THE BARUN EXPEDITION, 1954

By GEORGE LOWE

N 1952 at the end of the Cho Oyu Expedition, a small party consisting of Eric Shipton, Charles Evans, Ed. Hillary and myself pushed across a pass to explore the base of Makalu. It was during June, and the monsoon was approaching, but we crossed some exciting mountain country and reached a pass at the head of the Barun glacier before deluges of monsoon snow made us retreat down the

Barun valley to find our way out to the Arun river.

The valley was extremely beautiful; it was locked in by towering rock cliffs with cascading waterfalls. The floor of the valley was filled with flowers and grassy flats. The glacier at the head, although exceedingly rough and stony, led to a great choice of interesting summits with unmapped corners between Makalu and Everest. A high pass was the only way in and out of this valley as the junction with the Arun river was only 4,000 ft. above sea level guarded effectively by thick bamboo jungle and precipitous gorges. Late in June, as we walked towards the Indian border through the steaming valleys of the lower Arun, Hillary and I resolved to return to explore the country in the vicinity of the Barun valley.

When on the summit of Everest, Hillary looked across to Makalu and saw a possible route by reaching the North Col of the mountain and following the North ridge to the summit. With these enticing objectives put forward, the New Zealand Alpine Club organised an expedition to visit this area. Permission to visit the 'Barun and valley peaks' was the wording that we used on the understanding that Makalu would be the main peak reconnoitred, but permission to attempt Makalu was given to a Californian party, who asked explicitly for that mountain, and permission was granted to our expedition to explore the Barun

valley and peaks, excluding Makalu.

When this position was clarified, the expedition gave itself two objectives, climbing of peaks with a view of looking from afar at the routes on Makalu, and making as complete a survey of the area as possible. And so it was that the party had three able surveyors with three photo-

theodolites loaned by the Royal Geographical Society.

Norman Hardie and Jim McFarlane, both surveyors and civil engineers, assisted by Charles Evans, who was also competent to do a theodolite survey, made up the survey team. Dr. Michael Ball was invited to join the expedition as doctor, and the remainder were from New Zealand and consisted of Sir Edmund Hillary, Geoff Harrow, Colin Todd, Brian Wilkins, Bill Beaven and myself.

The expedition gathered on the Nepalese border at Jogbani on March 28, and from there travelled by truck for thirty miles of plain to Dharan. Some two hundred coolies were engaged here and we left on April 1 for the sixteen-day journey up the Arun valley to the rivers which give access to the mountain area near Makalu.

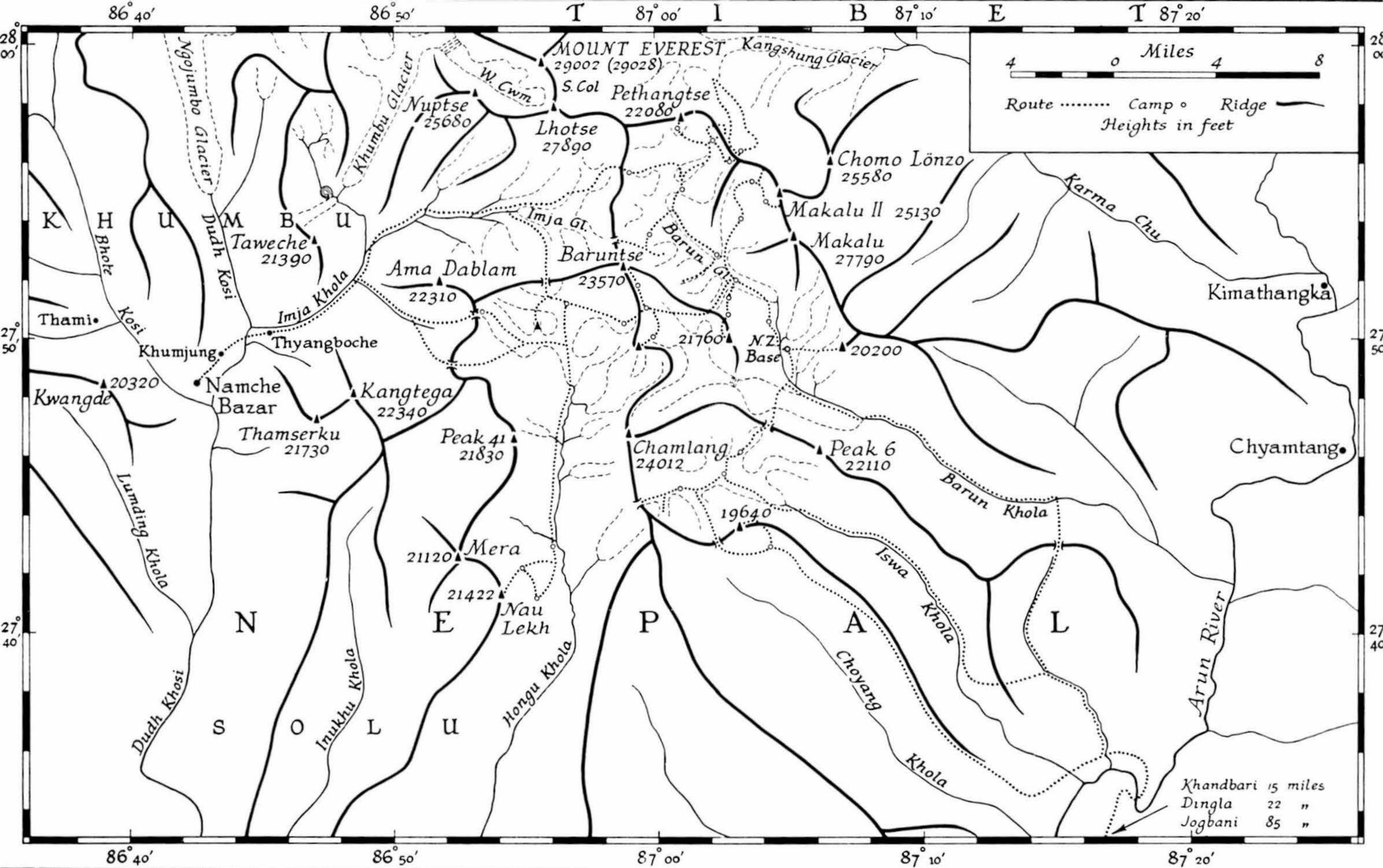
After a week's march we reached Khanbari, where we spent some days rearranging coolies, as the men from the lower valleys did not wish to carry beyond this point. And, as it is the last bazaar of any size, we took on a good number of loads of rice, flour, salt and cooking fat, needed to complete our food supplies.

