

## THE ASCENT OF NANDA DEVI

BY H. W. TILMAN

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THE impulse for a British-American Himalayan expedition came from across the Atlantic and, when the English members were roped in last winter, preparations were already far advanced for an attempt—not on Nanda Devi—but on Kangchenjunga. Since permission for this was problematical we adopted Nanda Devi<sup>1</sup> as a possible alternative; I might add with the hearty goodwill of all who had had anything to do with the mountain. For reasons which are obscure and which need not be gone into, permission was refused for the first string and so we fell back on our second.

Nanda Devi, 25,645 ft.,<sup>2</sup> is the highest mountain in Garhwal, indeed in British territory. Garhwal is a small district in the central Himalaya, the great range running diagonally across it from S.E. to N.W. The highest elevations lie on three spurs which extend in a southerly direction from the main axis; the one with which we are concerned forms the watershed between the Gori and Dhaulī rivers.

At its southern extremity this curls round to the W. and N., like a great hook, through Trisul East 22,320 ft., Trisul 23,360 ft., Nandakna 20,700 ft., and Nanda Ghunti 19,893 ft.; the last named representing the point of the hook. From these mountains subsidiary spurs extend north. On the main ridge just north of the bend lies Nanda Devi East, 24,391 ft.,<sup>3</sup> which throws off a mile-long ridge to the W., culminating in Nanda Devi itself. Still further north, on the shank of the hook, as it were, another ridge runs west through Kalanka 22,740 ft., Changabang 22,520 ft., and Dunagiri 23,184 ft., while from these lesser spurs run south. Between these spurs, converging from north and south, is the valley of the Rishi Ganga river, the sole drainage for 250 square miles of ice and snow contained within the ring-fence which almost encircles Nanda Devi. The gorge of this river, at a

<sup>1</sup> For other views of Nanda Devi and the approaches, see *A. J.* 23, 24, 47 and 48.

<sup>2</sup> 25,660 ft. by G.T.S., see *A. J.* 24. map facing 132.

<sup>3</sup> 24,379 ft. by G.T.S., *ibid.*



general elevation of 12,000 ft., forms the only line of approach to Nanda Devi and its basin practicable for a large and laden party.

The reader is spared any summary of previous attempts on the peak of Nanda Devi because there have not been any. Earlier efforts were directed to the more modest ambition of reaching the base of the mountain, and even this was not attained until 1934.<sup>4</sup> For all this apparent lack of someone else's mistakes by which we could profit, we had no doubts about where our attack should be made. In 1934 Shipton and I had viewed the mountain from all sides for more than a month, and having reconnoitred up the S. ridge to about 20,000 ft., came to the inevitable conclusion that there lay the only possible chance.<sup>5</sup>

It was not until I arrived in India at the end of April 1936, to make transport arrangements in Sikkim, that I learnt that Kangchenjunga was forbidden. There were thus two months to put in before the rest of the party would arrive in June, so I took four Sherpas into Sikkim by way of trying them out for Nanda Devi. Sherpas of any kind were hard to come by then owing to Everest, a French expedition in the Karakoram and a small British party in Sikkim. Of the four I tried, one only was worth a place on a serious show. He was Pasang Kikule, who was quite outstanding and who had done well on Everest, Kangchenjunga and Nanga Parbat, where he was one of the five porters to return alive from the high camp.<sup>6</sup> In the end, for want of others, I was compelled to take three of the four, and our total of six was made up with three rather worn Everest veterans.

Back in Darjeeling from this three weeks' excursion, I heard that Loomis, one of the Americans, was arriving in Bombay on May 21 and, contrary to previous ideas, I decided to make a rapid journey with him into the Nanda Devi Basin to dump some food there before the monsoon broke or the others arrived. If successful it meant that the main party would be less unwieldy and we should also learn whether the original route through the gorge was still passable. Loomis met me in Ranikhet on the 27th, and on the 29th we left with two Sherpas, 10 lb. of cheese and a tarpaulin, for none of our food or equipment had yet arrived. I had previously sent a wire to Joshimath, the jumping-off place, to collect 15 loads of atta, rice and satu, and another to the Rawal of the Badrinath temple, who knew me, to send down fifteen Mana men to act as coolies.

Strange to say, both these wires bore fruit, and on reaching

<sup>4</sup> *A. J.* 47. 58-75.

<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*, 46. 427 ; 47. 97-8.



Joshimath eight days later there was a delay of one day only before we were able to start for the Rishi gorge, carrying 900 lb. of coolie food. All went well, the weather was fairly considerate despite the monsoon having already broken and, by June 16, we had made our last dump in a cave on the Pisgah buttress beyond the difficulties of the gorge. On the previous day at 'The Slabs,' where the loads have to be hauled up, I had been knocked off a ledge by a falling stone while supervising the load-hauling. Having fallen about 20 ft. on to the slabs, I was lucky enough to stop rolling before completing the remaining 1,400 odd feet into the Rishi below. I was a bit battered and cracked a rib, but after a day's rest, while Loomis went on with the men and cached the loads, I was able to begin the march back, supported by a rope and with a man attending to the placing of each foot.

