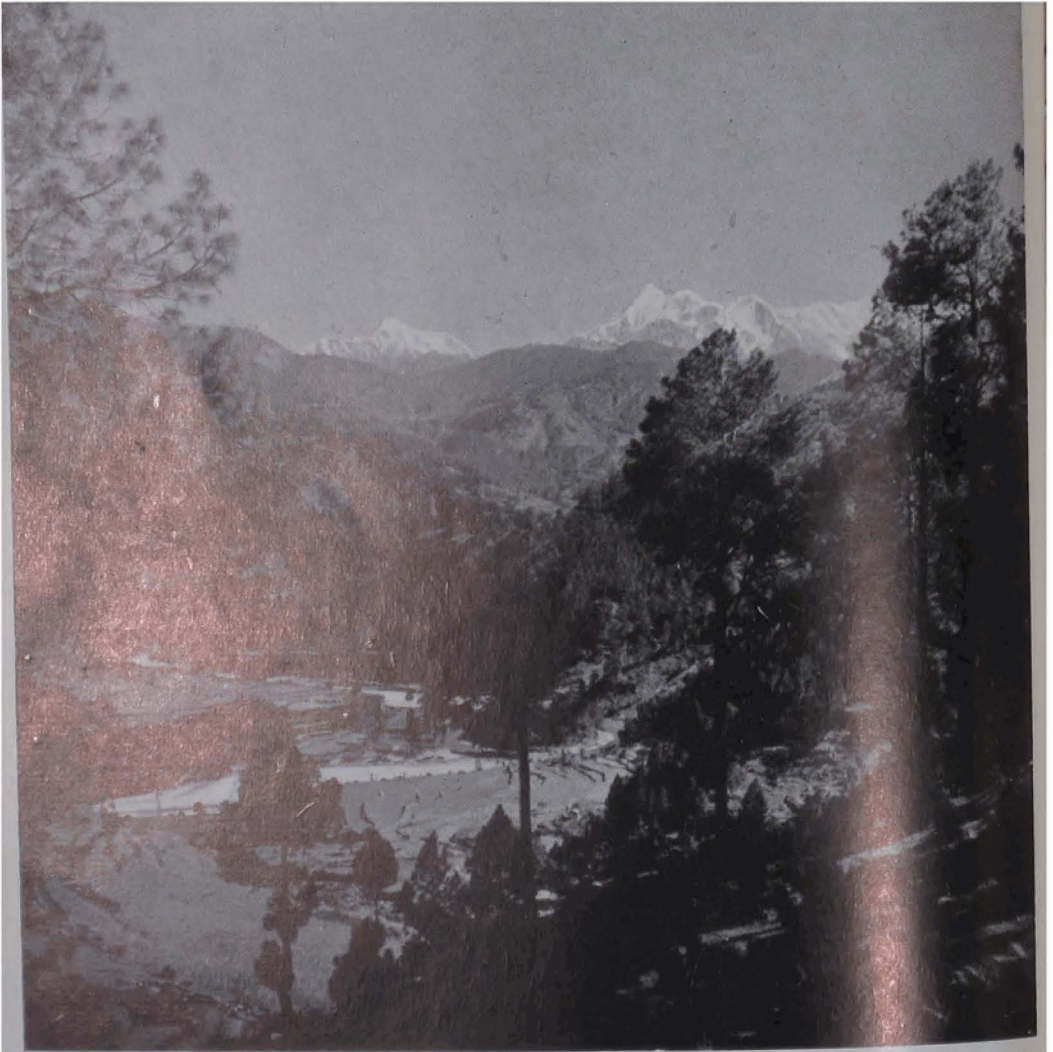


Photo by B. R. Goodfellow

1. *Pindar Valley with Nanda Ghunti and Trisul*

inspired to visit Garwhal by the writings of Meade, Smythe, Shipton and others who so praise its scenery and people. Moreover, we had been able to discuss the district with Wilfrid Noyce, who visited it in May 1943. Also Shipton in *H.J.*, vol. ix (1937), p. 85 onwards, had described the Ronti glacier and pass and his descent of the Nandagini; his two photographs, Nos. 7 and 8, illustrating this paper gave us some idea of the north and north-east side of the mountain. Noyce had a number of photographs taken from Point 16,586, due south of Nanda Ghunti and we were able to set up some of these stereoscopically. They enabled us to study the south face and east ridge of the mountain in some detail.

The plan which we developed was to cross the Ronti pass (about 17,000 feet) between Nanda Ghunti and Trisul, from the head of the Nandagini; to establish a base camp on the glacier illustrated by Shipton, which runs east from the saddle between Nanda Ghunti and Ronti; thence, we hoped to attempt Nanda Ghunti by the north ridge shown well in profile in Shipton's photograph on p. 86. Our only misgivings arose from his remark on p. 86. . . . 'The saddle reached by Longstaff and Rutledge . . .'; this was clearly well up the north ridge, and we wondered why they had not gone farther. We hoped, however, to climb Ronti if Nanda Ghunti proved too difficult.

Our march from Baijnath on the 9th October went according to schedule and is too familiar to need description. We left the main route at Kanol and took a short cut down a steep path to Sutol through a magnificent forest of deodar and sycamore, then in their autumn colouring, which made a fine setting for the stupendous background of Trisul. Throughout this approach we had frequent views of the upper part of the south ridge of Nanda Ghunti; and we surveyed it thoroughly with our glasses.

In Sutol that admirable character Subedar Umrao Singh made all our arrangements, providing a guide and extra porters for the upper Nandagini gorge. The route up this is much overgrown and took us two full days with a halt on the way at Lat Kupri, where there is a perfect camping ground of unforgettable beauty. We put our 'base camp' at the foot of the glacier coming down from the southern half of the great amphitheatre below the west face of Trisul; the best site is behind the northern moraine. It was disappointing to find this to be the limit of wood, although the height, so far as we could judge, was little over 12,000 feet.

We now knew our form well enough to realize that the time at our disposal and our own state of fitness and equipment made for the southerly and higher of the two peaks (that seen from Ranikhet). Ronti is the name given to the former Nanda Ghunti. Shipton, *H.J.*, vol. ix, p. 85.—*Ed.*

it out of the question to establish and maintain food and fuel supplies to a proper base camp beyond the Ronti pass. This ruled out the northern approach to Nanda Ghunti. We dismissed all idea of the East ridge, since, although we might hope to reach the east peak of Nanda Ghunti with no insuperable difficulty straight up from the Ronti pass, a full mile of ice ridge separated the east peak from the summit.

Our surveys and studies of the south face of the mountain had made it clear that the only reasonable route lay ultimately up the steep ridge running due south from the summit, which from Kausani had appeared to be the higher of the twin tops of Nanda Ghunti. This ridge was, according to our calculations, about 800 feet in height and rose at a very steep angle. To the left of it was the great west face, of impossible steepness, and to the east, an array of formidable hanging glaciers. The only approach to this south ridge was a twin rock buttress about 1,700 feet in height, divided by a curving couloir. The lower part of this was screened from view during our approach march, but we could be certain that only the eastern half of the upper buttress was safe, as a menacing ice bulge capped the western half. Noyce's photographs led us to expect no difficulty in reaching the base of the buttress up the more southerly of the two glaciers which flow eastwards from the hanging glaciers on the south face of the mountain. Realizing that we should have no time for anything else if we failed, we decided to attempt this formidable face. We moved our principal camp from the head of the Nandagini gorge to the moraine of the latter glacier, and found an excellent flat site, a veritable sun-trap at about 15,000 feet. In mid-October it was bitterly cold at night, and we had difficulty in getting going in the mornings before the sun reached us; it did so late in the day, as we were directly in the shade of the vast west wall of Trisul, whose summit was only three miles away. We planned to make our first forward camp on the level glacier, below the buttress, and the second camp on the crest of the buttress, or just below it on rock, leaving a full day for the short final ridge.

Our progress up the glacier was unexpectedly slow. There had been a month of unbroken fine weather, and the crevasses were wide open. We camped the first night at about 17,250 feet. The two of us in the climbing party and our two Sherpas slept in pairs in the excellent bivouac tents of the 1939 Polish expedition. It was cold, and we had a light snow shower in the night. The following day we moved on up the glacier by the route we had surveyed from below. On our right was a considerable ice-fall, under the hanging glaciers, and on our left the glacier was much

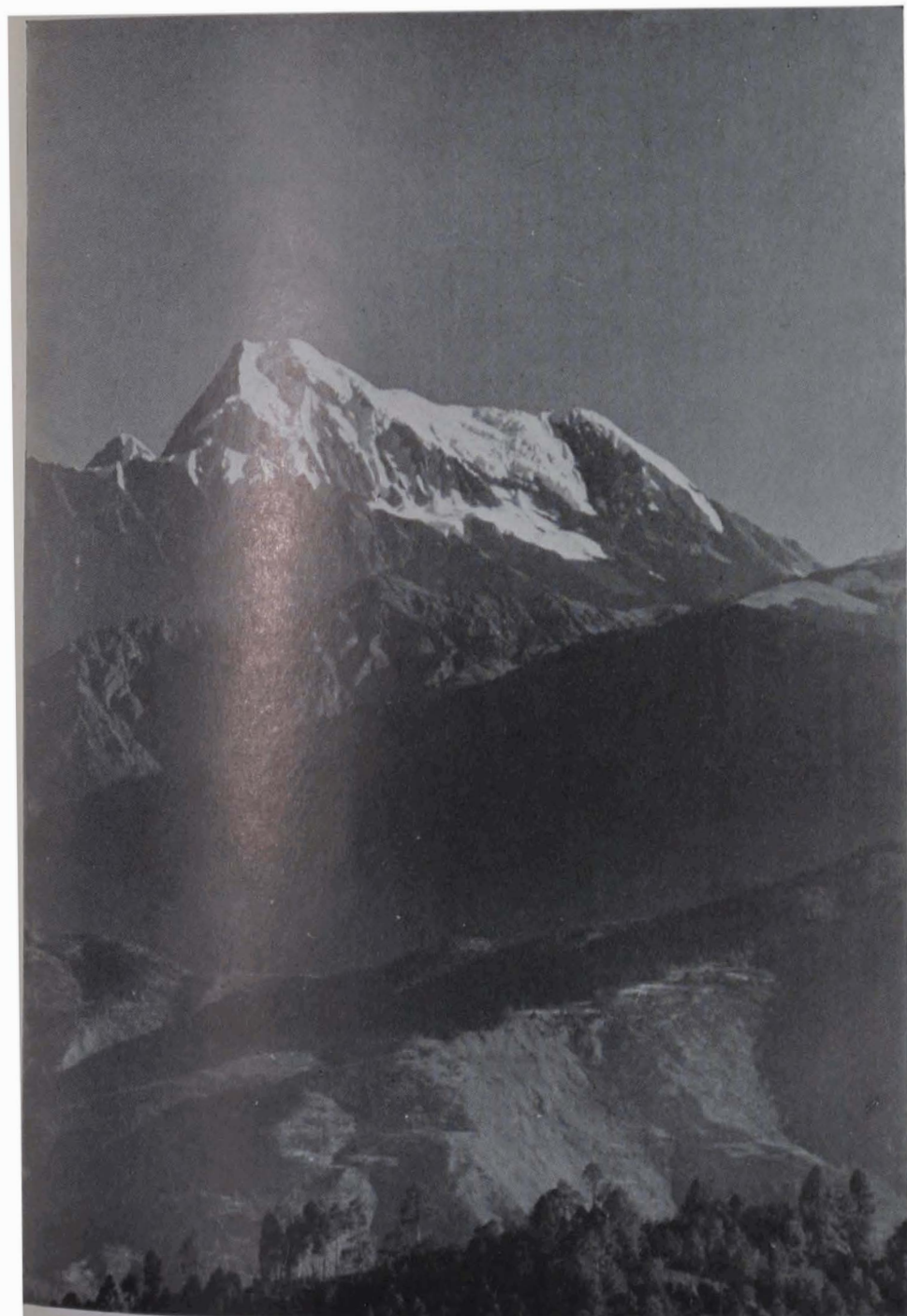


Photo by B. R. Goodfellow

2. Nanda Ghunti (20,700 feet). Telephoto from Gwaldam

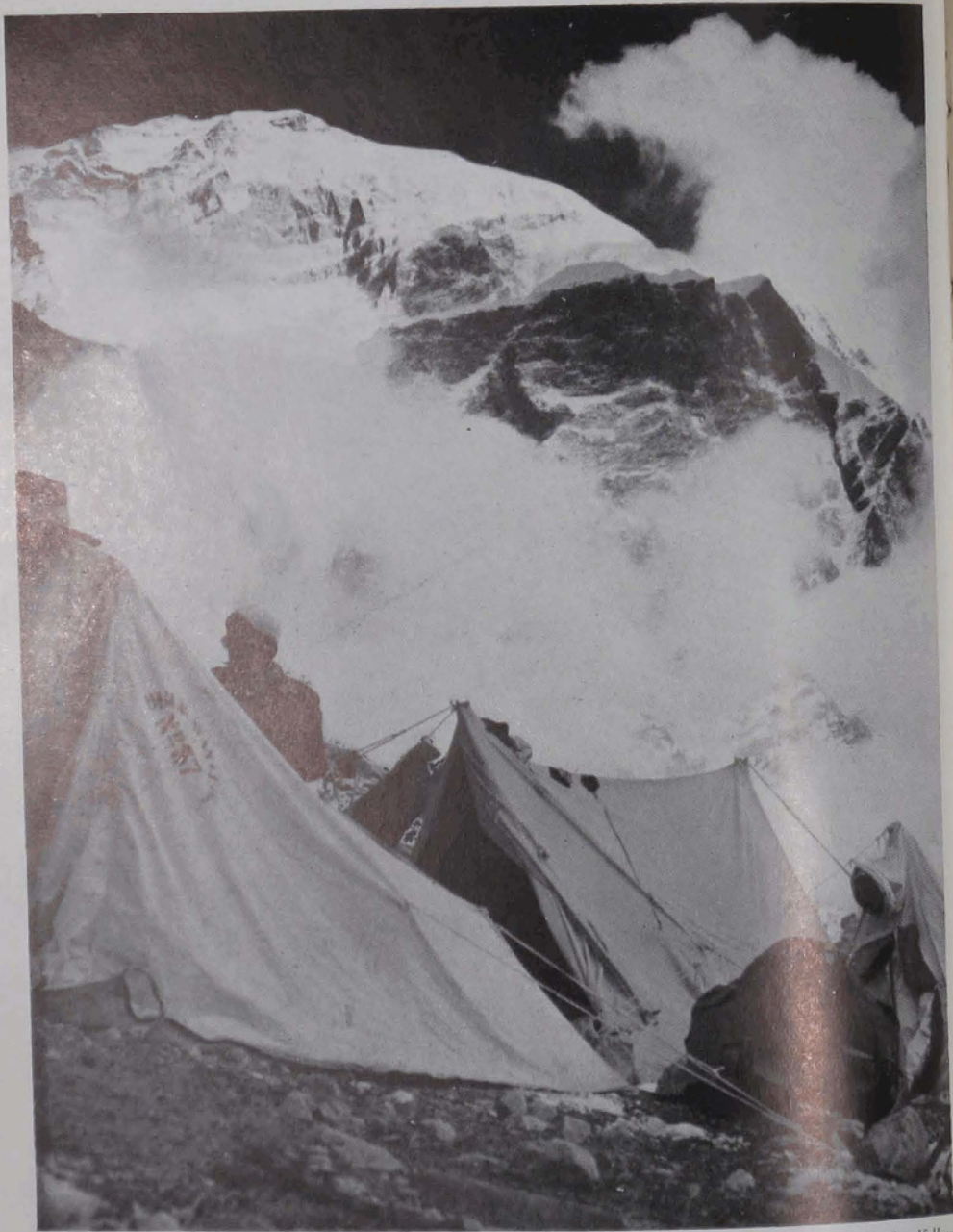


Photo by B. R. Goodfellow

*3. Evening at the base camp, 15,000 feet, below Nanda Ghunti.
Trisul in the sun*



Photo by B. R. Goodfellow

4. Base Camp at 15,000 feet on Nanda Ghunti (view looking south: slopes of Trisul west face on the left)

broken where it swung round a bend under the highest peak of the 19,000-foot 'curtain', between Nanda Ghunti and the Nandagini valley. As we breasted the middle slope of the glacier, above which we hoped there would be easy going, we found to our dismay a series of large crevasses running without a fault or a bridge from side to side of the glacier between the two ice-falls. We managed to turn the first crevasse on the right, through somewhat spectacular ice scenery, but there was no apparent way over the second. Three or four more were beyond. Meanwhile, foul weather had come up the valley and it was snowing hard. It was questionable whether we should be wise to stay where we were directly under the face of Nanda Ghunti, for it seemed unsafe even by Alpine standards. With no visible way ahead, we turned back and descended in foul snow conditions to our camp on the moraine. We had only reached 18,000 feet. The storm was a sharp one and quickly cleared, but snow had fallen right down to 10,000 feet and was about a foot deep at our camp.

From the place where we turned back we had seen at close quarters the lower part of the buttress and the route we had hoped to make up it. The whole of the east buttress overhung its base, but there was one fault, a gully rising from west to east by which the overhang might be turned to give lodgement on the steep slabs above. However, we could see that this was unsafe, for the hanging glacier immediately to the east of the buttress, which descends with astonishing steepness from between the twin summits, poured over into the head of the gully. So, had we reached it, we should have had to attack the great couloir up the centre of the buttress; this would have involved us in at least 1,500 feet of step-cutting in ice, at a high angle in the upper part. This we could not have done ten days out from Delhi, nor could we safely have attempted it until the fresh snow had cleared from the mountain.