Here also we divided the party into three groups to follow out the plan of exploring three valleys and making a rendezvous in the Barun valley at the foot of Makalu. The Choyang, the Iswa and the Barun are the three mountain rivers that flow south-east from the mountain at their heads and join the Arun within a few miles of one another.

Evans and Harrow planned to explore the Choyang and cross from its head waters into the head waters of the Hongu valley, and from there up the Hongu and over two passes used in 1952 to the Barun glacier. They were to take a theodolite and try to complete a survey. Beaven, Hardie, Todd and myself were to force a way up the Iswa valley and from there try to make a pass direct into the Barun valley. Hillary, McFarlane, Wilkins and Ball had the double task of making their way up to the Barun glacier with the main expedition baggage, and completing a survey as well. Certain peaks were agreed on to act as theodolite fixes to link the triple survey together. These journeys would also serve the purpose of acclimatisation for later high climbing, and it was arranged that we should try to meet at an agreed Base Camp in the Barun valley by April 30.

Evans' exploration began first. He left the main party soon after crossing the Arun rope bridge which is on the main trade route towards the Popti La and Tibet. From there he traversed the ridge between the Choyang and Iswa valleys, looking for a suitable chance to drop off to the Choyang floor. The Choyang was very steep-sided and filled with very thick bamboo and rhododendron growth in which no tracks were found, and for several days they traversed the ridge dividing the two valleys before finding a way down. They climbed a peak of 19,640 ft. on the watershed between the Choyang and the Iswa, but early cloud upset their hopes of a survey station. On April 25 they climbed out of the Choyang and made an easy pass into the Iswa valley, after failing to find a pass from the head of the Choyang to the Hongu valley.

While the other parties were exploring the Choyang and the Iswa, Hillary's party had the tedious job of double packing the hundred odd loads up the ridge between the Iswa and the Barun and down into the upper gorges of the Barun river. This devious route is the easiest way into the Barun valley, as below the point where the route meets the Barun river, the river leaps down in cataracts between tremendous cliffs to the Arun junction. The local people have never been successful in finding a way by the lower Barun. As with the Iswa party, Hillary's party had to deal with deep snow lying in the rhododendron jungle on the pass above the Barun river. Several of the porters carried up to





Crossing the Arun rope bridge made of twisted vine and bamboo. Although close to Everest and Makalu, river is here only 4000 ft. above sea level.

this in bare feet, but after that first day gave up, and the loads were then double packed by some of the locals clad in boots and some sixteen Sherpas that they had kept on. McFarlane had gone ahead with the theodolite and had made several survey stations, and chosen a site for Base Camp at about 16,000 ft. on river terraces close to the terminal of the Barun glacier. They found they were about half a mile from the Base Camp of the Californian party, who were attempting Makalu and had already been established some two or three weeks. From Base Camp, Makalu dominated the view. It is a glorious mountain, and snow plumes were being swept from its summit as from its great neighbour, Everest.

The journey up the Iswa valley began on April 16 when Beaven, Hardie, Todd and myself left the Barun party below the pass which leads to the Barun and plunged down through trackless forest to the Iswa river. With us were ten Sherpas carrying 60 lb. each, while we ourselves, as yet unfit, were carrying 40 lb. We followed down a steep creek and were soon involved in snow gulleys and occasional waterfalls to climb down. Progress was slow and we dropped packs and set out to reconnoitre. After seven hours of climbing, sliding, and breaking our way through bamboo and rhododendron, we climbed a great tree and looked across to the river and saw it leaping down over huge boulders. We had almost decided to abandon the attempt when Todd made a cast to the left and struck an old trail. It was too late to move on and we camped where we were in a thicket of brambles which we cleared. Next day at 6 A.M. we pushed off and struck the track which Hardie had worked on by torchlight, cutting blaze marks into the tree trunks with a kukri. We reached the river and turned upstream. The trail continued and even though sketchy and very rough we made ground. For two days at much less than one mile per day we struggled up towards the glacier. Two beautiful mountains beckoned at the head; one the Chamlang massif, apparently unclimbable with a huge wall supporting a four-mile-long summit ridge; the other, Peak VI, a shapely fluted spire of 22,000 ft.

On the fourth day of toil, we emerged on to a grassy flat with the Iswa river running quietly across the plain. Down valley, the bush leapt down in distant ridges. It was a thrill to emerge from the jungle struggle into this delightful field with mountain walls to hide it away from the non-explorer.

The cliffs were a feature of the valley. Never, except perhaps in the Barun, had I seen such rock walls. They were streaming in many places with threads of waterfalls. One night we camped in a beautiful flat at the foot of the cliffs. All round the camp there were holes in the ground and Hardie thought they were mole holes—but they varied in size so much. We grew curious and dug down and found, deep down, jagged rocks. We realised then that rocks fell from the cliffs above, screamed down like fiery meteorites with great velocity and buried themselves deep in our camp site. We moved our camp.