From Joshimath we double-marched and were back in Ranikhet on June 25, where we plunged at once into sorting out food and equipment which were now arriving. Thanks to the kindness of Messrs. Shebbeare and Champion of the Forest Service, we had the spacious Forest Bungalow at our disposal, and every inch of it was needed for the flood of food and equipment which threatened to engulf us. The food had been ordered, literally and metaphorically, on a Kangchenjunga scale, and obviously a lot would have to be scrapped; so we worked feverishly to attain this desirable end before the rest of the party could arrive and begin arguing about what to take and what to leave.

The party was now assembling, and by July 8 all were present except Carter, one of the Americans, who was we believed in Shanghai. It seemed a bit far from Nanda Devi and his arrival in time was doubtful, but arrangements had to be made for him here and at Joshimath. The party would then consist of Graham Brown, Odell, Lloyd, Loomis, Houston, Emmons, and myself—four Americans and four British. Emmons, who had damaged his feet severely on Minya Konka (24,906 ft.) in 1932,<sup>7</sup> did not intend going high, so the climbing party numbered seven. We had no official leader and, purely through the accident of knowing the ground and the porters, the onus of making the *bandobast* was upon me.

It was alarming to learn that the programme included some scientific work, and Odell, after the tradition of learned professors, was late in arriving. Until he came it was difficult to know how many coolies we should need, for pieces of scientific apparatus were said to be converging on Ranikhet from all parts of the world. But time was short, so I made a guess and sent off

<sup>7</sup> *A.J.* 45. 290-304.



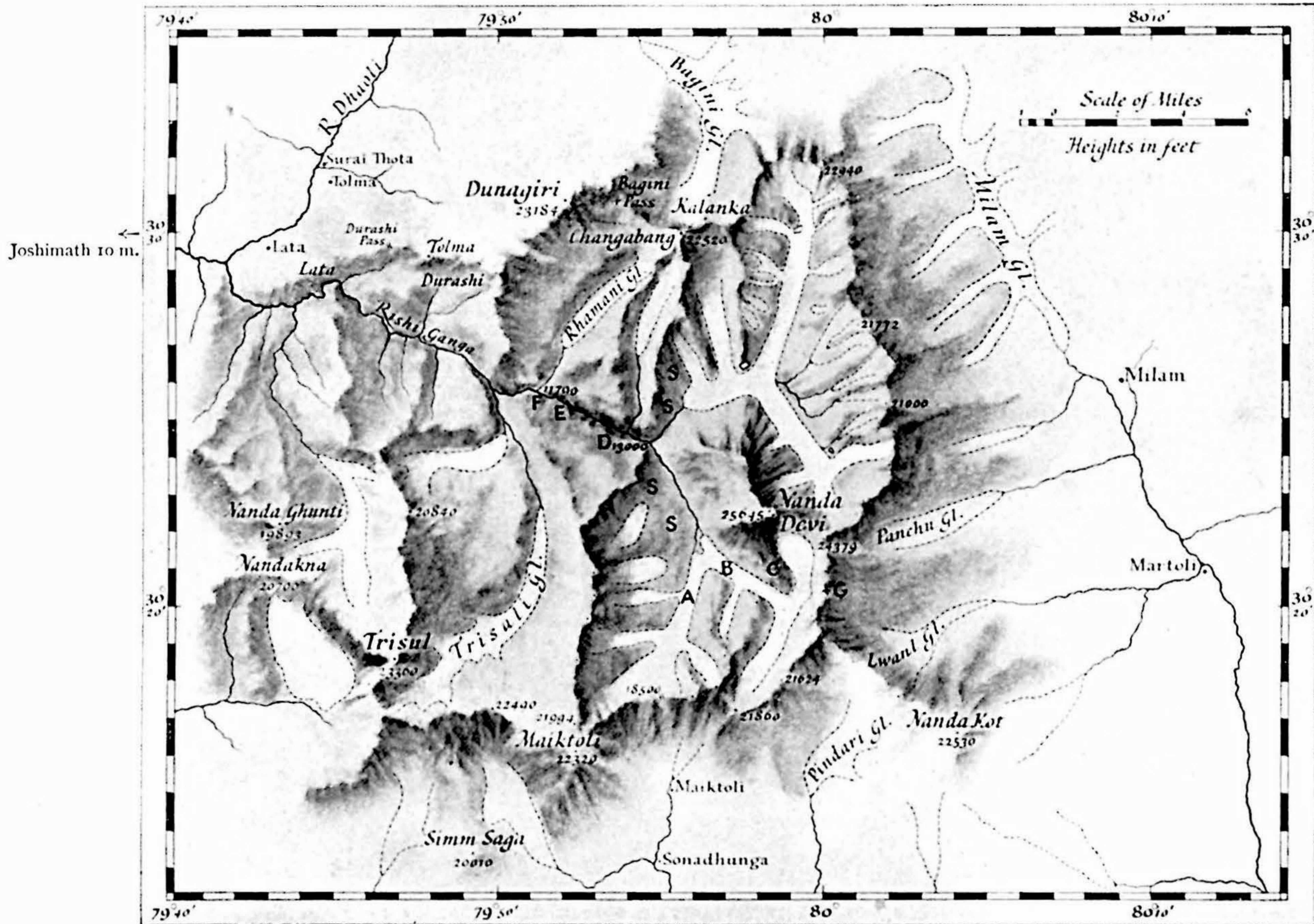
37 Dotials to meet us at Garul, 50 miles away, on July 10. On that day we piled ourselves, six Sherpas and 2500 lb. of junk into two lorries and arrived at Garul about midday, where we met the Dotials and began the first march. These men come from Doti in Nepal, bordering on the Almora district, and are professional porters. They had done so well in 1934 that I hoped they would carry right through the gorge but, by way of stiffening, I arranged for 10 Mana men to meet us in Joshimath, knowing that these men could be counted upon, whatever the Dotials might do.

