on to the firmer rocks of the Markhor path and by the lovely displays of Primula, Globe flower, Columbine and Adonis in the cliffs or by the hill-side. We reached the intermediate camp before six, where our cook had tea ready. Feeling then quite chirpy we packed up this camp and strode on down to Qamar Khwar in good time for dinner.

To tell the awful truth the climb as such was not very exciting. Very few steps had to be cut and the only danger about the rocks was their extreme rottenness. At the same time it was something to have succeeded at the first attempt and it is my belief that we struck the only justifiable route—at any rate for a first ascent. Any other way

seemed exposed to avalanche or stonefall or very steep ice.

We spent what we thought was a well earned rest day at Qamar Khwar, and the next day visited the pass at the end of our valley. There are in fact two passes: one of them leads over to a valley south of Qamar Khwar, the highest camping place being called Surch Ab (red water). Hence the Survey name of Surkar pass. The other, beyond it, which we had not time to reach, really does lead to Indus Kohistan. Both passes are about 14,800 ft. high and both at the end of June, in a year of very slight snowfall, were deep in snow. It is possible that in the height of summer gujars in search of 'pastures new' may occasionally use them. Both passes also are, as we thought, on the right and not on the left, as marked in the Survey map, of the big mountain mass marked 18,550 ft. This itself offers many interesting climbs. In fact, there is three weeks of interesting climbing on both sides of Qamar Khwar. Around the two passes also there would be magnificent ski-ing in April or May.

Botanically the forests are as rich and varied as any in Kashmir. The flowers are largely the same as Kashmir. I found Callianthemum kashmerianum for the first time, and Primula hazarica which I had also found in the Kaghan valley the other side of the Indus. The yellow form of Primula macrophylla, which is common in Kaghan and North-West Kashmir, does not seem to cross the Indus into Swat.

We are very grateful to the Ruler of Swat who not only supplied us with ample armed protection but ensured that we were given every facility in the way of transport, and welcomed us both on our arrival at and return to Saidu with true Pathan hospitality.

KULU REVISITED

By J. O. M. ROBERTS

IMALAYAN BYWAYS, in the ALPINE JOURNAL for November 1940, describes the somewhat aimless wanderings of myself and three Gurkhas in Kulu, Spiti, Lahul and Bashahr in 1939. 1940 was a blank year, but in 1941 I was lucky enough to be granted a month's leave and returned to Kulu. The tangle of glacier and

high mountains round the head of the Tos nala, a tributary of the Parbati, had always fascinated me, and there I decided to go. I had seen the mountains from a point to the west, from the head of the Jagat Sukh nala, two years before; later in that holiday we went up the Parbati and looked at Peaks 21,760 and 21,350 ft., but neither seemed safely climbable from the Kulu side. Eventually we left the valley by a new pass, by mistake, into Bashahr and thence to Spiti and Lahul. So the Tos nala peaks, the next highest in Kulu, remained unreconnoitred and untouched. In 1939 we seemed to walk great distances without achieving very much and in 1941 I determined to climb from a single base at the snout of the Tos Glacier and not to try and cover so much ground. Also, a month is not a long time for an expedition in

the Himalaya.

The party consisted of C. D. Buckle, Passang Lama Sherpa, Angkarma Sherpa and myself. I managed to collect together sufficient equipment for our needs and worked out an unscientific rationing plan for a month. We had intended motoring to Kulu in Buckle's car, but when he arrived up at Dharmsala from Kasauli on June 1 it was evident that his car had had enough of hills, so we hired a taxi and drove to Baijnath in the Kangra valley the next morning. From Baijnath we travelled in the so-called mail lorry to Bhuntar in the Kulu valley, 2nd class and in austere state, packed tight and upright with our knees somewhere near our chins and our rucksacks balanced surprisingly on our knees. Equally surprisingly we rattled into Bhuntar, still intact, at 7 o'clock that evening. We spent the first night of our holiday in a long, low-ceilinged native hut by the banks of the moonlit Beas. We looked at its rippling, silver expanse, listened to its roar all night, and drank its muddy waters next morning; it

made somewhat gritty but otherwise pleasantly creamy tea.