For a fit party in good conditions this might be a possible spectacular route up a very fine mountain. For us, failure on the mountain gave leisure to enjoy the beauty of the valleys in full autumn colouring and perfect weather, and the incomparable view from the shoulder of Jatropani.

While we were attempting Nanda Ghunti the other member of the party visited the Ronti pass, camping a few hundred feet below the summit, and rejoined us at the base. Thanks to Umrao Singh our relays of atta and vegetables from Sutol reached us in the upper valley without a hitch. We had further relied on bharal to supplement our tinned meat, but never saw a sign of one. There were monal pheasant and jungle fowl in plenty in the

upper Nandagini, and we would have been better off with a shotgun than a rifle.

The party consisted of Basil Goodfellow, John Buzzard, Innes Tremlett, with Pasang Dawa Sherpa and Nuri.

Times: The party took five days to Sutol, three to 'Base Camp' at 15,000 feet, spent three days up there and returned leisurely in eight days to Baijnath (end of road). The weather was extraordinary. Up the Nandagini, clouds started forming daily at about 1 p.m. at 16,000 feet and developed to a belt from 14,000 to 18,000 feet. A few light showers were experienced, and one heavy shower, mentioned above. All the mountains were very free from snow. It had evidently been like that for weeks and seemed absolutely settled.

CHAMBA DISTRICT

ON the 5th July 1945, Lt. J. W. Thornley left Dalhousie for Chamba. Next morning he started up the Saho nala and branched off to Silla Gharat. He crossed the Drati, 15,400 feet, to Tindi. From Tindi he went 8 miles up the Chenab to Salgaraon. With two coolies he attempted the 20,650-foot peak lying about 2 miles north of Salgaraon; but was held up at 15,500 feet by what appeared an impassable series of rock buttresses. His route ran via the ridge of an intermediate 17,800-foot peak, but a more feasible line appeared to be by the nala to the right.

He then trekked another 30 miles to Jarm, 9,500 feet, just above the Chenab. Crossing the Chenab he climbed the Kukti pass, 16,500 feet, and branching off, alone, climbed Grechu Jot, 17,811 feet. After the Kukti he descended the Budhll Nala to Brahmaur, and from Brahmaur reached Chamba on the 22nd, having covered 200 miles.

KASHMIR ALPS 1945, KOLAHOI (17,799 feet)

ON 26th June, R. D. Leakey left Sonamarg and crossed the Sardal Na pass, camping in the West Liddar valley just below the snout of the Kolahoi glacier. On the 29th he bivouacked at the base of a small peak about a mile east-north-east of the foot of the east ridge. It snowed about 6 inches during the night, rendering the bivouac uncomfortable and the climb next day awkward. He started climbing the east ridge of the mountain at 6.30 a.m. and reached the summit at 4 or 5 p.m. During the descent he slept a few hours on the ridge, from darkness until the rising of the moon at midnight. He got off the ridge at first light, reached the camp for breakfast and was back in Sonamarg that night.



Photo by T. H. Tilly

Kolahoi from the East

This climb resulted in an unfortunate degree of notice from the *Statesman of Delhi*. The following is one of the accounts which appeared in connexion with an ascent by members of the Punjab Mountaineering Club at the beginning of September:

American's amazing climbing feat.

Lahore, Sept. 13th. The American who made the lone ascent of Kolahoi peak (18,000 feet) this year and planted a packet of chewing gum on the summit was Sgt. R. D. Leakey of the U.S. Army Air Corps. He reached the peak on June 27 at 4.30 p.m. These facts are revealed in a letter he left along with the packet of chewing gum. The letter says: 'Whosoever finds this please send it to the Himalayan Club as evidence that Robert D. Leakey made a lone ascent of this peak by the east ridge and hopes to return that way.' According to members of the Indian party which followed Leakey a few weeks later, the American's solitary conquest of the peak after a most hazardous climb was an amazing feat.

The matter ended, so far as the *Statesman* columns were concerned, with a note from Leakey denying American nationality. It remains here to give warning against the advertisement of ascents; particularly when they are of a popular peak such as Kolahoi, and when the facts are likely to be submitted to the inevitable incorrectness and misrepresentation of the newspapers.

A correct account of the Punjab Mountaineering Club ascent has been given by W. Cowley, leader of the party. The thirty students had a base camp in the West Liddar valley, about a mile below the snout of the Kolahoi glacier, for six days. Two days were spent in reconnoitring, and on the third a good advance camp site was found on the prominent rocky island dividing the glacier south-west of Hiur Bhagwan. On the fourth day the peak itself was reconnoitred to a height of 17,000 feet, and on the fifth climbed by a party led by H. A. Hamid Khan. They left the glacier at 9.30 a.m. and three members reached the summit at 1.30 p.m.

It is to be hoped that this ascent will be the prelude to many made in the Himalaya by the Punjab Mountaineering Club; in particular that it will serve as an encouragement to Indian mountaineers. The newspaper statement that these were the first Indians to venture so high is not quite accurate. Kesar Singh, for instance, who reached the top of Kamet, must presumably be classified as an Indian. But it does open a fruitful line on the chances that Indians from the plains have of exploring their own hills; and to them we hope that the Himalayan Club may be able to render material and 'moral' assistance.

Shortly after this ascent the Rohtang pass was climbed by eleven girls of the Women's Section of the Club under the leadership of Miss C. L. H. Geary. Here, too, newspaper accounts were misleading, but the organization and carrying out of the journey were highly

creditable, and much praise is due to those who turn the efforts and enthusiasm of Indians towards their own hills.

LADAKH

ON 11th July 1944 Miss C. L. H. Geary and Miss Bozman left Leh for Shushal. They travelled by Ranbipur, the Chang La, Tankse and Panggong Tso. At Shushal they turned south, and returned by the Kongta La, crossing the Chang La again on the 28th July. They reached Srinagar again by Likhir and Hemis Shugpachan to Khalatse.

CHOMBU (20,872 feet)

CHOMBU, as yet unclimbed, is one of the mountains on the rocky ridge separating the Lachen and Lachung valleys in north-east Sikkim (Survey of India map No. 78A/NE—1 in. = 2 miles, 1941 Edition). The peak lies between Thangu and Mome Samdong and about 4 miles south of the Sebu La, well known to trekkers who make the circuit of the Lachen and Lachung valleys. In spite of its comparatively small height, no serious attempt appears to have been made on Chombu until that made at the beginning of November 1944 by Lt.-Col. C. R. Cooke and Mr. D. H. McPherson, whose brief notes on the possibilities of climbing the peak are given below:

The upper peak of the mountain consists of a narrow ridge about a mile in length, running roughly north-east to south-west, the highest point, 20,872 feet, being at the north-east end of the ridge. The long north-west and south-east faces of the mountain rise extremely steeply from about the 16,000-foot level and appear unclimbable or at least exceedingly dangerous. The south-west face and adjacent ridges were not examined, but even if climbable, the obvious difficulty of the long summit ridge would render the approach from this end unsatisfactory. There remains the north-east face with the adjacent north and east ridges. Of these, the north ridge appears to offer the best route to the summit and it was along this ridge that our party hoped to climb Chombu. The upper portion of this ridge is shown in profile in the view of Chombu, taken from the Jha Chu valley while approaching the Himalayan Club Jha Chu Hut from Thangu (see plate (a)).

The whole of the north ridge is seen end on from the Jha Chu Hut (15,000 feet) and it was thought, from an examination of photographs, that it would be possible to climb this ridge from its base (about 16,000 feet) amongst the moraines at the head of the Chombu valley, the name used by our party for the valley leading directly towards Chombu from the Jha Chu Hut. A reconnaissance made by our party on arrival showed, however,



Photo by D. H. Macpherson

(a) N.W. face of Chombu from Jha Chu Valley

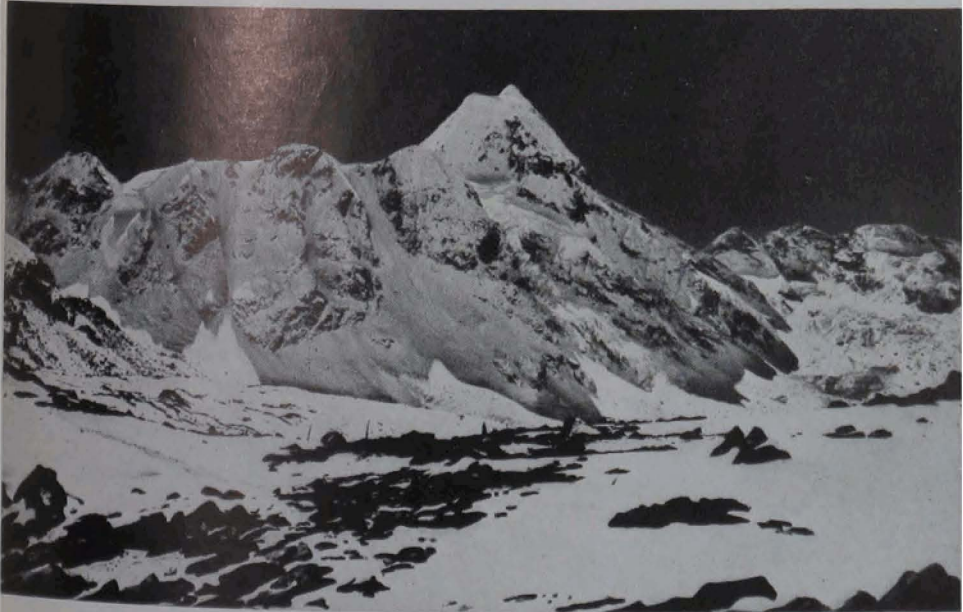


Photo by D. H. Macpherson

(b) Composite photograph of North face of Chombu

that the lower part of the ridge is exceedingly steep and it is doubtful whether it is possible to climb it direct. The best alternative appeared to be to attempt to reach the ridge from the large snow-field which lies at the base of the north-east face. To gain the snow-field there appeared to be several alternatives. The ice-fall immediately to the east of the north ridge was ruled out as dangerous and likely to take too much time; so also were the routes via the Sebu La and from the frozen lake in the Mome Samdong valley.

Fortunately an easy approach to the snow-field was discovered up the fourth couloir to the left of the north ridge, counting the ice-fall as the first (see Plate (b)). This fourth couloir was approached from the moraines at the head of the side valley to the left of our Chombu valley. The couloir is fairly steep in parts but not difficult, and leads to a well-defined snow col 17,800 feet on the edge of the snow-field about a mile from the base of the north-east face. A day only is necessary to reach this col from the Club Hut and our party reached it on 1st November. The whole north face of the mountain, including the couloirs and the col mentioned, are shown in the panoramic view of Chombu taken from a ridge to the north (Plate (b)).

The snow-field leading towards the final pyramid was, on a reconnaissance next day, easily crossed, but this was as far as our party reached. Our plan was, on the following day, to climb a steep narrow couloir, seen side view on the right centre of Frontispiece, leading from the snow-field to the north ridge. This couloir starts from the top of the ice-fall to the right of and at a lower level than the head of the snow-field, at about 18,000 feet, and strikes the north ridge at a well-defined break in the ridge, which can be made out in the view of the mountain from the Jha Chu valley, above the rocky cliff at the bottom left-hand corner of the photograph. We had hoped to establish Camp II on the ridge at this point—approximately 18,600 feet.

The ridge above this point appears narrow but climbable after a steep detour round one or two big rock gendarmes. We had allowed two days to reach that part of the ridge where it broadens out and becomes less steep and had provided for the establishment, if necessary, of a third camp on a small snow-field below and to the west of the ridge at approximately 20,000 feet. The first part of the summit ridge appears straightforward, but a steepish snow or ice-slope near the summit might force the climber out on to the north-west face for a short distance. Above that, there would appear to be no difficulty in reaching the summit.

Unfortunately our party was unable to attempt any part of the

route from the snow-field upwards as a heavy snow-storm on the night of the 2nd/3rd November forced us to retreat to the Jha Chu Hut and there was no time to make a fresh attempt before our leave expired.

It is considered that, given fine weather, it should be possible for an experienced party to climb Chombu in a period of from three to four weeks from Gangtok back to Gangtok. The weather in November is generally fine, but if an attempt were to be made another year, we should recommend the attack to be made a fortnight later, as by the first week of November the last of the monsoon storms should have passed, the clear cold weather set in, and the snow consolidated.

D. H. MCPHERSON.

LAMA ANDEN—SIKKIM HIMALAYA

A. J. M. SMYTH and Wing-Commander Ford, in September 1942, made what is probably the first ascent of Lama Anden (19,250 feet). Just before their expedition (the information given in the Club circular was misleading) Goodfellow and Blandy had made an attempt which was frustrated by bad weather. Smyth's party (*Climbers' Club Journal*, 1943, p. 91) made the ascent in astonishingly quick time, showing what a small party can do with efficient Sherpa organization. They were back in Calcutta within the fortnight.

On the march up conditions were bad and they got no view of the mountain. But they were more fortunate than Goodfellow in getting just the one fine break that made the climb possible.

IN MEMORIAM

CHARLES GRANVILLE BRUCE

1866-1939

[By courtesy of the *Alpine Journal*.]

CHARLES GRANVILLE BRUCE was born in 1866, and obtained his first Commission, through the Militia, in the Oxfordshire Light Infantry in 1887, but, having soon decided on a career in India, in preference to one in the British Service, he was, in 1889, appointed to the 5th Gurkha Rifles—a regiment in which he served most of his military life, and of which he was Colonel from 1931 to 1936.

Active service with the Military Police in Burma gave him his first experience of war, and this was followed in rapid succession by the Frontier expeditions of the Black Mountain in 1891, Miranzai in 1891, and Waziristan in 1894. The next few years were peaceful ones spent in the regiment as a company officer and adjutant, though he took every opportunity of exploring the neighbouring passes of the Khagan valley and the closer Himalaya, and making for himself a name as a mountaineer of repute. In 1892 he joined Mr. Martin Conway's expedition to the Karakoram, and in 1895 he was a member of Mr. Mummery's tragic exploration of Nanga Parbat, from which he returned with an attack of suppressed mumps, necessitating a severe operation, which affected him all his life.

In the meanwhile he had commenced a serious study of Gurkhali (the chief language of the Gurkhas) as well as some of the minor dialects, and became extraordinarily proficient and fluent in them all. With most oriental races Bruce had an uncommon sympathy; he seemed to be able to enter into their thoughts and speak to them as one of themselves, while he had a wonderful tolerance for, and understanding of their minds, which gave him an influence over them greater than any others could ever acquire. His never-failing humour and love of fun, often on the horse-play side, appealed especially to the simple mind of the Gurkha, over whom he gained a lasting hold.

Besides wrestling, fencing, running, and almost every form of athletic sport (except tennis), hill climbing was his main hobby, and to him was chiefly due the institution of the annual Khud Race, unsurpassed as a spectacle among athletic contests, which firmly established the Gurkha as practically invincible on the hillside, and which in effect also speeded up military hill work in general. At the same time Bruce wholeheartedly interested himself in organizing

as Scouts men specially trained to work on the steepest hillsides and selected for their wiry physique, fleetness of foot, and skill as marksmen.

The general uprising along the whole of the north-west frontier in 1897 put to the severest test the training that these men had been subjected to. A small contingent of Scouts, numbering about 120 men, from the 3rd and 5th Gurkhas, was organized under command of Capt. F. L. Lucas, with Lieuts. Bruce and Tillard (3rd Gurkhas) under him. These Scouts did yeoman service during the ensuing Tirah campaign, the hardest ever fought on the Frontier till then. They were called on for advance, flank and rearguard work by day and night; independent and dangerous missions were given them to do; no column felt complete without the Scouts accompanying them, and the success they achieved in protecting their own troops and taking toll of the enemy makes, for all time, a proud chapter of Frontier history. This original small contingent was later raised to a full battalion, 600 strong, and still under Lucas and Bruce finished the campaign in the Khyber area.

It was at this time that owing to Bruce's representations 'shorts' were introduced into the Army for the first time. The Scouts led the way by cutting off at the knee the long khaki trousers then worn with puttees, thus adding to freedom of movement in rough places. In spite of some official opposition, shorts were thus born, and their vogue became universal throughout the British Army. Incidentally it may be of some interest to note that these Scouts were the first of the whole Indian Army to be re-armed with the magazine Lee-Enfield rifle, in place of the old Martini, which from then on was gradually discarded, for up to then the British and Indian regiments of the Army in India had not been similarly armed.

Bruce, for his outstanding services in this campaign, was twice mentioned in Dispatches and was promoted Brevet Major. His name as a trainer of Scouts was made, and for many years afterwards he held an annual Scout camp for the instruction of officers in hill-lore, rapid movement and reconnaissance. Those attending these camps, besides the specialized military knowledge acquired, brought back with them many happy memories of nights spent under the stars, and the boisterousness and skill as a raconteur of their ever-cheery commander.

For the next seventeen years Bruce had not the good fortune to go on service again, but his reputation grew as a fine soldier, a good friend and companion, and a great mountaineer.

In May 1914 he was given command of the 1/6th Gurkha Rifles, who also, like the 5th, were permanently stationed at Abbottabad, and in August of that year the Great War broke out. In November

the 1/6th sailed from India for Egypt, and forming part of the 29th Indian Brigade were encamped at Kantara on the Suez Canal, while his old regiment, the 1/5th, in another brigade, camped at Ismailia, farther down the Canal.