It had been raining in Ranikhet for the last week and during the ten-day march to Joshimath it continued doing so, sometimes more, sometimes less violently. We picked up the Mana men, and on July 21 started for the Rishi, 7 Sahibs, 6 Sherpas, 10 Mana men and 37 Dotials. Our strength was speedily reduced by one, for there was a row over loads and the Dotials and Mana men nearly came to blows. By way of example I sacked the most pugnacious of the Dotials on the spot and, in the heat of the moment, gave him Rs. 5 too many!

We had peace after that and things went smoothly enough until the march which should have landed us at the foot of the most difficult part of the gorge. The Rhamani torrent, a glacier-fed stream, coming in from the N., had to be crossed, but I anticipated no trouble because on five previous occasions it had not given any. When we reached it at midday it was in flood. Loomis and I waded out in tentative fashion, but it was soon realized there was no possibility of crossing it that day. It was raining steadily and continued doing so all the afternoon and most of the night; everyone was wet and miserable. Before going to sleep one of the more eloquent of the Dotials put his head into my tent and announced that they had had enough and were going home.

Early next morning the water was down a bit and we managed to get a fixed rope across, hoping that this would hearten the Dotials. After breakfast some Mana men crossed and we rigged two ropes high above the water and began slinging loads across. Meantime the Dotials reaffirmed their intention of deserting and, even when everything and everybody was safely over, they refused to budge and asked to be paid off. I now played our last card, which I thought was a good one, and pointed out that the money was now all on the other side; but the reply to that was a suggestion that I should go and fetch it back. With the bribe of an umbrella two of them got across, and we paid the whole lot off, then and there, sitting in the pouring rain.





- A. South Glacier.
- B. South-East Glacier.
- C. 'Coxcomb' Ridge.
- D. Pisgah Buttress.
- E. 'Slabs.'
- F. Natural Bridge.
- G. 'Longstaff's Col.'
- S.S.S. The 'Sanctuary.'

By courtesy of R.G.S.]

THE NANDA DEVI BASIN, FROM A PLANE-TABLE SURVEY BY E. E. SHIPTON AND H. W. TILMAN.

[To face p. 16.





*Photo, T. G. Longstaff.]*

NANDA DEVI FROM THE E., TAKEN FROM ABOUT 21,000 FT. ON NANDA KOT, JUNE 11, 1905.