Next morning we hired four ponies for our loads and set off up the Parbati valley. A month later, when we were returning down this valley, with memories of its upper pine and chestnut forests still fresh, these lower reaches seemed rather nasty. But on that first morning we walked content, not minding the stony path and the heat of the sun, glad to be on our way to the snows at last. The sun grew hotter and the path steeper and the loquacious pony man revived us with half-ripe apricots, and my feet grew sorer, until we reached Jari, 13 miles. But there was no good camping site near water there, so we continued on another 5 miles to Kasol. As we entered Kasol it began to rain and we saw a magnificent Forest Department rest house. So we approached the caretaker and suggested that we should be allowed to spend the night there. But no amount of argument and bribery would convince him that travellers without permission might, in special circumstances, be allowed to spend a night in a forest bungalow. So we retired somewhat grumpily and camped on a grassy plain under magnificent deodar trees near the river. We were tired after the long, hot march, my feet were blistered and we were plagued by flies and little biting insects.

A Himalayan tradition appears to have grown up whereby one member of an expedition, unknown to the others, secretes in his ruck-sack a bottle of liqueur or other spirits and carries it nobly himself. On the first possible excuse this bottle is produced and the members of the expedition sing songs and eventually retire to their sleeping-bags somewhat out of condition. By mutual consent and arrangement, however, Buckle and I placed in one of the porter's sacks a bottle of whisky. This whisky, used lovingly and sparingly, flavoured our evening tea on the march and in base camp for a whole month. I recommend the plan. Anyway, that evening, stretched out on our sleeping-bags and drinking hot tea with a splash of whisky, we soon felt again that all was well with the world.

Next day we walked 11 miles to Barsheni and camped down by the river near where the Tos and Parbati torrents join; the same place as two years before. On the way we passed through Manikaran, where boiling water bubbles unexpectedly out of the rocks into the icy waters of the river. The inhabitants were busy repairing the damage of a fire which destroyed a quarter of the village early in the year. No lives were lost. We conjured up a delightful picture of the men and

women of Manikaran pouring boiling water on to the flames.

It was raining when we reached our camp site and water dripped depressingly from the trees; our drinking water was the cloudy Tos, three-quarters glacier mud and one-quarter dirty liquid. But again tea and whisky stopped the rain and all was well. Meanwhile, Passang, who had been recklessly breaking some of our few treasured remaining eggs into a saucepan, suddenly produced some superb fried scones and our contentment was complete. Passang had already proved himself an accomplished camp cook; perhaps we were not particular, but certainly I have never enjoyed food more over a period. Even our so-called high altitude ration was eaten with relish as we lay and discussed the virtues of Passang's curries in some high camp.

In the evening one of the Sherpas went into Barsheni village to collect coolies. We wanted ten men for the two days' carry to our base. Later, half a dozen of them arrived, wild-looking men and very keen to come with us. They insisted that we should write down their names and they discussed between themselves who the remaining four were to be. These Barsheni men have a surprisingly good command of the Hindustani language and are a long way superior both as men and carriers to the inhabitants of the main Kulu valley. But even the Barsheni coolies are not fond of snow, as I found to my cost in 1939.

We told them to come back at 7 o'clock the next morning.

The coolies arrived at 5 o'clock sharp. About three hours later, after the usual picking up and putting down of loads (our loads all weighed under 50 lbs.) they appeared satisfied and we set off up the Tos nala. It was a lovely walk through rich chestnut, pine and fir forests, with snow peaks filling the horizon above and the foaming Tos on our right hand. Apart from a tendency to sit down every five hundred yards or so for a bite to eat and a smoke, the coolies walked

well and in the afternoon we reached a place where the valley turned north-west. In the corner of the river thus formed there was a grassy alp ablaze with yellow kingcups, and in the middle of the alp a great boulder with overhanging sides, under which, as it was now raining steadily, we camped. On the way up our party had been increased by the addition of a very angry goat. We called it Bertina, being the feminised version of a somewhat goatlike friend of ours. Scorning the shelter of the boulder Bertina now stood shivering out in the rain, making ineffective attempts to wrench off her head.