Here, in February 1915, the Turkish attack on Egypt was met and repulsed, and three months later the Gallipoli campaign was launched. The 29th Indian Brigade, under Major-General Cox, joined the 29th Division at Helles on May 1, and from then onwards the 6th Gurkhas took a very prominent part in all major operations till the evacuation in December. In May, the 6th, under Bruce, most skilfully seized and permanently established themselves on an important tactical position on the extreme left of the line, called thereafter Gurkha Bluff, in memory of that fine feat of arms. Early in June the 1/5th Gurkhas joined the 29th Brigade and from then onwards these two battalions fought alongside each other till the end of the campaign. In the battle of 28th June casualties amongst officers and men were so severe and strengths so much reduced, that Bruce took over command of both battalions and worked them as one for the remainder of that desperate conflict, which lasted to 5th July, by which time the ground in front of their area was strewn with the corpses of 3,000 dead Turks, and the number of British officers left in the whole Brigade (including the Staff) totalled only eight. But unfortunately Bruce was severely wounded in the leg during the latter phase of the battle, was evacuated home and was not reported fit for service again till 1916. He was promoted Colonel for his brilliant work on the Peninsula.

While in Gallipoli it may be mentioned that he found an opportunity of making friends with the French troops who held the extreme right of the line at Helles, from Eski Himarlik Point westwards, some two miles distant from Gurkha Bluff, and that he managed to obtain from them a small keg of wine, which was duly appreciated in his own mess. It is not on record how the keg was transported from one flank to the other, but it is not unlikely that the Colonel carried it himself, for in his scouting days in the Khyber, to keep himself fit, he used to carry his orderly on his back many hundred feet up to an eminence called Mount Pisgah, from which the plains of Jellalabad, the Promised Land, were visible. And, talking of wine, it is no secret that Bruce was a convivial man and liked a glass of whisky as much as anyone. But when in Egypt he found it advisable to become a strict teetotaller, he did it completely and did not allow this sudden change in his habits to affect his manner in any way; he sang his Welsh songs, and danced his dances and laughed with and at himself with as much gusto on water as he

had formerly done on a stronger beverage. In this he showed a fine example of great self-control.

On Bruce's return to India in 1916, he was appointed Brigadier-General and given command of the Bunu Brigade and the North Waziristan Column operating against the Wazirs, and he also took a minor part in the Afghan campaign of 1919, for which he was twice mentioned in Dispatches and awarded the C.B. But active and powerful man as Bruce was, he was not at his best in great heat, and Bannu is one of the hottest spots on the whole Frontier. He stood it for two hot weathers, but with the advent of the third, his health broke down, and a Medical Board invalidated him out of the Service, advising him to live thereafter a very quiet and sedentary life, as he was no longer fit for any great exertion. To what extent he carried out this advice the records of two of the Mount Everest expeditions bear testimony. And so in 1920 he retired from the Army, after thirty-two years' distinguished service; but his greatest mountaineering feats were yet to come, of which accounts are given elsewhere.

In 1931 he was appointed Colonel of the 5th Royal Gurkha Rifles, to the great joy of himself and of all ranks of his old regiment among whom his name will be long remembered. During the tenure of his colonelcy he several times went out to India to visit the regiment, spending many cheery days with one or other of the battalions in Waziristan or in the Khyber, but finally, in 1936, on attaining his 70th year of age, he had to vacate this appointment and sever his career with the Indian Army, which he had served so well.

Charlie Bruce was a unique character, full of mirth and full of matured wisdom, widely read in many abstruse subjects, and of a very lovable disposition. The annual gatherings at the Gurkha Brigade Dinner will in future lose much of their hilarity by his absence, but talk of 'Old Bruiser' and legends about him will endure for many years. And so, when we took our last farewell of him in St. Martin's Church, in July 1939, the gathering of his many friends was not a sad one, but was almost merry and bright, and its tone undoubtedly was one that Charlie himself would have been the first to enjoy.

M. R. W. NIGHTINGALE.

PROBABLY no man since the time of the Schlagintweits had a wider knowledge of the Himalaya than General Bruce. No one ever had so intimate a knowledge of so many of its peoples. Bruce's climbing experience extended from the Safed Koh to Sikkim. He was with Conway on his notable expedition to the Karakoram, and with Mummery and Collie in the first attempt on Nanga Parbat. The snows of Khagan and Kulu were his happy hunting ground. In

1907, the Jubilee year of the Alpine Club, he nearly arranged the first exploration of Mount Everest; but at the last moment the plan was vetoed in London for political reasons. Again in 1910 he got leave from the late Maharaja of Nepal to explore Everest from the Nepalese side; but again at the last moment this had to be given up for fear of arousing religious hostility.

By profession a soldier, he was an acknowledged master in the difficult technique of fighting on the north-west frontier. His influence with his own Gurkhas was phenomenal; indeed, his desperate wound at Gallipoli was counted equal to the loss of a battalion. But mine is not the pen for an account of that side of his life. I never heard him allude to his fighting days except once: a lady asked him about his Frontier experiences, and he merely replied, with a modesty invariable in my experience, 'I think I have run away from every Pathan tribe on the Frontier at one time or another.' He was equally modest about his mountain climbing, as I well remember when I first met him forty years ago at Zermatt, with some of his Gurkhas, whom he was training in Alpine work.

His greatest contribution to mountaineering came through his wide knowledge of the tribes of the Himalaya. It was he who first trained Gurkhas for serious mountain work. He started the Baltis of Kashmir and the Bhotias of Garhwal on the upward path, a lead which Kellas so ably followed. But his great discovery was the value of the Sherpa, a Tibetan tribe long settled in Nepal. These, with their purer Tibetan cousins, have been the mainstay of every Himalayan expedition of recent years. Owing to him it is no longer necessary—though it may still be extremely advantageous—to take European Alpine-trained guides and porters to the Himalaya. The cause of his success was his sympathy with and knowledge of the language and habits of these varied peoples.

In 1923 he was elected President of the Alpine Club. In 1915 he was awarded the Gill Memorial, and in 1925 the Founder's Medal of the Royal Geographical Society. He was an Honorary Member of S.A.C., C.A.F., and G.H.M.

It was the adventure, not scientific interests, which absorbed him during his climbing holidays and longer expeditions. Of the latter, the Everest expedition of 1922 stands out. He made an ideal leader. But it is as a companion, the perfect one, that I most remember him: especially with Arnold Mumm and myself in Garhwal in 1907. He was the most invariably considerate, pleasant and uncomplaining companion it is possible to imagine. Not even the injured knee which deprived him of climbing Trisul with his devoted Subedar Kharbir Burathoki drew one word of disappointment or complaint

from him. Bruce's name became a household word: but only his friends knew his real worth.

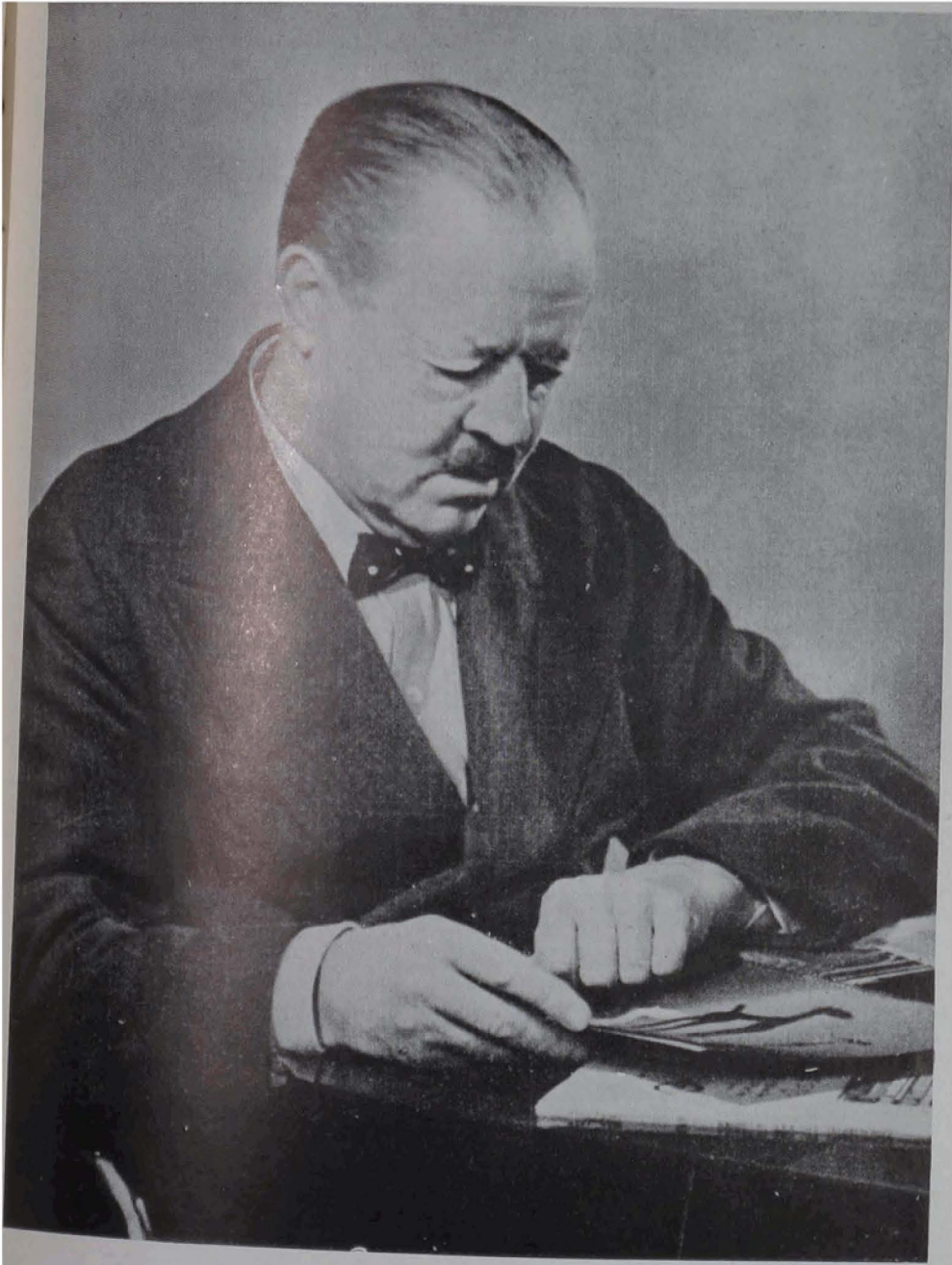
T. G. LONGSTAFF.

CHARLIE BRUCE was a half brother of the late Lord Aberdare and uncle of the present Peer. He married a daughter of the late Colonel Sir E. F. Campbell, Bart., who predeceased him in 1932 (*A.J.*, vol. xliv, p. 329). They had the misfortune to lose their only child, a son, who died as an infant in the Himalaya. This sad event, so Charlie once told me, was the greatest blow in his life.

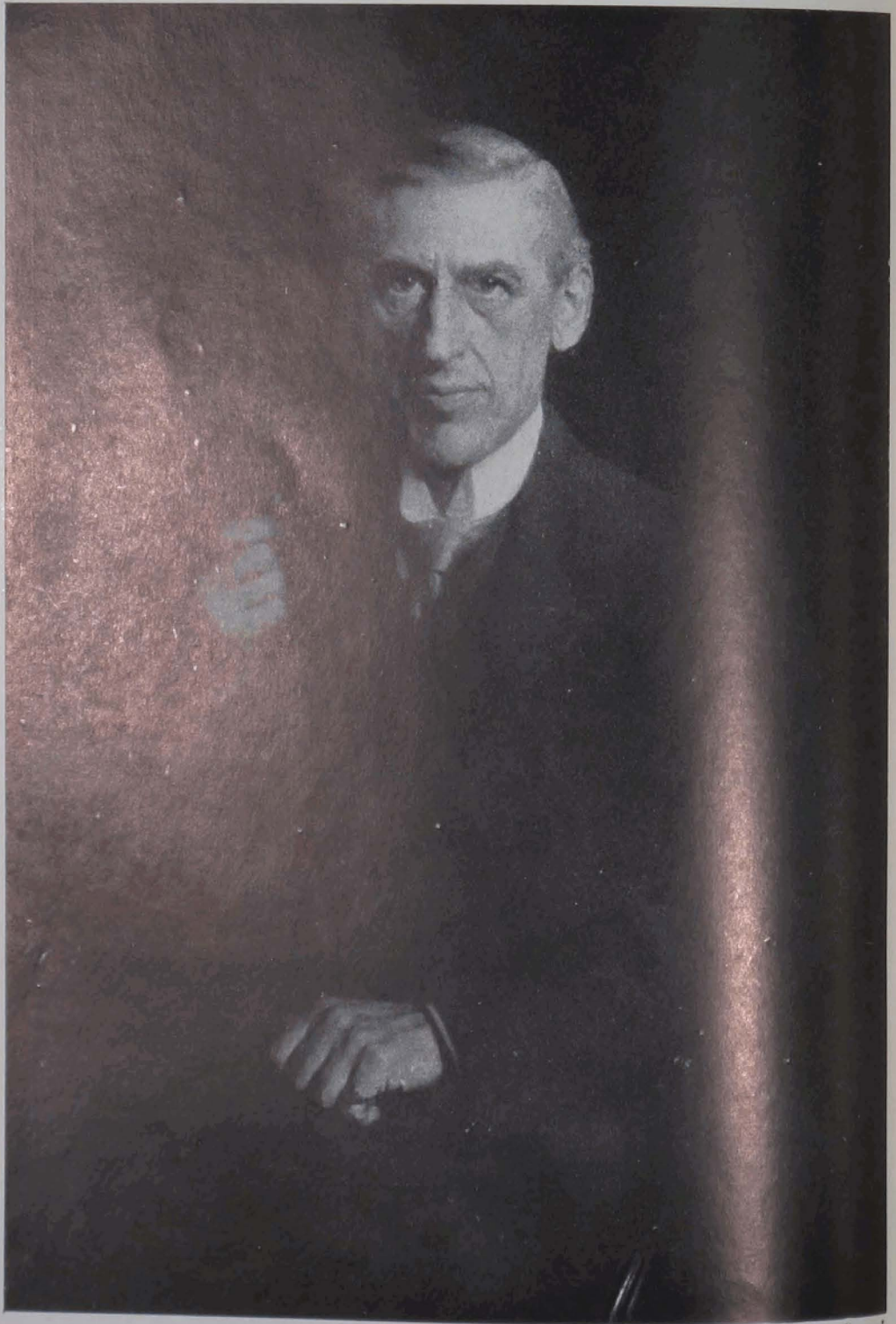
I seem always to have known him, but it was probably after his family had become connected with mine by marriage that I saw most of him. He was our leader in the 1922 Everest Expedition as well as in that of 1924, and none could have desired a more ideal one. There was no fuss and no worry; his sense of humour, his cheerfulness just smoothed away any difficulty. Gurkhas, porters, Tibetan natives, all at once acknowledged the great Leader and came under his spell. I can still hear the yells of delight from a small band of natives descending from the Jelep La, who had recognized his thick-set figure from afar. I can still see their greeting of him which was terminated only by Bruce catching hold of the foremost by the slack of his breeches and applying some resounding slaps, while volubly relating amidst shrieks of laughter a Rabelaisian story to the rest. With the Lamas, Dzongpens and Tibetan officials, Charlie's dignity was but equalled by his geniality.

Our only trouble was to prevent his going too high on the mountain; his great heart was not perhaps *practically* equal to 20,000 feet. Organically, he had not altogether recovered from his wounds, while his age was too advanced. He still appeared impervious to cold; he used to sit or stand about for hours in the bitter weather of the Base or No. I camps, clad only in khaki shorts, vest and a thin jacket. The photo-group facing p. 46 of *The Assault on Mt. Everest*, 1922, is characteristic, with the rest of us mostly muffled up to the ears. But once only in six months did I see him ruffled, and that was when a well-meaning individual, one of those 'who only England know', referred disparagingly to the colour of Charlie's Gurkhas. Bruce rose to his feet blazing with wrath, while I hurriedly interposed myself between him and his luckless victim. To my relief, he burst out laughing—for truly the honour of the Gurkhas was as his own.

One more reminiscence, this time at the Sorbonne in November 1922. After our joint lecture and when Bruce had been presented with the Gold Medal of the Société de Géographie, he and I were ushered into a small room where the late Maréchal Fayolle and that



Charles Granville Bruce, 1866-1939



By courtesy of the Alpine Journal

J. N. Collie, 1859-1942

gallant veteran General Gouraud—now our Honorary Member—were awaiting us. Charlie's knowledge of French was as elementary as the Frenchmen's English, but somehow Bruce and Gouraud ascertained that each, previously unknown to the other and badly wounded, had been evacuated on the same trawler from Cape Helles. Gouraud thereupon gently put his one arm round Charlie and embraced him—they had met but that once since 1915. This simple act seemed to me deeply pathetic, a forecast of the further Alliance of September 1939.

Bruce contributed four important books to Himalayan literature, *Twenty Years in the Himalaya, Kulu and Lahoul* (A.J., vol. xxviii, p. 415), *Assault on Mount Everest, 1922* (A.J., vol. xxxv, p. 306), *Himalayan Wanderer* (A.J., vol. xlvii, p. 178). All breathe the indomitable jovial spirit of the author—especially the latter with its characteristic tale of M. de Blacasse. To the *Alpine Journal*, Bruce contributed 'The Ascent of Ishpéro Zorn' (vol. xvi, pp. 494 sqq.), 'Christmas at Dharmsala' (vol. xvii, pp. 234 sqq.), 'Mountaineering in the Himalayas' (vol. xix, p. 321; vol. xx, pp. 305 sqq.), 'Himalayan Contrasts' (vol. xliii, pp. 1 sqq.), &c.