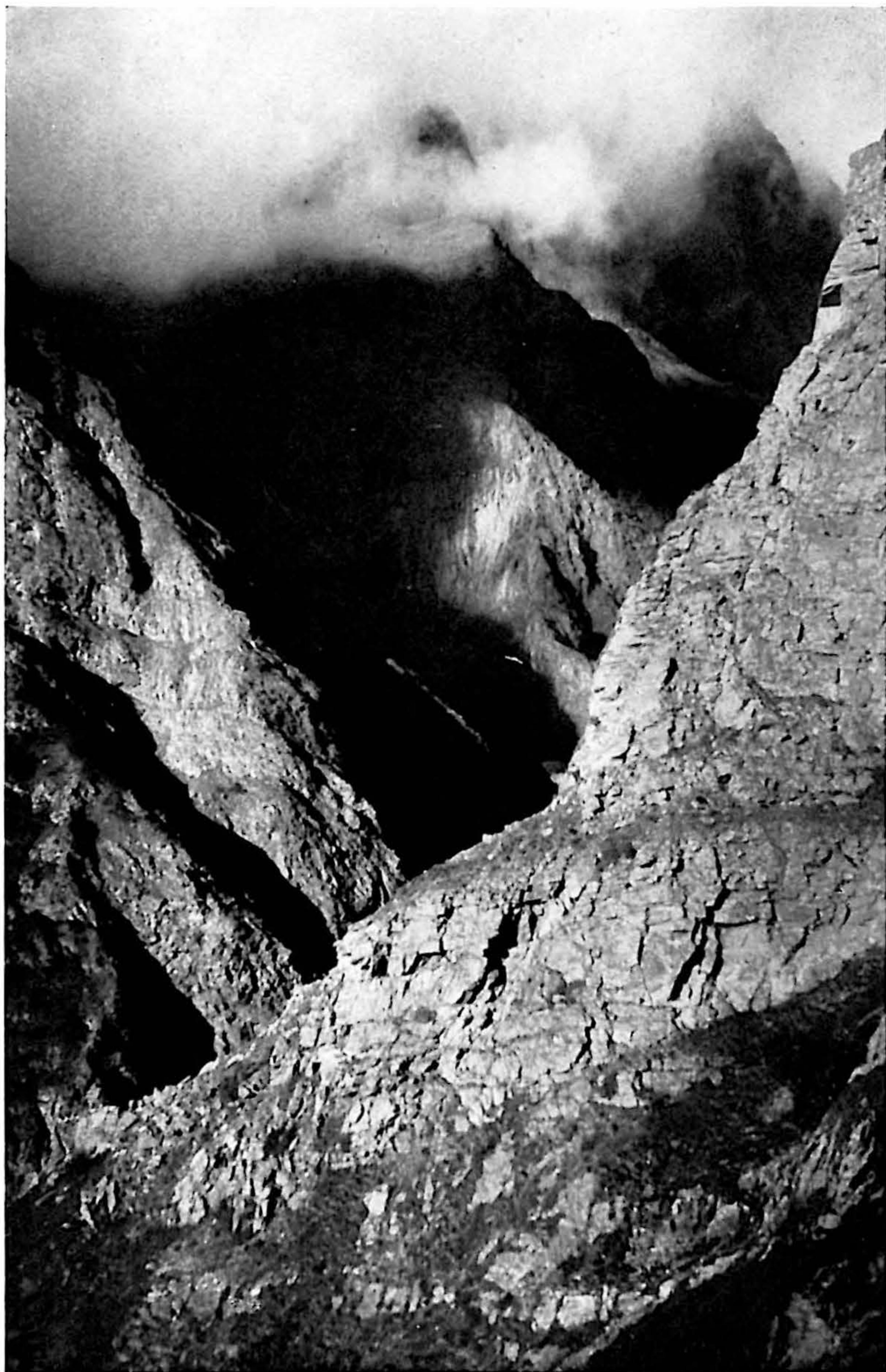




*Photo, T. Graham Brown.]*

IN THE UPPER RISHI GORGE, 1936.





*Photo, T. Graham Brown.]*

IN THE UPPER RISHI GORGE, 1936.





*Photo, T. Graham Brown.]*

THE UPPER RISHI GORGE LOOKING DOWN, 1936.





*Photo, T. Graham Brown.]*

PEAKS ON 'RIM' TO S., FROM ABOVE CAMP IV.

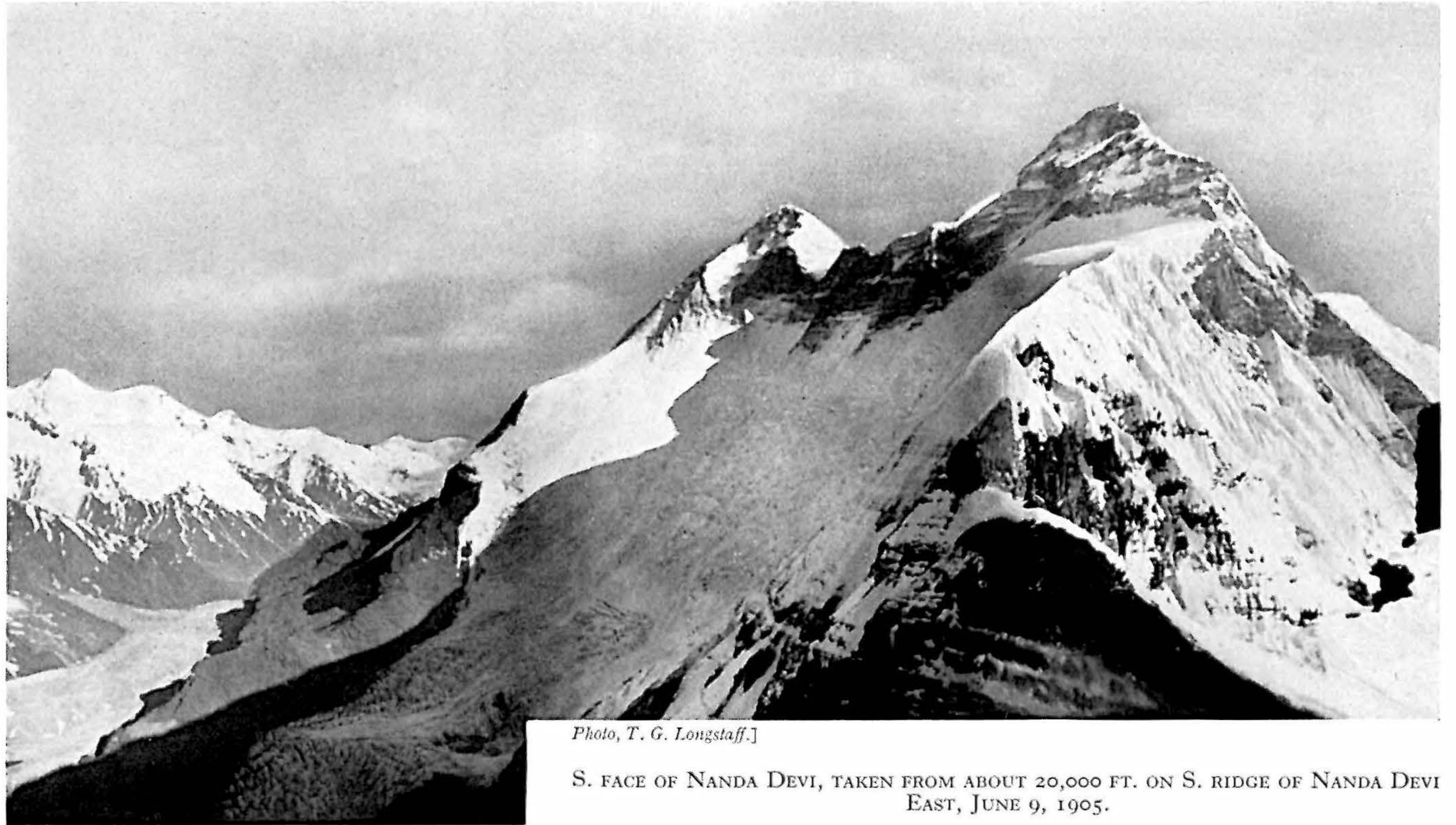




*Photo, T. Graham Brown.]*

NANDA KOT, TAKEN FROM BETWEEN CAMPS IV AND V.