Having now thoroughly explored the Iswa, we followed the escape

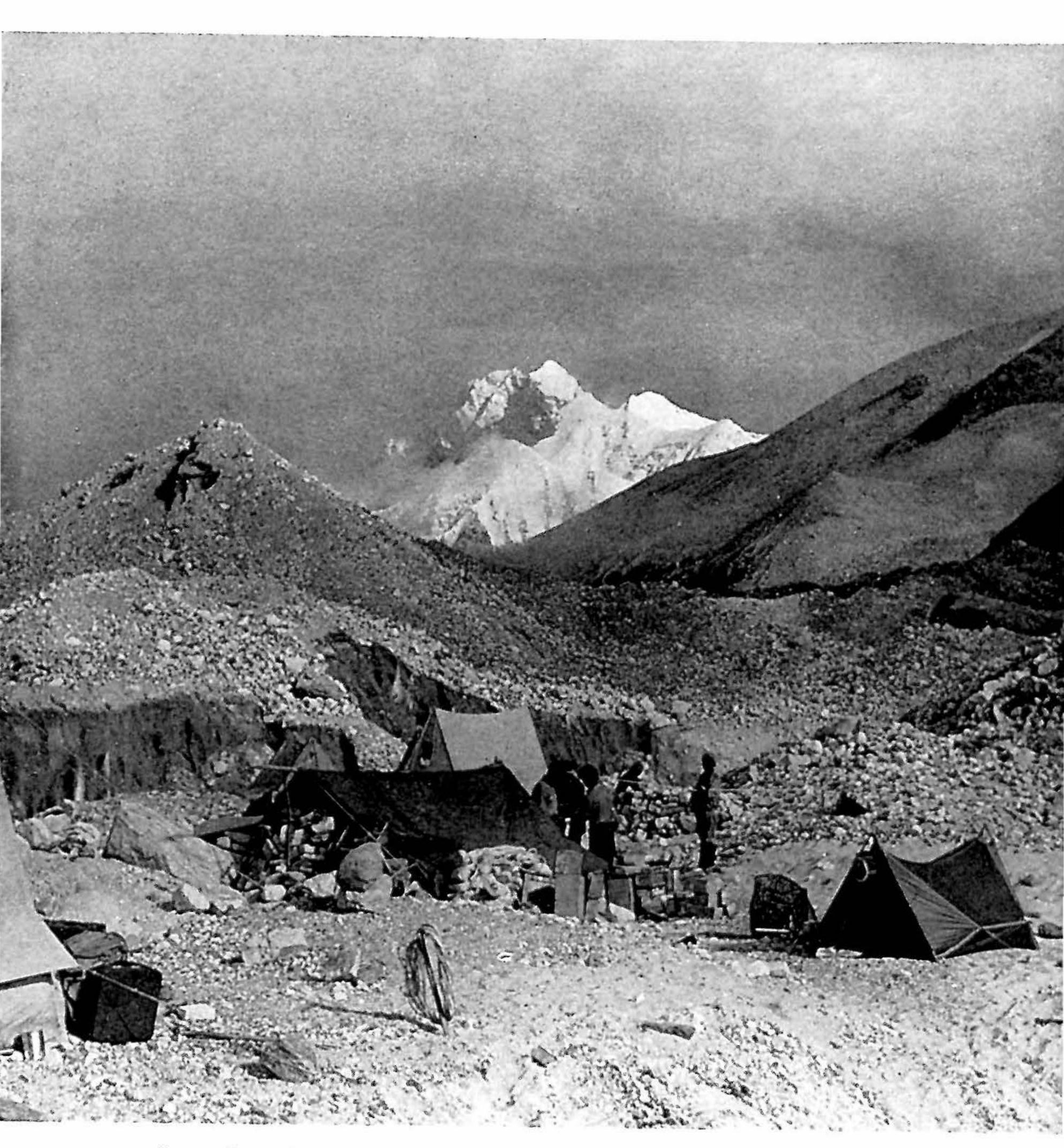
route over the pass between Chamlang and Peak VI, which I had discovered in the first few days. It was an easy pass of some 19,000 ft., which took us between the fluted cliffs of Peak VI on the right and the massive ice-falls of Chamlang on the left. The descent into the Barun was straightforward, and two days later we reached Base Camp but found nobody in occupation. Later that evening Ball arrived with one Sherpa, having climbed a peak of 20,200 ft. on the South-east ridge of Makalu. This was marked on our maps as a low peak of Peak III.

Ball reported that Hillary, McFarlane and Wilkins were climbing and surveying at the head of the Barun valley. On April 29 we rested at Base Camp and on the following morning Hillary arrived with one Sherpa with the news that an accident had occurred at the head of the Barun involving Wilkins and McFarlane. McFarlane was badly

injured.

On April 28 McFarlane, Wilkins and Hillary, and one Sherpa, had climbed a peak of 21,300 ft., and then Hillary and the Sherpa descended to camp. Wilkins and McFarlane continued on to reach a Col of 21,000 ft. which overlooked the Kangshung glacier. They descended a branch of the Barun glacier towards camp, and when only 300 yards from the terminal face of the branch, Wilkins plunged through a light snow covering into a deep crevasse. McFarlane, who was following, was carrying most of the coils in his hand, and they were separated by some thirty-five feet of rope. The surface was icy, and the jerk pulled him on his face. The rope flicked out as Wilkins dropped down the crevasse, and McFarlane was then pulled along the surface and down into the chasm. They both fell fully sixty feet, but Wilkins' fall was broken by McFarlane's weight. McFarlane was swept into the crevasse; he fell freely but damaged his back by hitting the sides, and landed in an upright position, two feet to the left of Wilkins. Mc-Farlane suffered concussion and could not be moved. Wilkins unroped and made his way along the floor of the crevasse for some twelve feet, to where it narrowed to two feet in width. In two hours he cut his way up to the surface and clambered out. He reached Hillary's camp at half past five and gave warning. Hillary left with five Sherpas, and carrying sleeping-bags and ropes they hurried to the scene of the accident.