Charlie Bruce had many relations while all his acquaintances were his friends. How many of these, I sometimes wonder, have realized what his life has meant—and still means—to those gallant Himalayan soldiers and sturdy, great-hearted natives, whose loyalty to the British Empire and to Bruce Sahib remains equally illimitable?

E. L. STRUTT.

JOHN NORMAN COLLIE

1859-1942

THE passing of Norman Collie at the ripe age of 82 years leaves a great gap in many circles, and not least in that of the mountaineering fraternity. Born in 1859 at Alderley Edge, in Cheshire, he was educated at Charterhouse, Clifton, University College, Bristol, and Würzburg University where he gained the degree of Ph.D. He was appointed Professor of Organic Chemistry at University College, London, in 1902, and held this appointment until his retirement. He was elected a Fellow of the Royal Society in 1896, and gained many other honours. But it is with his mountaineering prowess that we are mostly concerned. His knowledge of the mountains of many countries and continents was unequalled by any of his contemporaries, and his extraordinary faculty of discovering the best, and often the only route up a mountain, was a great asset to his companions, at a time when the era of guideless climbing was beginning. An instance of this is the famous 'Collie Step' in *Moss Ghyll on Scafell*, where he hacked a step in the rock with his axe,

which enabled the ascent to be made. In Scotland, too, he made many new climbs, and it was disappointing, on achieving some good climb, to find a cairn erected by Collie, of which no report had been made. In Skye, to which he was devoted, his discovery of the Cioch from a shadow noticed in a photograph of the face was another instance of his faculty of observation. In the Alps, with Hastings, Mummery and Slingsby, he made the first ascent of the Requin, the first ascent from the south-west of the Aiguille du Plan, and the first traverse of the Grépon, and later, with Hastings and Mummery, the first ascent from the north of the Col des Courtes and the first guideless ascent of Mont Blanc by the Brenva route. In Norway, too, many first ascents were made of the magnificent rock peaks of the Lofoten Islands, which spring direct from the sea. Higräftind and Rulten amongst them, of which Collie obtained some of his most beautiful photographs.

In 1895, with Hastings and Mummery, his well-trying companions in the Alps, he visited the Himalaya and made the first exploration of Nanga Parbat and the first ascent of Diomirai peak, 19,000 feet, with Mummery. A graphic account of this is given in his book. After this, the attempt was made on Nanga Parbat. Collie was not well enough to go on, but Mummery and Ragobir persevered to a height of 20,000 feet, after two nights on the mountain, when Ragobir became ill and they had to return. It was then decided to attempt the ascent from the Rakiot Nullah, and Mummery with Ragobir and Goman Singh set off to try to force the Diama pass while the others went by the Ganalo Nullah and the Red pass, and after much difficulty reached the rendezvous. There was no sign of Mummery, and the face, by which they would have had to descend from the Diama pass, seemed quite hopeless. It had been arranged that, if the pass was found impossible, Mummery would descend and follow the others.

Collie's time was nearly up, and while Hastings returned to the Diamirai Nullah, he descended to Astor to await news from Hastings. When it came and reported that the provisions left for the emergency and the camps were untouched, they decided to explore the upper part of the Diamirai Nullah, but when they got there, winter conditions had supervened and avalanches were roaring down, making the valley impassable, and the search had reluctantly to be abandoned. The last hope had gone.

Two years later he organized the first expedition by British climbers to the Canadian Rockies and in his six visits to this region he made many first ascents and did some fine exploring work, which was graphically described in his book, written in collaboration with H. M. Stutfield.

Very near to his heart were the Isle of Skye and the Coolins. For many years he and Colin Philip, the artist, shared Glen Brittle Lodge, and explored them very thoroughly. Later he was to be found at Sligachan most of the summer. I met him there at the time of the German attempt on Nanga Parbat, and he told me then, and showed on a photograph, that they were much farther from the summit than they thought and that enormous difficulties and dangers still confronted them, as was afterwards proved.

The last four years of his life were spent there, and there he died and was buried by the side of his faithful friend and gillie, John Mackenzie.

His versatility was exceptional. Scientist, painter, photographer and writer, in all these parts he excelled. As a mountaineer his judgement, endurance and skill made him a leader amongst men, and he was always ready to help the younger and weaker brethren.

A connoisseur of art, he had a wonderful collection of jade and precious stones and was an admirable judge of food and wines, as those who were privileged to be his guests know. At Sligachan his skill as an angler would provide the hotel with a breakfast of beautiful pink trout. An outstanding personality has been taken from us, and those who knew him will always preserve the memory of a great man.

W. N. LING.

[The following by courtesy of the *Alpine Journal*.]

PERHAPS the chief characteristic of Norman Collie's mountaineering career was what may be called 'inspired direction'. As a topographer and pathfinder he stood, among all the expeditions of which he was a member, in a class almost by himself. Not only was he expert as an iceman, *vide* the upper séracs of the Brenva Mont Blanc, or rock climber, but he was pre-eminently a great 'mountaineer'. Many leaders have owed much to the inspired direction of their party. Where, to quote only the names of departed, would Daniel Maquignaz have been without Farrar? Where Venetz without Burgener?

One instance on a classic peak may be quoted. In the first ascent of the often attempted Dent du Requin, the problem was solved at once by Collie: a descent of 200 feet of the east face thus enabling the party to attain the south-east arête. Collie on his first and only visit to the Himalaya appreciated fully the overwhelming dangers of avalanches. He and Bruce have spoken often to me of the risks taken by Mummery in his attempts on Nanga Parbat. The latter, relying on his wonderful skill, committed himself and his Gurkhas to chances which might be taken in the Alps but never in the great

Himalaya. Had Collie been present with his inspired direction, who knows whether the accident of 1895 would not have been avoided? It seems probable that, as 'mountaineers', Collie and Cecil Slingsby had few rivals in their generation.

E. L. STRUTT.

NORMAN COLLIE was all but the last survivor of a group of great mountaineers who followed upon the first Alpine pioneers and prophets, carried climbing into a score of other countries and ranges, and by their feats and writings stimulated a vast increase in the mountain following. Freshfield, Conway, Slingsby, Bruce, Collie, Mummery, each found his own new territory and wrote his own prophetic books of adventure. And of them all, perhaps, Norman Collie was the man of the greatest natural endowment and the man most exclusively devoted to mountains. I cannot write of his scientific attainment, although I used to hear his great predecessor in the London chair, Sir William Ramsay, pay tribute to his discoveries long before I knew of him as a mountaineer. But I feel bound to record, even here, that, in a characteristically sardonic aside, Collie once observed: 'If anyone ever happens to write an obituary of me, I want two things said—I first discovered Neon, and I took the first X-ray photographs.'

If he was a great scientist, he was no less a gifted artist, an aesthete in the finest sense, a romantic-minded Celt and a robust athlete never out of training. His accomplishments were many, and he lived, almost literally, for beauty. He painted effectively, and made an admirable portrait of his gillie and friend John Mackenzie, the only authentic local guide ever produced in our islands, whom Collie himself had trained, and beside whom he now lies buried. As an art connoisseur and collector he had few, if any, superiors in his own sphere. His knowledge covered the whole field of Chinese and Japanese art, porcelain, ivories, bronzes, embroideries, and our museums availed themselves of his infallible knowledge of date and authorship. The sensitiveness of his aesthetic judgement was not only of the eye, but equally of touch and taste and smell. He was an authority on wines—especially French wines—and on cigars, both of which he always bought himself at sales, and he was an expert judge of food and cooking. He was widely read, especially in English literature and medieval science, and he was a collector of editions and beautiful types and bindings. His rooms, those which he occupied in Campden Grove from his student days, until they were pulled down, and his later house in Gower Street, were piled high with variegated treasures, in seeming chaos. But everything in sight, china and jade and metals and books and paintings, was so arranged

as to pick up and repeat colour and lighting on a scheme designed for his own pleasure. To a degree almost unfair, among collectors, his scientific knowledge complemented his artistic judgement: he could buy precious stones on sight at auctions or on the docks, and at bargain prices, since his expert touch told him as much of their nature by weight and feel as his eye by their colour. And he would dilate on the multiple glory he could obtain from the colours of jewels, when he bombarded them with rays in his laboratory.

Of north Irish extraction, he was a Celt in imagination; mysticism and poetry occupied his thoughts as much as scientific speculation. Here, again, his contradictions helped one another, as in his photography, in which he produced some of the most artistically perfect pictures of his time, and in colour photography and colour processes, in which he was a pioneer. In his speeches indeed, and at times in his writing, the poetry could overweight his style. But he was a thrilling raconteur of eerie stories and folk mystery, of which it was impossible to say how much he himself believed. The best of them had the same blend of science and romanticism; as in the famous adventure of the Long Grey Man of Ben MacDhui, in which much of the grue depended on recalling the exact height of the ordnance cairn; and in the adventure of the haunted and nerve-shaking sea cave in Donegal, where his scientific coda, that the tide-driven air was playing upon the cavern mouth as upon a great organ pipe, so that, within it, the slow vibrations shattered through one while remaining inaudible, was almost as uncanny as the peasants' supernatural monster. He was an originator, in every one of his interests. He lived only to explore, no matter how hazardously. And mountaineering, with its many appeals to his abnormally acute senses, best satisfied this passion. New ascents in the Alps, plotted beforehand with Slingsby, Mummery and Hastings, and referred to only half humorously in their correspondence as 'the Quest'; new regions in the Rockies, in the Himalaya, in Norway and in every still unknown corner of these islands. He first explored alone many of the now popular climbing cliffs in Scotland, Ireland and the smaller islands.

He was one of the most daring of the Lakeland pioneers, and no one probably has ever approached his detailed knowledge of the Scottish and Irish sea cliffs. His attachment to the Island of Skye grew steadily with the years, and he has given his reasons for preferring it to all other hill country and ranges, in the best of his writings. For climbing and exploring he was as gifted physically as temperamentally. In spite of a gaunt and grey-silvery aspect that suggested fragility and even senescence, he was never ill and never tired; he remained erect, agile and hardy into great age, and he had

his machinery and breathing under such unusual control that, as he told me, he would often light his pipe as a preliminary to attempting a stiff rock problem.

His icemanship and rock technique were equally first rate. He is never known to have made a mislead or a false step, and on more than one occasion his skill and nerve saved a party or an individual from disaster.

His eye for country, for reconnaissance in a new range or for a route up a complicated face was unsurpassed, even among his accomplished colleagues. He was an excellent and resourceful companion in difficult conditions; but he was also entirely happy alone, in any weather and facing any risks. Much of his early wandering went unrecorded; and in later life he might now and again chuckle grimly over accounts of new climbs on Scottish cliffs, and remark with the familiar saturnine sidelift of his lip: 'They'll find a little cairn there—when they get up!' His discovery of the great but invisible pinnacle of the Cioch, from detecting an unusual shaped shadow on a photograph of the face, is the most often quoted example of good reconnaissance work in our island climbing.

It was only another of his contradictions that, although something of a recluse, he was devoted to good company, and talked wittily and picturesquely. A Lucullan dinner in his rooms, with maybe Hugh Stutfield, the medieval scholar W. P. Ker, the painter Colin Philip, Younghusband, Bruce, or his closest friend Slingsby, would be memorable for the range of the discussion, over problems of exploration, of philosophy, of art or of literature, with perhaps short shows of his beautiful slides to bring some new region into the talk. He was less interested in human beings than in ideas and form and colour, and he was not easily approachable except upon the ground of a common interest. His friends were from among the few with whom he had pursued one or more of these interests actively, and especially his far-flung climbing.

To younger men, with the same enthusiasms, he was generous and helpful; he started Dr. Kellas on his revolutionary method of Himalayan exploration, and in a meeting at our house in Cambridge between him and Gino Watkins, he appreciated so quickly that young Elizabethan's exceptional quality, that he promised him at once on behalf of the Royal Geographical Society the first financial support Gino's Arctic expeditions received. When he became interested in a man, his penetrating eyes flashed suddenly into an observant personal sympathy; when he was not, he was incapable of the pretence, even, of awareness of him.

The leader of the first German Nanga Parbat expedition—a very nice fellow—asked me to introduce him to Collie, the survivor of

the first explorers. Between, however, the blond and bluff young modernist, efficient and hustling, with his card neatly printed as 'Leader of the Nanga Parbat Expedition', and the supersensitive 'Wandering Scholar-artist' out of the Middle Ages, reluctantly materializing as a deep-grooved, yellow-ivory profile against dusty bronze and brocades, with something of a werewolf lurking in his quizzical half-smile, the gap, of time and temperament, proved unbridgeable; when we left, Collie was still discoursing remotely and to space about, I think, the optical miracle represented by the first character of the Chinese alphabet.

The last glimpse we have of him is, however, once again entirely sympathetic. With the coming of the war, he retired finally into Skye, and from the world. And then, in that remarkable book, *The Last Enemy*, we find Richard Hillary, the heroic young airman who was killed later, almost at the time of Collie's death, describing how he and a colleague spent a leave at Sligachan, and made trial of the alternative dangers of crags. 'We were alone in the inn,' he writes, 'save for one old man who had returned there to die. His hair was white but his face and bearing were still those of a mountaineer, though he must have been a great age. He never spoke, but appeared regularly at meals, to take his place at a table tight-pressed against the window, alone with his wine and his memories. We thought him rather fine.' There follows the story of a fantastic rock scramble and escape; and then, 'Over dinner we told the landlord of our novel descent. His sole comment was "Humph", but the old man at the window turned and smiled at us. I think he approved.' Norman Collie, I feel sure, would have liked that, for his own last appearance: to be unnamed himself, but turning at the sound of a mountain adventure, smiling over its rash absurdity, and flashing a silent approval at the close to the younger adventurer.

Most of us, as the years pass, find our once exclusive devotion to mountains becomes divided, at least, as between them and other and more human ties. Of all the wholehearted mountaineers I have known, Collie alone remained to the end wholly and passionately absorbed in the mountain world. His old age and death may seem to us to have been, in the result, solitary. But no man was better qualified by his talents to judge between the values that life offers. He lived a very long life consistently for, and among, the things that he found the most lovely; and he died surrounded by the unaging beauty of his principal devotion.

G. WINTHROP YOUNG.

SIR FRANCIS EDWARD YOUNGHUSBAND

1863-1942

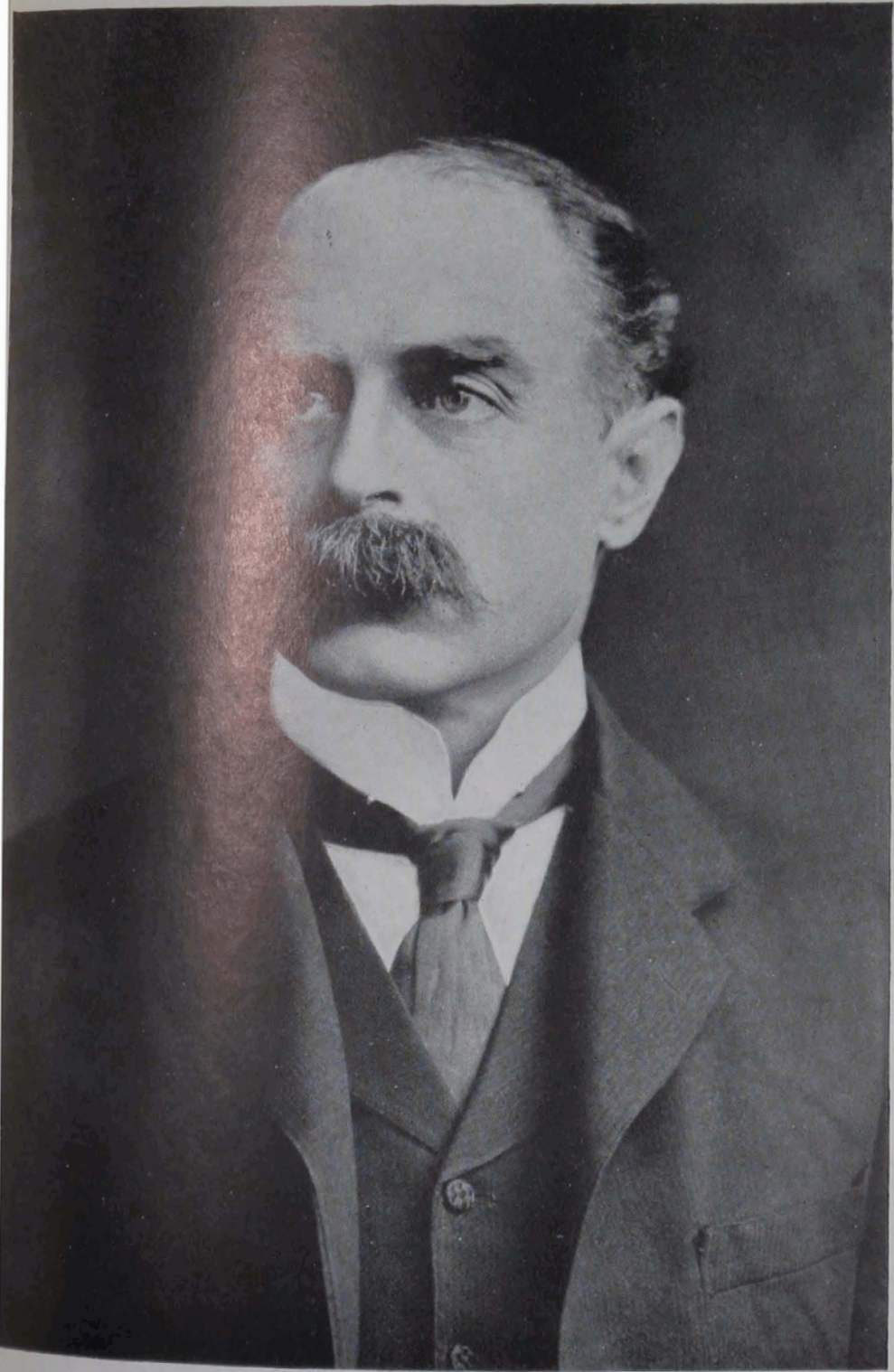
[By courtesy of the *Alpine Journal*.]

