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SCOTTISH GARHWAL AND KUMAON EXPEDITION

By W. H. MURRAY

Read to the Alpine Club on Tuesday, February 6, 1951

Himalaya. For although all men have an exploratory instinct, sad and material reasons severely cramp its expression. In February last, Douglas Scott, T. Weir, T. D. MacKinnon and I, all of the Scottish Mountaineering Club, decided to finance and organise an expedition of our own. Our object was the exploration of mountain country, and our choice of area was unanimous and made without discussion. Garhwal and Almora have been described by travellers as the most beautiful mountain country in the world, and for us that was sufficient.

Certain difficulties beset us at the outset, in that none of us had experience of Himalayan climbing, none could speak Hindustani, and we had only 8 weeks to prepare. We managed the preparation in time by division of labour. Scott pored over maps and made a plan. Weir arranged food supplies and transport, and MacKinnon the medical supplies. I myself laid on the organisation and got good counsel. Our plan was in six parts, ranging across the three parallel river gorges of the Dhauli, Gori and Darma:—(1) Penetration of the Rishiganga and Trisul Nalla to attempt Bethartoli Himal (20,840 ft.); (2) reconnaissance of the Lampak range north-east of Dunagiri village; (3) mountaineering on the Lampak peaks from the Uja Tirche glacier on their north side (via Malari); (4) the forcing of the Girthi gorges from the Dhauli to the Gori, that is, 38 miles eastwards from Malari to Milam, thus linking two of the great trade-routes between Tibet and India (we could find no record of this having been done); (5) the crossing of the Ralam Pass from the Gori to the Darmaganga: (6) reconnaissance of Panch Chuli (22,650 ft.) near the frontier of Nepal.

This was essentially a plan of travel and movement, not of siege tactics. It seemed ambitious for a first visit to the Himalaya, where so much has to be learned about a peculiar technique of travel. That we were able to carry it out does not mean that we did not make errors or meet difficulties; rather it means that the advance counsel given so willingly to us by Dr. Longstaff, H. W. Tilman and Basil Goodfellow proved good; while doubters, who promised that our plans must collapse, had not reckoned on the high quality of Dhotial coolies and the goodwill of the Bhotias who were to help us in the upper villages.

The six parts of our plan were found to pivot, as it were, on the arrival date of the monsoon—which in the Dhauli is normally the end of June. Thus Parts I and II had to be completed before the monsoon

or they would fail. Parts III and IV dodged the monsoon by taking us north of the chain's main axis, where rainfall is low. Parts V and VI were planned to come at the end of the monsoon in September. However, as a consequence of our inexperience, unexpected weather, and post-war price levels, several hitches occurred, and were overcome only

with difficulty. MALARI . 20344 TIRSULI JOSHIMAT DUNAGIRI KALANKA TAPOBAN CHANGABANG PASS 12400 MILLA BETATOLI NANDA GHUNTI NANDA HIMAL 25645 MARTOLI D TRISUL 23360 NANDAKINI R. NANDA KOT **QWAN**

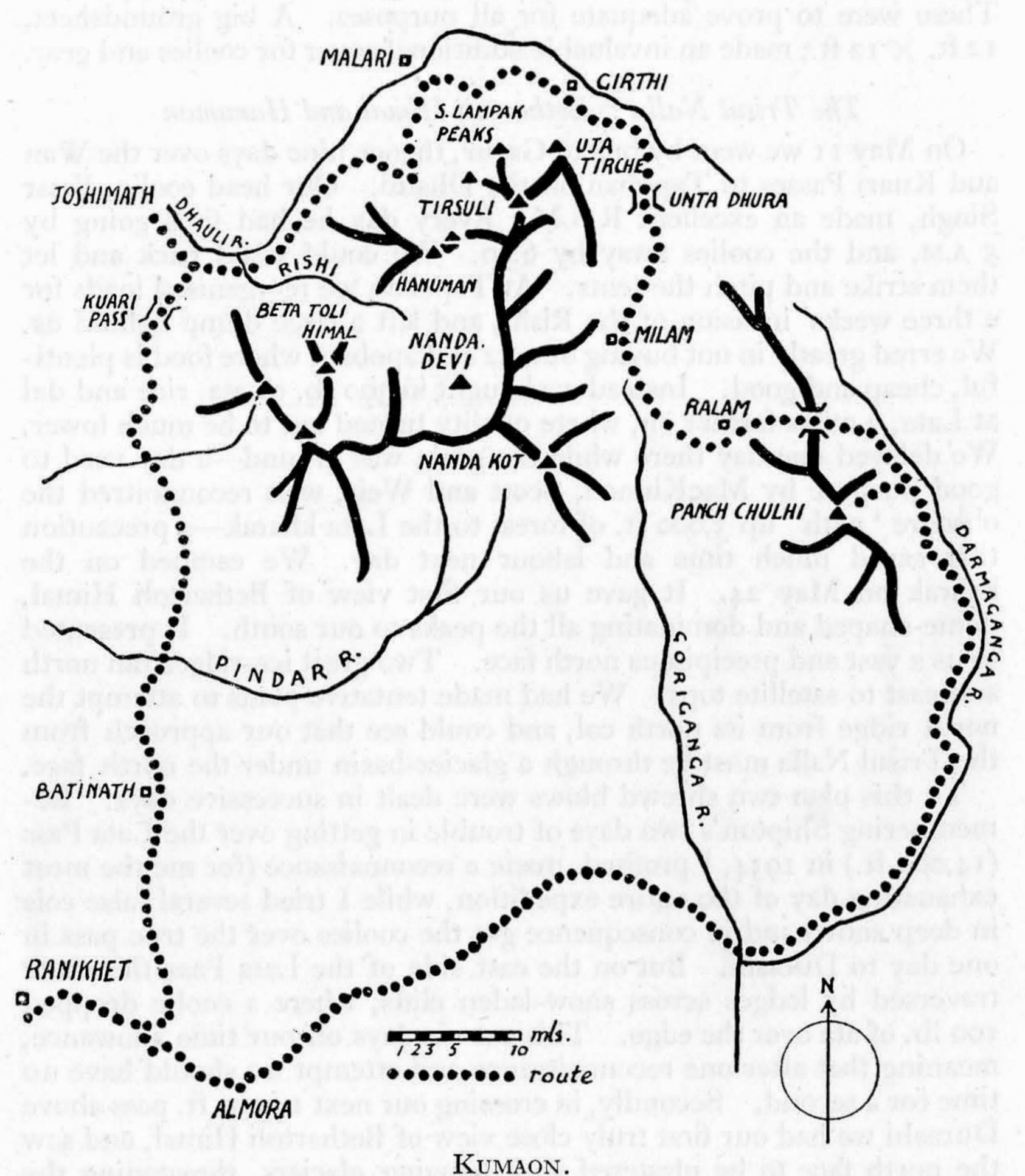
Eastern Garhwal.

Drawn by R. Anderson.

The preliminary organisation became a revelation to us in this respect: it showed us how very little we could hope to achieve without the goodwill of members of the Himalayan Club. I would especially mention the practical help given to us by J. A. K. Martyn of Dehra Dun, R. E. Hotz of Delhi, and A. R. Leyden of Bombay. But for the latter's pressure on the Customs Officials we should probably have died a lingering death on the Bombay quay.

When we arrived at Ranikhet on May 7, the best title for an article seemed likely to be 'With a thermometer in the Himalaya.' We required three days to allay the high temperatures and sore throats caused by the dusty plains—and to bargain with coolies. Some 25 Dhotials

were waiting for us. These had been laid on by Mrs. Ferguson of Essex House, who gave us invaluable assistance in this and other ways. We selected 18 of the best men, mostly young and all tough, at the normal rate of Rs.3 per day, plus R.1 for mountain work. Never before had we met so many men all at one time whom we liked so well.



The ro trip of 450 miles through GARHWAL and ALMORA districts.

Drawn by R. Anderson.

They were very simple and upright, and soon proved themselves to be scrupulously honest and high-spirited. In four months travel we had no pilfering and never a suggestion of mutiny. They cooked for us without extra pay.