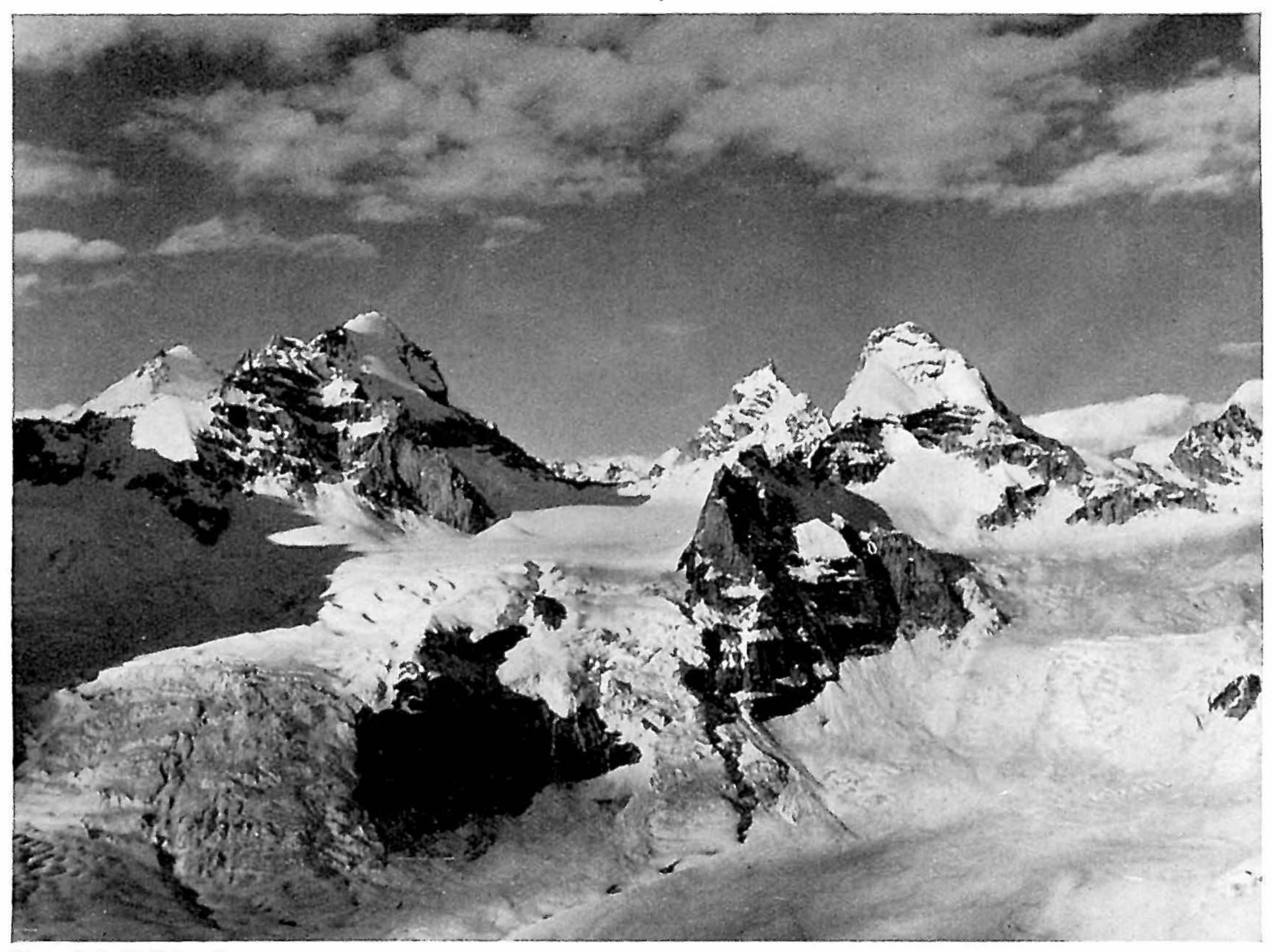
Towards evening the weather cleared. After supper of vegetable curry and rice we went and sat by the coolies' fire while they sang songs. The moon had risen and I sat there by the blaze of the fire trying to fix the scene in my memory: the wild, rugged faces lit by the fire, the flames reaching up into the sky, and behind, the clearcut moonlit shapes of the trees and mountains against the sky. Already the men's faces have begun to fade in memory, for we forgot to photograph them, but their wild hill names are written in my notebook: Ooti, Itzi and Jalamgir, Ramsaran, Gazarma, Parm and Suri, Pati,