FRANCIS YOUNGHUSBAND first went to India as a young officer of the King's Dragoon Guards and almost from the day of his arrival there he was fired with the love of travel and exploration.

From 1886 onwards he was almost continuously on the move and he covered in his journeys immense tracts of Central and Eastern Asia, some of them previously unexplored. The first of these journeys was the expedition into Manchuria with Sir Evan James, an account of which will be found in James's book *The Long White Mountain*. Then, starting from Peking, he traversed the Gobi Desert, and found his way into India over the Mustagh pass which had never before been crossed by any European. The descent from the summit of the pass on the southern side was a really formidable mountaineering feat, especially for a small untrained party unprovided with ice-axes, proper ropes, or even boots. It seems little short of a miracle that they succeeded in getting down safely. These experiences are described by Younghusband in his book *The Heart of a Continent*, a classic of Asiatic travel.

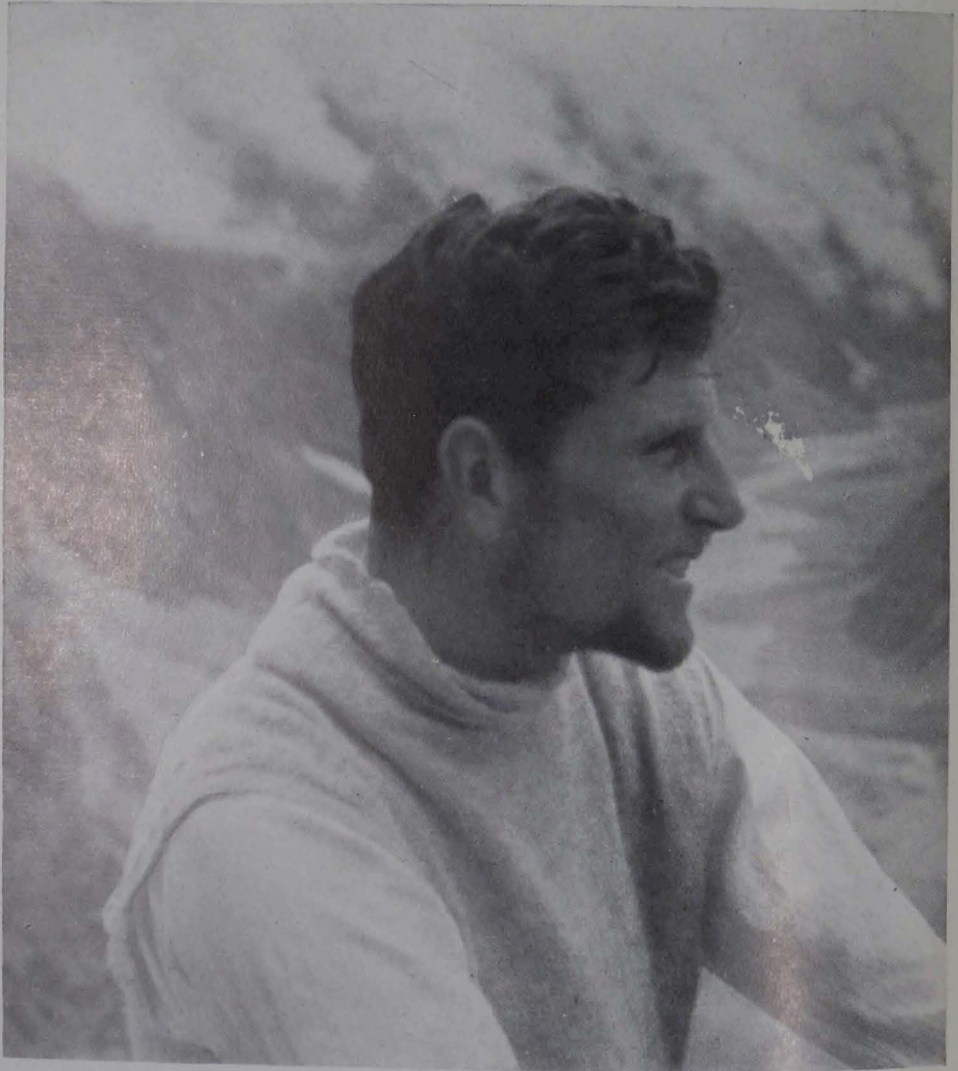
Further journeys in the Pamirs and all that complex maze of mountains 'where three Empires meet' followed in the years 1888-91, and he also served in Chitral as an officer of the Foreign and Political Department of the Government of India to which he had now been transferred. He acted, too, as a special correspondent of *The Times* at the relief of Chitral, and in the Transvaal and Rhodesia in 1896-7. An account of these latter experiences will be found in his book *South Africa of Today*, published in 1898.

The next important step in his career was his appointment as British Commissioner to the Tibet Mission in 1903. It was here that I first met him, and I served under him as secretary and interpreter to the Mission for the next sixteen months. He proved himself to be an ideal leader for such a mission. In the first place he was physically strong and hardy—a very necessary qualification for the experiences which lay before us. He seemed impervious to fatigue or cold and was unaffected by altitude, and he was extremely simple in his wants—quite indifferent, in fact, to those creature comforts to which most ordinary mortals attach importance. Then, too, it was invaluable to have a traveller of his experience at the head of the Mission. Our main difficulties throughout were geographical and climatic, and might at times have appeared insuperable to anyone less accustomed to Asiatic and Himalayan conditions. This, as I know from experience, stood us in good stead both when planning the



By courtesy of the Alpine Journal

Sir Francis Edward Younghusband, 1863-1942



P. R. Oliver, 1909-1945

advance of the Mission and during its actual progress. And, naturally, on the diplomatic side, his knowledge of the Chinese and of Asiatics generally was of the greatest value in our negotiations with the Tibetans and our relations with the Chinese Amban at Lhasa. There were innumerable pitfalls in which a less skilful negotiator might have been caught.

He looked the part, too. He was sturdy and strongly built with aquiline features and glance, and heavy moustache and eyebrows. He was quiet in manner and sparing of speech, and quite imperturbable in circumstances of either physical danger or diplomatic crisis. I have been by his side on several such occasions, and he was always a tower of strength and radiated courage and confidence. And, what was especially refreshing, he never lost his sense of humour and could see the comic side of the most serious situations.

Underneath all this passive exterior and serenity of demeanour lay deep spiritual convictions and a philosophy based on a lifetime of thought and reading; and it was this, I think, which gave him that essential equanimity which was with him so entirely genuine and which cannot be simulated. His philosophy is outlined in several of his books written in later years after his retirement, and it found expression also in the founding and furthering of the Congress of World Faiths, whereby he sought to bring together the followers of all religions and to find some spiritual common denominator acceptable to all mankind, irrespective of creed or dogma.

He was, in fact, that rare combination of philosopher and man of action. He was a great Englishman, honourable, sincere, and courageous, and his name will live both for what he did and for what he was.

FREDERICK O'CONNOR.

I AM asked to add an impression of Younghusband as he appeared in his younger days of active exploration, which has remained with me more clearly than recollections of our talks in much later years, of a more serious character. As a returning 'Indian' child he had been entrusted to my mother by his father, General Younghusband, C.S.I., who had been one of her father-in-law, Sir Henry Lawrence's 'young men', and spent some school holidays in her house. Later, he returned to visit us at Formosa, fresh from his first great journeys. And I was set, as a small boy, to entertain him by rowing behind him as bow oar from Cookham to Windsor and back, and showing him where to bathe. He was burned brick red, face and head and neck, with a general fiery effect of thick eyebrows and short hair; immensely sturdy with powerful chest and rocklike shoulders. In those days of river flannels, he stuck to his grey tweeds, and did not

lay aside even a coat for the heat. All a long day he rowed in front of me, untiring, unrelenting, taciturn, with a strong digging, fisherman's stroke. From time to time respectful questions brought terse but picturesque answers, jerked over his shoulder. In this way I heard of the China to India journey, of the cutting sand-winds, and of the famous crossing of the Mustagh pass, where he had only a meat axe to cut steps with; and cut them for hours in the ice for the yak's feet. I knew nothing of ice or snow passes in those days, and pictured an iceberg, down which he cut the steps, without dismounting, for all four feet of the yak separately; which it will be agreed was unforgettable, if bewildering. As we rowed upstream again, came the anecdote, staccato humour and unsmiling as before, of the elderly English lady traveller whose path he had crossed in the Pamirs. She had been alone for many months; she was so frail that a frame supported her in the saddle, and she was so nervous that, though the camps coincided for but a single night, she fixed an alarm bell to her tent-top and rang up twice in the small hours, in panic that her servants were about to murder her. He never relaxed, in energy or imperturbability, during the long, sunny, river day; and I was left doubtful whether the hero had really been 'entertained'. But he said once, between headers at Odney Weir, that it was a good change, and he sent marked copies of his Lectures to the Royal Geographical Society, as a reminder of our journey together.

The 'meat axe' proved to be a pickaxe, and there were no yaks on that part of his journey. But those who read the story will agree that the feat of getting the party across the pass, and the resource and nerve he displayed on this his first acquaintance with glaciers, were prodigious.

G. WINTHROP YOUNG.

THE passing of Sir Francis Younghusband leaves a gap in the lives of all interested in Himalayan travel, which it will be impossible to fill. Few of us have failed to draw inspiration from his early work or to benefit from his counsel. I can remember the deep impression which *The Heart of a Continent* made on me in 1899 when I read it at the age of twelve, how I longed then to see for myself the country he so grandly described, and how I begged my parents to find out how best I could train to go there. It was not for many years that I fulfilled my early ambition in its entirety.

Sir Francis was the inspiration of early Mount Everest expeditions, of men like Mallory and Norton. Generations of Himalayan travellers have consulted him before setting out, have carried his books in their baggage to read in the hills, have turned to him when they came back. He was one of the first whose advice we sought when the

Himalayan Club was founded. All his experience was at our disposal: he was gentle, generous, wise and thorough.

KENNETH MASON.

SIR AUREL STEIN, K.C.I.E.

1862-1943

[By courtesy of the *Alpine Journal*.]

AUREL STEIN, who died in Kabul on 26th October 1943, was the greatest Central Asian traveller of his generation. His pre-eminence was due to his scholarship, both in languages living and dead, and in archaeology and historical research. He was a resolute explorer of unknown mountain regions, a sound geographer and a good map maker.

Born at Budapest, he studied oriental languages and antiquities at the Universities of Vienna and Tübingen; but he told the writer of this notice he had to come to Oxford to complete his studies. He became a naturalized British subject, joined the Indian Educational Department, was appointed Principal of the Oriental College of Lahore and Registrar of the Punjab University in 1888 and in 1899 of the Calcutta Madrasa. But during these years he also carried out archaeological investigations in Kashmir and on the Afghan frontier. His work was of so pre-eminent a nature, especially his researches on the influence of Alexander's Greek colonies and its effect on native Buddhist art, that in 1910 he was transferred to the Archaeological Survey of India.

Here his great talents found a wider scope. He was already a Sanskrit scholar. He was one of the first to translate Kharosthi, a dead language. But his colloquial knowledge of the many living languages of the Indian borderlands and of Central Asia was unique and gave him admission to districts closed to other Europeans. Thus he was the first to follow the route of Alexander's invasion through parts of Bajaur, Swat and the upper Indus 'republics', including Darel, his papers in the *Geographical* and *Archaeological Journals* being for certain districts still our only source of information.

He first visited Chinese Turkestan in 1900-1, returning for a longer journey in 1906-8. In the course of these journeys he explored that part of the Kuen Luen which had been touched by W. H. Johnson in 1865,¹ covering much new ground in arduous conditions. It was in the Kuen Luen that he got badly frostbitten, but his resolute courage—and he suffered acute pain during months of hard travel—never permitted this disability to abate his activities. Later journeys took him to Kansu, where he followed out the ancient 'Silk

¹ *A.J.*, vol. xxiv, p. 133; vol. xxxiv, p. 54.

Route' from China to the west. In 1913-16 he carried out geographical and archaeological explorations in Western Central Asia and Persia, and in South Persia again in 1932-3. In 1926-8 he made a most valuable foray into Upper Swat, Baluchistan and Makran. In 1938-9 he travelled through Iraq and Transjordan, unravelling problems of Sassanian and Imperial Roman topography.

He was the author of many books, besides innumerable papers on Sanskrit and other oriental languages, archaeology and geography. His best known works are *Serindia* (5 vols.); *Sand-buried Cities of Khotan*; *Ruins of Desert Cathay*; *Innermost Asia* (4 vols.); *The Thousand Buddhas*; his last (1940) on *Old Routes of Western Iran*.

He was awarded the Gold Medal of the R.G.S. in 1909; also the Gold Medals of the Geographical Societies of France and Sweden; the Petrie Medal and the Gold Medal of the Royal Asiatic Society and the Society of Antiquaries. He had honorary degrees from Oxford, Cambridge and St. Andrews. He was created K.C.I.E. in 1912. Three years earlier he was elected an Honorary Member of the Alpine Club.

For many years he made his home in Srinagar, Kashmir, but often visited England. To meet him was always a delightful experience, for besides his personal charm, his profound scholarship enabled him to talk fascinatingly on any aspect of oriental civilization. His sympathetic understanding of oriental races made him welcome from Baghdad to China. It is doubtful if any other has ever been so supremely qualified as a traveller.

T. G. LONGSTAFF.

PETER R. OLIVER

1909-1945

[By courtesy of the *Alpine Journal*.]

LIEUT.-COLONEL PETER OLIVER was killed in action near Meiktila in Burma while commanding a battalion of the 13th Frontier Force Rifles. He was ahead of the main divisional column receiving an area for the night when he saw from tracks that some of the leading vehicles had taken a wrong fork in the road, and were heading straight for a force of the enemy that was being driven in from a flank. He immediately set off in his jeep in an attempt to round up the stray vehicles before they were cornered, and himself ran into the Japs. Together with his driver and orderly he left the jeep and engaged the enemy with his rifle. The sound of his firing warned the vehicles, and by taking a diversion they managed to escape. Having accomplished his purpose, he decided to return, but before he could regain the jeep he was shot in the neck and body by machine-gun fire and instantly killed. He was buried the following

morning, to quote a letter from his Adjutant, 'facing some high hills of which he was so fond'.

Peter Oliver was born in 1909 and was elected to the Club in 1933. His qualifications included three seasons' climbing and exploration in the Himalaya, and one season without guides in the Alps. His first climbs were made with E. H. Marriott in the Kanawar Kailas group, Baspa valley; thenceforward part at least of his leaves was spent in the hills. In 1930 he visited the Dhaula Okar range above Dharmasala in the Kangra valley and recorded his experiences in vol. iii of *The Himalayan Journal*. These ascents, made either alone or with an unskilled orderly, involved both rock climbing and snow and ice work. Like the good mountaineer he was quickly becoming, he records how, when descending a steep snow slope overlaid with loose hail, he took the greatest care to drive his crampons into the firm substratum.

In 1931 he returned to the same district. He was now more ambitious, and with his orderly climbed one peak of 19,000 feet and three of 18,000 feet.

In 1932 while on home leave he visited Switzerland, and with M. G. Bradley and E. F. D. Campbell made a number of guideless ascents, including the Fünffingerstock (peaks 1 and 2), Sustenhorn, Wichelplankstock, Winterstock by the east ridge, and Wilerhorn, and with Campbell the Gross Hockenhorn and Balmhorn-Altels traverse. He concluded the season with ascents of the Simmelistock and Kings peak accompanied by G. R. Speaker.

He had passed his novitiate, and in 1933 with Campbell attempted Dunagiri, 23,184 feet, in the Garhwal Himalaya. Little was then known about the mountain, apart from W. W. Graham's vague account¹ of his attempt in 1883, and the route selected was the west face and south-west ridge from the Tola Nala. Dunagiri was eventually climbed by the ridge, but it was reached from the east, not the west, and when in 1937 Peter and I made an attempt by the former route, being turned back a short distance from the summit by bad weather, it was evident that any attempt from the west was foredoomed to failure owing to the tremendously steep average angle and the danger from falling ice and stones. Possibly it was well, therefore, that Campbell's mountain sickness prevented a more determined attempt.

After this, Campbell had to return to England, leaving Oliver to make the second ascent of Trisul, 23,360 feet, accompanied by one porter, a climb involving some 4,000 feet of ascent on the last day, after a fresh snow fall, a great effort for a party of two.

In 1935 he was one of a party of Everest possibles in the Alps.

¹ *A.J.*, vol. xi, p. 366; vol. xii, p. 40.