Our needs were simple, however, for our policy was to live on the country. We had brought 440 lb. of food from Britain for high camps

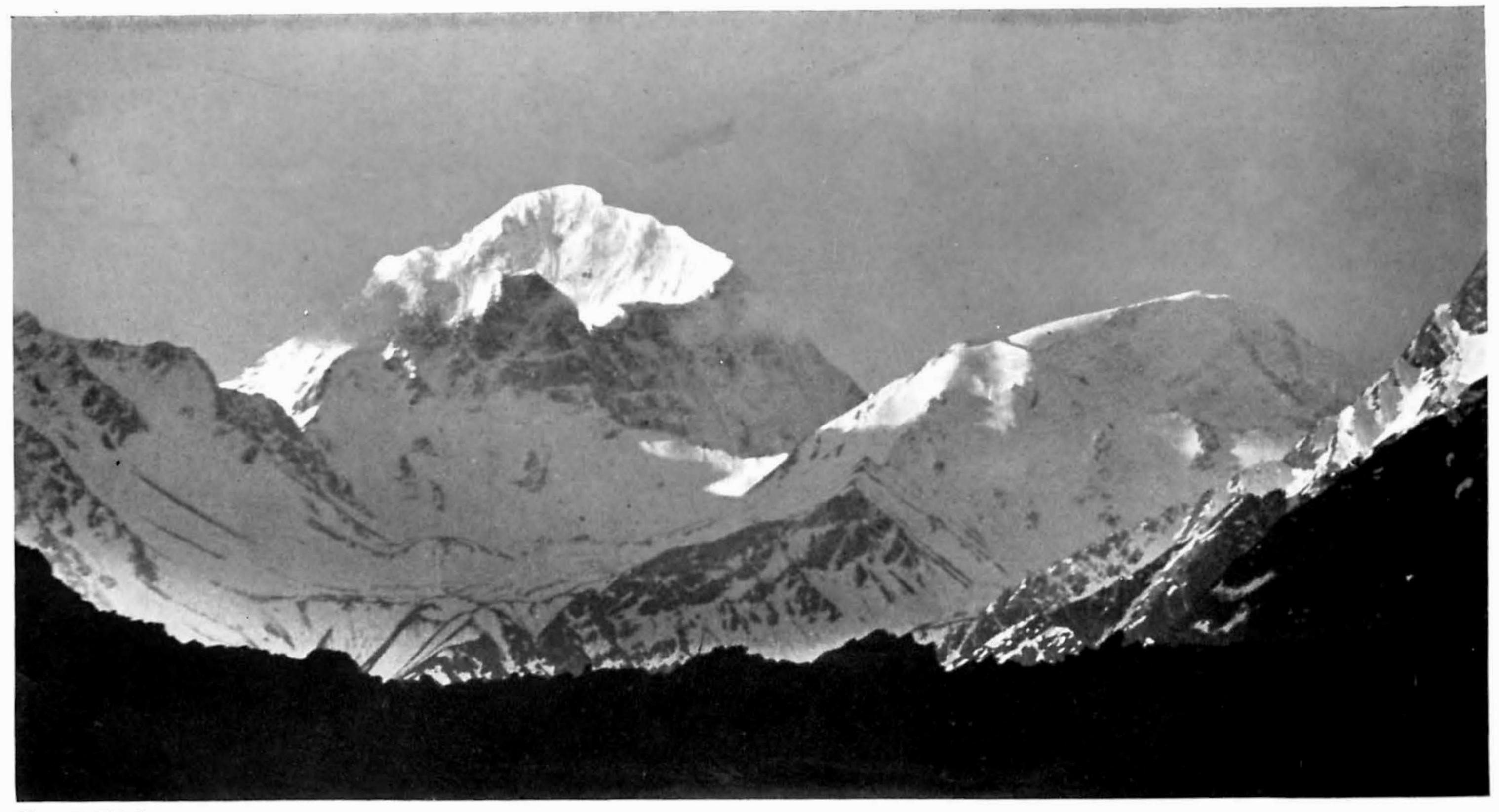
and to supplement the native diet. The total weight of gear for 4 months was 1,000 lb. This included four tents: two high-altitude tents (by Burns of Manchester and Black of Greenock) each weighing 12 lb.; one high-altitude tent for porters (from the Himalayan Club), 18 lb.; and a 'Bungalow' base-camp tent, 18 lb., with fly-sheet. These were to prove adequate for all purposes. A big groundsheet, 12 ft., made an invaluable additional cover for coolies and gear.

The Trisul Nalla: Bethartoli Himal and Hanuman

On May 11 we went by bus to Garur, thence nine days over the Wan and Kuari Passes to Tapoban on the Dhauli. Our head coolie, Kuar Singh, made an excellent R.S.M. Every day he had fires going by 5 A.M. and the coolies away by 6.30. We could stand back and let them strike and pitch the tents. At Tapoban we reorganised loads for a three weeks' invasion of the Rishi, and left a large dump behind us. We erred greatly in not buying our ata at Tapoban, where food is plentiful, cheap and good. Instead we bought in 300 lb. of ata, rice and dal at Lata, 6 miles farther on, where quality turned out to be much lower. We delayed one day there while the grain was ground—a day used to good purpose by MacKinnon, Scott and Weir, who reconnoitred the obscure 'path' up 3,000 ft. of forest to the Lata kharak—a precaution that saved much time and labour next day. We camped on the kharak on May 24. It gave us our first view of Bethartoli Himal, dome-shaped and dominating all the peaks to our south. It presented to us a vast and precipitous north face. Two great ice-ridges ran north and east to satellite tops. We had made tentative plans to attempt the north ridge from its north col, and could see that our approach from the Trisul Nalla must be through a glacier-basin under the north face.

To this plan two shrewd blows were dealt in successive days. Remembering Shipton's two days of trouble in getting over the Lata Pass (14,000 ft.) in 1934, I profited, made a reconnaisance (for me the most exhausting day of the entire expedition, while I tried several false cols in deep snow) and in consequence got the coolies over the true pass in one day to Durashi. But on the east side of the Lata Pass the route traversed by ledges across snow-laden cliffs, where a coolie dropped 100 lb. of ata over the edge. This cut six days off our time allowance, meaning that after one reconnaissance and attempt we should have no time for a second. Secondly, in crossing our next 14,000 ft. pass above Durashi we had our first truly close view of Bethartoli Himal, and saw the north face to be plastered with hanging glaciers, threatening the discharge of avalanches right across the basin. The mountain was revealed as complex, posing several hard problems.

Two more days were spent in crossing the Dibrugheta kharak and traversing along the north flank of the Rishiganga. A wild tangle of thorn, cotone aster and rose bush literally ripped the trousers off the coolies' legs. They were still travelling strongly when at last we came down to Duti at 11,000 ft. beside the Rishi. Ever since Tapoban we had had the correct psychological set up with the Dhotials. They



Photo, T. Weir.]

BETHARTOLI HIMAL FROM THE LATA KHARAK (12,000 FT.).

knew that after Duti we should retain only 6 of the best men for 4 months' mountain work, so they were all trying to be one of the 6. And then, when the 6 were chosen, they were very proud of it. They tried to show us we'd been right. Their names were Perimal (head coolie), Zungia, Goria, Matbir, Phakir and Narbir, all from the village of Tsimpu in western Nepal. At Duti we dumped a maund of ata for the return journey.

Next morning, we spent 4 hours in moving 1 mile up-stream, and the rest of the day in felling three trees to bridge the Rishi, which was here a white and roaring flood among giant boulders, between walls 5,000 ft. high. After long and unsuccessful efforts we at last managed to topple the trees into position and lash them. Lightning flashed and

thunder broke as we crossed.

On the following day we climbed 3 miles up the Trisul Nalla and established base camp beside the Berthartoli glacier at 12,000 ft. Close reconnaissance of the north face revealed that within the glacier basin itself a great rock ridge ran up to the north col, acting thus as a protecting curtain against ice-avalanches coming off the face. This curtain seemed a God-given highway and we rejoiced. Camp 2 was established near its base at 14,500 ft. Since seeing the mountain from Durashi, I had formed an alternative plan of attempting the east ridge instead of the north, but that plan was now scrapped in favour of the original, which was indeed unfortunate.