Darkness was coming on and a cold wind was sweeping across the glacier. Hillary tied on to a rope and the five Sherpas lowered him down the crevasse. When fifty feet down, the Sherpas became afraid of approaching the edge too closely and would not lower him any further. Although fifty feet down and within ten feet of McFarlane, Hillary could not see him, even though he flashed a torch, because the crevasse slanted away too steeply. After a great deal of shouting, Hillary was pulled up to the top again, but the rope had cut into the lip of the crevasse and he had the greatest difficulty in getting out. In doing this he threw his arm over the lip, and the Sherpas putting severe strain on the rope, levered him out, breaking two or three ribs in the process. Sleeping-bags and an eiderdown jacket were lowered to



CAMP I ON BARUN GLACIER. LHOTSE (LEFT) AND EVEREST BEYOND.

McFarlane, and although he shouted replies to say that he was safely inside the sleeping-bags, in his concussed condition he merely lay them across his lap. Hillary and the Sherpas descended to camp, spent an uneasy night, and were back before dawn next morning along with Wilkins.

Wilkins very pluckily descended the route by which he had climbed out of the crevasse and attached ropes to McFarlane, and, after a great deal of the ice of the overhang at the top of the crevasse had been chopped out, McFarlane was pulled to the top. He had spent some 16 hours in the crevasse.

His hands and feet were badly frostbitten, and although conscious, he was in a very bad way. From the frames of three Sherpa rucksacks, a stretcher was improvised and they lifted him an hour's walk into camp. The same day, Hillary and a Sherpa set off down the valley for assistance. They did not make the whole of the distance to Base Camp that day, but spent the night on the Barun glacier in a tent that they had carried with them, and arrived at Base Camp at 7 A.M. on the morning of April 29.

It was very lucky that Michael Ball, the doctor, was with us, as he was due to go back down the Barun to escort the last of the loads to Base Camp. Two hours after Hillary's arrival, Ball and myself, as I knew the position of the accident from having visited that area in 1952, set off with light packs containing medical equipment, and, using Hillary's tent on the glacier, reached the site of the accident very early the following morning. McFarlane was given an exhaustive examination by the doctor, who decided to move him in slow stages to Base Camp, to rest him there for some weeks so that he could gain strength for the exhausting journey to the Indian border.

Although he saw that McFarlane's hands and feet were badly frost-bitten and quite possibly he would lose portions of them, Michael Ball felt that waiting, even some weeks, could do very little harm to the limbs, and would allow McFarlane to get over the concussion and shock of the fall. Two sleeping-bags, an eiderdown jacket, cameras and survey equipment, were still at the bottom of the crevasse. With Wilkins and Todd who arrived later that day, and several Sherpas, I went to the scene of the accident, descended the crevasse and retrieved all the equipment. Measured by the length of the rope, the drop was fully sixty feet, and considering the ice projections and slanting sides of the crevasse, it was surprising that they were so little hurt in the fall.

The following day, we carried McFarlane on an improvised stretcher some miles down the Barun glacier. Three days later, after the most exhausting carry, mostly over miles of moraine-covered ice, we reached Base Camp. Both patient and carriers were quite exhausted. McFarlane could stand only about four hours of movement in any one day, and it seemed that he had displaced some of the vertebrae in his back. Hillary was resting in camp, having had his ribs strapped. Charles Evans and Geoff Harrow had arrived from the Choyang exploration, and so all were now assembled at the base of Makalu.



ABOVE RIDGE THE TECHNICAL GREAT PICTURE BASE FROM

The Californian Expedition were camped some half a mile away up the valley from us and were then attempting the South ridge of Makalu. From Base Camp we could see that they had established a camp at 21,000 ft. and were attempting the very formidable rock ridge above it. The doctor of the Californian party made several visits to McFarlane; both he, and in fact the whole of the Californian Expedition, gave every assistance and were even prepared to call off their expedition in order to assist us to get McFarlane to the Indian border. This very sporting offer we declined, as we felt that when McFarlane was stronger we could hire men from the village of Sedua to carry him out in easy stages.

Having recast our plans, a small party consisting of Evans, Harrow, Todd, Beaven and myself began an attempt to reach the North Col of Makalu, 24,800 ft., and from there attempt to climb Makalu II, with the idea of observing the final slopes of Makalu from this vantage point. A few miles up the Barun glacier a tributary glacier flows in from the western slopes of Makalu. We ascended this tributary glacier, which we called the 'Makalu glacier' and placed a camp at about 20,000 ft. at its head. From this camp which we called Camp III, Hardie, Todd and I reached a col of 21,500 ft. immediately to the north of Makalu II. From the Col we looked down on to the glacier which drains Chomo Lonzo and Makalu II and joins the Kangshung glacier. We looked across to the West face of Makalu and could see fairly easy glacier terraces leading most of the way to the Makalu Col and, we hoped, to the ridge. On the same day, Evans, Harrow and Beaven established Camp IV at about 22,000 ft. on the glacier terraces.

The following day, Hardie and I climbed a peak of some 22,000 ft. to the south of the Col, by a very steep ice ridge, which gave us a good view of the North ridge of Makalu II. The view confirmed our first opinion that the ridge was not the easiest way to the top of the mountain. Evans and Harrow were at the time attempting what we all thought was the most likely line, up the terraces towards the North Col. We could see them kicking steps up a long steep snow gulley and after making about a hundred feet above Camp IV they broke out to the right to a flat snow shoulder. This was chosen as a tentative site for Camp V.