The most gruelling day was a traverse from the Capanna Margherita to the Breithorn and Zermatt in soft snow under a broiling sun. Throughout this and other expeditions he proved himself thoroughly sound on all types of ground and exceptional in strength, stamina and speed. These qualities, allied to his personal qualities and Himalayan experience, especially in the handling of natives, made his inclusion in the 1936 Everest expedition a certainty. That, and the 1938 expedition, which he also accompanied, were tales of boredom and disappointment, and Peter was of the nervous, highly strung type that chafes against frustration and inaction. With many men frustration resolves itself into grievance, but it was never so with him. Whatever others might feel, however much one might hate the weather, the food, or even one's companions, it was impossible to continue to do so in his company, for pettiness, malice, uncharitableness, gloom and negative thinking melted within his orbit like snowflakes in the sun. The Sherpas were especially sensitive to these qualities, and to his invariable capacity for disentangling right from wrong and justice from injustice—in this I have never known him at fault.

In 1937 he joined me in Garhwal for a long leave. I look back upon that summer as the happiest I ever spent on the mountains. Sensitive, active of mind and body, and at times impulsive, he had an underlying quality of serenity which one only discovered when one knew him well. With him one felt that nothing could go wrong, that defeat on a mountain, even mountaineering itself, came second to his companionship. For Peter was a natural giver of himself; one who was not so much unselfish as selfless. It was in this atmosphere that the summer passed among the flowers and snows of that glorious mountain land.

Two incidents stand out in my mind. One was on the Mana peak. This was the finest Himalayan ascent either of us had made and comparable in length, difficulty and variety with the great routes on the south side of Mont Blanc. Peter did a full share in the leading, including much cutting in steep ice accomplished with the neatness and precision of a first-rate Alpine guide. The weather was perfect, but unhappily he was not yet fully acclimatized to altitude, and a few hundred feet from the summit he decided not to go on. When, after completing the ascent, I returned to him I found him angry—the one and only occasion I saw him thus. But it was not the anger of disappointment, nor was there one grain of resentment as the result of my going on: it was a reaction from the fears he had entertained for my safety as he watched me climb the rock ridge. 'You ought not to have gone on alone,' he kept saying, 'I was never so anxious in my life.' I had not thought of this aspect of

affairs and it made me feel very small and humble. It is my greatest regret that he was not able to crown the work he put into this ascent; it would have been his highest peak.

The other was on Dunagiri. We were struggling down the south-west ridge in the face of a gale when my feet lost all sensation. I mentioned this to Peter and he immediately insisted on a halt by a rock which partially protected us from the blast. There he made me remove my boots and for the next hour at least massaged my feet with his bare hands, thereby undoubtedly saving me from frostbite. Such thought and consideration for others were typical of the man.

Later, on Nilkanta he was at the top of his form and showed himself to be as good on really difficult rocks as he was on snow and ice. Not once during any ascent was there any symptom of unsteadiness or the semblance of a slip, though he used to tear down steep broken ground like a chamois.

For some years he was attached to the South Waziristan Scouts, a force of levies recruited to guard the North-West Frontier, in which he saw much varied service and participated in a number of skirmishes. For many years he suffered from trouble with his Achilles tendons, but this could not diminish his energy, for he climbed with his mind as much as with his body. Spare almost to the point of frailty, he used to take his tough hillmen for long cross-country route marches carried out at five miles an hour over all manner of ground, 'for the good of their souls and to teach them that they are not the only people who can walk over hills', as he used to put it. He could outlast them all.

By temperament and inclination he was an artist, and it is impossible not to feel that he missed his real vocation. His sketches of members of the 1936 Everest expedition will be found in *Everest, the Unfinished Adventure*. But financial considerations and commitments made it impossible for him to fulfil what I know to have been a deep-seated ambition—a personal grief about which he never complained.

His end was as he himself would have wished—helping others.

F. S. SMYTHE.

I FIRST met Peter Oliver at Razmak where we were both subalterns. He was a great walker and walked from Razmak to the top of Shindar, an ascent involving a 10-mile walk and about 6,000-foot climb, in 2 hours 40 minutes. The following year he and I together did some climbing round the Kanawar Kailas in Upper Bashahr. This was, I believe, his first experience of serious climbing and we had a delightful leave there. To my great regret that was the only climbing we did together, as leave periods never again coincided. He was a delightful companion, most enthusiastic and energetic.

Although we only climbed together once we have met on many other occasions, as his family and mine subsequently met.

EDWARD MARRIOTT.

MICHAEL SPENDER

SQUADRON LEADER MICHAEL SPENDER was killed in an air accident in May 1945. He will be remembered by all who are interested in polar and mountain exploration. He is mourned by a wide circle of friends with a marked diversity of interests.

It was said of Spender that he was too much of an artist to be a great scientist. How far the two are incompatible I am not prepared to say. Their claims certainly conflicted in Spender's career. At the age of eight he started to learn the piano. Within a year he was so advanced that his music mistress had little further to teach him. At Gresham's School his music master, Greatorex, was so impressed with his talent that he urged him to take up music as a profession. However, having won an exhibition at Balliol, he decided instead on a scientific career. At first he did physics, then at the end of his first year he changed to engineering. In spite of this, in the remaining two years he took first class honours in engineering. But nearly all his friends at Oxford were in the musical world, and it seems that the conflict between his artistic inclinations and his chosen course of study may have been partly responsible for the restlessness which marked his university career. Research in the electrical recording of music might have offered scope for both his main talents had he not discovered, after a year of this work, a distaste for commercial methods. He was to find a full measure of satisfaction in scientific exploration.

Spender's first appearance in this field was with J. A. Steers on the Great Barrier Reef expedition of 1928-9. There he spent a year making a very detailed survey of a typical island of the Reef, other surveys over a wide area of coral reefs and islands, and a series of accurate tidal observations. On his return from Australia he went to Switzerland to work with the Swiss Federal Survey and to study the latest methods of stereo-photogrammetric survey. He continued his studies under Professor Norlund of the Geodetic Institute in Copenhagen. In 1932 he was invited to join Captain Ejnar Mikklesen's expedition to East Greenland as surveyor. Here he developed new and ingenious methods of exploratory survey which enabled him to make an accurate survey of 120 miles of the Blosseville coast in eleven working days. He then made a fine map of a thousand square miles of Kangerdlugssuak. In 1933 he returned

to East Greenland with Knud Rasmussen's expedition. By the extensive use of his short base method and photogrammetry and with the assistance of air photography he and his assistants mapped the whole of the mountainous area as far as the Ice Cap between Umivik (Lat. 65°) and Kangerdlugssuak (Lat. 68°). So good was this work that a party who travelled 100 miles inland two years later to the Watkins Mountains could find no error in the map or in the determination of heights, although the country that they passed through had never been actually visited by the surveyors.

In 1935 Spender went with the Reconnaissance expedition to Mount Everest to make a stereo-photogrammetric survey of the mountain and a large area of the surrounding country. In 1937 he went with me again, this time to the Shaksgam. On both these expeditions he entered with great enthusiasm into the spirit of the light expedition, using all his ingenuity to reduce the weight of his survey equipment, denying himself tobacco and other small comforts to cut out the last ounce of unessential personal kit, carrying his full share of weight when necessary, and taking full advantage of every opportunity to widen the scope of his contribution to the work.

One of Spender's most outstanding characteristics was his penetrating interest in every detail of his immediate experience. Traveling through Tibet nothing seemed to escape his notice: the flora, the geology, the agriculture, the architecture, the local customs, every aspect of the country and the people received its share of his remarkably well-informed attention. Accompanying him on a railway journey in England one had the impression that one was taking an active part in driving the train: feeling the steepness of the gradient, gauging the weight of the load, and wondering if the engine had sufficient pressure of steam to make it. His intense interest in the detail of his environment sprang, not from a desire to acquire knowledge for its own sake, but from a strong zest for living, a flame that found fuel even in the most commonplace surroundings. This attitude of mind is supremely valuable in exploration, where it finds unusual scope both for expression and development. In the Karakoram in 1937 five months of intensive survey work, hard living and heavy physical labour left him straining to project the experience still farther into a boundless field. I have rarely seen such reluctance to return to the fleshpots.

Among his wide interests, psychology latterly held a prominent place. This was stimulated by a meeting with Jung in 1937 while the latter was making a tour of India. Later Spender travelled back to Europe on the same ship as the distinguished psychologist, and was fortunate enough to spend much of the time in his company. This contact made a profound impression on Spender. As a student

of human nature, it was natural that he should take the keenest interest in sociological problems. His own vivid temperament led him to the conviction that one of the greatest evils of our time was the increasing constriction of the life of most industrial and town workers, which confined their vision to a narrowing sphere, prevented them from mastering the whole of any craft, and removed them farther and farther from reality, and thus from the fundamental basis of human contentment. It was Spender's over-riding desire to contribute in some way to the solution of this great social problem.

His critical intelligence, his habit of giving free expression to his lively imagination, his intolerance of conventional forms made him a most stimulating companion. But these very qualities, combined with a lack of tact, perhaps surprising in one so sensitive, and a quick temper, led to many serious misunderstandings with those who had not had the opportunity or had not troubled to understand his complex nature. This resulted in his making many enemies and roughened the path of many of his undertakings. Some of his acquaintance thought him selfish and over-bearing. Superficially perhaps he was both. But below this surface one found a rare gentleness, a sympathetic understanding of people and a strongly developed power of self-criticism which was constantly rounding the sharp edges of his character and tempering its defects.

There was no man in whose company I found more pleasure, or with whom I would rather have shared the deep and varied experience of an exploratory journey.

E. E. SHIPTON.

COLIN FLETCHER KIRKUS

1910-42

C. F. KIRKUS was not a member of the Himalayan Club, but the *Journal* would be very incomplete without an account of him. The following notice is based on a memorial by A. W. Bridge.

Colin Kirkus's reputation rested chiefly on his cragsmanship. He started climbing in North Wales, and there to the end of his life was his happiest hunting-ground. It was A. B. Hargreave who coached him in the earlier days, and who perhaps originally developed his natural gifts as a mountaineer. Later, almost all of Welsh repute joined the band of his climbing companions; for he was a joy to be with, both as climber and as friend and rope-comrade. With them he pioneered routes over Cumbrian and Scottish and, in particular, Cambrian cliffs. Of these a startling series of ascents on Clogwyn dur Arddu between 1929 and 1933 is unparalleled in British rock-climbing history.

From his climbing grew gradually the fixed purpose of visiting the Himalaya, and especially Mount Everest. Much that he did was pure training. In 1932 he wrote to A. W. Bridge: 'The week-end before last I cycled to Capel Curig (135 miles) and walked over Pen Helyg, Carnedd Llewellyn, Glyder Fawr, Crib Goch, Crib y Ddysgl, Y Wyddfa and back along the road to Capel in just under 24 hours. . . .' With Bridge he slept out on the top of Ben Nevis at Easter, and wrote to him in September 1932: '. . . I'm afraid I may be considered too young. But we *must* manage to go together. . . . Everest! What a life's ambition, and in a few weeks, or perhaps a few days we shall know whether it is to be realised. It *must* be. . . .' He was not selected for the 1933 expedition, to his great disappointment. But he did in that year visit Gangotri on Marco Pallis's expedition, and with Dr. Charles Warren climbed the Central Sathopanth peak (22,060 feet). On this climb he was able to demonstrate that difficult rock-work is possible above 21,000 feet; and had he had the good fortune of further experience on smaller expeditions he would have fitted himself supremely for the assault on the Second Step. The late General C. G. Bruce used to assert strongly that he was exactly the man for the job.

After returning from India he visited the Alps, and continued in the other 'labour of love' at which he was so good, that of introducing newcomers to the hills. His book *Let's go Climbing* was written for such, and is exactly adapted to his public. At Easter 1934 he showed astounding endurance of a terrible ordeal in the accident in which Maurice Linnell lost his life. In 1937 he brought out the really excellent *Guide to Glyder Fach*, and seemed to be climbing as soundly as ever.

When the war came Colin Kirkus joined the R.A.F., and at the time when he was 'presumed killed on Active Service' he was a Pilot-Officer, Navigator in a Bomber Command attack on the Focke-Wulf works, Bremen, on the 13th September 1942. Just before it he wrote: 'I wish I could go back to the hills again, but I shan't really enjoy them until after the war, when all this business is behind me instead of just before. . . .' He would have returned, and he would have sought to return to the Himalaya, with which he fell in love even before he saw them, and remained enchanted ever after.

NOTES

THE PROBLEM OF MOUNT EVEREST

I SHOULD like to refer back to the late Editor's Notes which appeared under the above heading in the 1939 *Journal*. I apologize for the time-lag, but for most of 1939 I was away, and after that there were other matters which though, perhaps, of less importance, demanded immediate attention. Moreover, Everest is unfortunately still a subject of perennial interest.

In his notes Professor Mason, whose Editorship set so unattainable a standard and whose loss we shall all feel, disclaims criticism and appeals to facts. But his facts are selected and he ignores my main contention, which was that previous expeditions had been unnecessarily elaborate and expensive, and in consequence harmful to the interest of mountaineering. Apart from hazarding some strictures on false economy in the matter of food he devotes his argument mainly to the size of the party, and neglects the how and why. I admit that expense is not an absolute criterion, but we live in a commercial age and as a measure of relative efficiency it is a fair yardstick, and has a great bearing on our whole attitude towards these expeditions.

In 1938, at a cost of £2,000 odd against the £10,000 odd of previous years, we occupied Camp VI with two parties of two who were as well equipped and as fit to make a bid for the top as the parties of 1924 and 1933. Professor Mason correctly quotes my modest claim, 'that a small party run on modest lines has proved itself as likely to reach the top as a large expensive one,' and he then proceeds to refute a far less modest claim which was never made. 'There is no evidence whatever', he says, 'to show that with fine weather either of these two parties would have been any more successful than the two parties which went higher and farther in 1933.' Nor is there any evidence, one might fairly retort, to show that they would not. And then, knowing full well the impossible snow conditions above Camp VI in 1938, he gratuitously adds, 'in truth, the 1938 party did not get as far as Norton's party in 1924 or Ruttledge's in 1933, and it would be rash to assume that it could have succeeded where Mallory failed.' Again, no one is asked to make such a rash assumption. I merely claim that at a fifth of the cost, had we had equal snow conditions, we were no more and no less likely to succeed than the others.

To come now to the number of climbers in the party; there is really not a great deal in it. In 1938, when I plumped for seven, I

might have said with Clive that I was astonished at my own moderation. A full-blooded revolutionary, a root-and-branch reformer might have taken only five. Professor Mason, after discussing the question fully, comes down in favour of ten. For my part, I would have eight as a maximum and would consider six or seven adequate, but whether you have six, eight, or ten the party can still be 'big' or 'small', depending upon how it is run. Allowing for two parties of two for the attempt, a party of eight has a reserve strength of 100 per cent., which should be enough for anyone. The men start out fit, are presumably capable of taking care of themselves, and coughs and colds are not so devastating as Professor Mason would have us believe. His figure of ten is an improvement on the four previous parties, which were respectively thirteen, twelve, sixteen, twelve. He also apparently agrees that non-climbing leaders, base doctors, transport officers and wireless officers are unnecessary luxuries.

He quotes against me the case of the Nanda Devi party of eight as a 'small light party', with the implication that since the mountain was only of moderate height the party was on all-fours with the large Everest parties. It was undoubtedly extremely light—it had to be, with only six Sherpa porters who all faded out at 21,000 feet. The point made is that out of eight only two reached the summit. Surely we are not expected to put the whole party on top. And in this case *there were* three others fit enough and in position to make the attempt had the first party failed or had weather conditions justified a longer stay on the mountain. The number eight was arrived at fortuitously, not by reasoning, and was perhaps dictated by political rather than tactical necessities. There were four Americans coming, so it was thought that they should be balanced by four Englishmen. There is a further consideration that of the eight only one had been above 23,000 feet (twelve years before) and only one other had had Himalayan experience, so that allowance had to be made for possible acclimatization failures. This is a point which may have to be borne in mind by future Mount Everest parties, for in the past there has usually been a small nucleus of three or four climbers who had proved themselves able to go high, but owing to the passage of time and the war it seems likely that in the next party there is bound to be a larger proportion of unknown quantities. The same will apply to the Sherpas, since there has been little high climbing done during the war. Professor Mason ignores the number of Sherpas employed on the mountain, another factor which distinguishes 'large' parties from 'small'. On Nanda Devi we had six, on Everest in 1938 we had thirty, while previous parties had eighty or ninety.

Professor Mason and others indulge in much wild talk about faulty, unscientific diet, starvation tactics and living on roots. If the reader turns to page 2 of the 1939 *Journal*, where there is a short account of what we ate in 1938, he will wonder what the Professor means and what members of expeditions really expect. Perhaps the seven lean years of rationing will have helped them to modify their ideas. I have not checked it, but I think it is true to say that in 1938 we were the first to eat bacon and eggs on the North Col. As regards quantity, the scale was 2 lb. a man, and I defy any normal man to eat on an average more than this, or, having eaten it, to suffer from hunger. In fact, this figure could probably be cut to $1\frac{1}{2}$ lb. without anything but a beneficial effect on health and mobility. On Polar expeditions where conditions are more severe, the work as hard and the period more prolonged, the ration varies from 25 to 33 oz. Shipton and I like our food as well as anyone, and I am of the opinion of Dr. Johnson, that the man who does not mind his belly will scarcely mind anything else. For many years now I have believed, with the Food Reformers, that most of our modern ill health is due to faulty feeding—to the almost complete absence of fresh natural food in the average diet in favour of preserved, processed, devitalized food. But the effects of unbalanced faulty diet are long term—general ill health is the result of months or years of wrong feeding—and if Professor Mason had thought for a moment he would not have attributed the coughs, colds and sore throats, which afflicted us on arriving at Rongbuk to the food we had been eating for a mere three weeks since leaving Sikkim. Three weeks on bread and water would hardly have this effect; indeed, it is well known, or should be well known, that coughs and colds are usually the result of over-eating. He goes even farther and attributes all the minor ailments from which I have ever suffered, including the inability to go higher than 23,000 feet in 1935 and presumably the malaria I had in 1939, to this same faulty, unscientific diet. Surprising though it may seem, we did in 1938 take some thought for the morrow, what we should eat. True, a hearty attempt was made to break away from the 'tin' tradition, but no one was condemned to a course of grazing, and austerity was neither practised nor preached. On the contrary, the food was varied, adequate and approved by a dietician, Dr. A. L. Bacharach. Fresh natural food is what matters, and though on an expedition a certain amount of tins and chemicals are unavoidable the fewer the better.