We had intense frost at sunset. Facing our tents across the Rishi were rows of peaks that flashed like sharks' teeth, bearing names that rang like a peal of thunder—Changabang, Rishi Kot, Dunagiri. Snow

fell that night.

On May 31, with 3 coolies, we made our way up the curtain ridge. Its rocky edge, snow-covered, made difficult climbing for laden men. We were all unacclimatised and altitude began to tell. One full breath was required to each step. Anything that checked the rhythm of breathing—the fall of a nearby avalanche or too long a stride—caused panting. At 17,000 ft. the ridge became very thin indeed and we roped the coolies. It was now 2 o'clock and thunder clouds were blowing up the Rishi. So we decided to send the coolies down. We could not take them farther and expect them to get back alone. On rock they had remarkable natural talent, but obviously no experience of snow-bound rock. On a saddle of 17,800 ft. we made Camp 3. While Weir and MacKinnon cut out platforms for the two tents, Scott and I prospected ahead. To our dismay we came upon a tower dropping sheer on its far side. Roped together, we climbed along its thin crest and down a series of vertical steps to a block projecting over space. I lay flat and looked over the edge. A huge finger of rock tilted out over the glacier 1,000 ft. below; from its tip to the ridge's continuation was a clear drop of 200 ft.—a complete cut-off. We were defeated. We could do nothing save camp.

Next day was gloriously fine and our position sensational, hard against the ice-clad face of the main peak. I was strongly reminded of

the Col de la Fourche of Mont Blanc, save that the South face of Mont Blanc is a relatively gentle angle. We started to withdraw to base-camp, and were at once astonished at the speed with which Himalayan snow degenerates under the fierce Himalayan sun. In the Alps one does not reckon on snow going bad until mid-day, but here it went

thoroughly bad by 9 o'clock in the morning.

The food position now forbade a reconnaissance of the East ridge, which would be a four-day job at least, but we had been able to make a long distance examination of the South-east ridge of Hanuman, an unclimbed peak of 19,970 ft. at the junction of the Rishi and Ramani gorges. We repaired thither with all speed and established base-camp on June 2. Camp 2 we placed at 16,000 ft. on the east face, this in foul

weather. The tents were sheathed in ice overnight.

Next morning we crawled out into a white and arctic world, to see Nanda Devi shooting arrow-like into blue sky from the bent bow of the Rishi gorge. In $2\frac{1}{2}$ hours we slanted 1,000 ft. up the East face to the South-east ridge of Hanuman, then followed a couloir of mixed snow and ice 1,000 ft. to the crest, and the crest 1,000 ft. to a tower, which Scott led by delicate balance-work on loose and vertical rock. Beyond came a sudden chasm 400 ft.—once again a complete cut-off, invisible from a distance. We were barely 900 ft. from the summit. As we started down the weather deteriorated rapidly.

Mist was thick when we won clear of the ridge at 4.30 P.M. In the morning I had taken a back-bearing; so now, in lowering cloud and steadily falling snow, we steered 2 hours by compass across the complex East face, through a maze of ridges and boulders. As darkness fell, no tents had yet appeared. We thought we must have made some error, and began to fear benightment. Then I got a whiff of juniper smoke! Undoubtedly juniper. We turned into the wind. Within 10 minutes shadowy figures emerged through the white gloom, each

giving a delighted 'Salaam sahib.'

Despite the grey and trailing snow veils, the raw cold and gloom of 7 P.M., the coolies had two fires going and tea ready. Soup, pemmican, tea, chuppatties, biscuits and honey were served to us in our sleeping bags, while we listened to the blatter of wind-driven snow on the canvas and remembered our grim prospects of 30 minutes ago. The coolies gave this service of their free will, without having to be hunted, and without having been on an expedition before.

The Lampak Group from Dunagiri

On June 10 we arrived back at Tapoban on the Dhauli. Ata here was Rs.1/4 per seer as against Rs.2/8 at Joshimath only 6 miles away. Salt, ghur, rice and dal were in good supply. An Indian friend at Bombay had prophesied that no coolies would be found in the Dhauli valley. He had expressed alarm at our plans and concern at the certainty of the expedition's being stranded and unable to move. And sure enough, at Tapoban we could get no coolies. But after two days'

hard bargaining I raised 12 men from Lata at Rs.5 per day without return money. They made a good team with our six chosen Dhotials. Indeed, they wanted to stay with us for the remainder of the expedition—despite wild and angry scenes of dispute over loads on the morning of our setting out: a dispute which, without apparent reason and in the twinkling of an eye, ended in laughter all round.

For three days we travelled north up the Dhauliganga, which cuts 40 miles south from the Tibetan frontier. Not even the Rishi, I thought, could match it as a canyon. Its walls are no higher, but are close-set and sheer. We had never before seen a glacier river so grey and powerful, moving huge boulders with a thunderous rumble deep down in the river-bed. When the sun shines the water glitters like wax, without sparkle. Not a beautiful scene. Yet, at intervals, where some ravine cuts in and the walls give back, then sunlight streams through in shafts and far above some solitary snow-peak stands sharp on the blue sky.

On our third day we turned east up the Dunagiri Gad. Behind us vast cloud masses were rolling up from the south. Thus far our mountain weather, in terms of cloud and rain, had been no whit better than Scottish, if no worse. But this cloud was different—unusually massive and low-lying. But surely it was too early for the monsoon?

Our immediate plan was to explore the Lampak range, a group of some ten unclimbed peaks north-east of Dunagiri village. Based on the latter, we hoped to spend ten days climbing before moving to the north side of the group. For 6 hours we climbed up a sunlit track lined with deodars, wild roses and apricot trees, to the village at 11,800 ft. Sixty houses were built on the side of a low ridge, over-

looking well-kept fields of wheat and potatoes.

The villagers swiftly gathered in a central courtyard. The school, sitting in the open before a blackboard, broke up. Its 20 children filed into the yard; each came forward, bowed and saluted, then withdrew to the rear and sat down. All showed excellent manners and bearing. I explained our visit to the head man who, like all villagers we met throughout our entire journey, could understand my halting Hindustani perfectly, however difficult I found theirs. He at once promised all food we might need and all coolies. I then paid off the Lata men and we pitched camp beyond the village, beside a wood where a clean stream flowed past—a dozen unclimbed peaks around. An ideal spot for mountaineering. But day after day heavy pre-monsoon cloud came billowing up from the south. It completely prevented our reconnoitring the Lampak range. Had we known the routes we could have climbed. But first one must see. As it was, Weir and I made the first ascent of Peak 17,380 ft. to our north-east, which gave a climb of 6,000 ft. in 7½ hours. The route went by a long rock-ridge culminating in a sensational traverse across the face of a tower, and so on to the final snow dome. The climb succeeded, but its real purpose, the reconnaissance of the bigger peaks behind, failed in cloud.

On June 16, Scott and MacKinnon made the first ascent of Peak 16,690 ft. to our south, by the nearest of its two North ridges. They had a wonderful rock-climb on superb, milk-white granite. The sharp edge was serrated by little towers with sheer flanks. Day-long cloud again prevented reconnaissance. But Weir and I repeated this climb, truly the most enjoyable we have had in the Himalaya, and were rewarded. For just one minute the summit clouds swirled aside, giving us a clear view of the Lampak 20,000-footers, 6 miles northeast. We saw that no attempt was possible by the South-west faces. They presented iced walls like the North face of the Matterhorn, only considerably higher.