*Photo, T. G. Longstaff.]*

S. FACE OF NANDA DEVI, TAKEN FROM ABOUT 20,000 FT. ON S. RIDGE OF NANDA DEVI  
EAST, JUNE 9, 1905.

*[To face p. 17.]*



The outlook was a bit grim. There were now 23 of us to carry 56 loads, camp was still over half a mile away over steep and slippery ground, the Rishi had yet to be crossed by a rock bridge involving the roping-down of loads, and it was raining cheerfully. To offset this catalogue of woe was the knowledge that the remaining men could be trusted to see the thing through. By increasing loads we managed to move everything in two shifts and by 2 P.M. began the slow process of lowering the loads and getting them over the bridge. The first thing to arrive was a load on its own—one of the Sherpas had slipped. He managed to stop himself, but his load, an oxygen apparatus and 2 gallons of paraffin, shot over our heads into the river. I was not sorry to see the oxygen taken off our hands but the loss of oil was serious.

In the course of the afternoon everything was got down, but the pitiless rain continued; everyone grew colder and colder, and the Mana men began to drift away to a near-by cave. In the end the Sherpas and ourselves carried what we wanted to the overhang forming the camp a few hundred yards above the bridge.

Next morning a plan had to be evolved to meet these new conditions and obviously the time had come for some ruthless scrapping. We still had 60 days' food with us, and this was now cut to 40; finally, we were in a position to move everything in two shifts without carrying excessive loads: that is, no loads exceeded 60 lb. It was a fine morning, and at midday, when we had dried out a bit and it was once more raining, we persuaded the Mana men to make a trip up to the foot of 'The Slabs.' The newcomers now had their first taste of the gorge, for the route becomes hazardous with brutal suddenness. For the first 500 ft. above camp one is altogether *too* dependent on trees and bits of grass for the climbing to be either safe or enjoyable. It is 1500 ft. up to 'The Slabs,' which we reached in 3 hours and, having made them safe for the next day with a fixed rope, we hurried back to camp.

Next day we moved to what is known as 'Halfway,' about 1 mile beyond 'The Slabs,' and the same afternoon came back and carried forward the loads dumped there the previous day. And so it went on, through the gorge and into the 'Sanctuary,' moving camp one day and bringing up the rest of the loads on the following day. Fortunately, throughout this exacting 10 days, carrying 60 lb. over the steep and difficult country of the gorge, the weather remained wonderfully fine. It may be said, and I thought so at the time, that this was 'magnificent but not war'; that is to say, foolish preparation for high climbing, but it seemed



to benefit most of us. All the same I felt a heavy responsibility for having imposed this extra strain on the party through a misplaced confidence in the staunchness of the Dotials.

Our camp in the Sanctuary was 1 mile short of the snout of the S. Glacier. The glacier consists of two main branches which unite almost at the snout, the branch with which we are concerned coming in from the S.E. To obtain a footing on the mountain in 1934, Shipton and I had gone up the true left bank of the S.E. Glacier, that is the side away from the mountain, and at about 16,000 ft. had found a pleasant grass flat watered by a spring. This year we decided to eschew these delights and go up the unknown right bank which would be shorter—time was now of more importance than grass to lie on and spring water to drink.

Crossing the river by an avalanche-cone below the snout we followed up a narrow trough between the lower cliffs of the mountain and the glacier, sometimes being forced out on to the glacier itself to find better going or to avoid falling stones. About  $1\frac{1}{2}$  miles above the snout we found a convenient mud flat and a stream—such a snug billet that it was suggested we should make it our base camp though it was under 16,000 ft.

Our arrival at this place, called Moraine camp, and the discussion about a base, so affected Loomis that he was moved to open a bottle of apricot brandy, which all this time had been carried secretly in his load. This may be thought a rather premature celebration but it was in reality very timely, because the bottle was small, there were seven of us and Carter arrived next day. We had underestimated his resource and the possibilities of air travel.

While the Mana men were bringing juniper wood to Moraine camp, the Sherpas and ourselves reconnoitred and carried loads to our future base camp, which was stocked with three weeks' fuel and four weeks' food and occupied on August 7. On the same day we paid off the Mana men ; we were sorry to see them go, for they are fine, likable fellows and to them we owed a lot. The route to this camp lay up the right bank of the S.E. Glacier for another mile, then up a scree slope to a point about 1000 ft. above the glacier and 500 ft. below the crest of what we called the 'Coxcomb' ridge. We hoped to have been on top of the ridge, but the presence of water dictated our choice of site. The height was about 17,000 ft.

We were delayed here for a couple of days, one a voluntary holiday and the other an involuntary one, imposed on us by a blizzard, but on August 11 Camp I was occupied, the site for it



having been prepared and stocked previously. To reach it we crossed the ridge and traversed under the N. or mountain side of the 'Coxcomb,' a fantastically weathered ridge of crumbling yellow rock, and then climbed up the steeper rock and snow at the foot of the true S. ridge. The height was about 19,200 ft., and even at this early stage it was difficult to find a place which could be fashioned to hold a tent.