Some of Professor Mason's other Notes are vitiated with this 'small party' phobia. One finds it in the Note on the disaster on K2, the lesson of which, he urges, advocates of the small mobile

party should take to heart. Leadership and faulty tactics have nothing to do with the size of the party, and Professor Mason studiously refrains from any comment on the highly successful and even smaller expedition to K2 in 1938. There is not always safety in numbers. Both the German expeditions to Nanga Parbat which ended in disaster were on the lavish scale of a Mount Everest expedition, and their losses were consequently all the heavier. Even Col. Strutt, of whom as one of the old school one would have expected better, is bitten with this small party phobia. In reviewing a book in the 1940 *Journal* he remarks, 'the lack of success of some—so-called—"light" parties can in large measure be attributed to incipient starvation provoked by lack of porters and the consequent urge to live on roots'. I am not quite sure to which expedition this tribute is paid, but food happens to be one of the things of which the minimum weight required is accurately known and upon which economies are not likely to be made. Excess of food is as bad as excess of anything else. Every additional porter means another one to carry *his* food, and so on *ad infinitum*. But Col. Strutt's infection was only recent and was probably a direct result of Professor Mason's Notes, for in the 1939 *Journal* he begins his review of *Himalayan Assault*, the story of the French expedition, with the words, 'It is the tale of an expedition, overloaded with stores and personnel, struggling bravely against continuous bad weather.' He might have said the same of all the Everest expeditions.

Like Professor Mason, I disclaim criticism, but I feel that his *ex cathedra* condemnation of the modest scale expedition, which has held the field unanswered for seven years, may be thought by some to have settled the matter once and for all. I agree with him that regard must be had to the objective; that a party engaged in mountain exploration, for example, is not the same as a party attempting one of the Himalayan giants. But that is self-evident, and it is the scale of Mount Everest expeditions which is at issue and which in 1938 we endeavoured to show had always been extravagantly large. We tried to save the Mount Everest Committee from the unfortunate necessity of having to sell their souls to that newspaper which would pay most, with the attendant consequences of 'bally-hoo' and wireless transmitting sets, and their baleful effects upon the climbers concerned and climbing everywhere. I maintain we showed that the mountaineering virtues of simplicity and economy are not incompatible with a serious attempt upon Mount Everest, and I think it will be a retrograde step if we ever revert to the grandiose standards of earlier expeditions.

H. W. TILMAN.

POSSIBLE ALTERNATIVE TO TRAILL'S PASS

Map: New $\frac{1}{2}$ in. (1944), sheet 62B/sw, squares A3, B3.

SOME information which might interest members was gathered by J. C. Donaldson in June 1945.

The traditional way of crossing from the Pindari glacier to the Johar (Milam) valley is over Traill's pass (17,430 feet), a mountaineering route which takes four days. It is described in Heim and Gansser's *Throne of the Gods* (and see *H.J.*, vol. i, p. 80).

In August 1926, after an expedition to Kailas in Tibet, H. Rutledge and Colonel Wilson crossed Traill's pass from the Johar side to Phurkia. They had with them a party of four Bhotias from Martoli village in Johar, headed by Diwan Singh Martolia who was well known as a guide. These four were dismissed at Phurkia to return to their village, and advised to go by the safe Namik route. They had ropes and some equipment with them. Instead they struck up east from Phurkia, slept the first night below the snow-line, and keeping south of Nanda Kot found themselves by mid-day next day in the Shalang Gad, and were in their village Martoli the same evening.

In June 1945 J. C. Donaldson was camping at Martoli and heard this story from Ram Singh, one of the party. The route was described as easier and safer than Traill's pass, as well as shorter. Donaldson went with Ram Singh to look at the approach up the Shalang Gad. This they found opened at the top into a broad grazing valley, with impressive close-up view of Nanda Kot. There was a path all the way. The glacier was reached at about the level of Karbasya. Ram Singh indicated his first pass as lying somewhere to the south of Bhital Gwar on the opposite side of the glacier. It looked not formidable, and not over 16,000 feet. His account of it was that, after crossing and descending a little, one would find a fairly level snow-field (on which they had roped) rising to another pass of about the same height or a little higher. From there it would be possible to go down either into the Khaphini valley or to Phurkia. Donaldson and Ram Singh climbed up the side of Shalang Dhura in the hope of a view of it, but were not successful. Time from Martoli to the point in the valley reached by them was $5\frac{1}{2}$ hours.

The story was confirmed by Diwan Singh Martolia,¹ now living at Birthi, some way off. But it is not absolutely clear which side of Nandakhani (19,780 feet) the route is supposed to run; probably the south. It looks intricate, particularly if it were

¹ *H.J.*, vol. x, p. 77; vol. xi, p. 170. According to Donaldson, Diwan Singh was still active, though too old for guiding.—*Ed.*

tackled from Phurkia and to one who has seen the rocky ground of that side. If it was really done by these men it was a very creditable achievement.

Later in the year Donaldson was able to visit Phurkia and make the following further observations:

A party would certainly need tents.

The Bhotias could not have seen Phurkia from the crest of the pass. It is tucked right under the hillside. As Rutledge in 1926 is said not to have stopped at Phurkia, but to have camped on the west side of the Pindar, near Martoli, what the Bhotias probably could see was Martoli. They were unfamiliar with the valley and applied the name Phurkia, which is better known. The most promising start for the pass on this side would therefore seem to be from Martoli. From the point 1 of the height shown 12,520 on the new $\frac{1}{2}$ -inch sheet, looking up the Shel Changuch glacier, one sees what look like two practicable passes somewhere near the point marked 15,020. This would be a promising part to start exploration. The locals reported a rumour that a shepherd had crossed that way last year.

KHILLANMARG AVALANCHES, 1945

In the spring of 1936 an avalanche obliterated the former Ski Club hut at Khillanmarg (described in *H.J.*, vol. ix, p. 163). On the 28th February 1945 avalanches occurred covering roughly the same ground, but of a somewhat different character. The snow started to fall on the 24th February and continued with a high veering wind over the next days. At the same time the temperature rose, and the interior of Khillan hut, which was occupied by instructors and pupils of Aircrew Mountain Centre Skiing Course, became almost unbearably stuffy. On the afternoon of the 28th February Khillan hut was put out of bounds to all by the Chief Instructor at Gulmarg, in view of the uncertain conditions; but before any definite arrangements had been made for evacuation the avalanches fell. The main fall, at 3.45 p.m., was from half-way up the centre of Apharwat, sweeping the marg to within 50 yards of the hut, and on the other side damaging trees beyond the Red Run (width of about 300 yards). This may have started a second fall which took place about 10 seconds later from the gullies to the left, the other side of the Catchment Area fence. Christmas Gully, above and to the right of the hut, had avalanched when it was inspected next day, but at what time it is impossible to say. The hut was immediately evacuated and not re-occupied for a week.

These were the only serious avalanches during the whole spring, and it is interesting to compare them with the 1936 fall. In this case the avalanched snow was in block form, not dust as before, and its limits were clearly defined. It would seem that the strong veering wind driving snow into the gullies and compacting it at steep angles, together with a high temperature, was enough to give the necessary conditions. Then a small portion slipping off and undercutting the rest, or a minor slide from above, would set the whole mountain-side in motion. Or the finishing touch may have been given by the shift in wind direction at midday on the 28th. The chowkidar of Khillan hut, who up to that time had shown no signs of anxiety, became immediately agitated when the wind started to blow from, instead of towards, the mountain. His brother was killed in the 1936 fall.

TOURS IN SIKKIM AND TIBET

THE following notice is published at the request of Angharkay. (For the many who desire to make the most of a short time in Sikkim his services as Sirdar may be called invaluable):

‘Travellers wishing me to make arrangements for them for transport and/or servants for touring in Sikkim or Tibet are requested to supply the following information:

- Particulars.*
- (i) Route proposed, or area to be visited.
 - (ii) Itinerary and starting-point.
 - (iii) Whether using Dak Bungalows or tents.
 - (iv) Total weight of kit and transport requirements, i.e. riding ponies, mules or coolies.
 - (v) Number of party, including personal servants if any.
 - (vi) Whether cook, tiffin coolie, or sweeper required.

Rates. Travellers are advised that the rates will be as follows:

- (i) Riding pony Rs. 10 per day.
- (ii) Transport mules Rs. 6 per day.
- (iii) Cook Rs. 5 per day.
- (iv) Coolie Rs. 3 per day.
- (v) Sweeper Rs. 3 to Rs. 3-4 per day.

These rates are subject to fluctuations, which will be notified in advance. Half rates will be charged for transport returning unladen. There will be a 25 per cent. extra charge for days spent above the snow-line.

Passes. Travellers are advised to apply at least one month in advance for Dak Bungalow passes from the Deputy Commissioner, Darjeeling. It will also be necessary to obtain from the Political Officer in Sikkim, Gangtok, Sikkim frontier passes for each member

of the party, and, if visiting Tibet, special permits to enter Tibet. These should also be applied for from one to two months in advance of the starting date. If it is intended to leave the 'beaten track' (Dak Bungalow routes), or cross the frontier into Tibet, the Political Officer will require a medical certificate in the form to be obtained from him.

Food. Very few supplies are available in Sikkim or Tibet and practically none at all off the beaten track. It is, therefore, advisable to supplement tinned and other ordinary stores with a supply of fresh vegetables, eggs, butter, flour and a few chickens, which will be arranged for from Darjeeling or Gangtok if required, at the current market rates. The above-quoted rates for coolies, ponies, &c. are inclusive of food along the Dak Bungalow routes, but extra food for them will be required for portions of the journey beyond the beaten track plus the additional transport involved. The extra food will be arranged by me, if desired, at the current market rates.

Correspondence. During my absence, correspondence addressed to me in Darjeeling will be dealt with by my wife Ang Yang Tsen. Telegrams may be addressed to me: Angtharkay, Bhutia Basti, Darjeeling.'

ANGTHARKAY SIRDAR,
Lama Villa,
Bhutia Basti, Darjeeling.

GERMAN EXPEDITIONS AND ITALIAN PRISONERS OF WAR

THE expedition of three Germans to Sikkim has been recorded earlier in this number. Ernst Gröb, a Swiss, returned to Germany and his book was published in Munich in 1940. His companions were interned, and tradition will always have it that one escaped from the camp at Dehra Dun and wanders still as a nomad in Tibet; while the other returned and gave himself back to captivity.

We have not yet been able to get details of the German expedition operating in 1939 in the Kashmir-Karakoram area.

The Italian Prisoners of War at the Yol camp, Kangra valley, succeeded in organizing during 1944 and 1945 a series of most ingenious expeditions to the hills. A record of these, illustrated with some remarkable drawings and sketch-maps, was produced. But a shortened account which was to have been available for this number has not yet appeared.

REVIEWS

UPON THAT MOUNTAIN. By ERIC SHIPTON. *London: Hodder & Stoughton, 1943.*

This is a semi-autobiographical book which deals with most of Shipton's major expeditions and many minor phases of his climbing life. A glance at the list of contents produces some misgivings that, after those two grand books *Nanda Devi* and *Blank on the Map*, this might be rather a pot-boiler. But such fears were largely groundless; in its own way this is as good a feast as the others. The title of the book is perhaps not entirely happy, but then it must be very difficult to think of a new title for a climbing book; the field is becoming too limited. The significance of the title, which is a quotation from Shelley's 'Mont Blanc', seems to lie in the word 'that', which must be taken to mean not any particular mountain, but that universalized mountain which looms again and again into the consciousness of climbers, and dominates the lives of the great ones.

The author starts with Whymper and dreams of Chimborazo, which early had stolen his heart away, and ends when the news of the War reaches him on the Hispar Snow Lake. The thread between wanders amongst some of the world's loveliest mountains. Many of these are illustrated by fine photographs which have suffered little through war economy standards. The pictures of the Weisshorn and Mount Kenya, made dreamlike by cloud-swirls, and the sublime austerity of the Shaksgam photographs are outstanding. Another remarkable feature of the book is its brevity; within the compass of 210 pages there are to be found accounts of expeditions in five of the world's major mountain groups and much general mountaineering wisdom besides. This shortness, the lack of technicalities and the pleasant style of writing make it an especially valuable book for non-climbers whose eyes may already be turning towards the hills. That it has had a wide circulation during the War may prove to be of considerable importance to Himalayan mountaineering. There must be many to whom it has brought the revelation that the Himalaya are accessible to ordinary men with ordinary means. And further, Shipton's authoritative case for lightness and mobility will do much to confirm the already widely held view, that this, and not what Geoffrey Winthrop Young in his foreword calls the 'majestic cumbersome' of the old days, will be the mode of Himalayan travel in the future.

It is difficult to define the quality of Shipton's style which makes the book so readable and right. There is a simplicity, a directness

and an absence of straining after effect, but this is not all: The quality of a mountain book depends on two transferences: the author's appreciation of the mountain mood which all climbers get in varying degrees; and the transference of that emotion into words. The scientific writer attempts to eliminate emotion from both. At the other extreme, a climber who is also a poet must feel more deeply than the majority, and when he writes he runs a greater risk, for to convey the deeper emotion he needs a greater measure of skill; and it is the lack of skill rather than the falseness of the original feeling which produces these well-meaning purple monsters which sometimes appear in print. One would guess that Shipton is not a palpitatingly sensitive receiver of mountain feelings. He seems to go on inhaling them with no more fuss than a man breathing. And he gives them out again without dramatizing them, without stripping them to scientific nudity and without being coy about it. When there is glory, there is no need to disclaim or dodge it; it can be left where it belongs . . . with the mountains rather than with men. The manner in which the mountain moods come through his books with so little distortion is reflected by the way in which we are encouraged to enter the world of the book without impediment. The reader is constantly being drawn in, to identify himself with the 'hero'. This is quite right. The reason is that Shipton, in spite of his heroic role, seems to be like any ordinary mountaineer; and his extraordinary abilities do not prevent the ordinary mountaineer from sharing something of his experiences, stepping into those badly battered boots and looking 'beyond the brink of the ice ledge, . . . and immensely far below [to] a lake of vivid colour, at the bottom of which [was] the Sundardhunga river coiling like a silver water-snake, away into an ocean of cloud which stretched without a break over the foothills and plains of India'. Throughout the book such images are constantly evoked.

Then there is another attractive feature of Shipton's descriptive writing. He skips with great rapidity from the humble chores of camp to the heights and glories of the peaks, a style which reproduces much of the contrast that is the essence of mountain travel. In one paragraph he is taking castor oil, in the next he is lazing in the shade of the oak and pine woods beneath the sparkling peaks of Trisul and Nanda Ghunti, and in the next he is discussing pemmican and vitamin 'C'.

Throughout the book it is interesting to trace some gradual changes of attitude. There is the emergence of the faith in light expeditions, which, swinging between the poles of Everest 1933 and Spartan ventures with Tilman, finishes up somewhere between the two though nearer to the latter. There is his own widening horizon,

which starts with a love of volcanoes and gradually develops through orthodox Alpine climbing to embrace, at the end, a deep interest in all aspects of mountain travel from the psychology of team-work to the problems of surveying.

It is to be hoped, when paper restrictions are lifted, that the publishers will reproduce this book on a larger scale with an index and rather more detailed maps. Austerity, which may be desirable on mountains, and has been necessary in war-time mountain literature, should no longer be applied to a book as good as this.

R. A. HODGKIN.

BRENTVA. By T. GRAHAM BROWN. *London: Dent, 1944.* $8\frac{1}{2} \times 5\frac{1}{2}$ inches; xv and 225 pages; 72 photographs and maps. 25s.

Professor Graham Brown has written a remarkable book which sets a new style in Alpine literature. In this intensely personal record, his mountaineering philosophy and his ambitions from his rock-climbing novitiate to his experience in great Alpine expeditions are all distilled into the Brenva face of Mont Blanc. His plans, his attempts and his achievements are described in the most minute detail and with the scientist's regard for accuracy of topography, of times and dates, and of other climbers' expeditions on the face. The ascents he describes form a remarkable climax in the technique in which he has achieved special distinction, namely that of making routes up faces which are threatened from above by hanging ice with a safety which he achieves by having made the closest study of their seasonal and diurnal habits. His route up the 'Pear buttress', the third panel of his triptych, must surely rank as a classic in this class of expedition.

Such is the emphasis on the Brenva routes that they are described even to the point of repetition, and the many subsidiary routes get little hearing. One would like to have been told more of his descent from the Col Major by the Kennedy route, and of his lantern-light traverse of the Aiguille de Bionnassay which is dismissed in three lines. One is told far too little about the incomparable Graven, that giant among guides, whose character no one, other than his own countrymen, knows better.