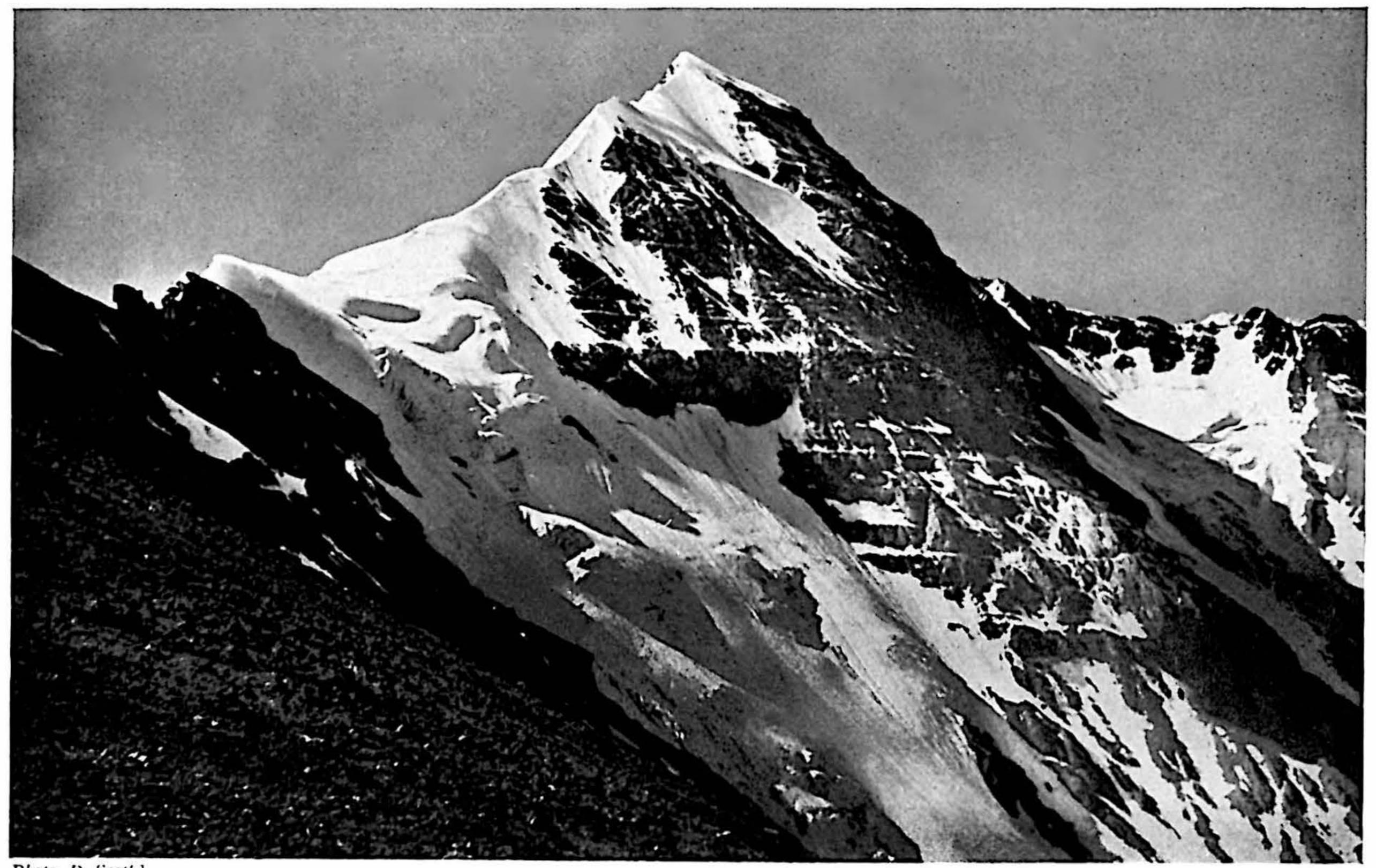
We resolved at once to cut our losses and go north. A base on the Tibetan side of the range would give us clearer skies. Instead of coolies, we obtained from Dunagiri five 'jhopa'—the same beast that is called 'jhibu' in the Goriganga—a cross between yak and cow. With these, on July 19 and 20, we took the high-level route to Malari, a most delightful hill-track crossing two passes of 13,620 and 14,790 ft. —a great improvement on the low-level route up the goat-crowded, dust-choked track in the Dhauli. So we came down to Malari, built in tiers on the verge of a great scarp. Ritual dancing was in progress to welcome and hasten the monsoon, thus confirming our fears.

The Ascent of Uja Tirche

Five hundred pounds of ata was ground for us while we wrangled for two days about coolie wages. The men of Malari had not, it seemed heard of Scotsmen and were slow to learn. At last, however, we beat them down from Rs.7 to Rs.4. On June 23 we set off eastwards. With 18 coolies, 18 goats carrying the ata in saddle-bags, and one cow, we crossed the northern spur of Lampak in two marches by the Surans ka Dhura (15,000 ft.). The descent lay down wide hillsides of alpine flowers to our new base, Lampak, a deserted grazing ground at 13,500 ft. beside the snout of the Uja Tirche glacier.

The glacier ran 7 miles south, fed by a horse-shoe of ten 20,000 ft. peaks. At the very back rose the tremendous North wall of Tirsuli. The peaks were all linked by one continuous ridge. The mountain dominating Lampak was Uja Tirche (20,350 ft.)—honoured with a name, in a country where so many great peaks are unnamed, by virtue of its position at the north end of the horse-shoe. Towards Tibet and the trade route over the Kungribingri La it presented a sheer Northeast face rising 8,000 ft. from the Girthiganga. To Surans ka Dhura it showed a sharp North ridge of 10,000 ft., which we luckily saw in profile on our day of arrival.

A good route went up the west flank of this ridge, joining its crest at 18,000 ft. There the ridge ran half a mile, bearing on its crest nine gigantic pinnacles. If these were passable—and we could indulge no fond hopes after our Rishi experiences—access would be had to a twisting snow-ridge of 2,000 ft., twice interrupted by high steps of ice. We determined to try this route at once.



Photo, D. Scott.]

Uja Tirche (20,350 ft.) The North Ridge on left. The rock face is 4,000 ft. From Camp II Uja Tirche at 17,400 ft.



Photo, D. Scott.]
Pinnacles of Uja Tirche, on North Ridge at 18,000 ft. Mackinnon and Weir on Rope. Route goes up the tongue of snow.

Next morning our six Dhotials carried Camp 1 to 17,400 ft., where a broad scree-shelf lay 700 ft. under the pinnacles. Our nearer view of the upper ice-walls showed each to be a triangle, the apex of a hanging glacier; the first, 1,000 ft. up the ridge, 200 ft. high; the second, 400 ft. under the summit, 100 ft. high. Either might defeat us. To our north and east, as far as the eye could see, stretched the bare lands of Tibet, roofed by shining skies and barred 120 miles away by a ripple of snows.

MacKinnon, meanwhile, went on alone and reconnoitred the pinnacles. He returned full of optimism. At 5.15 A.M. we climbed up to them and roped in two pairs, Weir with MacKinnon (leading) and Scott with myself. Never had we seen a ridge so fantastic. The pinnacles stuck madly askew out of the crest. The west flank was banded by horizontal strata, yellow, brown and purple, providing seams by which we turned four pinnacles. Then came the central three, sheer on the west, overhung in front. We turned east by a ledge, chanced on a snow-choked chimney running up the face, and climbed by it to the crest. In grey light this seemed a sensational move, but we were then able to pass the remaining pinnacles on the western bands. A final buttress, split by a fortunate chimney, brought us on to the snow ridge at 8.30.

The snow was frozen. We picked our way in crampons through thin crevasses where a hanging glacier pulled away. The ridge narrowed, swung this way and that, corniced heavily on our left, up to the first wall. Good snow at its base misled us into climbing the steep left-hand edge of the triangle. But this snow gradually thinned out on underlying ice. Steps had to be cut. The excessive angle high up forced us into a traverse across the face to the corniced right-hand edge, where slashed steps were still required for the edge spikes of crampons. I reached the top feeling dismay. The forenoon sun would loosen the snow-skin, and I suspected that the afternoon sun would rot the steps. Our return would have to go much lower on this right-hand edge, involving us in hours of downhill step-cutting in ice.

We were now half-way to the top. The edge twisted up in huge zig-zags, raw-edged and corniced, falling abruptly on the right into cloud. After 7 hours' climbing we reached the second triangle. We took it by the left edge and were again forced off the direct ascent of the apex, compelled to cut 50 ft. on ice across the exposed face, then through another cornice. Sixty feet of quicker cutting in snow-ice brought us back to the true ridge. The way was free ahead. At 2 P.M. we gained the summit.