The Sherpas now began to fail. Two had been left at the Base and never went above it, one, I am sorry to say, dying three weeks later of dysentery. He probably contracted this on the way in, having accompanied Emmons along the Pilgrim Road, a notorious place for disease. Of the other four, two only went to Camp II, Pasang and Nima Tsering, and there the former became snow-blind and Nima sick and, having lain there for seven days, recovered but sufficiently to go down. Apart from this assistance in establishing I and II, all the work on the mountain was done by the Sahibs. But I doubt whether the failure of the Sherpas was a great handicap, because the whole route was one demanding much care and we might have found them more of a hindrance than a help, for one only could really be trusted as a climber.

At Camp I the effects of altitude were most evident; for the first few days those who had not been high before were off colour and had slight headaches; it was between 19,000 and 20,000 ft. that all experienced most lassitude. Our morale was still further lowered at this camp by a minor disaster. A large tin of tea, almost all we had, fell down the *khud* on to the glacier and, although two search parties went down after it, it never was recovered. The snow which fell daily was regarded more as a hindrance to finding the tea than to climbing the mountain. Even the Americans missed it badly, so the sort of hell of unfulfilled longings which the wretched tea-swilling Britons endured can be easily imagined.

On the 12th Odell and I reconnoitred for Camp II while the others brought up more loads. The crest of the ridge was too narrow and broken to follow and we kept close under the N.W. side of it. For 700 ft. the way lies over loose and rotten rock where the slightest mistake in placing a foot sends down a stone, and where a too vigorous use of the hands will bring half the arête about one's ears. Beyond this horrible place we roped up (and were always roped from here to the top); the way lay mostly on snow, but again it was seldom possible to climb on the crest owing to corniches. The angle was steep on both sides, impossibly so on the Rishi side, the snow was not very reliable and steps had to be cut deeply.



Approaching the *gîte*, as Camp II came to be known, the climbing became interesting and great care was needed. A long traverse beneath one cornice led to another crowning a snow rib running at right angles, through which a hole had to be flogged, and where a big load always tried hard to shove one off. The last step round a rock buttress, lightly covered with snow of doubtful integrity, roused so much misgiving that we talked of putting a fixed rope there; but it was an awkward place to fix anything and familiarity bred sufficient contempt for us to do without.

The *gîte*, 20,400 ft., was as the name implies, a restricted platform 6 ft. wide and 20 ft. long, backed by a sheer rock wall on one side and falling steeply to the glacier on the other. On this after some labour we made room for a small Burns tent, 7 ft.  $\times$  4 ft., and a Logan, 7 ft.  $\times$  6 ft. On the 14th it was occupied by Graham Brown and Houston, who next day did a reconnaissance for Camp III and were joined at II the same evening by the two Sherpas. The plan was that they should help Graham Brown and Houston to carry a camp to III next day so as to make room for two more Sahibs at II.

Meanwhile the rest of us continued stocking Camp II. We all did several journeys on different days between I and II. I had the misfortune to make five and enjoyed none, for on the loose rock to the roping-up place, the prolonged strain of treading delicately like Agag, to avoid killing those behind, became almost intolerable. And above there the daily fall of snow meant that steps had to be cleared out or cut afresh.

On the 16th, when the second pair were to occupy II, we were puzzled on the way up to see two tents still standing there. When we arrived we found both Sherpas out of action, so that Graham Brown and Houston had to make two journeys to III; or rather one and a half because Loomis and Lloyd went on up the ridge with loads and met them halfway. This was a trying day for the four concerned.

On the 18th Odell and I went from II to III, while Lloyd, Loomis and Carter occupied II. Above the *gîte* the going for 200 ft. was similar to the ridge below with several doubtful places. Thereafter the route lay along the crest of a steep and narrow snow ridge, or slightly on the Rishi side of it, which was less steep than the other, though both fell away abruptly. The upward angle was  $40^\circ$  to  $45^\circ$ . This continued for 600 ft. and then the angle eased off and we found Camp III at the foot of what we called the 'Snow Saddle.' The height was about 21,200 ft., and after the cramped quarters of I and II it was a pleasure to be in a place where there was room to turn round.



Estimating the height of the various camps was always a source of worry. We had no aneroid with us ; possibly our scientists scorned a thing so simple that any idiot could read it ; but we had a boiling-point thermometer, or hypsometer, which soon earned for itself a more opprobrious title of like sound which is unprintable. Out of this we got as much fun as information, for the results it gave were always interesting, sometimes amusing and seldom accurate. After several hours of exhausting climbing in what we foolishly thought was an upwards direction, it was startling to be told that we had descended a hundred feet. The scientists blandly assured us that these vagaries were due to a ' column of cold air ' ; we, on the contrary, thought that it might be something to do with ' hot air '—and a lot of it.