On May 15, Hardie and I, together with Hillary and Wilkins who had come up from Base Camp after resting, set off for Camp IV to relieve Evans and party. Hillary had had sixteen days' rest in which to repair his ribs and he felt that he was now fit again. We had with us seven Sherpas, carrying ropes and pitons to fix on the route to the Col, and also further supplies of food.

We reached Camp IV before midday, but Hillary had found the ascent caused his breathing some distress.

The following day, Wilkins and I ascended the route which Evans and Harrow had reconnoitred, and fixed two hundred feet of rope across the icy section in the bottom of the snow gulley. Upon our return we found that Hillary was coughing and vomiting and was feeling very ill. He spent a very disturbed night, and the following morning it was



Makalu from summit of Pethangtse. Urkien and Wilkins in foreground. Makalu II is above Urkien's head. French route was up the facing ridge of Makalu.

decided that we would all accompany him back to Camp III. With four Sherpas carrying our packs, we began the return, with Wilkins and myself assisting Hillary at each arm, while Hardie was roped between us and the Sherpas as a safe anchor. We had made some half of the distance towards the camp when Hillary pitched over on his face and became unconscious. We emptied the packs and with these made an emergency stretcher, while Hardie and one Sherpa hurried to Camp III to get assistance. After a very exhausting carry, during which Hillary became delirious and kept talking of two fears, one that he was being frostbitten, and the other that the sun was so strong on the back of his neck that he was getting sunstroke; his breathing and pulse had both increased at an alarming rate and it was a great relief when we were near Camp III to meet Charles Evans with a rescue party.

Evans, who was also a doctor, decided to rest Hillary in the tents at Camp III and sent a request to the Californian party for one of their emergency oxygen sets which they had for medical purposes only. Evans was not sure whether Hillary had pneumonia or not, and ordered this in case of emergency. Hillary had all the symptoms of being dangerously ill, he had become very dehydrated, his tongue had become swollen and rutted, which made it very difficult to take in water. This was given him on every possible occasion and during the night he

was able to sleep when oxygen was administered.

The following day he was better, but still very ill. All available Sherpas were brought up to Camp and on May 18 he was carried down to Camp II where he spent a much easier night, noticing quite extraordinarily the effect of the difference in altitude on the ease of his breathing. The following day he was carried over the very difficult moraine to Camp I on the Barun glacier, where he rested until May 27 when he had very greatly recovered. It seemed that his broken ribs had damaged an area of lung which showed great weakness when he went to 22,000 ft. This caused rapid deterioration, and dehydration, so serious that it upset his body chemistry. To further complicate matters, when in this low state of health, the old symptoms of the malaria that he had contracted when in the Pacific struck him, and was diagnosed as such by Evans when he was at Camp II.

A reluctant decision was made to withdraw the camps on Makalu.

Almost a month was involved with the two accident cases and we wanted to complete the survey and also to climb at least one of the three declared objectives of the expedition. And so it was decided that Hillary and McFarlane were to make their way to the Indian border escorted by Michael Ball and Wilkins, while a party of four attempted Baruntse, 23,570 ft., the ice-fluted corner-stone of the Barun and Imja watersheds. Norman Hardie, wishing to complete the survey at the head of the Barun glacier, took a theodolite and, at the last moment, Ball and Wilkins joined him for a few days' climbing before their departure with the invalids. In a very few days, they were able to get in a great deal of climbing, their first peak being Pethangtse, 22,080 ft., which turned out to be much easier than it looked. Exciting views

were had from the top; the Kangshung face of Everest stood clear from the South Col to well north showing the full extent of the great North-east ridge of the mountain, on which the two 'steps' which caused so much discussion on the expeditions of the 1920's and 1930's were clearly outlined. It would seem that both steps might be turned on the Kangshung face. In addition to two peaks of 21,500 ft., Ball with one Sherpa climbed an unnamed peak of 22,560 ft. which is the next peak north of Makalu II. This was a particularly fine rock climb on which Sherpa Urkien exclaimed in the English that he learnt extraordinarily quickly 'Urkien go up, but how he come down?'