The bent bow of the edge gave just enough room for four men. Clouds rolled round us. The ascent had taken nearly 9 hours, but we still imagined that the descent would require only half that time. Still, we feared deterioration of snow and turned down at 2.10 P.M., all on one rope. I went first, and already, at the upper wall, had to re-cut both hand and foot holds. Near the end of the traverse they looked sound and I used a foot hold without re-shaping. It broke away and

I fell, braking with my axe until the rope tightened. I returned to the true ridge, and the others followed. It was something quite new in my experience here to find that not only had snow-ice rotted in the sun, but pure ice too. I had not dreamt that to be possible around 20,000 ft., least of all in cloud.

Below, the snow greatly worsened. It balled on the crampons. We all, except MacKinnon, took them off for greater security. Cornices on one side forced us on to snow-slopes that were inclined to slide. Great care was needed. We reached the big lower ice-wall at 4.30 P.M. The original route being too dangerous, we cut 150 ft. down the iceslope on our left and so to a great crag on the west edge of the triangle, by which we descended 80 ft. There now remained a long rightward traverse across pure ice to regain the true ridge. The ice was hard, wet, brittle. Steps had thus to be large—and time-consuming. I cut one-quarter of the way and returned. MacKinnon cut the second quarter. As he came back his crampon-spikes split off the whole base of a step, and down he shot to be stopped by the rope. Yet that ice was again clear ice. His use of crampons on it would have been justified in the Alps. Below him the ice-slope cascaded 4,000 ft. over cliffs. He cut skilfully back to the crag. Then Scott and Weir went out and cut the third quarter.

At sunset, with 200 ft. of nylon rope dragging at my waist, I completed the traverse. That was a wonderful moment when I stepped on to the North ridge. The party's safety was assured; the sky frostily clear. Westwards, the spike of Kamet stood black upon the afterglow. Eastwards the risen moon swung to the tops like a thrown orange.

Our total supply of rope was now stretched across the ice wall, so the two middle men had to clip themselves on to it with sling and karabiner and cross one at a time, sliding the ring. When all were over we sped downwards on the now freezing snow—I hour to the pinnacles. The moon was bright enough to light our way through the maze of spires, so that we reached Camp 2 at II.I5 P.M. Eighteen hours on a rock and ice ridge left us too tired for food. As we turned in Uja Tirche still thrust its silver wedge to the moon, and the great North ridge rose jagged against the stars.

The Girthi Gorge

Camp 2 on Uja Tirche gave us one clear view westwards across the Uja Tirche glacier to the mountain of South Lampak, 20,750 ft. It threw eastwards down to the glacier three long rock-ridges. Two of them looked impossibly icy, but the left-hand ridge of 5,000 ft. most promising, even easy in its upper third. Four days later we pushed a new Camp 2 three miles up the glacier to the base of the ridge—a most charming alp. Three Dhotials then carried Camp 3 up the crest to 18,500 ft., just under an 800-ft. buttress. We pitched two tents on a sharp snow-ridge, each flank of which fell 1,000 ft. to glaciers. Foul

weather pinned us in the tents for two days, while on either side avalanches thundered day and night. In the end we retired over snow-bound rocks.

A week later we returned, only to be defeated above Camp 3 by rotten rock on the buttress. A party reckless of risk might have forced the buttress and gained the easy snow-ridge leading to the summit. In my own judgment the rock gave no reasonable hope of such a party's

survival. We retired to Lampak base-camp on July 9.

The way was now clear, and the time ripe, for Part IV of our plan—the traverse by the Girthiganga from Malari 38 miles eastwards to Milam on the Goriganga. Our Lampak base was already 7 miles along the Girthi track—a track worn by Malari goat-herds to their eastern grazing grounds. Accordingly, on July 10, we despatched Perimal to collect eleven more coolies and seven goats from Malari. The goats would carry our ata in saddle-bags. In three days the men and goats arrived. On July 13 we set out.

For the first time in weeks all monsoon cloud had vanished. In brilliant sunshine we slanted up from the glacier across the northern spur of Uja Tirche. Acres of the hillside were covered thick in alpine flowers—blue primulas and rock geraniums, white anemones and saxifrage, purple stonecrop, dwarf yellow broom and buttercups—which grew densely in fields sweeping down and across the hillside. Everywhere were delicious and heady scents. The very grass was burnished

in the slant of the sun.

Then we crossed the col—and what a change confronted us! For the first time we looked into the gorge where the Kio Gad joins the Girthi. At the junction, Ramba Kot, 17,000 ft., rose straight up in a chaos of jumbled towers and spires and buttresses. It was colourful rock, warm brown and yellow, but it walled the gorge for 6 miles; to us it looked fearsomely stark after those flower-thick alps on the Lampak side.

Although precipitous, the gorge on our own flank was fortunately less steep. We picked our way along rock-walls bedecked with countless flowering shrubs and plants, supplemented now with purple thistle and silver birch, sometimes with pine—a Hanging Garden of Himachal. At each turn of the bluffs some new scent rose to the nostrils. And far aloft, clouds flitted among the wild pinnacles of Uja Tirche.

That day we made 4 miles. We camped on the only patch of flat ground big enough to take the floor-space of one tent, about 1,000 ft.

above the river. The coolies packed into a cave.

On our second day's march we had to cross eight great ravines. Only one of these drained a glacier. The difficulty we most feared in this whole traverse of the Girthiganga was the fording of glacier streams rushing in from the south. But on this north side of the main axis little rain had fallen for some days. There was much less water in these ravines than we had feared. The crossings were easy and often on snow-bridges, but the flanks were cliffs. I sometimes waited on one

side to watch the party across to the other, where they appeared as 27 white and black dots winding across invisible seams on walls that dropped a thousand feet to the Girthi. Yet I always followed easily. The route continued, an improbable thread—it was so slender: at one moment arched by red roses; at the next like a belfry staircase.

The path became literally a 'goat-track,' going under overhangs where we had to crouch and place the feet slowly with that thousand-foot drop an inch from the boot's welt: technically easy, yet so dramatic that all we lacked was a black bear coming round the next corner. At the day's end, when we came down to grass at the river's edge, we had

travelled 3 miles.

A hundred yards upstream from camp we were delighted to find a two-log bridge leading on to a little plateau of cultivated ground, where two men of Malari had adventured to grow potatoes, barley and 'papar.' They had devised an irrigation system, built and thatched two stone houses, in appearance like a Scottish shieling, and made two stone shrines above the fields. Their wives and three children were there. This was the farthest point to which the Malari colonisers had

penetrated.

For two days after that the gorge broadened, granting us grassy alps. But we only covered $7\frac{1}{2}$ miles. The river-bed had risen 4,000 ft. to an altitude of 14,000. Delay was caused by glacier streams. Goats had to be unloaded and reloaded. We ourselves had to strip off our trousers and fight a way over. On day 5, cloud, rain and sleet troubled our passage over the watershed, the Unta Dhura, at 17,640 ft. En route, we passed the frozen lake of Gangpani, the highest source of the Girthi at 16,570 ft. In drizzly sleet we joined the dismal traderoute from Tibet. The snow-lined track streamed with caravans of laden yaks, sheep, goats and horses, driven by long-haired Tibetans, all wearing wide grins and ex-War Department bush-hats.

We turned south, descending 5,000 ft., crossing two glaciers, and travelling in all 13 miles through the most desolate valleys before we could find a stick of wood for a fire. We camped at Samgong. We

were all exhausted that night.

Next morning, July 18, we strolled 3 miles into Milam.

We were greatly puzzled that no one before us should have forced the Girthi gorges. Not until three months later did we find that this had in fact been done in 1893 by Dr. Kurt Boeckh. We sincerely hope that our re-opening of the route after nearly sixty years will be of real service to travellers. For it gave us the most wonderful journey that any of us had ever had. July is undoubtedly the best month for its flower display.

We rested one week at Milam, greatly enjoying the company of the Christian medical missionary, Mr. Leonard Moules, who gave us nothing less than a banquet on arrival, and much valuable information about the country, people, weather, and mountain routes. Most sadly, MacKinnon's three months' leave had expired and he had to go home.