Nandu and Udmaram.

Next day we reached our base camp at about 12,500 ft., near the snout of the Tos Glacier and opposite a tributary glacier flowing in from the east. Our camp was down by the river, by a clear stream of drinking water, at the upper limit of the juniper, and further supplied with a cave, in which the Sherpas cooked and slept. The Sherpas said that they had never killed a goat in their lives, so the Barsheni men dispatched poor Bertina swiftly and painlessly. Then, after they had cut some juniper, we paid them and they ran off laughing and

shouting, leaving us by ourselves in the rain.

Next morning was fine and Buckle and I walked up the W. moraine of the main glacier, up a small but adequate sheep path, to get a view of the country at its head. After a couple of hours we sat down, got out map and binoculars and, very humbled, looked at the view. Buckle was puzzled by his first sight of a large Himalayan glacier. He said he thought glaciers were made of ice. Certainly the lower four miles of the Tos constitute just about the most boulder-strewn, dirtiest stretch of glacier that I have ever seen. Higher up the glacier forms a T, its eastern arm continuing for another eight miles and holding on its northern wall two 21,000-ft. peaks and several nineteen and twenty thousanders. These were the mountains we had come to climb, but this first view was not reassuring and I remembered what I had written of these same mountains in 1939: 'To the E. was a great mass of mountains, unclimbed and unexplored; this is the triangle of country enclosed between the Tos and Parbati valleys and the watershed of the main Himalayan range. The peaks were as fine as the pictures I have seen of those of Garhwal, and from here they mostly looked comfortingly unclimbable.' I followed this up by quoting Shipton to the effect that one should not climb peaks in the Himalaya, but explore and cross passes. However, this philosophy did not quite satisfy our



Photo, J. O. M. Roberts.]

19,000-20,000 FT. PEAKS AT HEAD OF TOS GLACIER, FROM E. GLACIER COL CAMP.

consciences, so we examined again one fine snow mountain, later identified as Pk. 21,148 ft., and thought we could see a way up, provided certain large bulges of hanging glacier could be safely avoided. Mindful of recent accidents in the Himalaya, it was this hanging ice

on the peaks which alone really frightened us.

We discussed future plans as we walked back to camp and eventually decided to make a preliminary training and reconnaissance trip up the eastern branch of the Tos Glacier, opposite our camp. From a col or peak at its head we hoped to get a more comprehensive view of the mountains of the main glacier and the surrounding country than we would by walking up the main glacier itself. We spent the next day

organising and sorting stores and equipment.

On the morning of June 9 we crossed the Tos stream by a snow bridge below camp, trudged up moraine and boulder slopes opposite and gained the ice at about 11 A.M., as the mists shut down and rain set in. We could see enough to realise, however, that the northern mountain wall of the glacier was festooned with hanging ice, and we kept at a safe distance. We camped at 4 P.M. By this time the weather was, temporarily, perfect and we could see a col at the head of the glacier, which is about six miles long from its snout. As we pitched camp the ice precipices opposite came to life in the hot afternoon sunshine, and avalanche after avalanche roared off. An hour later the clouds shut down again and rain and sleet pattered on our tent throughout the evening and for most of the night.