On the following day Odell and I did a reconnaissance while the others carried between II and III. The ' snow saddle ' provided easy going for 700–800 ft. on sound snow at an angle of  $30^{\circ}$ . It then steepened again to  $45^{\circ}$ , the snow covering became thin and slightly protruding outcrops of soft, crumbly rock appeared. We tackled this steep glacis directly above us, keeping in the middle of what was now the wide ' hogsback ' of the S. face, but the going became increasingly difficult and neither the rocks nor the snow in their vicinity could be trusted. It was obviously no place for a laden party. The only safe route was an all-snow one and the most likely place to find this was in a broad, shallow gully about a quarter of a mile to our left. But by now we had contrived to get ourselves into trouble on some ice-glazed rock, and all our attention had to be concentrated on getting out of it by a traverse in the opposite direction, so the gully was left for another party to investigate.

That evening we were once more all together in Camp III and felt that we were progressing, but as a check to any undue optimism there was a blizzard that night. It blew itself out by morning and Lloyd and Loomis went up to see if the gully could be reached while the rest of us went down to II for the remaining loads. The reconnaissance party reported that the gully could be reached by a route that was nearly all snow, but there was no place for a camp, nor likely to be for a long way up. It was thereupon decided to move the present camp to the upper part of the ' snow saddle ' nearer the gully, a matter of 500 ft., and to press the attack by the gully.

There were unmistakable signs of bad weather at hand that afternoon, a sun-halo and mock suns, but next day was fine and three of us brought the remaining loads from II, while the others dumped some loads on the upper saddle and dug out a tent site. Poor Pasang and Nima were still lying there, for Pasang remained



too blind to move. We promised them that next day two of us would come down again and see them safely over the worst of the route to I. Until they were down they were merely a source of anxiety and to-morrow we expected to be out of reach. But we woke next morning to find a blizzard raging which continued for forty-eight hours. Not a great deal of snow fell but there was much drift, and the wind at times reached gale force. These three blizzards we experienced all came from the S.E. and lasted thirty-six, twelve and forty-eight hours. So far as my short experience goes they are unusual during the monsoon, but this year in the United Provinces the monsoon was exceptionally severe.

The morning of the 24th was fine and sunny and we turned out again, feeling the worse for wear after forty-eight hours in our sleeping-bags and worried by the loss of two valuable days. Lloyd and I went down to II in accordance with our promise to the Sherpas, and the others took two tents to the new Camp IV. On getting to II we found the Sherpas had already gone, having evidently grown tired of waiting. That evening five of us were established in IV with food for nearly a fortnight—we were in a strong position.

To me fell the invidious task of deciding who should have first shot at the summit, and Odell and Houston, who were both going strong, were chosen. The plan was for the five of us at Camp IV to carry a bivouac as high as possible next day; the summit party would be allowed two days in which to make their bid, and on the third day a second pair would take their place whether they had succeeded or not.

We each had about 15 lb. to carry and the going was rather heavy after the blizzard, but since we climbed on two ropes we were able to change the lead frequently. The traverse over to the gully, snow on rotten rock, was rather hazardous, but once in the gully it was a long grind up snow at an angle of  $45^{\circ}$  to  $50^{\circ}$ . By 3 P.M. we had made a lot of height and we headed for an ill-defined rock ridge on our right, which seemed to offer easier going and the chance of finding a camp site. The change, however, was for the worse and the proposed camp site sloped away as steeply as the rest of the mountain. We took a rest here and noted with satisfaction that we were level with Trisul, 23,360 ft. We then tackled a rock tower immediately above us, on top of which we hoped there might be tent room, and Lloyd did a grand lead up a rock chimney with his load on, pulling the rest of us up after him. The top of the tower proved to be only a yard square and the ridge in the vicinity was equally unaccommodating, but a little higher there were possibilities.



It was now 4 P.M., the snow after a day of hot sun would be at its worst, and Lloyd, Loomis and I had to descend. With the assent of all, but feeling rather selfish, we dumped our loads and left Odell and Houston to fend for themselves. A poor time they had too, for they had to climb another 150 ft. before even the most imaginative could discern the makings of a platform, and it was almost dark before they got settled.

The following day they reconnoitred up the ridge. The height of the bivouac was 23,500 ft., and 500 ft. higher they found a level snow shelf, big enough for two tents and clearly the place from which to start for the summit. Above this were several hundred feet of interesting and difficult rock and snow ridge, but happily the rotten rock had given place to a hard quartzite which was a joy to handle. This ridge ended in a snow dome where it abutted against a wide snow terrace leading by an easy gradient to the foot of the final snow and rock wall, a few hundred feet below the summit. The dome marked the limit of their reconnaissance. They returned to camp, intending to move it higher next day, but that night Houston was taken violently ill—possibly a piece of the bully beef which they ate was tainted.

About 8 next morning when we in Camp IV were debating whether to go up with a second tent, risking finding no platform in order to save a day, and wondering how far they had got on the way to the top, we were startled to hear Odell's familiar jodel, rather like a donkey braying. It sounded so close that at first I thought they were coming down, having climbed the peak the first day, but it suddenly dawned on us that it was S O S. The bivouac was out of sight 1700 ft. above, but Carter went out and shouted back; a few minutes later he returned to announce that 'Charlie is killed'—'Charlie' being Houston.

As soon as we had pulled ourselves together Lloyd and I started up as fast as we could manage, followed later by Graham Brown and Carter. It was a climb not easily forgotten, trying to go fast and not being able, wondering what we should find and above all what we could do. A likely assumption was that Odell was also hurt, and the chance of getting a helpless man down was remote indeed, and, as if to bear out this assumption, we could get no answer to repeated calls on the way up. About 2 P.M. we came in sight of the bivouac, some 30 yards away, where the mystery deepened at the sight of two ice axes. Voices were heard, and the next thing was 'Hullo, you blokes, have some tea.' 'Charlie is *ill*' was the message Odell had tried to convey—another such experience as this would almost reconcile one to the carrying of a small wireless set.