Scott, Weir and I carried on with Part V.

The Ralam Pass in the Monsoon

There was one part of our plan which from the beginning had given us a certain amount of apprehension. This was the six-day crossing of the Ralam Dhura, 18,470 ft., from Milam in the Gorgiganga to Sipu in the Darmaganga, near Nepal. There we should be in position to make reconnaissance of the Panch Chuli and try the ascent. We had intended leaving this move for the clear and settled weather of late September, had not the high cost of food and coolies precluded delay. We must go now, in the thick of monsoon cloud, consequently with

smaller hope of success.

The name 'Panch Chuli' means The Five Fires—'fires' in the sense of fire-places. They symbolise the home-fires of five famous brothers, saints and heroes, who all married an Indian princess named Draupadi. In defence of their kingdom they had to go to war with land-grabbing relatives. One of the five was Arjuna: and just before leading his army into battle Arjuna became conscious-stricken at the prospect of fighting relatives; so he turned to his charioteer for guidance—How could he ever be justified in going to war? But his friend and charioteer was none other than Krishna, who is to Indians what Christ is to us—God incarnate. Krishna's answer is that inspired Hindu scripture, the *Bhagavad Gita*—the Song of God.

At the close of their adventurous lives, the five brothers and Draupadi travel into the Himalayas. They climb up to the Abode of the Gods:

and there are symbolised by these five peaks, the Panch Chuli.

They are an extraordinarily beautiful cluster, all difficult, all shapely. None have been climbed. Moreover, they are surrounded by a far-flung screen of thirty or forty other unclimbed mountains, through the heart of which we had now to travel by way of the Ralam Dhura.

But this crossing of the watershed between the Gori and Darma was 32 miles and involved our crossing three passes and four glaciers, which to us were unknown. Consequently the difficulties of route-finding in heavy cloud seemed likely to be serious. The Ralam Dhura had not been crossed for nine years; so far as we could discover, never before in the monsoon. Moreover, Dr. Longstaff had warned us that the pass was rather dangerous through stonefall even in pre-monsoon conditions.

Accordingly, we abandoned hope of the pass before ever reaching Milam. Instead, we made plans to take the longer and more southerly route by Mansiari and Sobala, only to have them dashed at Milam by reports that three bridges had been carried away by floods. We had now either to go by the Ralam Dhura or forfeit the Panch Chuli. The latter was not to be thought of. Unexpected encouragement came from Moules, who swore that we should get less cloud on the Ralam route than the southern one. To cap his counsel he produced for us a Bhotia named Delib Singh, who had crossed the pass before and was willing to go again. So we engaged eleven Milam men at Rs.6 (no return money), and on July 25 set off with these and our six Dhotials.

Our first march went 9 miles down the Gori, which we crossed to the village of Tola. Next day we began our big break eastwards, climbing a 15,000 ft. pass and descending 3,000 ft. to Ralam—a cluster of twenty houses set on the side of a deep, green glen. This day's journey introduced us to a complete change of scenery—from stark screes to wide and fertile pastures knee-deep in flowers. At Ralam we met only women and children and old men. The active men were all away to Tibet for the season's trade. But we did meet much goodwill.

On our morning of leaving four drummers turned out to beat a tattoo, accompanied by fourteen boys who sang and danced for us. The procession went for a full mile before us towards the Shankalpa glacier. The drummers showed excellent sense of rhythm and the boys (all under ten) a startingly well-controlled abandon in dancing. They sang in unison, sweetly and without affectation. The baksheesh that goes with such a demonstration, however, was somewhat ruinous

to already impecunious mountaineers.

That same day we camped in thick cloud and drizzle several hundred feet under the Yankchar Pass (16,500 ft.), and next morning went over the far side to our second glacier, where we camped at 15,000 ft. The Ralam Dhura was now immediately overhead, $2\frac{1}{2}$ miles around a bend in the glacier. And conditions could not have been worse. Inside four hours warm sunshine changed to cloud and drizzle, hail, sleet, snow and thunder and lightning. All night long enormous avalanches thundered off the surrounding mountain groups. I feared trouble with the coolies next day. Would they face an 18,500 ft. pass in dirty weather? Supposing they would, could they make such a crossing without full mountaineering equipment? I expected the worst—until the required miracle happened.

Towards midnight the sky cleared and we found ourselves circled by a dozen unclimbed mountains, sharp-pointed and snow-clad, gleaming in the light of a full moon. The scree beneath us flashed frostily. The sky next morning was still cloudless—almost black. The sun blazed upon the ice-fluted peaks. And this was the height of the monsoon!

We made fast progress up the Yankchar glacier. Led by Delib Singh and Tirlok Singh, the latter a tough and most high-spirited Bhotia from Milam who did half an hour's step-cutting among crevasses, and did it well, we arrived in four hours at the base of the rock and scree wall rising 600 ft. to the pass. The wall was snow-dusted and looked difficult for a moment, until we saw an easy passage to the left-hand side. At mid-day we reached the crest—a col between two 20,000 ft. peaks. These last are unclimbed, and I imagine will remain so.

Long-delayed clouds were now billowing up from the South-west, but we had arrived in the nick of time. A clear view was still open down the far side. There our third glacier rolled gently for several hundred feet, its wide ice-sheets covered with an inch or two of wet snow, then plunged 3,500 ft. in ice-falls to the invisible fourth glacier, which cut across it at right angles. Although the first descent was not steep, yet it was so icy that I prepared myself mentally for two hours'

step-cutting and rope-work in order to get the coolies down to a better surface. But before I knew what they were about, they had tipped the loads over the edge and gone flashing after them on their backsides. They went faster than they had imagined, but all stopped safely a couple of hundred feet above the first crevasses. Only one crate split and cast the contents. By the grace of God it was the medicine chest, not food.

Crevasses now forced us leftwards to the flanking cliffs, which had already been discharging both heavy guns and light. Yet we made the passage without incident for an hour, until one ton-weight boulder whizzed straight at the last three coolies. They had good warning and ran hard at the correct angles. Immediately afterwards the glacier dropped sharply in an ice-fall of a thousand feet. Direct descent was impossible, but an opportune ledge on the north-flanking cliff allowed us to rise off the glacier and descend all the way by a long rock-ridge—steep but technically easy.

That night we camped on a grassy alp beside our fourth glacier, the Nipchukang, and early next morning went down the narrow pastures of its left-hand moraine. Grass and flowers were soon augmented by dwarf rhododendrons, then by cotoneasters and red rose-bushes, at the last by birch and pine. After days spent among rock, snow and ice our minds were once again enchanted by the rich scents of the vegetation. Down at Sipu, in the Lassar Yankti (11,200 ft.), we pitched

camp on a flat meadow where a clear stream burbled through.