It took us six hours' hard snow slogging to reach the col; its height we estimated at 16,500 ft. On the far side ice precipices fell to the main Tos Glacier. An easier way down might be found further to the E. We did not attempt the crossing as this glacier was to be the objective of a later trip. We could see all the mountains of the Kulu-Spiti marked on the Survey map 52H from Pk. 21,165 to Pk. 19,510, although we only identified the individual peaks for certain later. Further to the E., round the head basin of the Tos Glacier, were other peaks, unmarked, of 19,000-20,000 ft. and a col over to the Techu

nala glacier.

On June 11 we decided to see whether the snow slopes directly to the W. of our camp on the col did not lead up to Pk. 19,061 of the map. They did, and a delightful walk in perfect weather, up steep, crisp snow, with only one difficult section of ice and step-cutting, led us to the summit and a comprehensive view of the mountains of Kulu. Description would be tedious, but I could see many of my old friends of 1939: Pk. 20,101, S. of the Parbati, and Pks. 21,760 and 21,350 ft. above the Dibibokri. To the W. were Deo Tibba, now no longer a virgin peak, bumpy and unimpressive from this side, and beyond, on the far side of the Kulu valley, Bruce's Solang Weisshorn. Unfortunately Buckle was not yet acclimatised and had had to turn back soon after leaving camp. The Sherpas built a cairn overlooking the void of rock precipices falling to the E. glacier arm and we slept in the sun for a couple of hours and then descended. The next day we returned

to base camp, noting with amusement as we ran down the easy slopes from the col the pitiful craters in the snow every 200 yards or so, where we had sat on our loads and panted on the ascent two days before.

We reached camp in torrential rain and crawled into our tents, soaked through. The Sherpas' cave was a blessing and it was not long before hot tea was thrust through the sleeve entrance of my tent, followed by a hunk of Karma's celebrated brown bread, butter and jam. It was unfortunate for Buckle that the whisky bottle, which had the properties of a widow's cruse, was in my tent and the heavy rain prevented intercommunication. My diary says 'grand curry for supper, perfect evening.' Next morning we thoroughly enjoyed ourselves and my spasmodically written diary breaks into unusual eloquence and expresses the pleasures of an off day fairly well.

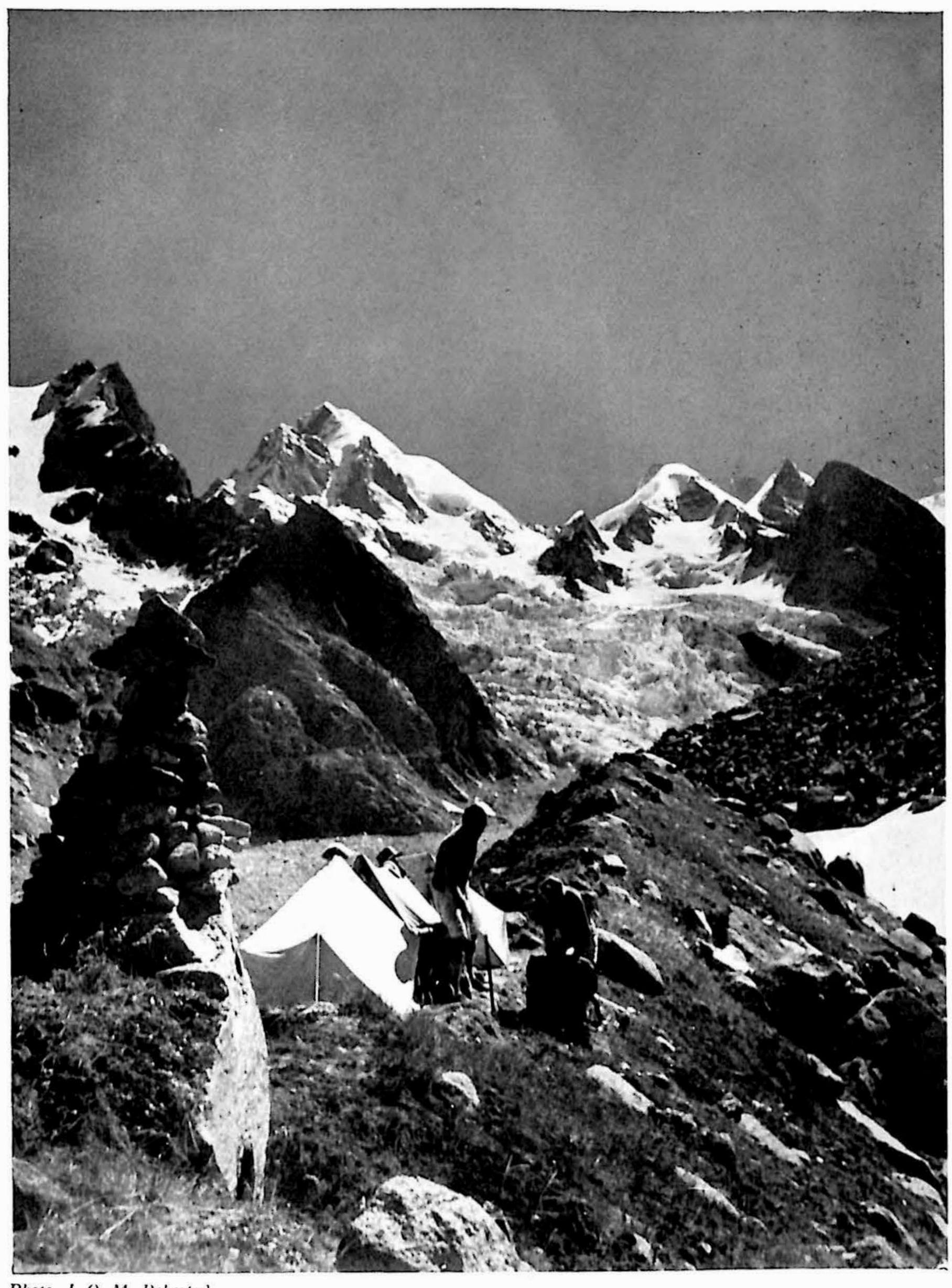
'Friday, June 13.