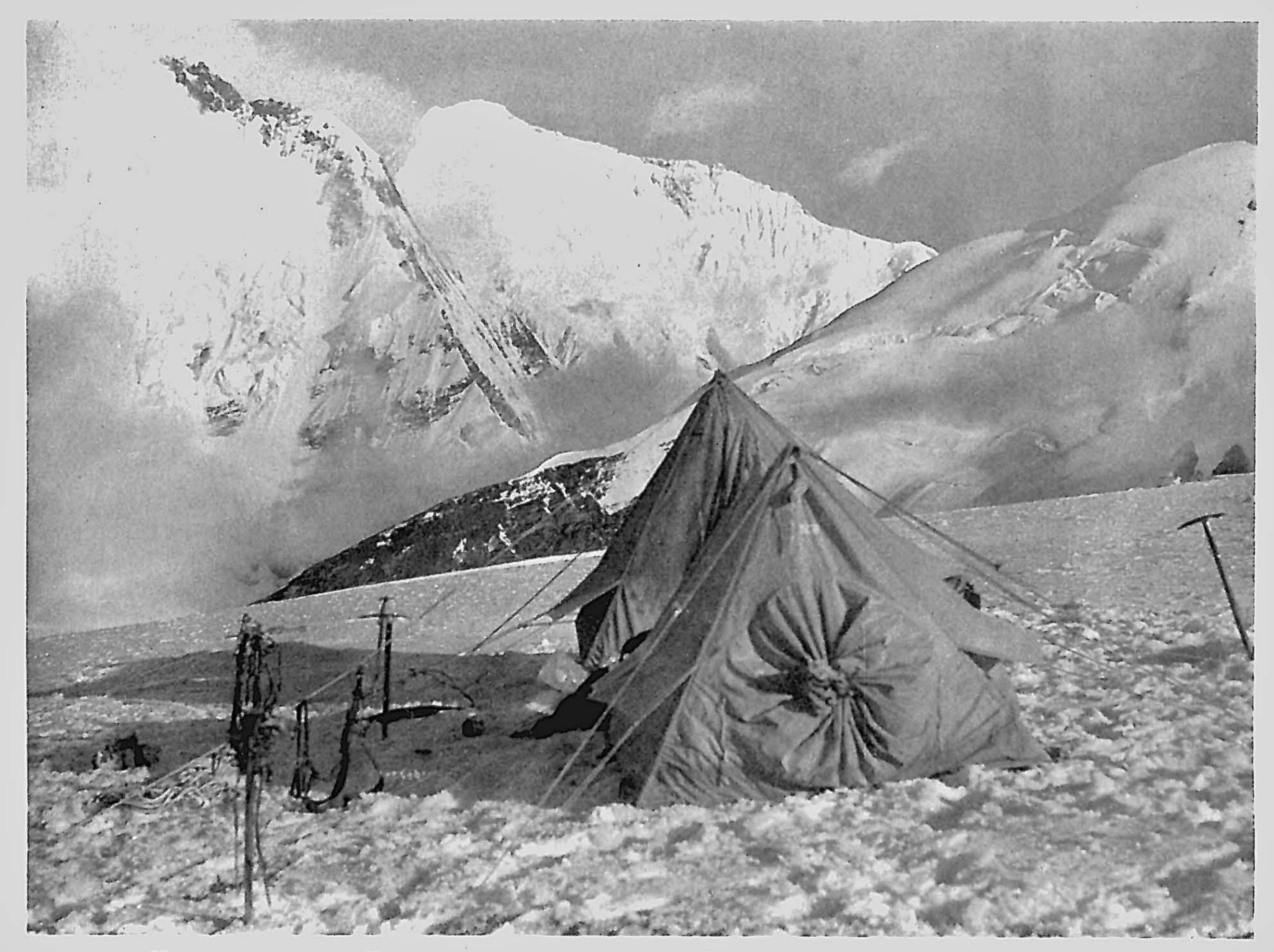
Hardie completed the survey and then after climbing several peaks, two of them over 22,000 ft., he made a pass direct from the Barun glacier to the Imja glacier by a route that had been looked at several times in 1951 and 1952 by the Reconnaissance and Cho Oyu expeditions

but on every occasion discarded as being too difficult.

Baruntse, was climbed by a party of four—Todd, Harrow, Beaven and Lowe—which left the Base Camp in the Barun on May 26. The Barun plateau was reached by a steep tributary glacier and the pass of about 20,000 ft. which was used for the first time in 1952, and a camp was

placed just below the saddle that leads to the Hongu glacier.

This camp commands a glorious view of Makalu and Lhotse and the great peaks for many miles east and west. During the evening, when we had the most wonderful sunsets, the Sherpas who had carried the Rugby ball to all camps, kicked the ball about. On May 29, with four Sherpas, we carried a high camp to 22,000 ft. on a small col below Baruntse. The following day the four of us left camp at 6 A.M., and although the wind was very strong and gusty, the day was clear. The snow was soft and we made slow going over the first 1,000 ft., when the ridge levelled out and we thought that the way to the summit would be fairly easy. After traversing one or two snow bumps we were crossing a level corniced section just below a great cleft in the ridge, when Beaven, who was forced nearer the edge by the steepness, thrust in his ice-axe to move to the next step that he had cut, when a split leapt away from his ice-axe and became a great fissure and a large section some 200 ft. long dropped away down the face. Beaven was left standing on the very brink while I, who was roped to him, leapt down the opposite slope, expecting to feel a jerk on the rope. He turned to me with a rather self-conscious grin and murmured something about 'that was close,' and made his way carefully back along the steps. We sat down further back, both considerably shaken and told one another of the very close shaves we had had. Todd and Harrow caught us up at this time, not having seen the cornice break, and offered to take over the lead. Todd began cutting steps across an exceedingly steep face of snow and the next two rope lengths took him about one and a half hours. In turning a corner the slope required places for the hips as well as the feet. The day was now well advanced, and Beaven and I debated the wisdom of continuing. I was firmly of the opinion that they would not reach the summit that day, and argued that it was better



Kangshung face of Everest from camp at foot of Pethangtse at head of Barun Glacier.

The n.e. ridge of Everest shows first and second steps.

to return the following day over the prepared ground and reach the summit with more time in hand. Beaven was in favour of going on, and this we did for a short distance and then, as the weather deteriorated and Todd shouted back that the way ahead was becoming increasingly

difficult, Beaven and I turned and went back to camp.

Snow fell during the afternoon, and we estimated that the others would turn back, giving themselves enough time to reach camp before dark. When darkness descended and Todd and Harrow had not yet returned, we became very apprehensive as a storm of snow and wind was increasing; I went out with Mingma and climbed a few hundred feet above the camp, shouting into the wind and flashing a torch. Great was our relief when we received an answer to our cry. The returning pair had lost the way and in their tiredness were despairing of ever finding the camp. Baruntse had been climbed, the summit was reached at 4.30, after a most exciting climb. Nothing was seen from the summit because of the swirling cloud, and they returned as fast as they possibly could, but found along the steep corniced ridge that the wind and snow had filled in the many hundreds of steps that they had cut on the ascent.