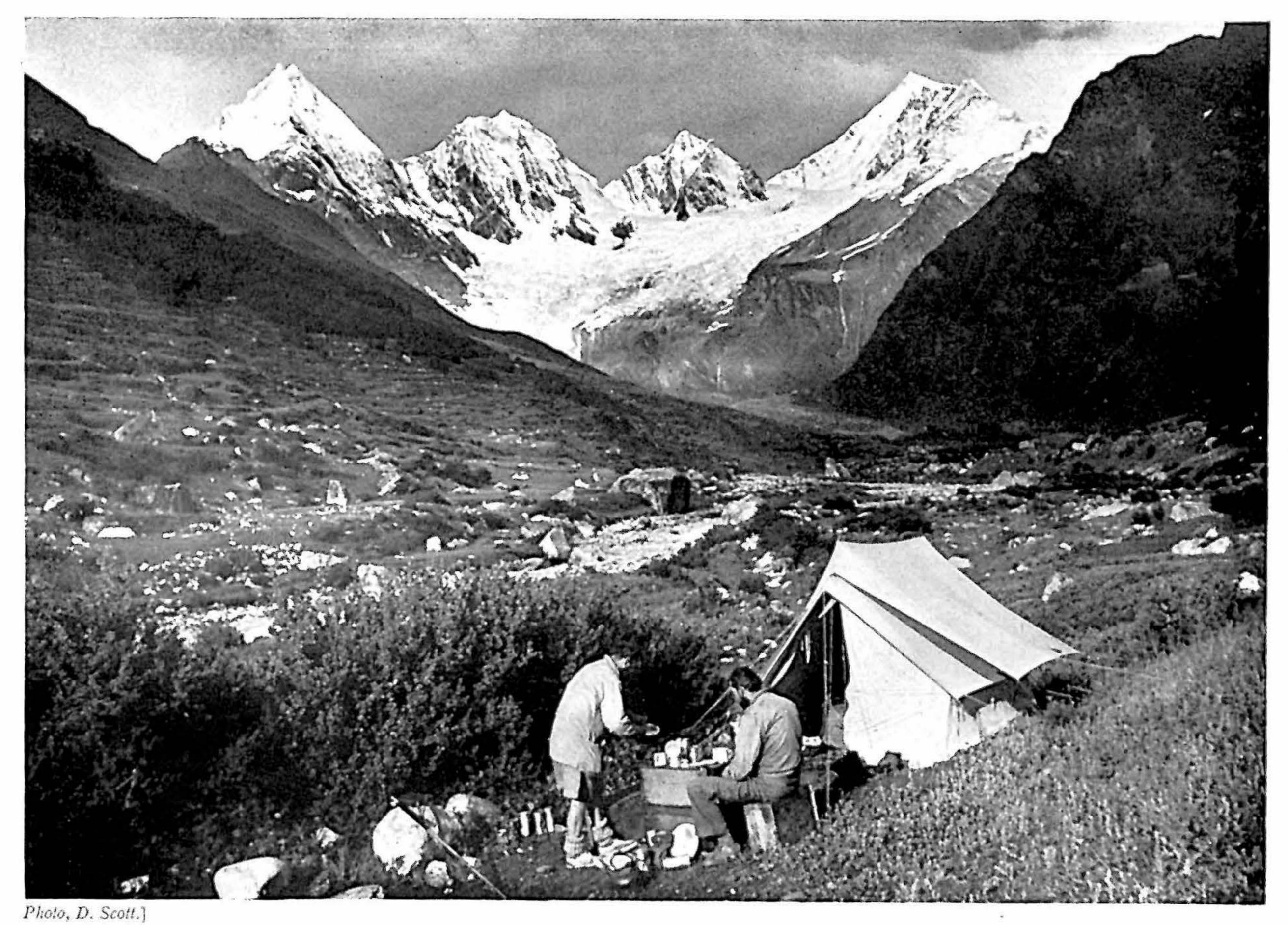
We had two delightful days of rest on this meadow, but I groaned for MacKinnon, who until Milam had been our Medicine Man. (He had done excellent work in all the villages, having very good supplies with him). At Sipu I was much troubled by women. About half a dozen came for treatment, showing me stomachs pitted all over with clean scars, curiously like old vaccination marks. I thought that this was some obscure skin disease, so I painted them with Castillani's paint—a deep, imperial purple. It was wonderful stuff to look at. It gave me, and I am sure them too, great satisfaction. We parted, all hoping for the best. Not until a long time later did I discover what these skins marks really were. It seems that when these Bhotia women have tummy trouble—bad indigestion or dysentery—they lie down with a bit of red charcoal on their stomachs, while a kind friend blows it red-hot. . . . What I ought to have given them was a pill, not a skin-paint.

On August 3, we moved 7 miles down-river to Sona, on the Darmaganga, below the east wall of Panch Chuli. Thus opened the last

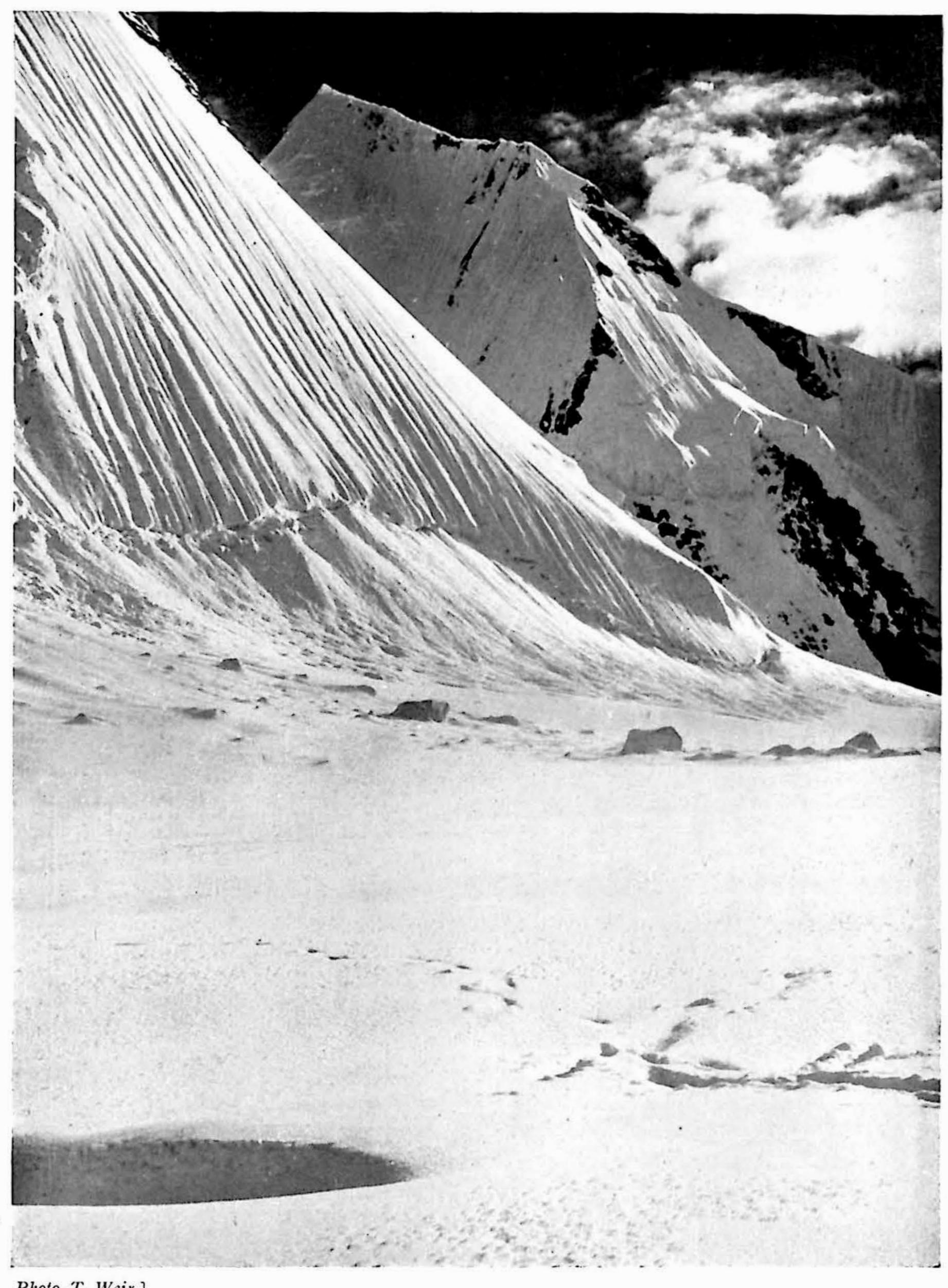
stage of our expedition.

The Panch Chuli

We pitched our base camp a quarter of a mile up the Sona Gad on the true left bank of the stream. On a first reconnaissance in the monsoon the ascent of even one of the six peaks was more than we could expect; for they are difficult even by Himalayan standards. But we did hope, by trial and error, to discover a route that might take some future party



PANCH CHULI (22,650 FT.) FROM BASE CAMP, SONA GAD. Right to left: SUMMIT—22,650 FT. POINTS—20,710 FT., 20,780 FT., 21,120 FT.



Photo, T. Weir.]
THE PANCH CHULI (22,650 FT.) FROM CAMP IV AT 19,000 FT. ON THE UPPER SONA
GLACIER, 8 AUGUST, 1950.

to the top. Our task was to explore and help to distinguish bad ways

from good. If lucky, we might gain the summit.