Though Houston was ill and painfully weak, he insisted on going down the same afternoon to make room for another, so that there might be no delay in making the summit bid. We all four roped up, and some way down met Graham Brown and Carter, when, leaving Houston with them and Lloyd, Odell and I returned to the bivouac. This was a stout effort on Houston's part and a piece of outrageously bad luck for him.

Next day we moved camp in two shifts to the higher site at 24,000 ft., and on the 29th set out for the top, getting off at 6 A.M. Thanks to the previous reconnaissance we were not long on the difficult ridge, and 8 o'clock saw us beginning the long trudge up the snow terrace. In spite of a cold night and the early hour the snow was not good and speedily became execrable. We were soon going in over our knees and, in steeper places, it was hard to make any upward progress at all. A very hot sun added to our discomfort and hopes of the summit grew faint, but there was no help beyond plugging on and seeing how far we could get; this we did, taking our time and resting frequently. Towards 1 P.M. we were surprised to find ourselves approaching the final wall and, once this was reached, we felt the deed was done. There was a difficult bit of rock which Odell led and which I thought horribly unsafe, then we were landed fairly on the steep glacia with the summit only a couple of hundred feet above us.

Presently we entered a short but very steep gully in which the snow was reasonably good and, after a severe struggle, we drew ourselves out on to a gently sloping corridor just below the summit ridge. Odell had finished the gully and was moving up to where I sat, preparatory to continuing by the corridor, when there was a sudden hiss and, quicker than thought, a slab of snow about 30 yards long slid off the corridor and disappeared down the gully, peeling off the snow where our steps had been kicked as it went. At its lower end the avalanche broke away to a depth of a foot all round my axe, which was well driven in and to which I was holding; the break at its upper limit extended to a depth of three or four feet.

The corridor route had somehow lost its attractiveness and we finished the climb by the ridge, reaching the top at 3 P.M. There was no wind and it was warm in the sun, though the air temperature was 20° F. It is noteworthy that while we enjoyed this weather the foothills of Garhwal were experiencing tremendous floods. At this late hour there was too much cloud for any distant views, but we did get a glimpse through a cloud vista of the sun-drenched Tibetan uplands. The summit is not the attenuated and precarious stance found on the top of so many



Himalayan peaks, but a snow ridge about 150 yards long and 20 yards wide. We started down at 3.45 P.M., reaching the bivouac 2 hours later.

There is not much more to tell. The next day was spent at IV with the rest of the party. We still had enough food to get a second party up, but Loomis and Carter were both having trouble with slightly frozen feet and there was no one to accompany Lloyd.

On the 31st we all got back to the Base, 21 days after leaving it. It was a bitterly cold and windy day, the snow was hard and dangerous and a laborious time was spent cutting steps down the snow arête to II. The mountain was having a parting fling at us and the number of slips we made makes me quite hot to think of even now. We were all pretty tired.

The joy of return was marred by the death of Kitar. He had got steadily worse in spite of all that Emmons could do for him and had died the previous night. He lies buried there among the mountains to which he had given of his best, as his remarkable record of service testifies. He had been to Kamet, Nanga Parbat, three times to Kangchenjunga and thrice to Everest.

Emmons had not been idle. He had completed a plane-table survey of the S.E. Glacier and its branches, and got to within 500 ft. of the top of 'Longstaff's col,' accompanied only by one inexperienced coolie. This is a col on the eastern rim of the Basin at the foot of the S. ridge of Nanda Devi East; the height is 19,200 ft. It was known by this name amongst ourselves because in 1905 Dr. T. G. Longstaff and the two Brocherel brothers, in an attempt on Nanda Devi East, pitched a camp on the col and were thus the first to look down into the Basin.<sup>8</sup> This year, after the party had left the Base Camp, Houston, Pasang and myself went out over this col and made a Pass of it. It is very steep on the Basin side and, although attractively short and direct, is not recommended as an alternative to the Rishi route for a large party.

The breakdown of the Sherpas calls for a word of explanation, but as I have pointed out we had to take the leavings. Of the six, I expected two only to go high, Kitar and Pasang. Kitar died and Pasang became snow-blind at II—through his own carelessness. But he is a grand porter, worked harder than anyone; we all liked him and I had entertained hopes of seeing him on the top.

Perhaps I ought to add that no mechanical aids were used, apart from the apricot brandy. Our sole oxygen apparatus (taken

<sup>8</sup> *A.J.* 23. 202 sqq. ; 47. 60.



for use medicinally) was drowned in the river, pitons were forgotten at the Base, crampons and snow-shoes were solemnly carried up only to be abandoned, while the glacier drill with which we burdened ourselves was a scientific instrument and not, as the name implies, an ingenious device for facilitating glacier travel.

If I may blow our own trumpet for a moment I should like to claim that for once a party of mixed nationality was a success. As nations the Americans and ourselves do not always see eye to eye, but when it comes to doing a job of work together, as for example in the late war or in more serious affairs like climbing a mountain, we seem to pull together very well. We worked united in the will to put any two of our members on the top—the *team* accordingly deserves the credit.