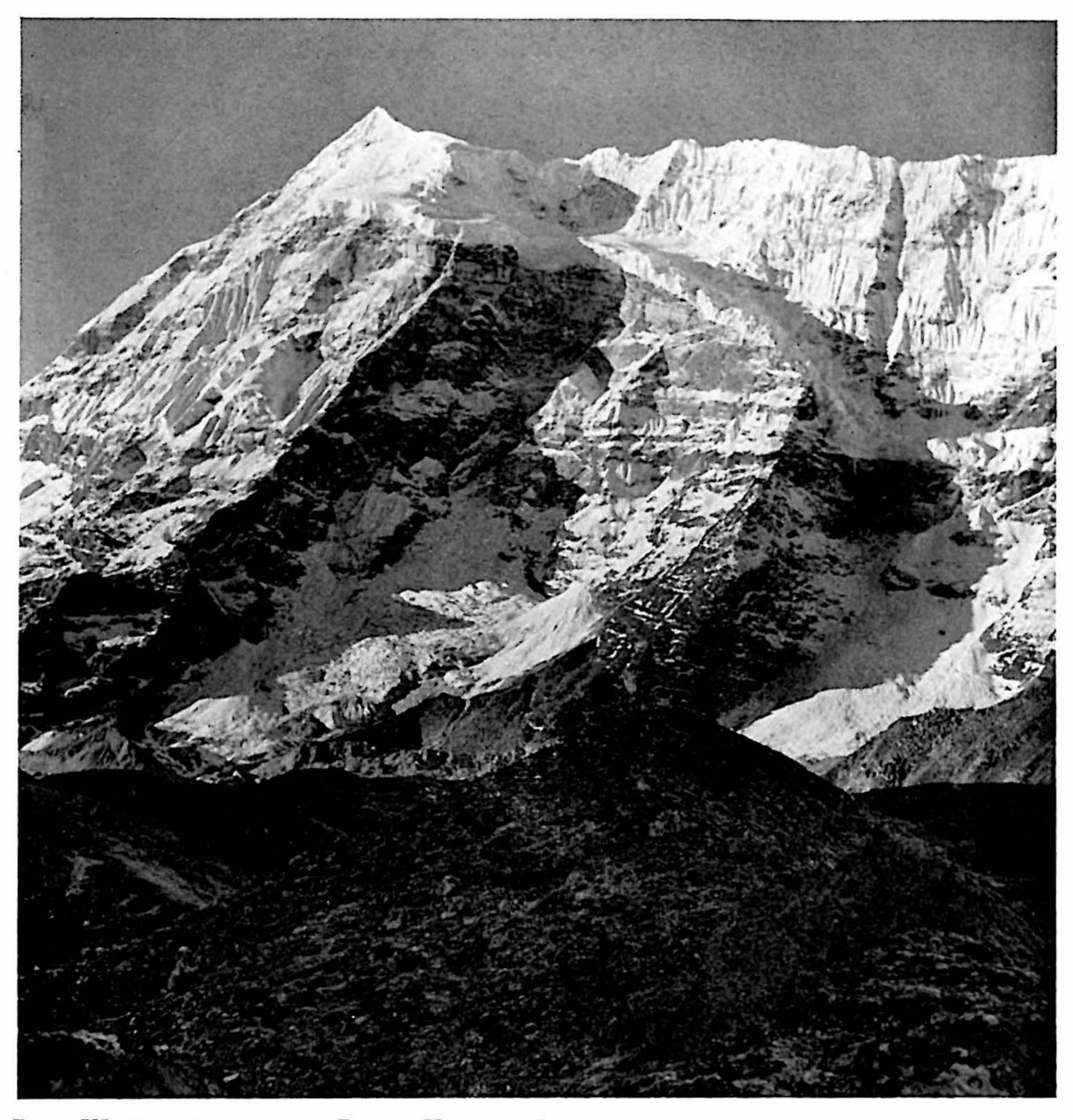
The following day, Todd and Harrow descended to the camp on the

Barun plateau.

Beaven and I sat through a day of rather damp monsoon snowfall and on June I we repeated the climb. Although we started earlier, and reached the summit at half past two, our descent took much longer and we too did not get back till long after dark. The climb of the ridge is an ice-climb of very high technical difficulty, and it is a great pity that this superb climb was not crowned by an equally superb view from the summit.

Beyond the highest point that we had reached two days before, the climbing consisted of cutting eighteen rope lengths along an extraordinarily steep corniced ridge. This section took us three and a half hours and required the greatest concentration and finished with a very steep snow gully that we pigeon-holed. Once above this, all the technical difficulties were over and a long slog in deep snow was made to a rounded snow cone which we found was the summit. Snow began falling and we had no view whatsoever. We descended to the steep snow gully and found the snow had deteriorated to a dangerously loose condition, and the descent of the first three hundred feet took us one and a half hours. As with Todd and Harrow, all the steps of the ascent had been filled in, and had to be scraped out or recut. If it had not been for the improvements in the high altitude boots, that had been made on the experience that we had had on Everest, the climb could not have been done under the cold conditions. Although our feet were constantly in deep and icy steps and unable to be kept warm by movement, they kept warm enough to stop fears of frostbite.

Darkness caught us as we descended the last stretch of the difficult corniced ridge. We felt our way down the rest of the climb which although quite difficult on the ascent, we found easy after the concentration



Peak VI from base camp, Barun Valley. A difficult and attractive peak on divide between Barun and Iswa Valleys.

needed for the ridge behind us. Eight hundred feet above the tent we were met by Annullu and Mingma, who had been left at camp on their own, and when we did not return at dark, they set out on their own initiative to come and look for us.

A storm was blowing up, and we were very thankful for their loyalty in coming out to meet us, despite the natural fear that Sherpas have of moving on the mountains in the dark. We were as greatly relieved to see them, as they were to see us. They led us back to the tents and administered to our few needs, which consisted merely of taking off our boots and helping us into our sleeping-bags, where we slept for many hours.

The following day we returned to our camp on the Barun Plateau. A heavy snowstorm had deposited eighteen inches of snow, and by the look of the grey billows of monsoon cloud that were daily rolling up

the valleys from the plains we knew that more was to follow.