'I woke up at about 7 A.M. and lay in my sleeping-bag, lazily enjoying every minute; the thought of an off day, not having to get up, a wash and a good breakfast. Karma brought tea and I had a Nice biscuit (strictly H.A.) with it and then dozed off again. Outside, a perfect day and deep blue sky. After a couple of hours, partly reading and smoking, partly sleeping, I sat up and started reorganising my belongings, throwing out damp sweaters and sleepingbags into the sunshine, cleaning my cameras, sorting gloves and socks. At about 9 o'clock I crawled out. The rocks round camp were covered with socks, windproofs, sleeping-bags and woollies, all drying and airing. Claude and I went off to the washing stream and stripped naked, soaped and splashed. A little higher up Karma beat socks and shirts energetically on the rocks and laid them out to dry on the warm grass. We took nudist photos and some cine shots of each other and then wandered back to camp and breakfast; hot porridge, milk and sugar, eggs and brains, and chupatties and marmalade to finish with. After breakfast we sorted food for our next trip, which we hope to start tomorrow up the main glacier. We plan to be away about twelve days.'

We also used to spend much time identifying flowers with the aid of Coventry's three volumes on the flowers of Kashmir and pressing them, somewhat unsuccessfully, in a copy of Blackwood's Magazine. We were extremely amateur botanists (though perhaps no more so than some that write of their finds and experiences in the Himalaya) but keen, and we were soon referring to certain flowers familiarly by their Latin names. It is interesting to note, in the interests of posterity and science, that this was a very early summer and we found several varieties which do not normally flower until August.

On June 14 we left base camp again, staggering under indecently large loads, and began the day by failing to ford the glacier stream in order to get across to the E. moraine. After I had had a narrow escape from being washed away we decided to cross by the ice, or rather stones, and spent a beastly three hours doing so. The path on the far bank never materialised and we spent the rest of the day in thick mist and drizzle, clambering in and out of masses of boulders. We camped at 5 P.M., rather depressed and not knowing where we were. But after supper we went outside and saw to our joy that the mists had lifted, that we were on the right line and nearly at the corner of the glacier,

where we had hoped to put our advanced base.



Photo, J. O. M. Roberts.]