With the book narrowed down to Brenva alone the reader feels that, vast though the scale and the difficulty of this face may be, its description in such detail belongs to the realm of climbers' guides rather than of literature. In fact it seems a pity that when setting out to write a book with such care, and such richness of feeling for the mountains on the grand scale, Graham Brown did not draw upon his wider experience. What could he not have written if he

had chosen for his title Mont Blanc, for is he not internationally recognized as its leading exponent?

The photographs, which are all his own and were all taken on the first Leica to be imported into England, are a unique commentary on the climbs. Owing to war-time publishing difficulties they are all grouped together at the end, but this is no drawback since the text demands such constant reference to them that they are more readily thus found. The view of the face from the Fourche de la Brenva, which also appears on the dust cover, is fit to rank artistically with the greatest.

B. R. GOODFELLOW.

ZWISCHEN KANTCH UND TIBET. Picture diary of a new expedition in Sikkim. ERNST GROB, LUDWIG SCHMADERER, HERBERT PAIDAR. *Published by Bruckmann, Munich, 1940.*

The production of a book so beautifully and copiously illustrated at Munich in the year 1940 is remarkable. The end of Ernst Grob's quotation from his brother, with which he prefaces the introduction, might serve as its epilogue:

‘und über allem Leid liegt irgendwo
immer eine stille Versöhnung.’

(... and over all suffering there lies always somewhere a peaceful reconciliation.)

That I think is the spirit in which we judge of this book: not as a thing of boastfulness, a triumphant Nazi gesture in the strength and defiance of 1940; but as a thing of pride certainly, yet of living and doing so full that it were impossible not to accept and enjoy them. At the close of the book the reader's feeling is of pity and sympathy. The suffering has come indeed, and swept with it this that was fine in the German spirit, along with the distortion and brutality that accompanied it. Now it is over.

The book is a description, mainly in annotated picture form, of the expedition of three climbers to Sikkim in 1939. At the end are given extracts from the diaries of the climbers. The chief goal of the expedition was the Tent peak (24,165 feet) north of Kangchenjunga. The illustrations of the long and very difficult ridge joining this to the Nepal peak (23,519 feet), which had to be traversed, are outstanding. (For the account see p. 46 earlier in this number.) Besides this ascent, the party reached the Sugarloaf saddle, made the first crossing of the Langpo La and the first ascent of the southern summit of the Langpo peak, this last under exceptionally bad conditions.

The Naziisms peep in, at moments. Flags are hoisted *glücklich* on summits. Pride is exhibited in the achievement of *Grossdeutschland*.

But the authors are too busy enjoying, not only 'the struggle' but the flowers and goatherds that they photograph. They forget themselves, happily. But they forget also, at times, their Sherpas. The porters who were left alone in the camp under the summit of the Nepal peak, with very little food and in a state of anxiety about their sahibs' return, showed a huge fortitude which is hardly appreciated. It was little wonder that they began to fall to pieces on the descent. An uncertain relation with their porters has always been a characteristic of Germanic climbing. It is perhaps partly that the Germans seem often to be competing rather than co-operating. But for the *Drei im Himalaja* there is clearly among the porters a feeling of admiration and willingness to suffer with them. The Sherpa Pansy's remark: 'where you go sahib I go too' has the ring of comradeship. And admiration is the taste left at the end. This thing may have gone wrong, may have become distorted and hideous. But something fine has been lost besides in the ruin. With that something we would be reconciled.

MOUNTAIN CRAFT. By GEOFFREY WINTHROP YOUNG. 4th edition, revised. Published by Methuen, London, 1945. 25s.

The appearance of this new edition of the standard book on mountain craft is extremely welcome. The author states in his additional Preface that 'it has not been possible to bring up to date our chapters dealing with specific ranges now unattainable' and therefore that 'the body of the work, in which the theory and practice of mountain and climbing craft were set out and to some extent first formulated, I am reissuing after a full revision'. In point of fact the omission of the chapters on ski mountaineering and the various ranges may seem to many an improvement, and for two reasons. The volume is easier now to handle; and it is the co-ordinated work of one author (except for a part of the Equipment Section) who has concentrated in it the quintessential wisdom of mountaineering practice. *Mountain Craft* is become now the completed corollary to *On High Hills*.

It is remarkable how little has in fact had to be revised. The book remains what it has always been, the best of all reading on the subject, both for the beginner and for the man who feels that he knows a little about mountaineering and needs to be humbled. Mr. Winthrop Young derives his knowledge from his experience in the Alps and Great Britain; but everything that he says applies to the Himalaya, and the additions that might be made would concern the specialized problems of high altitude equipment, porters and siege technique. These are, anyway, a study in themselves, and would need to themselves a special section or probably a special book.

The most important 'reconsideration' is in respect of modern rock technique. This covers sections on 'expert belays', 'kinetic belays', 'psychical belaying', &c. It is, perhaps, well to have these tabulated; though it is difficult not to wonder how many first-class climbers had consciously considered their classification before. Some may be surprised to see old friends under new names, as the poets would be surprised to see the modern criticisms of their more spontaneous versification.

There is no need to add here remarks about the literary quality of *Mountain Craft*. The book is written in a prose style as distinguished and varied as that of *On High Hills*, and the new edition gains in being a single composition rather than a compilation. It is the rarest of all pieces of writing—a text-book become a work of art.

THE AMERICAN ALPINE JOURNAL, 1945.

THE LADIES' ALPINE CLUB, 1945.

THE SIERRA CLUB BULLETIN, OCTOBER 1944.

THE JOURNAL OF THE MOUNTAIN CLUB OF SOUTH AFRICA, 1944.

It is a pleasant sign of more fraternal mountaineering days' return to be greeted with overseas Journals. In the *American Alpine Journal* outstanding is the account of climbing and exploration on and around Aconcagua by Arthur Emmons, undertaken during 1944. The account of the Bolivian Andes explored by Prem in 1939 points to further possibilities of greater mountaineering in South America. Those who maybe could not be active physically have speculated upon the hills, delving back into the old, perhaps profitless but irresistible questions of Mountain Mysticism; or turned historical, as in the High Adventure of Mr. Randall. It is to be hoped that in the next years the Americans will be able to stretch themselves farther, and to return to the Himalaya on the lines of their best expeditions of the past.

The Ladies' Alpine Club has produced a most competent and serviceable number, to the year 1945. Very much has been done and thought about mountains, and even from the Alps comes an article by Claire Engel describing ascents near Kandersteg. It is to be hoped that the L.A.C. practice, parallel to that of the Alpine Club, of holding meets in Britain will continue, and will link up with the greater mountaineering movements in post-war years. Certainly men of the climbing clubs would be ready to assist again; or to encourage such projects as those faintly suggested in Winifred Murray's article.

The exciting feature of the *Sierra Club Bulletin* is the photography

of J. N. LeConte. 'Sentinel Rock' and 'The brink of Yosemite Fall' have a quality very rare in photographs, other-worldly like a background to Poe. 'The Sierra Club farther afield' shows a healthily mountain loving membership, mainly homesick for its mountains.

Some pleasant and some difficult climbing has been done by the South Africa Mountain Club, and we are grateful for the record of it and for the persistent enthusiasm it shows.

CLUB PROCEEDINGS

A MEETING of the Central Committee of the Himalayan Club was held at New Delhi on 17th May 1946. The Annual General Meeting was held in the President's, M. W. Yeatts, room in Jaiselmer House, Mansingh Road, New Delhi, on 24th May 1946. The President took the Chair.

The minutes of the last Annual General Meeting were read and accepted. The Honorary Secretary's report for 1945 was received, as was a statement of accounts from the Honorary Treasurer.

REPORT ON WORK OF THE CLUB DURING THE YEAR

Membership. Forty new members were elected during 1945. The membership is now 527, as against the 497 of 1940, the last year in which the *Journal* was published.

Obituary. We mourn the death of the following members of the Club:

Sir Charles Bell.

L. Bujak, Esq., reported drowned.

Lt. P. G. Burder, killed in action.

Capt. P. R. Collins, killed in action.

Major R. J. P. Locke, killed in action.

Major-General Sir Charles McWatt.

Lt.-Col. A. D. G. Ramsay.

Col. C. H. D. Ryder, a founder member.

Theodore Roosevelt.

K. C. Roy, Esq., died during a trek in the Zemu valley.

Capt. Langton Smith, lost with his party on the Zemu glacier.

In Memoriam Notices will be found earlier in this number. It is regretted that it has not been possible to amass more of them. Any information regarding possible notices for the next number should be sent to the Honorary Editor.

Library. The following were issued during the year: Library books—134. Volumes of *Himalayan Journal*—90. Copies of *A Climber's Guide to Sonamarg, Kashmir*—108. *Elements of Cragmanship*—55.

The Club undertook during 1945 the publication of *A Climber's Guide to Sonamarg*, compiled by instructors at Aircrew Mountain Centre, and of *Elements of Cragmanship* by P. Work. The guide is on sale to the general public through the local secretaries and through bookshops in Delhi and Srinagar. It is free to members on application.

Climbing on Home Leave by W. Allsup is also free on application to members. On payment: *Routes in the Western Himalaya, Kashmir*,

&c., by Kenneth Mason (Rs1.8), and the Club Catalogue (8 annas) are available.

Club Dinners. A Club dinner was held at the Imperial Hotel, New Delhi, on 19th April 1945. This was the first dinner to be held either in Delhi or Simla and was restricted to members. Seventeen attended. Talks were given by C. R. Cooke and G. Whittle; the latter also showed lantern slides and photographs.

Owing to the success of the first dinner a second was held on 22nd November 1945, at the Imperial Delhi Gymkhana Club. This was attended by forty-eight members and guests. After-dinner talks were given by Brigadier E. A. Glennie and C. R. Cooke.

Replies to a proposal for a Club dinner in London have not been encouraging. It is asked that those interested in a Club lunch should get in touch with Colonel H. W. Tobin.

Aircrew Mountain Centre continued its work in Kashmir during 1945. Some account of the summer activities is given on p. 87 of this number. The Centre was only finally closed in the early part of 1946.

Reports. It was stressed in the Honorary Secretary's annual Report that he and the Honorary Librarian are often asked for information on climbs and treks which it is known have been carried out before. Members are asked to let them have details of expeditions and, where possible, photographs in case these should be of use to the Honorary Editor. (See 'Club Notices', Section VI.)

Awards. We record that Brigadier E. A. Glennie, C.I.E., D.S.O., of the Survey of India, has been awarded the Founder's Gold Medal of the Royal Geographical Society for 1946.

Liaison Officers. In the past it has been the policy of the Government of India to request the Club to supply a liaison officer to accompany any foreign expedition climbing in India. The duties of the liaison officer are to ensure that the porters and local inhabitants are properly treated, that local customs are observed, &c. Before the war the Club kept a panel of names of members who wished to be considered for these appointments, and it is proposed to start a list again. The secretary asks that those interested should send their names to him. A Swiss expedition is expected to be coming out in 1947 to attempt either K₂ or Nanga Parbat. An American expedition is proposed to Kangchenjunga.

CLUB NOTICES

I. ADDRESSES

All communications for the Honorary Secretary and Honorary Treasurer should be addressed as under :

Honorary Secretary/Treasurer,
c/o Officers' Library, General Staff, New Delhi,
G.H.Q., A.P.O.

Books presented to the Library, including those sent for review, and all communications to the Honorary Librarian, should be sent to :

Hon. Librarian, Himalayan Club,
c/o Officers' Library, General Staff, New Delhi,
G.H.Q., A.P.O.

Communications for the Honorary Editor and papers for the *Himalayan Journal* should be addressed to :

The Honorary Editor,
Field House, Jack Straw's Lane,
Headington Hill,
Oxford.

II. APPOINTMENTS

The following are elected officers of the Club from 1st April 1946 to 31st March 1947.

President: M. W. Yeatts.

Vice-Presidents: J. B. Morrison. C. R. Cooke.

Hon. Secretary: Major A. F. Clark.

Hon. Asst. Secretary: A. Percy-Lancaster.

Hon. Treasurer: J. B. Shearer.

Hon. Editor: C. W. F. Noyce.

Hon. Asst. Editor: Mrs. H. P. V. Townend.

Hon. Librarian: Major C. H. Hooper.

Committee: Lt.-Col. J. B. Angwin, L. R. Fawcus, Miss B. N. Joly, P. Mason, Brig. G. H. Osmaston, Maj.-Gen. J. G. Bruce, Major J. R. Foy, G. B. Gourlay, Sir Alan Lloyd, J. S. H. Shattock.

Additional Members of Balloting Committee: J. G. Acheson, Maj.-Gen. D. Beanland, T. A. Schinzel, H. Lall, C. I. Turcan, C. Crawford, N. F. Frome, S. S. Khera, Major J. O. M. Roberts, K. L. H. Wadley.

Equipment Officers: Central Section: Major P. L. Wood; Eastern Section: C. Crawford.

The following are addresses of Honorary Local Secretaries of the Club for the year 1st April 1946 to 31st March 1947:

Eastern Section: L. R. Fawcus, Hon. Secretary, Eastern Section, Himalayan Club, c/o Geological Survey of India, Chowringee, Calcutta.

Sikkim: Mrs. A. J. Dash, Kenmure Point, Darjeeling.

Kashmir: F. Betterton, Esq., c/o Postmaster, Srinagar, Kashmir.

Garwhal: Mrs. A. E. Browne, Bothwell Bank, Ranikhet, U.P.

Kulu: Major H. M. Banon, Sunshine Orchards, Manali, Kulu.

Chamba: J. Slattery, Esq., 'Snow View', Chamba.

IV. EQUIPMENT

A list of the equipment available for use in the Western Himalayas was given after the list of members for 1946, and will not be reprinted here.

Application should be made for its use to Major P. L. Wood, R.E., G.S.I.S., Imperial Records Building, Queensway, New Delhi. For the Eastern Section equipment, application should be made to C. Crawford, Esq., I.C.I., 18 Strand Road, Calcutta.

Climbing nails can be obtained from the Equipment Officer, New Delhi, at Rs1.4 per dozen. Triconni No. 1 and Clinker types are available.

It was decided at the Annual General Meeting to form an Equipment Committee consisting of the following: Brigadier G. H. Osmaston, Lt.-Col. A. Gardiner, Major P. L. Wood, A. Percy-Lancaster, The Hon. Assistant Secretary, a nominee of the Eastern Section. This committee will be responsible for maintaining equipment, studying latest developments in equipment (such as rubber nailed boots), &c.

V. BACK NUMBERS OF THE *HIMALAYAN JOURNAL*

The back numbers of the *Journal* from vol. v onward, which had been held by the Clarendon Press, have now been transferred to Messrs. B. H. Blackwell of Oxford. Members *ex-India* should apply direct to Messrs. Blackwell, who will charge 6s. per copy. Members in India apply to the Hon. Librarian, and receive copies on payment of Rs4 each from the stock held in India. Non-members apply direct to Messrs. Blackwell and pay 8s. per copy. The supply is limited and is disappearing fast. Members wishing to make up sets are advised to apply as early as possible.

VI. INFORMATION ON EXPEDITIONS

The following notice is issued by the President to all members of the Club:

HIMALAYAN CLUB.

1. Now that the War is over, we want to bring the *Journal* to its former standard and to provide a constant flow of material for it and for the information side of the Club generally. We are constantly being asked for information on this or that particular territory, route, &c. If members send, as a matter of course, a skeleton report of every climb, exploration, or trek, these reports could be card-indexed and built up into an invaluable source of experience and information. If any report seemed to offer particular interest as immediate material for the *Journal*, the author would be asked to expand it into an article.

2. The skeleton should cover the following points:

(a) Date and time of departure.

(b) Diary, mentioning weather conditions.

(c) Date and point of termination.

(d) Equipment—comments.

(e) Provisions, distinguishing:

(i) what can be got on the routes;

(ii) at centres near the routes;

(iii) brought in from outside.

(f) Porters, local coolies, pack transport.

(g) Approximate cost under appropriate heads.

(h) Specialist notes (e.g. on flora, fauna, geology), maps, route reports can be inserted either in the diary or as a separate topic.

3. Purely routine or picnic treks need not be reported, but any unusual conditions should be noted, e.g. exceptional weather.

4. All reports should be addressed to the Hon. Secretary.

In this connexion, an extremely interesting and detailed report has been received from Sgt. J. R. Ewer, on an expedition undertaken up the Talung valley towards Kangchenjunga in March/April 1945. The party very nearly reached the Talung glacier, by way of Be and Sakyong, cutting their way up the last part of the valley. It has been thought best not to attempt to print parts of this report, but to hold it available for use of members considering expeditions in this direction. It is another indication of what can be done by a small, enterprising party in a short time.

VII. THE ACCIDENT ON THE ZEMU GLACIER

It is not known at the time of going to press exactly how Captain Langton Smith and his party lost their lives, in the big early storm of 20th–23rd October 1945, either on the Zemu glacier or the Sugar-loaf. A search party going out this summer (1946) will, it is hoped, bring back information which should be available for the next number.

At the Central Committee meeting in New Delhi on 17th May 1946 the question of compensation to the dependents of the sirdar (Lobsang) and porters was discussed.

VIII. THE *HIMALAYAN JOURNAL*

Where in the present number the spellings of names conforms to a recognized map spelling, contributors have been allowed to follow their fancy. (Kanchenjau, for instance, has a variety of artistic forms.) As much licence as seemed reasonable has been allowed with other words.

For the real defects and omissions in this number there is nothing for it but to apologize in advance, and hope for better in the next. *Ignari qui peccant.*

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