Two days after climbing Baruntse, Charles Evans arrived at the camp on the Plateau glacier with some seventeen Sherpas who were carrying the whole of the expedition baggage across the passes to Thyangboche monastery. A bleak wind whipped snow particles across the Plateau glacier as the party trailed slowly up to our camp. Most of the Sherpas were clad in their home-made yak boots and their coats were thin, as they had been with us several months in the hot valleys; several of the party were boys in their teens and included two girls of the same age, and it was interesting to see how matter of fact they were in the biting cold, and about the headaches that they suffered with the altitude. Earlier that day Beaven, Harrow, Todd and I had prospected the top of the route down the steep six hundred feet of rock that is the only practicable way off the Plateau glacier into the broad Hongu valley. Ordinarily with a small party it would be a touchy climb which could be climbed down carefully, with care needed to avoid touching off loose rocks. Now, with driving snow, iced rocks and seventeen illshod, not too able Sherpas, it was a very difficult problem. We assembled five hundred and fifty feet of heavy manilla line and fixed this over all but fifty feet of the whole descent. Most of the ropes we joined together in one long line and descended the rocks holding on to the rope, dislodging every loose or perched rock by sending these bounding and crashing down into the abyss. We returned to the Plateau and assembled all the loads at the top of the slope. We then roped ourselves each to one of the ablest high altitude Sherpas and each worked a stage of about one hundred and twenty feet where we relayed the loads down, returning one hundred and twenty feet up to carry down again. In this way we shepherded most of the loads and all the Sherpas down to the flat glacier in the Hongu valley. The whole operation taking two very busy days. On the third we double-packed to the Hongu lake, which is near the foot of a pass which would take us over to the Imja valley, and then an easy walk down valley to Thyanboche and Sherpa land. This pass did not need the four of us. Harrow was elected to lead the band and get the main baggage over the top.



Chomo-Lönzo from the slopes of a 21,500 ft. peak climbed by Hardie, Ball, Wilkins and Urkien.

Evans stayed on the Plateau with three Sherpas to complete some survey. Todd and Beaven drew the most energetic straws—straws that sent them down valley after yet one more peak, Nau Lekh, 21,445 ft., which they climbed on June 8, making the nineteenth twenty-thousand-foot peak for the expedition. The climb was fairly straightforward, and they were exceedingly fit and fast. They reached the summit along with the last clear view of the pre-monsoon time; they returned in rain, snow and cloud, as the monsoon took over for the next few months. Nau Lekh was a great finish to the climbing and the exploring. It was the twenty-third first ascent and enabled a great deal of the survey to be tied together. And of course it also gave tempting views of still further blanks on the map that are yet to be surveyed.

At the same time as we were crossing the Plateau and the Hongu-Imja divides, Hardie was performing the most exciting feat of a direct crossing across the Barun-Imja watershed by a route that had been inspected several times by Shipton and others and decided against because of its difficulty and danger. After the climb of Pethangtse and several other peaks with Ball and Wilkins, he left them to look for possible passes. In the search he visited three places and chose one wall of ice slightly less repellent than the others, and after climbing two more peaks, one called Cho Polu, 22,030 ft., he began the descent of the wall. The first three hundred feet from the crest of the pass were down a steep ice-slope which Hardie had cut steps down the day previously. With two hundred feet of nylon rope joined to doubled nylon tent cords he was able to lower his three Sherpas and their loads down the slope to a platform he had cut in the ice. He then climbed down the steep stairway and anchored the rope to the ice-wall by two steel pitons. All this took some time, as did the search for the next line of descent. Hardie had with him Eric Shipton's photographs of the wall from lower down on the glacier which did not show three long straight chutes of ice. Hardie could see these from above and one at least seemed to have a straight uniform route all the way across crevasses to the bottom of the slope. The chutes could have been caused by soft snow sliding down, so they included several detours to push at heaps of snow to see if they would avalanche into the chutes. No avalanches could be started, and judging this safe enough, they chose the most likely and began the descent about noon. The three Sherpas were on one hundred feet of rope and Hardie was at the end of another hundred feet. In this way he could clip a snap link on to the front man when steps had to be cut, or act as an anchor while they descended.

There were many obstacles and progress was slow, hastened a little when Aila dumped about fifteen pounds of tsampa. The worst obstacle was a yawning crevasse that could not be turned or bridged. By this time he was almost certain there was a route to the Imja floor, so hammering in a steel piton they lowered everything to the bottom lip, slid down the rope and so continued knowing they could not now turn back. The ice chute became steeper with ice that required a great number of steps cut in the slope, but eventually the chute widened

into a broad avalanche fan and the worst was over. At 7 P.M. they walked thankfully out on to the Imja glacier and camped. On June 8, Hardie met the main party coming over from the Hongu valley and

accompanied them to Thyangboche.

In the Hongu I still had two thoughts in mind: first to cross the Mingbo saddle, a very direct if difficult route to Thyangboche, and then to get to Sherpa land to see the whole of the annual bacchanalian ceremony of Dumji. The Sherpas had told us such a lot about the ceremony of Dumji that we all wished to attend, and as the week of celebration drew near, the anticipation caused an excitement which

affected everybody.

The crossing over the Mingbo saddle to Thyangboche was accomplished in two days. With me were Mingma and Onji Gyalbo, two very fine men from the village of Kundi at which I was going to attend the week's ceremonies of Dumji. The crossing was difficult, and for me a grand and exciting finish to the mountain part of the expedition. Snow conditions were rather extraordinary and dangerous because of the monsoon dampness causing soggy snow to avalanche in unexpected ways. On the second day we left the snow and descended a long valley down and down from rocks to mosses, then grass to shrubs, down to trees and a yak herder's storehouse near the monastery. Khumbu is very beautiful and like the Sherpas I felt it was like a home-coming too. Khumbu had the delights of the stomach, fresh potatoes, milk, curds and grain, and the delights of the eye, flowers, and friendly green growth.