White Sail Peak from advanced base on E. moraine of Tos Glacier.

June 15 was a short day; we camped early at the bend eastwards in the glacier at about 13,500 ft. Pk. 21,148 was in full and magnificent view, and next morning Karma and I climbed a rock point some 2000 ft. above camp to get a better look at a proposed route to the summit. The route looked feasible, so we decided to attempt the mountain without delay. It began to snow at noon and continued till 4.30 P.M., when there were about two inches of snow round the tents.

We left with six days' food. The large and formidable icefalls which at first sight appear to bar all approach to the mountain we outflanked easily by rock and moraine slopes and gained the névé fields above. We slept that night at about 17,000 ft. The weather had been perfect all day and we had suffered much from the heat and glare. The following day we moved camp up to the col, about 18,500 ft., between Pk. 21,148 ft. to the W. and Pk. 19,530 ft. To the N. the descent into Spiti looked fairly easy, on to a feeder of the Bara Shigri Glacier. We camped just below the crest of the col and Passang and I went off to make a short reconnaissance of the route ahead. Snow set in at mid-

day and continued until nightfall.

On June 19 we left camp on a perfect morning at 7 A.M., roped in two pairs, Passang and Buckle, Karma and myself. Our route can be best described as lying up the W., or Spiti, edge of the S. snow and ice face, rather than the S. ridge, as the ridge is ill defined. We went up steep snow slopes, kicking steps and cutting here and there, to a shoulder at 20,000 ft.—10 A.M. Passang led most of the way. The next and only severe obstacle was a great bump of fairly stable hanging ice blocking further direct progress. We turned it on the left. I went ahead and was pecking rather ineffectively at a short but perpendicular ice face, smothered in powder snow being blown off the slopes above, when Passang suggested that he should come up and take over the lead. This was uncalled for, so I scrabbled up somehow. Above the going was easier, but the whole 400 ft. or so took two hours to negotiate. We were now at the foot of the final pyramid and the climbing above was extremely steep and laborious but technically easy; it is difficult to fall off a mountain when one is up to one's knees in it. Karma led most of the way like a willing horse and in an hour and a half we were on the summit. It was a narrow summit and there was not much room to move about. Buckle and I took off our boots and massaged our numb feet and looked at the view. Only over the lower Tos nala were there clouds; the rest of the horizon was clear. To the N. rock precipices fell abruptly to the Bara Shigri Glacier, which here runs as straight as a main road, and beyond the Shigri was the maze of Spiti mountains and, beyond them, Tibet.

I tried, without certain success, to identify Shilla, the 23,000-ft. peak in Spiti, which I have tried to climb, but never seen. In fact, despite the existence of a story of an ascent in 1860, I am beginning to doubt the existence of the mountain itself. But the point is unimportant. Heights above sea level in the Himalaya are pernicious and variable things, and until the modern surveyor comes along and stops



White Sail Peak from above advanced base.

Route by slopes to right of icefalls, thence to col and by right-hand skyline.

all argument (and why the obscure calculations of one man should be believed by all, I cannot say) Himalayan mountains seem to wax and wane in an alarming manner. Thus several Karakoram peaks have shrunk since they were measured by the Workmans' surveyors, whereas in Sikkim a counteraction seems to be in progress, for in the interval of three years between the first account of a recent expedition in the *Himalayan Journal* and the publication of a book, a certain peak has risen in fame and stature from 'a false summit about 22,300 ft. high' to 'a mountain 23,500 ft. high.'

Meanwhile we are on the top of White Sail Peak, as we intend to call it, despite what may be printed on a subsequent map, only 21,148 ft. high, though probably the surveyors are wrong, and must get back to camp. We left the summit at 2 P.M. and reached camp at 5.15. The steep section from the base of the summit cone to the shoulder required great care, and from the shoulder, although the slopes were less steep, the snow was in bad condition and only one man in a pair could safely move at a time. Next day we went on down to the advanced base.