Next morning a semi-circle of four white and spiky peaks thrust clear of the clouds. The main top on the right, 22,650 ft., towered far above the others, not one of which was under 20,000 ft. My first reaction was to make a pencil sketch before they vanished again—a sketch later destined to serve a good end. Meanwhile the most promising route was clear. On each side of the summit great glaciers descended—on the left the Meola, on the right the Sona, each ending up in ice-falls 5,000 ft. high. Up one of these glaciers we had to find a way. Their lower halves were impossible. But the upper halves, leading to the south and north summit ridges respectively, looked climbable. But how to get there? Here we had a stroke of luck. Between the two glaciers stood a great cliff. One very steep grassy shelf slanted up its face. Could we get up that shelf we could then dodge the ice-falls by gaining the Sona glacier at 16,000 ft. where the angle began to fall back, and where it protruded a little branch glacier. Once there, we should be able to reach the North col at approximately 20,000 ft.

On August 5 the Dhotials carried Camp 2 three miles up the Sona Gad to a little alp against the great cliff at a height of 12,200 ft. It was perched like a nest on the mountain wall, with the vast ice-fall of the Meola plunging underneath. The camp made a most peaceful scene when I walked away in the evening and looked back—the cluster of tents, the bright juniper fire, the coolies sitting contentedly around, knitting, smoking, chatting—a scene that grew more dramatic at night. Then the stars stood out above the ring of the four peaks. The coolies' fire became a red splash in the dark, lighting up the smoke as it curled in tall columns against the black cliffs behind. In the big tent there was just one candle burning, but it seemed incredibly bright, lighting

the whole tent pale green.

Next day we got all the coolies up that cliff—the shelf was full of strawberries and flowers—just as clouds rolled up from the Darmaganga to blanket the route over the glacier snout. So we pitched Camp 3 on a snowfield at 16,000 ft., sent down four of the Dhotials, and waited. At 3.30 P.M. the cloud lifted and revealed the snout as an icefall of 1,500 ft. flanked by rock-ridges. From below it had looked a mere nothing. Direct ascent was for Dhotials not possible, so we made reconnaissance for the morrow. Two hours' work disclosed a route between the glacier and the flank of the left-hand ridge, giving a gain in height sufficient to pass the ice-fall.

Cloud and drizzle delayed our morning's start until 7.30. This was the vital day. If only we could get Camp 4 up to 19,000 ft. in the upper glacier basin—just under the North col, we should be in a strong position for making Camp 5 and the summit. We climbed 1,500 ft. up rotten rocks, then roped and cut a long line of steps through marginal crevasses to the centre of the branch glacier, then straight up to the main glacier, which was three-quarters of a mile wide and heavily

crevassed on its right-hand half. We, therefore, bore left, along a smooth and shining highway of one and a half miles, only once rising

in an ice-fall through which a central corridor rose invitingly.

We had just glimpsed this good route when the clouds again rolled over all. Behind them the sun burned intensely; its heat overpowering. The coolies were enervated by glacier lassitude, but kept going rather than let us down. We ourselves had too much to think about to be enervated. The glacier being snow-covered, we had to keep wide awake to spot hidden crevasses. It was flanked too by great mountain walls, from which avalanches poured at five minute intervals. In thick mist there was always the risk of our straying leftwards into the danger area.

Above the final ice-fall the Dhotials could go no farther. We sent them back alone to Camp 3, for they were men of resolution and good judgment. Scott, Weir and I now carried the loads ourselves until we came to a patch of flat snow, spread like a magic carpet at the very brink of a huge crevasse, which gaped blue and hazily profound as though it were a hole in the surrounding clouds. This was an ideal camp-site—if safe. We hung around undecidedly, until the mist lifted for a few seconds. We were just out of range of the debris falling from a great ice-cliff. We pitched our tent. Height 19,000 ft.

Our work for next day was to carry Camp 5 up to the North col, so Scott and I set out in the late afternoon to reconnoitre. Level snowfields led us easily to the glacier basin. The cliffs buttressing the col came into full view. A few minutes' very silent study showed them to be nearly 1,000 ft. high and close to the vertical. They were ringed below by a bergschrund, from which 300 ft. of bare ice swept up to the rocks—and the ice was everywhere raked by stone-fall. We were beaten.

Our ascent thus far had even now earned us a true reward. The peak of Panch Chuli was right before our eyes, its upper ice-ridges so thin that we could see the sun shining through. And looking outwards our eyes ranged over the vast snow-fields, past the pin-point of the tent and across the profound gorge of the Darmaganga, now 10,000 ft. below among the clouds, to ranks of unknown snow-ranges, topped by towering cumuli and receding into the everlasting blue that roofs Tibet. Truly this was the abode of the Gods and the Five Brothers—worth much sacrifice of the flesh! And the sacrifice was certainly asked of us. We stayed one more day up at that camp—the tent our sunshade, upon which intensely fierce sun beat—beat upon the snows and reflected back with all the heat and glare of a furnace. Snow-goggles had to be worn inside the tent; for even there our eyes grew inflamed. We lost our appetites by day and our sleep by night. All night long the avalanches fell loud, near and often. Our tent was a 100 yards beyond the farthest debris marks, but one could not help wondering whether some greater fall might not sweep the camp site. By daylight we judged it safe: no further falls could be great. But in the dead of night every new crash and rattle made one wonder.

At dawn we were glad to get away. We descended 7,000 ft. to Camp 2. Meanwhile, my pencil sketch suggested that access could be

gained to the Meola glacier above its huge ice-fall, at 16,000 ft.; and that if so it should be possible to reach the South col and to climb Panch Chuli's south ridge.

While Weir and the coolies returned to base, Scott and I made a new and successful reconnaissance. We climbed to 16,000 ft. by way of the central cliff and found the only way on to the Meola. The upper glacier, by Chamonix standards, was not excessively difficult. The South col was partly screened from us, but the neighbouring slopes and angles augured no great barrier like the North col. I think it is by this route that Panch Chuli will be climbed. For us it involved more icework and higher camps than our Dhotials could cope with; it required Sherpas or Bhotias familiar with snow-work. We returned to base.

On August 13 we began withdrawing down the Darmaganga.

Our goal was Almora, 130 miles south. A journey of thirteen days. Daily we lost height, dropping nearly 10,000 ft. through the Middle Hills of Kumaon. The red fields of millet, which spread quilt-like around the high villages, gave way to the pale green of rice, and to maize standing twice as tall as a man. The heat again grew tropical. Enormous bright-hued butterflies danced around our heads. Grey and red monkeys browsed among banana palms. Roasted corn-cobs appeared on our daily diet. As for the birds—! At last we heard the black partridge calling. In one day we saw the pigmy owlet as small as a thrush, the grey-headed fly-catcher, a most brilliant sunbird that fluttered like a moth while it sipped nectar from the blooms of a shrub—but these are just a few among a great host.

Back at Ranikhet on August 27 we relaxed for a week, eating huge meals at Essex House, listening to the monkeys go thumping over the bungalow roof, and looking north across a vast jumble of wooded foothills to the clouded spires of Panch Chuli. It became possible to look back dispassionately on our four months' journey. Dr. Longstaff had told us, 'Mark your red-letter days by camps, not summits (no time there).' As with everything else he said, we found he was absolutely right. Himalayan climbing did not seem to us to be better than Alpine; for the altitude is against full enjoyment. But the travel among the mountains—surely it can have no equal in the world! Full of uncertainty and variety, daily change of scene—always some new, unexpected encounter—it taught us much of permanent value. To my own mind the most important knowledge is how to enjoy the present without worry for the future. The Himalayan traveller who cannot swiftly acquire this philosophy and apply it will go mad with anxieties. From this first venture of ours it seems to me that the art of Himalayan mountaineering is to plan and prepare for all the uncertainties—and then to forget them. Careful organisation is needed to realise dreams: but our plans are to be subject to Providence, and their outcome, therefore, something we can always accept serenely, and in light of which act anew for the best. The art of mountain travel is the art of being bold—bold enough to enjoy life, NOW.