Back at base camp life seemed very good. The bottle of whisky was waiting and Buckle made himself sick by eating too many of Passang's scones. We discussed plans. General Bruce writes of the 'giant snowy peaks directly above Pulga bungalow.' These peaks, called Baskihag on the map, the highest only 17,186 ft. high but a very fine mountain, filled the southern view from our base and we had often looked at them and designed climbs along their airy knife ridges of snow. Baskihag now attracted us as the summit would give us a comprehensive view of the country in which we had been climbing for the last few weeks, though we could only spare three days for the climb from Pulga, which is just across the river from Barsheni.

On June 23 we staggered down carrying enormous loads to our boulder in the middle of the flower meadows; time might be short, but we had promised ourselves an off day among the pines and grasslands and we spent the 24th lazing and eating Bertina's successor, a sheep. We managed to get hold of two coolies here and carried only gentlemanly rucksacks down to Barsheni next day. Ever since we left base camp mists and clouds had lain in masses on the upper hills and henceforward mist and rain were to be our lot above 10,000 ft. The monsoon was coming and our season of climbing drawing to an end.

With the same two coolies we went up into the mists above Pulga. The coolies did not know the way nor could they carry, but in the afternoon we got on to the Phangehi Galu path and made better progress. But we had not lost the way in vain, for our saucepans were full of wild strawberries and we talked, as we walked, of strawberries and 'Klim' that evening. We camped at 4.30 P.M. at about 11,500 ft., among the rhododendrons, and sent the coolies home; they had only been carrying about 35 lbs. each but were quite exhausted.

We told the Sherpas to call us at 4 o'clock the next morning. I woke at 7. The rain was coming down steadily. I lay in my sleeping-bag wondering how that morning cup of tea and later breakfast were ever

going to materialise. But soon the Sherpas were astir; a shelter of silver birch poles and a ground sheet was rigged up for the fire, and tea arrived, hot and sweet, at 8 o'clock. Later in the day we went for a walk in the mists, wading knee deep through wet forget-me-nots and potentillas, and spent a couple of hours on a wet rock, eating chocolate, smoking and talking and waiting for a view which never cleared.

Our time was up. Next day we descended, with halts for more strawberry picking; they were compensation for the loss of our peak. By the afternoon we were in Manikaran, hot and tired from walking along the dusty mule path. June 29 was a Sunday, but not a day of rest. We left Manikaran at 7.30 A.M. and limped into Bhuntar very footsore at 4 P.M. The distance was only 20 miles, but we were out of training for road walking. Halfway, at Shat, we bathed in a lovely green river running over amber stones, but how those last miles into Bhuntar dragged. We drank tea and ate Indian sweets in Bhuntar bazaar and caught the evening bus to Bajaura and its dak bungalow, three miles down the valley.

Next day we came back to earth with a twelve hours' bus journey, 3rd class, to Baijnath. Life was not too good. The war was apparently not over. Were the Germans in Dharmsala yet? If so, we were going straight back to that house we had seen in the Tos valley, among the chestnut trees. We shocked what few English people we met

with our beards, hollow laughs and crude manners.

Before supper we lay outside the bungalow, and talked of the places we had seen and the things we had done. During the night a thunderstorm broke and the hills were lighted up. We got up at 5 A.M. and drove down the Kangra valley in blinding rain: then up the hill back to Dharmsala, where the sun was breaking through the clouds and we made the last shot of our cine film, drinking beer on the steps of my bungalow. Buckle left three hours later and took Passang with him to put him on his way back to Darjeeling. It had been a good month.

MOUNTAINEERING MEMORIES OF THE PAST (Concluded)

By G. P. BAKER

In 1897 I was with Norman Collie in the Canadian Rockies, a pioneer expedition into the great unknown regions hitherto unexplored or visited by mountaineers. We had Sarbach, the guide of St. Niklaus, with us, and for the first week were joined by H. B. Dixon, A.C., and some American members of the Appalachian Club, Parker being in the party with a plane table for survey work.

It was at this stage that an accident occurred to one of the Americans which might have been serious but for the skill and resource shown

¹ See also Dr. Collie's account in A.J. 19. 441 sqq.